EVIDENCE REVIEW

LIBRARIAN:

A medical librarian with a perioperative background conducted a systematic search of the databases Ovid MEDLINE®, Ovid Embase®, EBSCO CINAHL®, and the Cochrane Database of Systematic Reviews. The search was limited to literature published in English from May 2017 through October 2021. At the time of the initial search, weekly alerts were created on the topics included in that search. Results from these alerts were provided to the lead author until December 2021. The lead author requested additional articles that either did not fit the original search criteria or were discovered during the evidence appraisal process. The lead author and the medical librarian also identified relevant guidelines from government agencies, professional organizations, and standards-setting bodies.

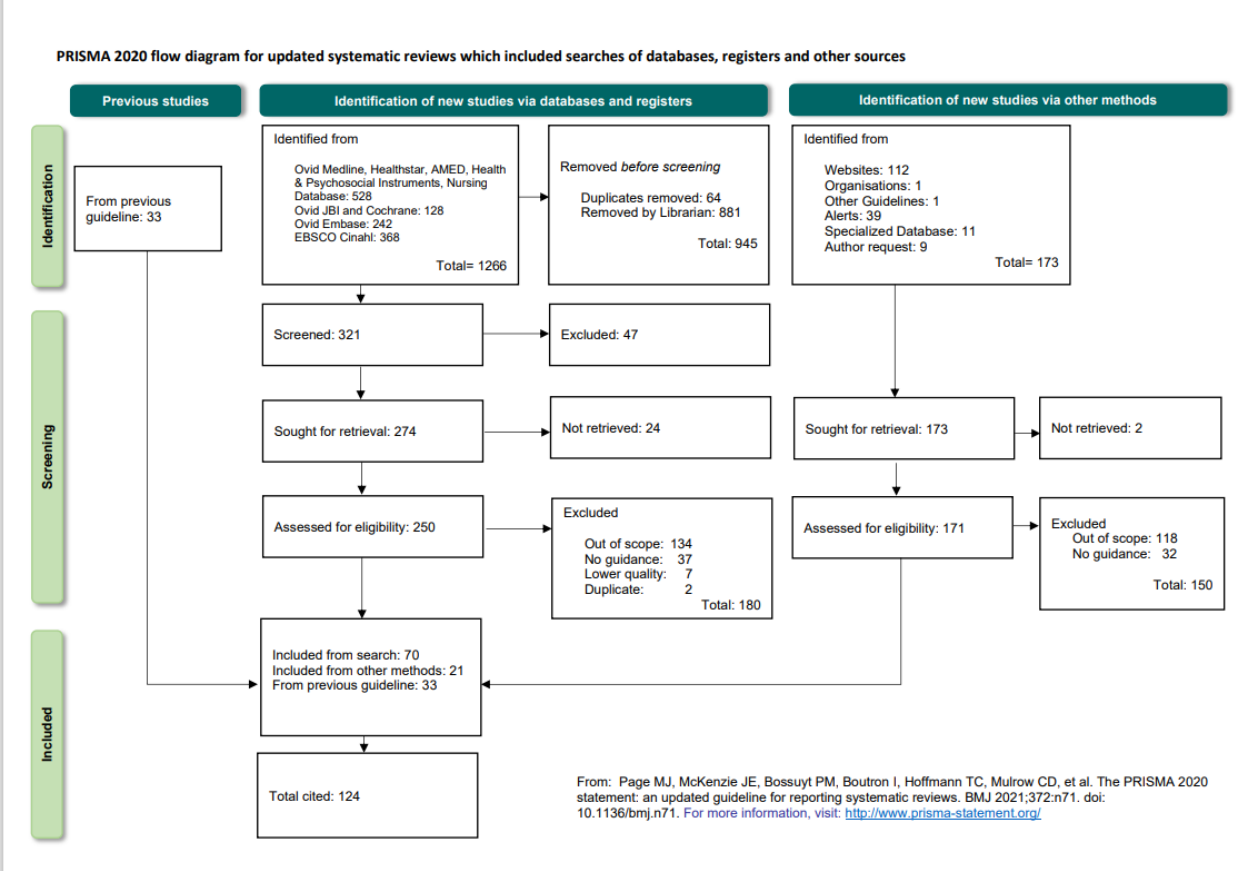
Included were research and non-research literature in English, complete publications, and publications with dates within the time restriction when available. Historical studies were also included. Excluded were non-peer-reviewed publications and older evidence within the time restriction when more recent evidence was available. Editorials, news items, and other brief items were excluded. Low-quality evidence was excluded when higher-quality evidence was available, and literature outside the time restriction was excluded when literature within the time restriction was available.

Articles identified in the search were provided to the project team for evaluation. The team consisted of the lead author and one evidence appraiser. The lead author and the evidence appraiser reviewed and critically appraised each article using the AORN Research or Non-Research Evidence Appraisal Tools as appropriate. A third appraiser was consulted if there was a disagreement between the lead author and the primary evidence appraiser. The literature was independently evaluated and appraised according to the strength and quality of the evidence. Each article was then assigned an appraisal score. The appraisal score is noted in brackets after each reference as applicable.

Each recommendation rating is based on a synthesis of the collective evidence, a benefit-harm assessment, and consideration of resource use. The strength of the recommendation was determined using the AORN Evidence Rating Model and the quality and consistency of the evidence supporting a recommendation. The recommendation strength rating is noted in brackets after each recommendation.

On May 17, 2021, a medical librarian conducted a systematic search of 16 health science databases, the names and date coverage of which are given in Table 1. These results were screened by the medical librarian, and then the lead author.

Table 1: PRISMA 2020 flow diagram



On July 21, 2021, a medical librarian conducted additional searches for relevant publications on websites of 16 organizations selected by the author (including government departments). Full details of these supplementary searches is included in the Supplementary Content on the aorn.org web site. These results were also screened by two screeners: the medical librarian, and then the lead author.

Table 1: Databases searched and coverage

Database	Coverage
AORN Full Text Journals@Ovid	
Books@Ovid	
JBI EBP Database	Current
EBM Reviews - ACP Journal Club	1991 to Current
EBM Reviews - Cochrane Central Register of Controlled Trials	Current
EBM Reviews - Cochrane Database of Systematic Reviews	2005 to Current
EBM Reviews - Cochrane Clinical Answers	Current

AMED (Allied and Complementary Medicine)	1985 to Current
Embase	1974 to Current
Health and Psychosocial Instruments	1985 to Current
Ovid Healthstar	1999 to Current
Ovid MEDLINE(R) ALL	1946 to Current
Ovid Nursing Database	1946 to Current
EBSCOhost CINAHL	1937 to Current

Search strategy development process: The medical librarian referred to a search strategy used for the previous Guideline. A draft search strategy was developed using terms listed in the previous strategy and additional search terms identified from a meeting with the lead author. Using the MeSH® Subject Headings database, additional search terms were identified and added to the search strategy. The strategy was limited following the constraints in the eligibility criteria outlined by the lead author.

Editor's note: *MEDLINE is a registered trademark of the US National Library of Medicine's Medical Literature Analysis and Retrieval System, Bethesda, MD. Embase is a registered trademark of Elsevier B.V., Amsterdam, The Netherlands. CINAHL, Cumulative Index to Nursing and Allied Health Literature, is a registered trademark of EBSCO Industries, Birmingham, AL. The Medical Subject Headings (MeSH®) thesaurus is a controlled vocabulary produced by the National Library of Medline and is used for indexing, cataloging, and searching biomedical and health-related information and documents.*

SEARCH STRATEGIES

Ovid (Medline and Embase)

1. (perioperative nursing or operating rooms).sh. or (ambulatory surgery center or surgicenter or endoscopy suite or catheterization laboratory or perioperative nursing or operating rooms or operating theater or operating theatre).ti,ab,kw.

2. ("cost control" or "Decision-making, organizational" or "cost-benefit analysis" or "costs and cost analysis" or "cost savings" or "Value-based purchasing" or "efficiency, organizational").de,sh. or ("value purchasing" or "value stream mapping" or "financial impact analysis" or "product selection" or "quality assurance" or "cost effectiveness" or "organizational efficiency" or "Benefits and Costs" or "cost-benefit data" or "cost effectiveness analysis" or "cost-utility analysis" or "costs and benefits" or "economic evaluation" or "cost containment" or "cost comparison" or "cost measures" or "cost minimization analysis" or pricing or consignment or vendor).ti,ab,kw.

3. ("device approval" or "disposable equipment" or "surgical equipment" or "materials management" or "equipment and supplies").de,sh,hw. or (storeroom or "par level" or "Single use devices" or "Apparatus and Instruments" or Devices or Equipment or Inventories or "Medical Device" or Supplies or "Patient care items").ti,ab,kw.

4. ("purchasing, hospital" or "financial management").de,sh,hw. or ("hospital purchasing" or "purchasing department").ti,ab,kw.

5. "group purchasing".de,sh,hw. or ("hospital group purchasing" or "hospital joint purchasing" or "hospital shared purchasing").ti,ab,kw.

6. ("equipment design" or "equipment failure" or "equipment safety").de,sh,hw. or ("device failure" or "medical device failure" or "equipment malfunction" or "device safety" or "medical device safety").ti,ab,kw.

7. ("Interdisciplinary communication" or "cooperative behavior").de,sh,hw. or ("compliant behavior" or committee or team or "multidisciplinary communication" or "cross disciplinary communication").ti,ab,kw.

8. "health information interoperability".de,sh,hw. or "electronic medical record interoperability".ti,ab,kw.

9. ("medical device legislation" or "medical device recalls" or "safety based medical device withdrawals").de,sh,hw. or ("device approval process" or "food and drug administration device approval" or "new device approval" or "medical device regulation" or "medical equipment legislation" or "Biomedical Device Recalls" or "biomedical device safety withdrawals" or "medical device safety withdrawals").ti,ab,kw.

10. (sustainability or "greening of the operating room" or "environmental responsibility" or "environmental impact" or "environmentally responsible products" or "energy use reduction" or "minimization of regulated waste" or "reduction of landfill waste" or reprocessing or "reuse of single use medical devices" or "reformulation of custom supply packs" or "Equipment Reusability" or "Product Recycling" or "product containers" or "sustainable energy").ti,ab,kw. or "conservation of energy resources"/mt, ec or "equipment reuse"/ec or "renewable energy"/ec or "waste management"/mt, ec or "disposable equipment"/ec or "medical waste"/ec or recycling/ec or (recycling or "product packaging").de,sh,hw.

11. "operating rooms"/ec

12. 1 and 2

13. 3 and 11

14. 4 and 11

15. 5 and 11

16. 6 and 9

17. 7 and 12

18. 8 and (1 or 11)

19. 10 and 12

20. 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19

21. limit 20 to english language

22. limit 21 to yr="2017 - 2022"

23. remove duplicates from 22

24. 23 not (conference or proceeding or poster).tw,pt.

25. 24 not "OR Manager".so,jn.

EBSCOhost (CINAHL)

S1 ((MH "Perioperative Nursing") OR (MH "Operating Rooms") OR (MH "Operating Room Personnel")) OR TI ("ambulatory surgery center" or surgicenter or "endoscopy suite" or "catheterization laboratory" or "perioperative nursing" or "operating rooms" or "operating theater" or "operating theatre") OR AB ("ambulatory surgery center" or surgicenter or "endoscopy suite" or "catheterization laboratory" or "perioperative nursing" or "operating rooms" or "operating theater" or "operating theatre")

S2 ((MH "Cost Control") OR (MH "Cost Benefit Analysis") OR (MH "Costs and Cost Analysis") OR (MH "Cost Savings")) OR TI ("value purchasing" or "value stream mapping" or "financial impact analysis" or "product selection" or "quality assurance" or "cost effectiveness" or "organizational efficiency" or "Benefits and Costs" or "cost-benefit data" or "cost effectiveness analysis" or "cost-utility analysis" or "costs and benefits" or "economic evaluation" or "cost containment" or "cost comparison" or "cost measures" or "cost minimization analysis" or pricing or consignment or vendor) OR AB ("value purchasing" or "value stream mapping" or "financial impact analysis" or "product selection" or "quality assurance" or "cost effectiveness" or "organizational efficiency" or "Benefits and Costs" or "cost-benefit data" or "cost effectiveness analysis" or "cost-utility analysis" or "costs and benefits" or "economic evaluation" or "cost containment" or "cost comparison" or "cost measures" or "cost minimization analysis" or pricing or consignment or vendor)

S3 ((MH "Disposable Equipment") OR (MH "Surgical Equipment and Supplies") OR (MH "Equipment and Supplies")) OR TI ("device approval" OR "materials management" OR storeroom or "par level" or "Single use devices" or "Apparatus and Instruments" or Devices or Equipment or Inventories or "Medical Device" or Supplies or "Patient care items") OR AB ("device approval" OR "materials management" OR storeroom or "par level" or "Single use devices" or "Apparatus and Instruments" or Devices or Equipment or Inventories or "Medical Device" or Supplies or "Patient care items")

S4 ((MH "Purchasing Department") OR (MH "Financial Management")) OR TI "hospital purchasing" OR AB "hospital purchasing"

S5 TI ("group purchasing" OR "hospital group purchasing" or "hospital joint purchasing" or "hospital shared purchasing") OR AB ("group purchasing" OR "hospital group purchasing" or "hospital joint purchasing" or "hospital shared purchasing")

S6 ((MH "Equipment Safety") OR (MH "Equipment Design") OR (MH "Equipment Failure")) OR TI ("device failure" or "medical device failure" or "equipment malfunction" or "device safety" or "medical device safety") OR AB ("device failure" or "medical device failure" or "equipment malfunction" or "device safety" or "medical device safety")

S7 (MH "Cooperative Behavior") OR TI ("Interdisciplinary communication" or "compliant behavior" or committee or team or "multidisciplinary communication" or "cross disciplinary communication) OR AB ("Interdisciplinary communication" or "compliant behavior" or committee or team or "multidisciplinary communication" or "cross disciplinary communication)

S8 TI ("health information interoperability" OR "electronic medical record interoperability") OR AB ("health information interoperability" OR "electronic medical record interoperability")

S9 (MH "Medical Device Legislation") OR TI ("medical device recalls" or "safety based medical device withdrawals" OR or"device approval process" or "food and drug administration device approval" or "new device approval" or "medical device regulation" or "medical equipment legislation" or "Biomedical Device Recalls" or "biomedical device safety withdrawals" or "medical device safety withdrawals") OR AB ("medical device recalls" or "safety based medical device withdrawals" OR or"device approval process" or "food and drug administration device approval" or "new device approval" or "medical device regulation" or "medical equipment legislation" or "Biomedical Device Recalls" or "biomedical device safety withdrawals" or "medical device safety withdrawals")

S10 (MH "Medical Waste/EC") OR TI (sustainability or "greening of the operating room" or "environmental responsibility" or "environmental impact" or "environmentally responsible products" or "energy use reduction" or "minimization of regulated waste" or "reduction of landfill waste" or reprocessing or "reuse of single use medical devices" or "reformulation of custom supply packs" or "Equipment Reusability" or "Product Recycling" or "product containers" or "sustainable energy" or "conservation of energy resources"/mt, ec or "equipment reuse"/ec or "renewable energy" or "waste management" or "disposable equipment" or recycling or "product packaging") OR AB (sustainability or "greening of the operating room" or "environmental responsibility" or "environmental impact" or "environmentally responsible products" or "energy use reduction" or "minimization of regulated waste" or "reduction of landfill waste" or reprocessing or "reuse of single use medical devices" or "reformulation of custom supply packs" or "Equipment Reusability" or "Product Recycling" or "product containers" or "sustainable energy" or "conservation of energy resources"/mt, ec or "equipment reuse"/ec or "renewable energy" or "waste management" or "disposable equipment" or recycling or "product packaging")

S11 (MH "Operating Rooms/EC")

S12 S1 AND S2

S13 S3 AND S11

S14 S4 AND S11

S15 S5 AND S12

S16 S6 AND S9

S17 S7 AND S12

S18 S8 AND (S1 OR S12)

S19 S10 AND S12

S20 S8 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S19

S21 S8 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S19
Limiters - Published Date: 20170101-20210531; English Language; Peer Reviewed

S22 S21 NOT (conference OR proceeding* OR poster)
Limiters - Published Date: 20170101-20210531; English Language; Peer Reviewed

Web Searches// All searches in date order from oldest to newest. All searches conducted in 2021 unless indicated otherwise.

6/21: From FDA home page (www.fda.org), scrolled all the way down to "About FDA"> In "NAVIGATE THE ABOUT FDA SECTION," chose "FDA Organization"> Chose "Center for Devices and Radiological Health" from LEFT nav bar> Chose "CDRH Patient Science and Engagement Program" from LEFT nav bar> Chose "Clinical Outcome Assessments (COAs) in Medical Device Decision-Making" from "Patient Science and Engagement Initiatives at CDRH" box> Under "Articles" heading, chose first resource in bulleted list. Saved for author screening.

7/9: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Scrolled to "SEARCH MEDICAL DEVICE DATABASES" and chose "All Medical Device Databases"> Scrolled to resource, saved for author

7/9: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Scrolled to "NAVIGATE THE MEDICAL DEVICE SECTION" and chose "Products and Medical Procedures"> Saved resource for author screening.

7/9: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Scrolled to "NAVIGATE THE MEDICAL DEVICE SECTION" and chose "Device Advice" link> Scrolled to "SEARCH MEDICAL DEVICE DATABASES" and chose "Code of Federal Regulations."

7/9: Landing page for agreements with Center for Biologics Evaluation and Research (CBER), the Center for Drug Evaluation and Research (CDER), and the Center for Devices and Radiological Health (CDRH), entered into three Intercenter Agreements (ICAs).

7/9: Navigated to FDA home page (www.fda.gov)> Chose "Combination Products" from "RESOURCES AND PROGRAMS"> Chose "Classification and Jurisdictional Information" from "NAVIGATE THE COMBINATION PRODUCTS SECTION"> Chose "Intercenter Agreements" from LEFT nav bar> Scrolled down to resource; saved for author screening. (x3)

7/9: Navigated to FDA home page (www.fda.gov)> Chose "Combination Products" from "RESOURCES AND PROGRAMS"> Chose "Classification and Jurisdictional Information" from "NAVIGATE THE COMBINATION PRODUCTS SECTION"> Chose "Jurisdictional Updates" from LEFT nav bar> Scrolled to "Jurisdictional Update: Intercenter Agreements" in bulleted list; saved resource for author screening.

7/9: Navigated to FDA home page (www.fda.gov)> Chose "Combination Products" from "RESOURCES AND PROGRAMS"> Chose "Classification and Jurisdictional Information" from "NAVIGATE THE COMBINATION PRODUCTS SECTION"> Chose "Jurisdictional Updates" from LEFT nav bar> Scrolled to "Jurisdictional Update: Intercenter Agreements" from bulleted list> Saved first link, "Review of Agreements, Guidances, and Practices..." for author review.

7/12: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Scrolled to "NAVIGATE THE MEDICAL DEVICE SECTION" and chose "Device Advice" link> Chose "Standards and Conformity Assessment Program" from LEFT nav bar> Chose "Accreditation Scheme for Conformity Assessment (ASCA)"> Saved resource for author screening.

7/12: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Scrolled to "NAVIGATE THE MEDICAL DEVICE

SECTION" and chose "Device Advice" link> Scrolled to "SEARCH MEDICAL DEVICE DATABASES"> Saved resource for author screening

7/12: Navigated to FDA home page (www.fda.gov)> Chose "Regulatory Information" from MENU option on top right corner of page, under "TOPICS" heading> Clicked "Learn more"> Scrolled to "Guidance Document Search"> Searched: "evaluation of medical devices"> Chose result for author screening.

7/12: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Scrolled to "NAVIGATE THE MEDICAL DEVICE SECTION" and chose "Device Advice" link> Chose "Standards and Conformity Assessment Program" from LEFT nav bar> Chose "Accreditation Scheme for Conformity Assessment (ASCA)"> Scrolled to first bullet point under "Final Guidances (September 25, 2020)," ("Program guidance: The Accreditation Scheme for Conformity Assessment (ASCA) Pilot Program - Final Guidance")> Saved resource for author screening.

7/12: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Chose "Resources for You" from under the "NAVIGATE THE MEDICAL DEVICE SECTION" heading> Chose "Industry (Medical Devices)" from LEFT nav bar> Saved resource for author screening.

7/12: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Scrolled to "SEARCH MEDICAL DEVICE DATABASES" and chose "All Medical Device Databases"> Scrolled to resource, saved for author screening.

7/12: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Scrolled to "NAVIGATE THE MEDICAL DEVICE SECTION" and chose "Device Advice" link> Chose "How to Study and Market Your Device" from LEFT nav bar> Chose "Premarket Submissions" from LEFT nav bar> Chose "Premarket Notification 510(k)" from LEFT nav bar> Saved resource for author screening.

7/12: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Scrolled to "NAVIGATE THE MEDICAL DEVICE SECTION" and chose "Medical Device Safety"> Chose "MedSun: Medical Product Safety Network" from LEFT nav bar> Saved resource for author screening.

7/12: From FDA home page (www.fda.gov), chose "Medical Devices" under "PRODUCTS WE REGULATE" heading> Chose "Resources for you" from "NAVIGATE THE MEDICAL DEVICE SECTION" heading> Saved resource for author screening.

7/12: From FDA home page (www.fda.gov), chose "Medical Devices" under "PRODUCTS WE REGULATE" heading> Chose "Resources for you" from "NAVIGATE THE MEDICAL DEVICE SECTION" heading> "Chose Health Care Providers (Medical Devices)" from LEFT nav bar> Saved resource for author screening.

7/12: From FDA home page (www.fda.gov), chose "Medical Devices" from "PRODUCTS WE REGULATE"> Chose "Device Advice" from "NAVIGATE THE MEDICAL DEVICE SECTION"> Chose "Guidance Documents (Medical Devices and Radiation-Emitting Products)" from LEFT nav bar> Saved resource for author screening.

7/12: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Scrolled to "SEARCH MEDICAL DEVICE DATABASES" and chose "All Medical Device Databases"> Scrolled to resource, saved for author screening.

7/12: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Scrolled to "SEARCH MEDICAL DEVICE DATABASES" and chose "All Medical Device Databases"> Scrolled to resource, saved for author screening.

7/12: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Scrolled to "SEARCH MEDICAL DEVICE DATABASES" and chose "All Medical Device Databases"> Scrolled to resource (named "Recalls of Medical Devices" in list), saved for author screening.

7/13: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Scrolled to "NAVIGATE THE MEDICAL DEVICE SECTION" and chose "Device Advice" link> Chose "Unique Device Identification" from LEFT nav bar> Saved resource for author screening.

7/13: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Scrolled to "NAVIGATE THE MEDICAL DEVICE SECTION" and chose "Device Advice" link> Chose "Unique Device Identification System (UDI System)" from LEFT nav bar> Chose "UDI Rule and Guidances, Training, Resources, and Dockets" from LEFT nav bar> Saved resource for author screening.

7/13: Navigated to FDA home page (www.fda.gov)> Chose "Regulatory Information" from MENU option on top right corner of page, under "TOPICS" heading> Clicked "Learn more"> Scrolled to "Guidance Document Search"> Searched: "Unique Device Identification System"> Chose first result for author screening.

7/13: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Scrolled to "NAVIGATE THE MEDICAL DEVICE SECTION" and chose "Device Advice" link> Chose "Unique Device Identification" from LEFT nav bar> Chose "UDI Basics" from LEFT nav bar> Saved resource for author screening.

7/13: From FDA home page (www.fda.gov), chose "Device Advice" from "NAVIGATE THE MEDICAL DEVICE SECTION"> Chose "Unique Device Identification" from LEFT nav bar> Chose "Benefits of a UDI System" from LEFT nav bar> Saved resource for author screening.

7/13: From FDA home page (www.fda.gov)> Scrolled to "NAVIGATE THE MEDICAL DEVICE SECTION" and chose "Device Advice" link> Chose "Unique Device Identification System (UDI System)" from LEFT nav bar> Chose "UDI Rule and Guidances, Training, Resources, and Dockets" from LEFT nav bar> Scrolled to "UDI FAQs" under "UDI Rule and Guidance"> Saved resource for author screening.

7/15: Navigated to CMS web site (cms.gov)> "value based purchasing" in Search box> Chose "Hospital Value-Based Purchasing Program" from result list.

7/15: Navigated to CMS web site (cms.gov)> "value based purchasing" in Search box> Chose "Hospital Value-Based Purchasing Program" from result list> Clicked link, "Hospital VBP Program."

7/15: From FDA web site (www.fda.gov)> Under "PRODUCTS WE REGULATE" heading, chose "Radiation-Emitting Products"> Under "NAVIGATE THE RADIATION-EMITTING PRODUCTS SESECTION [SIC[" heading, chose "Radiation-Emitting Products and Procedures"> Chose "Medical Imaging" from LEFT nav bar> Chose "Medical X-ray Imaging" under "Additional Information"> Saved resource for author screening.

7/15: From FDA web site (www.fda.gov)> Under "PRODUCTS WE REGULATE" heading, chose "Radiation-Emitting Products"> Under "NAVIGATE THE RADIATION-EMITTING PRODUCTS SESECTION [SIC[" heading, chose "Radiation-Emitting Products and Procedures"> Chose "Medical Imaging" from LEFT nav bar> Chose "Medical X-ray Imaging" under "Additional Information"> Chose "Fluoroscopy" from LEFT nav bar> Saved resource for author screening.

7/15: From FDA web site (www.fda.gov)> Under "PRODUCTS WE REGULATE" heading, chose "Radiation-Emitting Products"> Under "NAVIGATE THE RADIATION-EMITTING PRODUCTS SESECTION [SIC[" heading, chose "Radiation-Emitting Products and Procedures"> Chose "Surgical and Therapeutic Products" from LEFT nav bar> Chose "Medical Lasers" from bulleted list> Saved resource for author screening.

7/15: From FDA web site (www.fda.gov)> Under "PRODUCTS WE REGULATE" heading, chose "Radiation-Emitting Products"> Under "NAVIGATE THE RADIATION-EMITTING PRODUCTS SESECTION [SIC[" heading, chose "Radiation-Emitting Products and Procedures"> Chose "Surgical and Therapeutic Products" from LEFT nav bar> Chose "Ultrasound Therapy" from bulleted list> Saved resource for author screening.

7/15: Author request "[for State Operations Manuals Appendices A and L]; saved resource for author screening. (x2)

7/15: Navigated to OSHA site, osha.gov> In "Topics" drop-down menu, chose "Health Care" under the "By Sector" heading> Chose "Infectious Diseases" from LEFT nav bar> Scrolled to "Bloodborne Pathogens" heading, and under "Specific Diseases," clicked link for "Bloodborne Pathogens and Needlestick Injuries. OSHA Safety and Health Topics Page."> Scrolled down to "Standards."> Saved resource for author screening.

7/15: Navigated to TJC web site (https://www.jointcommission.org/)> Clicked "Standards" from TOP nav bar> Scrolled to "FAQs about the Standards" link> Scrolled down to "Environment of Care (EC)" from LEFT nav bar> Browsed to resource, saved for author screening.

7/15: From FDA web site (www.fda.gov)> Under "PRODUCTS WE REGULATE" heading, chose "Radiation-Emitting Products"> Under "NAVIGATE THE RADIATION-EMITTING PRODUCTS SESECTION [SIC[" heading, chose "Radiation-Emitting Products and Procedures"> Chose "Computed Tomography (CT)" from "Related Links"> Saved resource for author screening.

7/15: Navigated to CMS web site (cms.gov)> Search "device reprocessing"> Chose first result> Saved result for author screening.

7/15: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Scrolled to "NAVIGATE THE MEDICAL DEVICE SECTION" and chose "Device Advice" link> Scrolled to "Unique Device Identification (UDI) System" on LEFT nav bar> Scrolled to "UDI Rule and Guidances, Training, Resources, and Dockets" from LEFT nav bar> Scrolled to "09/24/2013/ Final Rule/ Final Rule - Unique Device Identification System (in the Federal Register)"> Chose "PDF" version from RIGHT nav bar.

7/15: Navigated to CMS web site (cms.gov)> "value based purchasing" in Search box> Chose "Hospital Value-Based Purchasing Program" from result list> Scrolled down to "Hospital VBP Program Measures - Reliability Analysis (PDF)".

7/15: From NIOSH home page (https://www.cdc.gov/niosh/index.htm), searched "Medical Devices" & scrolled to "CDC - Bloodborne Infectious Diseases - Safer Medical Device Implementation - Step 1 -

NIOSH Workplac… https://www.cdc.gov/niosh/topics/bbp/safer/step1b.html"> Added resource for author screening, with hopes that PDFs will be updated by the time she needs them.

7/15: Navigated to FDA home page (www.fda.gov)> Chose "Regulatory Information" from MENU option on top right corner of page, under "TOPICS" heading> Clicked "Learn more"> Scrolled to "Guidance Document Search"> Searched: "single-use devices"> Selected result for author screening.

7/15: From FDA web site (www.fda.gov)> Under "PRODUCTS WE REGULATE" heading, chose "Radiation-Emitting Products"> Under "NAVIGATE THE RADIATION-EMITTING PRODUCTS SESECTION [SIC[" heading, chose "Radiation-Emitting Products and Procedures"> Chose resource from bulleted list under "Related Links"> Saved resource for author screening.

7/15: Navigated to OSHA home page, osha.gov> From "Standards" drop-down menu, chose "Law and Regulations"> Under "Resources," chose "Standard Interpretations."> Chose "Standard #" tab to sort by that (versus name)> Chose "Part 1910 - Occupational Safety and Health Standards"> Chose "1910.1030 - Bloodborne pathogens"> Scrolled to resource, saved for author screening. (x4)

7/15: From Healthcare Infection Control Practices Advisory Committee (HICPAC)'s page in CDC web site (https://www.cdc.gov/hicpac/index.html)> Clicked on "Go to CDC's Infection Control Guidelines Library"> From "Guidelines & Guidance Library," under "Basic Infection Prevention and Control Guidelines" heading, chose "Disinfection and sterilization"> Clicked on Guideline for author screening.

7/20: Navigated to bookmarked URL for ECRI Top 10 resources (https://www.ecri.org/components/HDJournal/Pages/Top-10-Health-Technology-Hazards-Complete-Top-Ten-Hazards-Archive.aspx?tab=2)> Saved resource for author screening.

7/20: From main ECRI web site (www.ecri.org); signed in> Chose "Health System Risk Management" from "Memberships & Services" drop down menu> Scrolled to "Top 10 Patient Safety Concerns for 2021"> Browsed list of concerns, chose resource for author screening.

7/20: Author request for info from "DNV"> Have DNV bookmarked, https://www.dnv.us/assurance/healthcare/standards/niaho-ac-dl.html> Chose "NIAHO® Accreditation Requirements - Acute" from menu> Scrolled through TOC of document, added relevant for author screening.

7/20: Navigated to ECRI web site (www.ecri.org); signed in> Searched "medical devices"> Filtered by "Health System Risk Management"> Scrolled to result; saved for author screening. (x3)

7/20: Navigated to bookmarked URL for ECRI Top 10 resources (https://www.ecri.org/components/HDJournal/Pages/Top-10-Health-Technology-Hazards-Complete-Top-Ten-Hazards-Archive.aspx?tab=2)> Saved resource for author screening.

7/20: From main AAMI web site (www.aami.org), clicked "Read more" from the "Healthcare Technology Management (HTM)" box> From "Healthcare Technology Management" page, scrolled down> Chose "HTM Resources"> Scrolled down, saved resource for author screening.

7/20: Author request, "AAAHC"> Navigated to bookmark for Accreditation Handbook for Ambulatory Health Care> Browsed book TOC, scrolled to Chapter 10 (Surgical and Related Services)> Scrolled to resource/ sounded relevant for author screening.

7/20: Navigated to ECRI web site (www.ecri.org); signed in> From drop-down menu ("Memberships & Services")> Chose "Health System Risk Management" from "PUBLICATIONS" heading> Filtered by "Guidance Articles"> Scrolled to result; saved for author screening.

7/20: Navigated to APIC home page (apic.org) from Google search result "APIC: Home"> Chose "Topic-Specific Infection Prevention" from "Resources" drop-down menu> Chose "Disinfection and Sterilization"> Scrolled to "Reprocessing surgical instruments" under the "Position statements and key messages" heading.

7/20: Navigated to APIC home page (apic.org) from Google search result "APIC: Home"> Chose "APIC COVID-19 Resources"> Scrolled down to "Guidance" heading, saved result for author screening.

7/20: From main AAMI web site (www.aami.org), clicked "Read more" from the "Healthcare Technology Management (HTM)" box> From "Healthcare Technology Management" page, scrolled down> Chose "HTM Resources"> Scrolled down, saved resource for author screening.

7/20: From main AAMI web site (www.aami.org), clicked "Read more" from the "Healthcare Technology Management (HTM)" box> From "Healthcare Technology Management" page, scrolled down> Chose "HTM Resources"> Scrolled down, saved resource for author screening.

7/20: From main AAMI web site (www.aami.org), clicked "Read more" from the "Healthcare Technology Management (HTM)" box> From "Healthcare Technology Management" page, scrolled down> Chose "HTM Resources"> Scrolled down, saved resource for author screening.

7/20: From IHI home page (http://www.ihi.org/> From "Resources" drop-down menu ("Resources Overview"), chose "Publications."> Scrolled to resource for author screening.

7/20: Navigated to APIC home page (apic.org) from Google search result "APIC: Home"> Chose "Topic-Specific Infection Prevention" from "Resources" drop-down menu> Chose "Disinfection and Sterilization"> Scrolled to "AJIC articles" ("May 2013 AJIC special issue on disinfection/ sterilization")> Scrolled to relevant result for author screening.

7/20: From IHI home page (http://www.ihi.org/> From "Resources" drop-down menu ("Resources Overview"), chose "Publications."> Scrolled to resource for author screening.

7/20: Navigated to APIC home page (apic.org) from Google search result "APIC: Home"> Chose "Topic-Specific Infection Prevention" from "Resources" drop-down menu> Chose "Disinfection and Sterilization"> Scrolled to "AJIC articles" ("May 2013 AJIC special issue on disinfection/ sterilization")> Scrolled to relevant result for author screening.

7/21: Navigated to bookmarked URL for ECRI Top 10 resources (https://www.ecri.org/components/HDJournal/Pages/Top-10-Health-Technology-Hazards-Complete-Top-Ten-Hazards-Archive.aspx?tab=2)> Browsed list for each year from 2016 to current> Saved resource for author screening

7/21: From ECRI main page (https://www.ecri.org/), signed in as member.> Under "Memberships & Services," chose "Health System Risk Managment"> Scrolled to "SELF-ASSESSMENT QUESTIONNAIRES (SAQS)" and clicked link to "View Self-Assessment Questionnaires"> Scrolled to resource, saved for author screening.

7/21: From main ECRI web site (www.ecri.org); signed in> Chose "Health System Risk Management" from "Memberships & Services" drop down menu> Scrolled to "Top 10 Patient Safety Concerns for 2021"> Browsed list of concerns, chose resource for author screening.

7/21: Navigated to FDA home page (www.fda.gov)> Chose "Medical Devices" from "PRODUCTS WE REGULATE" heading> Chose "Medical Device Safety" from "NAVIGATE THE MEDICAL DEVICE SECTION"> Chose "Medical Device Recalls" from LEFT nav bar> Chose "2021 Medical Device Recalls" from LEFT nav bar> Scrolled to result; saved for author screening.

7/21: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Under "NAVIGATE THE MEDICAL DEVICE SECTION," Chose "Digital Health Center of Excellence"> Chose "Cybersecurity" from LEFT nav bar> Scrolled down to resource, saved for author screening.

7/21: Navigated to FDA home page (www.fda.gov)> Chose "Regulatory Information" from MENU option on top right corner of page, under "TOPICS" heading> Clicked "Learn More" from "Search for FDA Guidance Documents'> Chose first result, saved for author screening.

7/21: Author request for AORN Position Statement> Went to URL www.aorn.org> Chose "Guidelines and Clinical Resources" drop-down> Chose "Position Statements" from "Clinical Resources" heading> Scrolled down to this resource; for author screening.

7/21: Navigated to bookmarked URL for ECRI Top 10 resources (https://www.ecri.org/components/HDJournal/Pages/Top-10-Health-Technology-Hazards-Complete-Top-Ten-Hazards-Archive.aspx?tab=2)> Browsed list for each year from 2016 to current> Saved resource for author screening

7/21: Navigated to ECRI web site (www.ecri.org); signed in> Searched "supply chain"> Filtered by "Strategic Insights for Health System"> Scrolled to result; saved for author screening. (x2)

7/21: Navigated to bookmarked URL for ECRI Top 10 resources (https://www.ecri.org/components/HDJournal/Pages/Top-10-Health-Technology-Hazards-Complete-Top-Ten-Hazards-Archive.aspx?tab=2)> Saved resource for author screening.

7/21: Navigated to bookmarked URL for ECRI Top 10 resources (https://www.ecri.org/components/HDJournal/Pages/Top-10-Health-Technology-Hazards-Complete-Top-Ten-Hazards-Archive.aspx?tab=2)> Browsed list for each year from 2016 to current> Saved resource for author screening (x5)

7/21: Navigated to ECRI web site (www.ecri.org); signed in> Searched "medical devices"> Filtered by "Health System Risk Management"> Scrolled to result; saved for author screening.

7/21: Navigated to bookmarked URL for ECRI Top 10 resources (https://www.ecri.org/components/HDJournal/Pages/Top-10-Health-Technology-Hazards-Complete-Top-Ten-Hazards-Archive.aspx?tab=2)> Saved resource for author screening.

7/21: Navigated to bookmarked URL for ECRI Top 10 resources (https://www.ecri.org/components/HDJournal/Pages/Top-10-Health-Technology-Hazards-Complete-Top-Ten-Hazards-Archive.aspx?tab=2)> Saved resource for author screening.

7/21: Navigated to ECRI web site (www.ecri.org); signed in> Searched "medical devices"> Filtered by "Health System Risk Management"> Scrolled to result; saved for author screening.

7/21: Author request for AHA reources> Chose "Promoting Healthy Communities" from "Individuals & Communities" drop-down menu> Scrolled to "SOCIAL DETERMINANTS OF HEALTH"> Scrolled to "Ensuring Access to Care in Vulnerable Communities"> Scrolled to "Task Force Report"> Clicked on "Full Report"

7/21: From main American College of Surgeons web site (https://www.facs.org/), clicked "About ACS" from top menu> Chose "Statements of the College" from LEFT nav bar> Scrolled down through statements, saved resource for author screening.

7/21: Navigated to bookmarked URL for ECRI Top 10 resources (https://www.ecri.org/components/HDJournal/Pages/Top-10-Health-Technology-Hazards-Complete-Top-Ten-Hazards-Archive.aspx?tab=2)> Saved resource for author screening.

7/21: Navigated to bookmarked URL for ECRI Top 10 resources (https://www.ecri.org/components/HDJournal/Pages/Top-10-Health-Technology-Hazards-Complete-Top-Ten-Hazards-Archive.aspx?tab=2)> Browsed list for each year from 2016 to current> Saved resource for author screening

7/21: Navigated to bookmarked URL for ECRI Top 10 resources (https://www.ecri.org/components/HDJournal/Pages/Top-10-Health-Technology-Hazards-Complete-Top-Ten-Hazards-Archive.aspx?tab=2)> Saved resource for author screening.

7/21: Navigated to bookmarked URL for ECRI Top 10 resources (https://www.ecri.org/components/HDJournal/Pages/Top-10-Health-Technology-Hazards-Complete-Top-Ten-Hazards-Archive.aspx?tab=2)> Saved resource for author screening.

7/21: Navigated to ECRI web site (www.ecri.org); signed in> From drop-down menu ("Memberships & Services")> Chose "Health System Risk Management" from "PUBLICATIONS" heading> Filtered by "Guidance Articles"> Scrolled to result; saved for author screening.

7/21: Navigated to ECRI web site (www.ecri.org); signed in> Searched "medical devices"> Filtered by "Health System Risk Management"> Scrolled to result; saved for author screening.

7/21: Navigated to ECRI web site (www.ecri.org); signed in> From drop-down menu ("Memberships & Services")> Chose "Evaluations & Guidance" from "PUBLICATIONS" heading> Scrolled to result; saved for author screening.

7/21: Navigated to TJC web site (https://www.jointcommission.org/)> Clicked "Resources" from TOP nav bar> Scrolled to "Patient Safety Information" link in bulletted list below "Gain Access to Valuable Information" heading> Scrolled down to "Sentinel Event" under "Patient Safety Portals"> Scroll to "View the full list of Sentinel Event Alert publications" under "Overview"> Browsed the list of "Sentinel Event Alert Newsletters", saved resource for author screening.

7/21: From main American College of Surgeons web site (https://www.facs.org/), clicked "About ACS" from top menu> Chose "Statements of the College" from LEFT nav bar> Scrolled down through statements, saved resource for author screening.

7/21: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Scrolled to "SEARCH MEDICAL DEVICE DATABASES" and chose "MAUDE (Manufacturer and User Facility Device Experience) Database"> Saved resource for author screening.

7/21: Google search: "fda medical devices"> Chose first result, "Medical Devices | FDA"> Brought me to a main "landing page" regarding Medical Devices> Scrolled to "SEARCH MEDICAL DEVICE DATABASES" and chose "All Medical Device Databases"> Scrolled to resource, saved for author screening.

7/21: Author request for AHA reources> Chose "Resource Center" from "Data & Insights" drop-down menu> Scrolled to "AHA REPORTS AND STUDIES"

7/21: Author request for AHA reources> From "Individuals & Communities" drop-down menu, chose "Promoting Healthy Communities"> Scrolled down, clicked on "Advancing Health in America" next to "RELATED TOPICS"> From "Advancing Health Podcast", scrolled to result for author screening.

8/20: Navigated to FDA home page (www.fda.gov)> Chose "Medical Devices" from "PRODUCTS WE REGULATE" heading> Chose "Medical Device Safety" from "NAVIGATE THE MEDICAL DEVICE SECTION"> Chose "Safety Communications" from LEFT nav bar> Chose "2021 Safety Communications" from LEFT nav bar> Scrolled to result; saved for author screening.

11/8: Browsing other resources on ECRI, saw this resource. Saved for author screening.

1/10/2022: Navigated to fda.gov> in "Products We Regulate," chose "Medical Devices."> From "Navigate the Medical Device Section" heading, chose "Digital Health Center of Excellence."> From LEFT nav bar, chose "Wireless Medical Devices"; saved resource for author review. (x2)

1/10/2022: Navigated to fda.gov> in "Products We Regulate," chose "Radiation-Emitting Products."> From "Radiation-Emitting Products" heading, chose "Radiation Safety."> From LEFT nav bar, chose "Electromagnetic Compatibility (EMC)".> From LEFT nav bar, chose "Radio Frequency Identification (RFID)"; saved resource for author review.

1/10/2022: Navigated to cdc.gov> Used "A-Z Index" on top right to find "Healthcare Infection Control Practices Advisory Committee (HICPAC)"> Chose "Guidance Documents"> Chose "Core Infection Prevention and Control Practices for Safe Healthcare Delivery in All Settings – Recommendations of the HICPAC (2017)"; saved for author review.

RESULTS

Studies that offer insights that can inform perioperative nursing practice in the area of product evaluation were included in this review. Studies that appeared to meet the inclusion criteria were excluded if they were of lower quality, provided no guidance, were duplicates of already-included studies, full text was not available in English, the results were not applicable or generalizable to the perioperative practice setting, were the wrong setting, or wrong population. A synthesis of the study results informed construction of practice recommendations and this synthesis is described briefly in the corresponding rationales that follow each practice recommendation. Additional information about each included study is found in the evidence table that corresponds to the published guideline.

REGISTRATION

PROSPERO Registration: CRD42021262448