

## Thoracic Surgery

### 1. MCG Criteria Used

#### Clinical Criteria: MCG Care Guidelines, 30th Edition

- Lobectomy, Lung, by Video-Assisted Thoracic Surgery (VATS) (MCG ORG: S-802 ISC, 30th Edition)
- Fundoplication and Hiatal Hernia Repair, Transthoracic (MCG ORG: S-550 ISC, 30th Edition)

#### Applicable CPT / HCPCS Codes:

| CPT / HCPCS Code | Description                                                                                                 |
|------------------|-------------------------------------------------------------------------------------------------------------|
| 32663            | Thoracoscopy, surgical, with lobectomy (single lobe)                                                        |
| 32666-32668      | Thoracoscopy, surgical, with wedge resection and additional resection, with or without diagnostic procedure |
| 32480-32482      | Removal of lung, by open approach, single lobe and two lobes (open lobectomy and bilobectomy)               |
| 43334, 43335     | Repair of paraesophageal hiatal hernia, transthoracic approach, with or without implantation of mesh        |
| 43328            | Esophagogastric fundoplasty, transthoracic approach                                                         |
| 43117, 43124     | Partial and total esophagectomy procedures with thoracic component, when applicable                         |

### 2. Statement of Rationale

Akido Labs uses the criteria in MCG Care Guidelines (30th Edition) to supplement the general Medicare criteria regarding thoracic surgical procedures, including lung lobectomy by video-assisted thoracic surgery and transthoracic fundoplication with hiatal hernia repair, where Medicare coverage criteria are not fully established or require additional clinical specificity. MCG criteria are used to ensure consistency in reviewing the conditions to be met for coverage of thoracic surgery and to determine when such services are medically necessary, including the appropriate level of care. Thoracic surgery in the Medicare Advantage population carries substantial perioperative risk, including respiratory failure, prolonged air leak, pneumonia, and cardiac complications, that is elevated in older adults with limited pulmonary reserve and cardiovascular comorbidity. The conditions treated, including lung cancer and symptomatic large hiatal hernia, carry their own serious natural history. Absent consistent, evidence-based criteria, there is material risk of both inappropriate denial of medically necessary surgery and inappropriate approval of an operation where the perioperative risk outweighs benefit or where a less invasive approach is appropriate.

#### Potential Clinical Harms:

**Lobectomy by VATS:** Inappropriate denial of lobectomy for a resectable early-stage lung cancer or other defined indication could permit progression of a curable malignancy to an advanced and

incurable stage. Conversely, inappropriate approval of lobectomy in a patient with inadequate pulmonary reserve to tolerate resection exposes the patient to postoperative respiratory failure and death without offsetting benefit, when sublobar resection, nonsurgical therapy, or surveillance would be appropriate.

**Transthoracic Fundoplication and Hiatal Hernia Repair:** Inappropriate denial of transthoracic hiatal hernia repair in a patient with a large or complicated paraesophageal hernia, such as one causing obstruction, strangulation, or refractory symptoms, could permit progression to a surgical emergency. Inappropriate approval of a transthoracic approach where an abdominal or laparoscopic approach is appropriate exposes the patient to the greater morbidity of thoracotomy without offsetting benefit.

### Clinical Benefits:

**Lobectomy by VATS:** MCG criteria define the indications for lung lobectomy, including resectable malignancy and other defined pulmonary pathology, and incorporate assessment of the patient's ability to tolerate resection, while supporting the minimally invasive VATS approach where appropriate to reduce perioperative morbidity. By tying resection to defined indications and physiologic fitness, these criteria directly mitigate both the harm of permitting a curable cancer to progress and the harm of operating on a patient who cannot tolerate resection, as identified above.

**Transthoracic Fundoplication and Hiatal Hernia Repair:** MCG criteria define the indications for transthoracic fundoplication and hiatal hernia repair, including large or complicated paraesophageal hernia and defined anatomic circumstances that favor a transthoracic approach, while recognizing alternatives. This evidence-based selection directly counters both the harm of allowing a complicated hernia to progress to emergency and the harm of an unnecessarily morbid surgical approach described above. The clinical benefits of using MCG Care Guidelines are highly likely to outweigh any clinical harms, including delayed or decreased access to services, because the criteria incorporate indication thresholds drawn from thoracic surgery specialty society guidance and are unlikely to lead to inappropriate denials.

## 3. Explanation of Supplementation

**Basis for Use:** Original Medicare clinical criteria are not fully established and require supplementation to ensure consistent medical necessity and level-of-care determinations for thoracic surgery. While Medicare statutes establish the general 'reasonable and necessary' standard, they do not specify the clinical thresholds (e.g., resectability and physiologic fitness for lobectomy, or the hernia characteristics and anatomic circumstances favoring a transthoracic approach) required to distinguish indicated from nonindicated thoracic procedures.

**Applicable Medicare References:** Social Security Act Section 1862(a)(1): 'Reasonable and necessary' standard Medicare Benefit Policy Manual, Chapter 1: Inpatient Hospital Services Covered Under Part A (CMS IOM Publication 100-02) Medicare Benefit Policy Manual, Chapter 6: Hospital Services Covered Under Part B (CMS IOM Publication 100-02) Medicare Program Integrity Manual, Chapter 6, Section 6.5 (CMS IOM Publication 100-08) Code of Federal Regulations: 42 CFR 412.3; 42 CFR 419.22; 42 CFR 422.101 Medicare Coverage Database: <https://www.cms.gov/medicare-coverage-database/search.aspx> For these thoracic procedures, no specific NCD or LCD fully establishes clinical intervention thresholds; Original Medicare criteria are not fully established, requiring supplementation. Within the above statutes and regulations, MCG criteria assist in determining the appropriateness of lobectomy based on resectability and physiologic fitness; the appropriate surgical approach, including the minimally invasive VATS technique; the appropriateness of transthoracic fundoplication and hiatal hernia repair based on

hernia characteristics; and the expected clinical course and necessity of inpatient care. Use of these criteria helps ensure thoracic procedures are not incorrectly denied when medically appropriate, nor incorrectly approved when not reasonable and necessary, and may decrease inappropriate denials by creating a consistent set of evidence-based review criteria.

## 4. Summary of Clinical Evidence

\*Note: The following evidence summary is derived directly from MCG Care Guidelines, 30th Edition (guidelines S-802 and S-550). The reference lists below are drawn from those respective MCG guidelines.\*

### Background

**Lobectomy, Lung, by VATS (MCG ORG: S-802 ISC)** Lung lobectomy is the resection of an anatomic lobe of the lung, performed most commonly for resectable lung cancer and also for defined benign conditions including bronchiectasis, severe pulmonary injury not treatable by other means, and bronchopulmonary malformation. The video-assisted thoracic surgery (VATS) approach is a minimally invasive technique associated with reduced perioperative morbidity relative to open thoracotomy in appropriately selected patients. Candidacy depends on resectability and the patient's pulmonary and physiologic reserve.

**Fundoplication and Hiatal Hernia Repair, Transthoracic (MCG ORG: S-550 ISC)** Transthoracic fundoplication and hiatal hernia repair addresses gastroesophageal reflux disease and hiatal hernia through a thoracic approach. It is reserved for circumstances in which a transthoracic approach is preferred, such as large or complicated paraesophageal hernia, prior failed abdominal repair, or associated esophageal pathology, with abdominal and laparoscopic approaches serving as alternatives in other circumstances.

### Evidence Summary

**Lobectomy, Lung, by VATS (MCG ORG: S-802 ISC)** This guideline (30th Edition) is supported by peer-reviewed articles and thoracic surgery specialty society guidance establishing the indications for lobectomy, the comparative perioperative outcomes of the VATS approach, and the importance of physiologic assessment of resectability.

**Fundoplication and Hiatal Hernia Repair, Transthoracic (MCG ORG: S-550 ISC)** This guideline (30th Edition) is supported by peer-reviewed articles and surgical specialty guidance establishing the indications for fundoplication and hiatal hernia repair and the circumstances that favor a transthoracic over an abdominal or laparoscopic approach.

**Rationale (from MCG)** Use of these MCG care guidelines helps the clinician identify patient-specific complex clinical factors that establish the medical necessity of thoracic surgery and the necessity of inpatient hospital care across the perioperative period. The evidence-based clinical criteria ensure patients receive the most appropriate care for their specific condition, reduce unnecessary risks, and provide a standard that can reduce disparities in care. These guidelines supplement but do not replace, modify, or supersede existing Medicare regulations or applicable NCDs or LCDs.

**Related CMS Coverage Guidance (as cited in MCG 30th Edition):** Code of Federal Regulations (CFR): 42 CFR 412.3; 42 CFR 419.22; 42 CFR 422.101; CMS IOM Publication 100-02, Medicare Benefit Policy Manual, Chapters 1 and 6; CMS IOM Publication 100-08, Medicare Program Integrity Manual, Chapter 6, Section 6.5; Medicare Coverage Database: <https://www.cms.gov/medicare-coverage-database/search.aspx>

## References with Citation Summary -- Lobectomy, Lung, by Video-Assisted Thoracic Surgery (VATS) (MCG ORG: S-802 ISC, 30th Edition)

1. Wald O, Izhar U, Sugarbaker DJ. Lung, chest wall, pleura and mediastinum. In: Townsend CM, Beauchamp RD, Evers BM, Mattox KL, editors. Sabiston Textbook of Care Surgery. 21st ed. Elsevier; 2022:1584-1640.e1. [ Context Link 1, 2, 3, 4, 5, 6, 7, 8, 9 ] Disease >Lobectomy, Lung, by Inpatient & Surgical > Optimal Recovery Guidelines > Thoracic Surgery and Pulmonary Video-Assisted (VATS) (S-802) thoracoscopic lobectomy for lung cancer. Annals of Thoracic Surgery 2019;107(2):603-609.
2. Berfield KS, Thoracic Farjah F, Surgery Mulligan MS. Video-assisted DOI: 10.1016/j.athoracsur.2018.07.088. [ Context Link 1, 2 ] View abstract...
3. Fairbairn K, Rice J, Worrell SG. Robotic lobectomy. Thoracic Surgery Clinics 2023;33(1):33-41. DOI: 10.1016/j.thorsurg.2022.07.011. [ Context Link 1 ] View abstract...
4. Ganti AKP, et al. Small Cell Lung Cancer. NCCN Clinical Practice Guidelines in Oncology [Internet] National Comprehensive Cancer Network (NCCN). v. 1.2026; 2025 Jul 25 Accessed at: <https://www.nccn.org/>. [accessed 2025 Aug 21] [ Context Link 1, 2, 3, 4, 5 ]
5. Riely GJ, et al. Non-Small Cell Lung Cancer. NCCN Clinical Practice Guidelines in Oncology [Internet] National Comprehensive Cancer Network (NCCN). v. 8.2025; 2025 Aug 15 Accessed at: <https://www.nccn.org/>. [accessed 2025 Aug 21] [ Context Link 1, 2, 3, 4, 5, 6, 7 ]
6. Handy JR, et al. Expert consensus document on pulmonary metastasectomy. Annals of Thoracic Surgery 2019;107(2):631-649. DOI: 10.1016/j.athoracsur.2018.10.028. [ Context Link 1, 2, 3, 4 ] View abstract...
7. Gould MK, et al. Evaluation of individuals with pulmonary nodules: when is it lung cancer?: diagnosis and management of lung cancer, 3rd ed: American College of Chest Physicians evidence-based clinical practice guidelines. Chest 2013;143(5 Suppl):e93S-e120S. DOI: 10.1378/chest.122351. (Reaffirmed 2025 Jun) [ Context Link 1, 2, 3, 4 ] View abstract...
8. Bergsland E, et al. Neuroendocrine and Adrenal Tumors. NCCN Clinical Practice Guidelines in Oncology [Internet] National Comprehensive Cancer Network (NCCN). v. 2.2025; 2025 May 28 Accessed at: <https://www.nccn.org/>. [accessed 2025 Jun 04] [ Context Link 1, 2, 3, 4, 5 ]
9. Davidson K, Shojae S. Managing massive hemoptysis. Chest 2020;157(7):77-88. DOI: 10.1016/j.chest.2019.07.012. [ Context Link 1, 2, 3 ] View abstract...
10. Nahid P, et al. Treatment of drug-resistant tuberculosis. an official ATS/CDC/ERS/IDSA clinical practice guideline. American Journal of Respiratory and Critical Care Medicine 2019;200(10):e93-e142. DOI: 10.1164/rccm.201909-1874ST. (Reaffirmed 2025 Jul) [ Context Link 1, 2 ] View abstract...
11. Yablonskii PK, Kudriashov GG, Avetisyan AO. Surgical resection in the treatment of pulmonary tuberculosis. Thoracic Surgery Clinics 2019;29(1):37-46. DOI: 10.1016/j.thorsurg.2018.09.003. [ Context Link 1, 2 ] View abstract...
12. Daley CL, et al. Treatment of nontuberculous mycobacterial pulmonary disease: an official ATS/ERS/ESCMID/IDSA clinical practice guideline. Clinical Infectious Diseases 2020;71(4):905-913. DOI: 10.1093/cid/ciaa1125. (Reaffirmed 2025 May) [ Context Link 1, 2 ] View abstract...
13. Chang AB, et al. European Respiratory Society guidelines for the management of children and adolescents with bronchiectasis. European Respiratory Journal 2021;58(2):2002990. DOI: 10.1183/13993003.02990-2020. [ Context Link 1, 2, 3, 4 ] View abstract...
14. Hill AT, et al. British Thoracic Society Guideline for bronchiectasis in adults. Thorax 2019;74(Suppl 1):1-69. DOI: 10.1136/thoraxjnl-2018-212463. (Reaffirmed 2025 Jun) [ Context Link 1, 2, 3 ] View abstract...
15. Asensio JA, et al. Operative management of pulmonary injuries: Lung-sparing and formal resections. In: Asensio JA, Meredith JW, editors. Current Therapy of Trauma and Surgical Critical Care. 3rd ed. Elsevier; 2023:262-283.e2. [ Context Link 1, 2, 3, 4 ]
16. Clark RA, Perez EA, Chung DH, Pandya SR. Predictive factors and outcomes for successful thoracoscopic lung resection in pediatric patients. Journal of the American College of Surgeons 2021;232(4):551-558. DOI: 10.1016/j.jamcollsurg.2020.12.013. [ Context Link 1 ] View abstract...
17. Drawbert HE, Hey MT, Tarrazzi F, Block M, Razi SS. Early discharge on postoperative day 1 following lobectomy for stage I non-small-cell lung cancer is safe in high-volume surgical centres: a national cancer database analysis. European Journal of Cardio-Thoracic Surgery 2021;Online. DOI: 10.1093/ejcts/ezab490. [ Context Link 1 ] View abstract...

18. Verma A, et al. The presence of cost-volume relationship in robotic-assisted thoracoscopic lung resections. *Annals of Surgery* 2023;278(2):e377e381. DOI: 10.1097/SLA.0000000000005699. [ Context Link 1, 2, 3 ] View abstract...
19. Benson AB III, et al. Colon Cancer. NCCN Clinical Practice Guidelines in Oncology [Internet] National Comprehensive Cancer Network (NCCN). v. 4.2025; 2025 Jun 27 Accessed at: <https://www.nccn.org/>. [accessed 2025 Jul 11] [ Context Link 1, 2 ]
20. Sudarshan M, Murthy SC. Current indications for pulmonary metastasectomy. *Surgical Oncology Clinics of North America* 2020;29(4):673-683. DOI: 10.1016/j.soc.2020.06.007. [ Context Link 1 ] View abstract...
21. Kanzaki R, et al. Preoperative evaluation and indications for pulmonary metastasectomy. *Journal of Thoracic Disease* 2021;13(4):2590-2602. DOI: 10.21037/jtd-19-3791. [ Context Link 1 ] View abstract...
22. Karpelowksy J, Seitz G. A surgical approach to pulmonary metastasis in children. *Surgical Oncology Clinics of North America* 2021;30(2):389-399. DOI: 10.1016/j.soc.2020.11.007. [ Context Link 1 ] View abstract...
23. Wood DE, et al. Lung Cancer Screening. NCCN Clinical Practice Guidelines in Oncology [Internet] National Comprehensive Cancer Network (NCCN). v. 1.2025; 2024 Oct 14 Accessed at: <https://www.nccn.org/>. [accessed 2024 Oct 15] [ Context Link 1, 2, 3 ]
24. Wolin EM. Advances in the diagnosis and management of well-differentiated and intermediate-differentiated neuroendocrine tumors of the lung. *Chest* 2017;151(5):1141-1146. DOI: 10.1016/j.chest.2016.06.018. [ Context Link 1 ] View abstract...
25. Zobel M, Gologorsky R, Lee H, Vu L. Congenital lung lesions. *Seminars in Pediatric Surgery* 2019;28(4):Online. DOI: 10.1053/j.sempedsurg.2019.07.004. [ Context Link 1 ] View abstract...
26. Altorki N, et al. Lobar or sublobar resection for peripheral stage IA non-small-cell lung cancer. *New England Journal of Medicine* 2023;388(6):489498. DOI: 10.1056/NEJMoa2212083. [ Context Link 1 ] View abstract...
27. Saji H, et al. Segmentectomy versus lobectomy in small-sized peripheral non-small-cell lung cancer (JCOG0802/WJOG4607L): a multicentre, open-label, phase 3, randomised, controlled, non-inferiority trial. *Lancet* 2022;399(10335):1607-1617. DOI: 10.1016/S0140-6736(21)02333-3. [ Context Link 1 ] View abstract... <https://careweb.careguidelines.com/ed30/isc/0555410a.htm> 8/12 6/29/26, 2:16 PM ISC - Lobectomy, Lung, by Video-Assisted Thoracic Surgery (VATS)
28. Chen H, et al. The 2023 American Association for Thoracic Surgery (AATS) expert consensus document: management of subsolid lung nodules. *Journal Thoracic and Cardiovascular Surgery* 2024;168(3):631-647.e11. DOI:Surgery 10.1016/j.jtcvs.2024.02.026. Context Link 1, 2 ] ViewLung, by Inpatient &ofSurgical Care > Optimal Recovery Guidelines > Thoracic and Pulmonary [Disease >Lobectomy, abstract...Thoracic Surgery (VATS) (S-802) Video-Assisted
29. Suzuki K. Extended sleeve resection for lung cancer. *Thoracic Surgery Clinics* 2018;28(3):291-297. DOI: 10.1016/j.thorsurg.2018.03.004. [ Context Link 1 ] View abstract...
30. Beauchamp G. Fundamentals of Standard Sleeve Resection. *Thoracic Surgery Clinics* 2018;28(3):285-289. DOI: 10.1016/j.thorsurg.2018.03.003. [ Context Link 1 ] View abstract...
31. Park HS, et al. A guide for managing patients with stage I NSCLC: deciding between lobectomy, segmentectomy, wedge, SBRT and ablation-part 4: systematic review of evidence involving SBRT and ablation. *Journal of Thoracic Disease* 2022;14(6):2412-2436. DOI: 10.21037/jtd-21-1826. [ Context Link 1 ] View abstract...
32. Daly ME, Beagen P, Madani MH. Nonsurgical therapy for early-stage lung cancer. *Hematology/Oncology Clinics of North America* 2023;37(3):499512. DOI: 10.1016/j.hoc.2023.02.002. [ Context Link 1, 2 ] View abstract...
33. White AC Jr, Weller PF. Cestode infections. In: Loscalzo J, Fauci A, Kasper D, Hauser S, Longo D, Jameson JL, editors. *Harrison's Principles of Internal Medicine*. 21st ed. McGraw Hill Education; 2022:1790-1796. [ Context Link 1 ]
34. Walling AM, et al. Palliative Care. NCCN Clinical Practice Guidelines in Oncology [Internet] National Comprehensive Cancer Network (NCCN). v.2.2025; 2025 Mar 31 Accessed at: <https://www.nccn.org/>. [accessed 2025 Apr 29] [ Context Link 1 ]
35. Kent MS, et al. The Society of Thoracic Surgeons expert consensus document on the management of pleural drains after pulmonary lobectomy: expert consensus document. *Annals of Thoracic*

- Surgery 2024;118(4):764-777. DOI: 10.1016/j.athoracsur.2024.04.016. [ Context Link 1, 2, 3, 4, 5 ] View abstract...
36. Batchelor TJP, et al. Guidelines for enhanced recovery after lung surgery: recommendations of the enhanced recovery after surgery (ERAS®) Society and the European Society of Thoracic Surgeons (ESTS). *European Journal of Cardio-Thoracic Surgery* 2019;55(1):91-115. DOI: 10.1093/ejcts/ezy301. (Reaffirmed 2025 Jul) [ Context Link 1, 2 ] View abstract...
37. Feray S, Lubach J, Joshi GP, Bonnet F, Van de Velde M, PROSPECT Working Group \*of the European Society of Regional Anaesthesia and Pain Therapy. PROSPECT guidelines for video-assisted thoracoscopic surgery: a systematic review and procedure-specific postoperative pain management recommendations. *Anaesthesia* 2022;77(3):311-325. DOI: 10.1111/anae.15609. [ Context Link 1 ] View abstract...
38. Alwatari Y, et al. Trends of utilization and perioperative outcomes of robotic and video-assisted thoracoscopic surgery in patients with lung cancer undergoing minimally invasive resection in the United States. *JTCVS Open* 2022;12:385-398. DOI: 10.1016/j.xjon.2022.07.014. [ Context Link 1, 2 ] View abstract...
39. Tupper HI, et al. Video-Assisted vs robotic-assisted lung lobectomies for operating room resource utilization and patient outcomes. *JAMA Network Open* 2024;7(5):e248881. DOI: 10.1001/jamanetworkopen.2024.8881. [ Context Link 1, 2 ] View abstract...
40. Clermidi P, et al. Fast track pediatric thoracic surgery: Toward day-case surgery? *Journal of Pediatric Surgery* 2017;52(11):1800-1805. DOI: 10.1016/j.jpedsurg.2017.02.005. [ Context Link 1, 2 ] View abstract...
41. Premier PINC AI™ Healthcare Database (PHD), 01/01/2023-12/31/2024. Premier, Inc. [ Context Link 1, 2, 3 ]
42. Dyas AR, et al. Anatomic lung resection outcomes after implementation of a universal thoracic ERAS protocol across a diverse health care system. *Annals of Surgery* 2024;279(6):1062-1069. DOI: 10.1097/SLA.0000000000006243. [ Context Link 1 ] View abstract...
43. Brown LM, et al. Readmission after lobectomy for lung cancer: not all complications contribute equally. *Annals of Surgery* 2021;274(1):e70-e79. DOI: 10.1097/SLA.0000000000003561. [ Context Link 1 ] View abstract...
44. Fiorelli A, Forte S, Santini M, Petersen RH, Fang W. Did conversion to thoracotomy during thoracoscopic lobectomy increase post-operative complications and prejudice survival? Results of best evidence topic analysis. *Thoracic Cancer* 2022;13(15):2085-2099. DOI: 10.1111/17597714.14525. [ Context Link 1 ] View abstract...
45. Kreso A, Mathisen DJ. Management of air leaks and residual spaces following lung resection. *Thoracic Surgery Clinics* 2021;31(3):265-271. DOI: 10.1016/j.thorsurg.2021.04.005. [ Context Link 1, 2, 3 ] View abstract...
46. Attaar A, Luketich JD, Schuchert MJ, Winger DG, Sarkaria IS, Nason KS. Prolonged air leak after pulmonary resection increases risk of noncardiac complications, readmission, and delayed hospital discharge: a propensity score-adjusted analysis. *Annals of Surgery* 2021;273(1):163172. DOI: 10.1097/SLA.0000000000003191. [ Context Link 1, 2, 3 ] View abstract...
47. Geraci TC, McCormack AJ, Cerfolio RJ. Discharging patients home with a chest tube and digital system after robotic lung resection. *Annals of Thoracic Surgery* 2024;118(4):811-816. DOI: 10.1016/j.athoracsur.2024.05.004. [ Context Link 1 ] View abstract...
48. Chopra A, Doelken P, Hu K, Huggins JT, Judson MA. Pressure-dependent pneumothorax and air leak: physiology and clinical implications. *Chest* 2023;164(3):796-805. DOI: 10.1016/j.chest.2023.04.049. [ Context Link 1, 2 ] View abstract...
49. Zoeller C, Ure BM, Dingemann J. Perioperative complications of video-assisted thoracoscopic pulmonary procedures in neonates and infants. *European Journal of Pediatric Surgery* 2018;28(2):163-170. DOI: 10.1055/s-0038-1636917. [ Context Link 1 ] View abstract...
50. Thorpe A, Rodrigues J, Kavanagh J, Batchelor T, Lyen S. Postoperative complications of pulmonary resection. *Clinical Radiology* 2020;75(11):876.e1-876.e15. DOI: 10.1016/j.crad.2020.05.006. [ Context Link 1, 2, 3 ] View abstract...
51. Bhatnagar M, Fisher A, Ramsaroop S, Carter A, Pippard B. Chylothorax: pathophysiology, diagnosis, and management-a comprehensive review. *Journal of Thoracic Disease* 2024;16(2):1645-1661. DOI: 10.21037/jtd-23-1636. [ Context Link 1 ] View abstract...

52. Cao C, et al. Outcomes of major complications after robotic anatomic pulmonary resection. *Journal of Thoracic and Cardiovascular Surgery* 2020;159(2):681-686. DOI: 10.1016/j.jtcvs.2019.08.057. [ Context Link 1, 2, 3 ] View abstract...
53. Toste PA, Revels SL. Management of complications following lung resection. *Surgical Clinics of North America* 2021;101(5):911-923. DOI: 10.1016/j.suc.2021.06.013. [ Context Link 1, 2, 3, 4 ] View abstract... <https://careweb.careguidelines.com/ed30/isc/0555410a.htm> 9/12 6/29/26, 2:16 PM ISC - Lobectomy, Lung, by Video-Assisted Thoracic Surgery (VATS)
54. Hadaya J, et al. Impact of hospital volume on outcomes of elective pneumonectomy in the United States. *Annals of Thoracic Surgery* 2020;110(6):1874-1881. 10.1016/j.athoracsur.2020.04.115. Link Surgery 1 ] View abstract... Inpatient & Surgical CareDOI: > Optimal Recovery Guidelines[ >Context Thoracic and Pulmonary Disease >Lobectomy, Lung, by Video-Assisted Surgery (VATS) (S-802)
55. Verma A, etThoracic al. Hospital variation in the development of respiratory failure after pulmonary lobectomy: A national analysis. *Surgery* 2022;172(1):379-384. DOI: 10.1016/j.surg.2022.03.022. [ Context Link 1, 2 ] View abstract...
56. Hudson T. The role of social determinates of health in discharge practices. *Nursing Clinics of North America* 2021;56(3):369-378. DOI: 10.1016/j.cnur.2021.04.004. [ Context Link 1 ] View abstract...
57. Chovanec KA, Arsene C, Beck A, Zachrich K, Liedel B, Wolff-Elliott J. Association of discharge disposition with outcomes. *Population Health Management* 2021;24(1):116-121. DOI: 10.1089/pop.2019.0176. [ Context Link 1 ] View abstract...
58. Admitting, transfer, and discharge. In: Perry AG, Potter PA, Ostendorf WR, Laplante N, editors. *Clinical Nursing Skills and Techniques*. 11th ed. Elsevier; 2025:40-51. [ Context Link 1 ]
59. Centers for Medicare and Medicaid Services. "Condition of participation: Discharge planning." 42 CFR Pt. 482.43 Washington, DC 2025 Jan 01 [accessed 2025 Jul 22] Accessed at: <https://www.ecfr.gov/>. [ Context Link 1, 2, 3 ]
60. Cancer care plans. In: Gulanick M, Myers JL, Bowman-Woodall C, editors. *Nursing Care Plans*. 11th ed. Elsevier; 2025:641-760. [ Context Link 1, 2 ]
61. Adverse drug reactions and medication errors. In: Burchum JR, Rosenthal LD, editors. *Lehne's Pharmacology for Nursing Care*. 12th ed. Elsevier; 2025:64-75. [ Context Link 1, 2 ]
62. Targeted care planning and care transitions. In: Perez R, editor. *CMSA's Integrated Case Management*. 2nd ed. Springer Publishing Company LLC; 2023:178-189. [ Context Link 1, 2 ]
63. Communication and collaboration. In: Perry AG, Potter PA, Ostendorf WR, Laplante N, editors. *Clinical Nursing Skills and Techniques*. 11th ed. Elsevier; 2025:17-39. [ Context Link 1, 2 ]
64. Elements of Excellence in Transitions of Care (TOC). TOC Checklist [Internet] National Transitions of Care Coalition. 2006 Accessed at: <https://www.ntocc.org>. [accessed 2025 Sep 16] [ Context Link 1 ]
65. Medical-surgical nursing. In: Hinkle JL, Cheever KH, Overbaugh KJ, editors. *Brunner & Suddarth's Textbook of Medical-Surgical Nursing*. 15th ed. Wolters Kluwer; 2022:33-55. [ Context Link 1 ]
66. Transition of care. In: Gillingham DC, editor. *Foundations of Case Management*. Blue Bayou Press; 2021:137-144. [ Context Link 1 ]
67. Becker C, et al. Interventions to improve communication at hospital discharge and rates of readmission: a systematic review and meta-analysis. *JAMA Network Open* 2021;4(8):e2119346. DOI: 10.1001/jamanetworkopen.2021.19346. [ Context Link 1 ] View abstract...
68. The nursing process in drug therapy and patient safety. In: Tucker RG, editor. *Karch's Focus on Nursing Pharmacology*. 9th ed. Wolters Kluwer; 2023:47-57. [ Context Link 1 ]
69. Safe medication preparation. In: Perry AG, Potter PA, Ostendorf WR, Laplante N, editors. *Clinical Nursing Skills and Techniques*. 11th ed. Elsevier; 2025:586-607. [ Context Link 1 ]
70. The case manager's roles, functions, and activities. In: Gillingham DC, editor. *Foundations of Case Management*. Blue Bayou Press; 2021:9-14. [ Context Link 1 ]
71. Anderson TS, Ayanian JZ, Herzig SJ, Souza J, Landon BE. Gaps in primary care follow-up after hospital discharge among Medicare beneficiaries. *Journal of the American Geriatrics Society* 2025;DOI: 10.1111/jgs.19496. [ Context Link 1 ] View abstract...
72. Hernandez-Vaquero D, et al. Survival after thoracoscopic surgery or open lobectomy: systematic review and meta-analysis. *Annals of Thoracic Surgery* 2021;111(1):302-313. DOI: 10.1016/j.athoracsur.2020.05.144. [ Context Link 1 ] View abstract...

73. Harding MM. Substance use disorders in acute care. In: Harding MM, Kwong J, Hagler D, Reinisch C, editors. *Lewis's Medical-Surgical Nursing: Assessment and Management of Clinical Problems*. 12th ed. St. Louis, MO: Mosby; 2023:162-178. [ Context Link 1 ]
74. Management of patients with dermatologic disorders. In: Hinkle JL, Cheever KH, Overbaugh KJ, editors. *Brunner & Suddarth's Textbook of Medical-Surgical Nursing*. 15th ed. Wolters Kluwer; 2022:1815-1864. [ Context Link 1 ]
75. Centers for Medicare and Medicaid Services. "Admissions." 42 CFR 412.3 Washington, DC 2025 Jul [accessed 2025 Jul 22] Accessed at: <https://www.ecfr.gov/current/title-42/chapter-IV/subchapter-B/part-412>. [ Context Link 1 ]
76. Centers for Medicare and Medicaid Services. "Hospital services excluded from payment under the hospital outpatient prospective payment system." 42 CFR 419.22 Washington, DC 2023 Jul [accessed 2025 Jul 22] Accessed at: <https://www.ecfr.gov/>. [ Context Link 1 ]
77. Centers for Medicare and Medicaid Services. "Requirements relating to basic benefits." 42 CFR 422.101 Washington, DC 2025 Jun 03 [accessed 2025 Jul 23] Accessed at: <https://www.ecfr.gov/>. [ Context Link 1 ]
78. Centers for Medicare and Medicaid Services. Medicare Benefit Policy Manual. Chapter 1 - Inpatient Hospital Services Covered Under Part A Rev. 10892 [Internet] Centers for Medicare and Medicaid Services. 2021 Aug Accessed at: <https://www.cms.gov/manuals/>. [accessed 2025 Sep 09] [ Context Link 1 ]
79. Centers for Medicare and Medicaid Services. Medicare Benefit Policy Manual. Chapter 6 - Hospital Services Covered Under Part B Rev. 12425 [Internet] Centers for Medicare and Medicaid Services. 2023 Dec Accessed at: <http://www.cms.gov/manuals/>. [accessed 2025 Sep 09] [ Context Link 1 ]
80. Centers for Medicare and Medicaid Services. Medicare Benefit Policy Manual. Chapter 15 - Covered Medical and Other Health Services Rev. 13108 [Internet] Centers for Medicare and Medicaid Services. 2025 Apr 11 Accessed at: <https://www.cms.gov/manuals/>. [accessed 2025 Sep 09] [ Context Link 1 ]
81. Centers for Medicare and Medicaid Services. Medicare Program Integrity Manual. Chapter 6, Section 6.5 - Medical Review of Inpatient Hospital Claims for Part A Payment Rev. 10365 [Internet] Centers for Medicare and Medicaid Services. 2020 Oct 02 Accessed at: <https://www.cms.gov/medicare/regulations-guidance/manuals/internet-only-manuals-ioms>. [accessed 2025 Sep 09] [ Context Link 1 ]  
<https://careweb.careguidelines.com/ed30/isc/0555410a.htm> 10/12 6/29/26, 2:16 PM ISC - Lobectomy, Lung, by Video-Assisted Thoracic Surgery (VATS)
82. Medicare Coverage Database. [Internet] Centers for Medicare and Medicaid Services. Accessed at: <https://www.cms.gov/medicare-coverage-database/search.aspx?> Updated 2025 [accessed 2025 Oct 23] [ Context Link 1Surgery ] Inpatient & Surgical Care > Optimal Recovery Guidelines > Thoracic and Pulmonary Disease > Lobectomy, Lung, by Video-Assisted Thoracic Surgery (VATS) (S-802)

## References with Citation Summary -- Fundoplication and Hiatal Hernia Repair, Transthoracic (MCG ORG: S-550 ISC, 30th Edition)

1. Yates RB, Oelschlager BK. Gastroesophageal reflux disease and hiatal hernia. In: Townsend CM, Beauchamp RD, Evers BM, Mattox KL, editors. *Sabiston Textbook of Surgery*. 21st ed. Elsevier; 2022:1056-1078.e1. [ Context Link 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 ]
2. McKinley SK, et al. Surgical Treatment of GERD: Systematic Review and Meta-Analysis. [Internet] Society of American Gastrointestinal and Endoscopic Surgeons. 2020 Nov Accessed at: <https://www.sages.org/>. [created 2001; accessed 2025 Sep 17] [ Context Link 1, 2 ]
3. Hanna NM, et al. Management of Symptomatic, Asymptomatic, and Recurrent Hiatal Hernia: A Systematic Review and Meta-Analysis. [Internet] Society of American Gastrointestinal and Endoscopic Surgeons SAGES. 2024 Jan Accessed at: <https://www.sages.org/publications/guidelines/>. [accessed 2025 Sep 17] [ Context Link 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 ]
4. Reinersman JM, Deb SJ. Transthoracic paraesophageal hernia repair. *Thoracic Surgery Clinics* 2019;29(4):437-446. DOI: 10.1016/j.thorsurg.2019.07.001. [ Context Link 1 ] View abstract...
5. Slater BJ, et al. SAGES guidelines for the surgical treatment of gastroesophageal reflux (GERD). *Surgical Endoscopy* 2021;35(9):4903-4917. DOI: 10.1007/s00464-021-08625-5. [ Context Link 1, 2, 3, 4 ] View abstract...

6. Watson AC, Watson DI. Antireflux surgeries and hiatal repair: keys to success. *Expert Review of Gastroenterology & Hepatology* 2025;19(2):181-195. DOI: 10.1080/17474124.2025.2464039. [ Context Link 1, 2 ] View abstract...
7. Randle RJ, Liou DZ, Lui NS. Management of paraesophageal hernias. *Thoracic Surgery Clinics* 2024;34(2):163-170. DOI: 10.1016/j.thorsurg.2024.01.005. [ Context Link 1 ] View abstract...
8. Zerbib F, et al. ESNM/ANMS consensus paper: Diagnosis and management of refractory gastro-esophageal reflux disease. *Neurogastroenterology and Motility* 2021;33(4):e14075. DOI: 10.1111/nmo.14075. [ Context Link 1, 2, 3 ] View abstract...
9. ASGE Standards of Practice Committee, et al. American Society for Gastrointestinal Endoscopy guideline on the diagnosis and management of GERD: summary and recommendations. *Gastrointestinal Endoscopy* 2025;101(2):267-284. DOI: 10.1016/j.gie.2024.10.008. [ Context Link 1, 2, 3, 4, 5 ] View abstract...
10. Mazer L, Telem DA. Paraesophageal hernia: current management. *Advances in Surgery* 2021;55:109-122. DOI: 10.1016/j.yasu.2021.05.008. [ Context Link 1, 2, 3, 4, 5, 6, 7 ] View abstract...
11. Nizam W, Khan H, Brock MV. Esophagus. In: Cameron JL, Cameron AM, editors. *Current Surgical Therapy*. 14th ed. Philadelphia, PA: Elsevier; 2023:3-80. [ Context Link 1 ]
12. Markar SR, et al. EAES Multidisciplinary Rapid Guideline: systematic review, meta-analysis, GRADE assessment and evidence-informed recommendations on the surgical management of paraesophageal hernias. *Surgical Endoscopy* 2023;37(12):9013-9029. DOI: 10.1007/s00464023-10511-1. [ Context Link 1, 2, 3, 4, 5 ] View abstract...
13. Daly S, et al. SAGES guidelines for the surgical treatment of hiatal hernias. *Surgical Endoscopy* 2024;38(9):4765-4775. DOI: 10.1007/s00464024-11092-3. [ Context Link 1, 2, 3, 4, 5 ] View abstract...
14. Amer MA, Smith MD, Khoo CH, Herbison GP, McCall JL. Network meta-analysis of surgical management of gastro-oesophageal reflux disease in adults. *British Journal of Surgery* 2018;105(11):1398-1407. DOI: 10.1002/bjs.10924. [ Context Link 1 ] View abstract...
15. Lee Y, et al. Long-term outcomes following Dor, Toupet, and Nissen fundoplication: a network meta-analysis of randomized controlled trials. *Surgical Endoscopy* 2023;37(7):5052-5064. DOI: 10.1007/s00464-023-10151-5. [ Context Link 1 ] View abstract...
16. Schlottmann F, Strassle PD, Patti MG. Antireflux surgery in the USA: influence of surgical volume on perioperative outcomes and costs-time for centralization? *World Journal of Surgery* 2018;42(7):2183-2189. DOI: 10.1007/s00268-017-4429-1. [ Context Link 1 ] View abstract...
17. Pauwels A, et al. How to select patients for antireflux surgery? The ICARUS guidelines (international consensus regarding preoperative examinations and clinical characteristics assessment to select adult patients for antireflux surgery). *Gut* 2019;68(11):1928-1941. DOI: 10.1136/gutjnl-2019-318260. [ Context Link 1 ] View abstract...
18. Katz PO, Dunbar KB, Schnoll-Sussman FH, Greer KB, Yadlapati R, Spechler SJ. ACG clinical guideline for the diagnosis and management of gastroesophageal reflux disease. *American Journal of Gastroenterology* 2022;117(1):27-56. DOI: 10.14309/ajg.0000000000001538. (Reaffirmed 2025 Nov) [ Context Link 1, 2, 3, 4, 5 ] View abstract...
19. Sharma P, Shaheen NJ, Katzka D, Bergman JJGHM. AGA clinical practice update on endoscopic treatment of Barrett's Esophagus with dysplasia and/or early cancer: expert review. *Gastroenterology* 2020;158(3):760-769. DOI: 10.1053/j.gastro.2019.09.051. [ Context Link 1, 2, 3 ] View abstract...
20. American Gastroenterological Association, Spechler SJ, Sharma P, Souza RF, Inadomi JM, Shaheen NJ. American Gastroenterological Association medical position statement on the management of Barrett's esophagus. *Gastroenterology* 2011;140(3):1084-1091. DOI: 10.1053/j.gastro.2011.01.030. (Reaffirmed 2025 Jun) [ Context Link 1, 2 ] View abstract...
21. Fedorova E, Watson TJ. Antireflux and endoscopic therapies for Barrett esophagus and superficial esophageal neoplasia. *Surgical Clinics of North America* 2021;101(3):391-403. DOI: 10.1016/j.suc.2021.03.002. [ Context Link 1 ] View abstract...  
https://careweb.careguidelines.com/ed30/isc/1406400a.htm 7/10 6/29/26, 2:16 PM ISC - Fundoplication and Hiatal Hernia Repair, Transthoracic
22. Zaninotto G, et al. The 2018 ISDE achalasia guidelines. *Diseases of the Esophagus* 2018;31(9):doy071. DOI: 10.1093/dote/doy071. [ Context Link 1& ] View abstract... Inpatient

- Surgical Care > Optimal Recovery Guidelines > General Surgery > Fundoplication and Hiatal Hernia Repair, Transthoracic
23. Kohn GP, (S-550) et al. SAGES guidelines for the use of peroral endoscopic myotomy (POEM) for the treatment of achalasia. *Surgical Endoscopy* 2021;35(5):1931-1948. DOI: 10.1007/s00464-020-08282-0. (Reaffirmed 2025 Jul) [ Context Link 1, 2 ] View abstract...
  24. Hugova K, et al. Per-oral endoscopic myotomy versus laparoscopic Heller's myotomy plus Dor fundoplication in patients with idiopathic achalasia: 5-year follow-up of a multicentre, randomised, open-label, non-inferiority trial. *Lancet. Gastroenterology & Hepatology* 2025;10(5):431-441. DOI: 10.1016/S2468-1253(25)00012-3. [ Context Link 1, 2 ] View abstract...
  25. Crawford C, Cook M, Selzer D, Iliakova M, Brengman M, American Society for Metabolic and Bariatric Surgery Insurance Committee. American Society for Metabolic and Bariatric Surgery position statement on describing and coding paraesophageal hernia repair with concurrent bariatric surgery. *Surgery for Obesity and Related Diseases* 2024;20(9):795-797. DOI: 10.1016/j.soard.2024.05.019. [ Context Link 1 ] View abstract...
  26. Munie S, Nasser H, Gould JC. Salvage options for fundoplication failure. *Current Gastroenterology Reports* 2019;21(9):41. DOI: 10.1007/s11894019-0709-2. [ Context Link 1, 2 ] View abstract...
  27. Witek TD, Luketich JD, Pennathur A, Awais O. Management of recurrent paraesophageal hernia. *Thoracic Surgery Clinics* 2019;29(4):427-436. DOI: 10.1016/j.thorsurg.2019.07.011. [ Context Link 1, 2 ] View abstract...
  28. Zhang D, et al. Analysis of outcomes of reoperative fundoplication in more than 500 patients after failed primary antireflux surgery: Experience over two decades. *Journal of Thoracic and Cardiovascular Surgery* 2025;DOI: 10.1016/j.jtcvs.2025.06.024. [ Context Link 1 ] View abstract...
  29. Maret-Ouda J, Markar SR, Lagergren J. Gastroesophageal reflux disease: a review. *Journal of the American Medical Association* 2020;324(24):2536-2547. DOI: 10.1001/jama.2020.21360. [ Context Link 1, 2 ] View abstract...
  30. Fass R. Gastroesophageal reflux disease. *New England Journal of Medicine* 2022;387(13):1207-1216. DOI: 10.1056/NEJMc2114026. [ Context Link 1, 2 ] View abstract...
  31. Chervu N, et al. Contemporary association of preoperative malnutrition and outcomes of hiatal hernia repairs in the United States. *Surgery* 2023;174(2):301-306. DOI: 10.1016/j.surg.2023.04.013. [ Context Link 1, 2, 3 ] View abstract...
  32. Wong LY, Parsons N, David EA, Burfeind W, Berry MF. The impact of age and need for emergent surgery in paraesophageal hernia repair outcomes. *Annals of Thoracic Surgery* 2023;116(1):138-145. DOI: 10.1016/j.athoracsur.2023.01.017. [ Context Link 1, 2, 3, 4 ] View abstract...
  33. Oor JE, Roks DJ, Broeders JA, Hazebroek EJ, Gooszen HG. Seventeen-year outcome of a randomized clinical trial comparing laparoscopic and conventional Nissen fundoplication: a plea for patient counseling and clarification. *Annals of Surgery* 2017;266(1):23-28. DOI: 10.1097/SLA.0000000000002106. [ Context Link 1 ] View abstract...
  34. Yadlapati R, Gyawali CP, Pandolfino JE. Personalized approach to the evaluation and management of gastroesophageal reflux disease. *Clinical Gastroenterology and Hepatology* 2022;Online. DOI: 10.1016/j.cgh.2022.01.025. [ Context Link 1 ] View abstract...
  35. Slater BJ, et al. Multi-society consensus conference and guideline on the treatment of gastroesophageal reflux disease (GERD). *Surgical Endoscopy* 2023;37(2):781-806. DOI: 10.1007/s00464-022-09817-3. [ Context Link 1 ] View abstract...
  36. Alimi Y, Azagury DE. Gastroesophageal reflux disease and the patient with obesity. *Gastroenterology Clinics of North America* 2021;50(4):859-870. DOI: 10.1016/j.gtc.2021.08.010. [ Context Link 1 ] View abstract...
  37. Proprietary health insurance data sources (2023-2024); and Medicare 5% Standard Analytical File (2022-2023). [ Context Link 1, 2 ]
  38. Premier PINC AI™ Healthcare Database (PHD), 01/01/2023-12/31/2024. Premier, Inc. [ Context Link 1 ]
  39. Imai TA, Soukiasian HJ. Management of complications in paraesophageal hernia repair. *Thoracic Surgery Clinics* 2019;29(4):351-358. DOI: 10.1016/j.thorsurg.2019.07.009. [ Context Link 1 ] View abstract...
  40. Corbett JM, Eriksson SE, Sarici IS, Jobe BA, Ayazi S. Complications after paraesophageal hernia repair. *Thoracic Surgery Clinics* 2024;34(4):355-369. DOI: 10.1016/j.thorsurg.2024.06.002. [ Context Link 1, 2 ] View abstract...

41. Hudson T. The role of social determinates of health in discharge practices. *Nursing Clinics of North America* 2021;56(3):369-378. DOI: 10.1016/j.cnur.2021.04.004. [ Context Link 1 ] View abstract...
42. Chovanec KA, Arsene C, Beck A, Zachrich K, Liedel B, Wolff-Elliott J. Association of discharge disposition with outcomes. *Population Health Management* 2021;24(1):116-121. DOI: 10.1089/pop.2019.0176. [ Context Link 1 ] View abstract...
43. Centers for Medicare and Medicaid Services. "Condition of participation: Discharge planning." 42 CFR Pt. 482.43 Washington, DC 2025 Jan 01 [accessed 2025 Jul 22] Accessed at: <https://www.ecfr.gov/>. [ Context Link 1, 2, 3 ]
44. Ventura KA. Upper gastrointestinal problems. In: Harding MM, Kwong J, Hagler D, Reinisch C, editors. *Lewis's Medical-Surgical Nursing: Assessment and Management of Clinical Problems*. 12th ed. St. Louis, MO: Mosby; 2023:1050-1087. [ Context Link 1, 2 ]
45. Postoperative nursing management. In: Hinkle JL, Cheever KH, Overbaugh KJ, editors. *Brunner & Suddarth's Textbook of Medical-Surgical Nursing*. 15th ed. Wolters Kluwer; 2022:437-459. [ Context Link 1, 2 ]
46. Targeted care planning and care transitions. In: Perez R, editor. *CMSA's Integrated Case Management*. 2nd ed. Springer Publishing Company LLC; 2023:178-189. [ Context Link 1, 2 ]
47. Elements of Excellence in Transitions of Care (TOC). TOC Checklist [Internet] National Transitions of Care Coalition. 2006 Accessed at: <https://www.ntocc.org>. [accessed 2025 Sep 16] [ Context Link 1 ]
48. Medical-surgical nursing. In: Hinkle JL, Cheever KH, Overbaugh KJ, editors. *Brunner & Suddarth's Textbook of Medical-Surgical Nursing*. 15th ed. Wolters Kluwer; 2022:33-55. [ Context Link 1 ]
49. Transition of care. In: Gillingham DC, editor. *Foundations of Case Management*. Blue Bayou Press; 2021:137-144. [ Context Link 1 ]
50. Becker C, et al. Interventions to improve communication at hospital discharge and rates of readmission: a systematic review and meta-analysis. *JAMA Network Open* 2021;4(8):e2119346. DOI: 10.1001/jamanetworkopen.2021.19346. [ Context Link 1 ] View abstract... <https://careweb.careguidelines.com/ed30/isc/1406400a.htm> 8/10 6/29/26, 2:16 PM ISC - Fundoplication and Hiatal Hernia Repair, Transthoracic
51. The nursing process in drug therapy and patient safety. In: Tucker RG, editor. *Karch's Focus on Nursing Pharmacology*. 9th ed. Wolters Kluwer; 2023:47-57. [ Context Link>1 Optimal ] Inpatient & Surgical Care Recovery Guidelines > General Surgery >Fundoplication and Hiatal Hernia Repair, Transthoracic (S-550)
52. Adverse drug reactions and medication errors. In: Burchum JR, Rosenthal LD, editors. *Lehne's Pharmacology for Nursing Care*. 12th ed. Elsevier; 2025:64-75. [ Context Link 1 ]
53. Safe medication preparation. In: Perry AG, Potter PA, Ostendorf WR, Laplante N, editors. *Clinical Nursing Skills and Techniques*. 11th ed. Elsevier; 2025:586-607. [ Context Link 1 ]
54. The case manager's roles, functions, and activities. In: Gillingham DC, editor. *Foundations of Case Management*. Blue Bayou Press; 2021:9-14. [ Context Link 1 ]
55. Anderson TS, Ayanian JZ, Herzig SJ, Souza J, Landon BE. Gaps in primary care follow-up after hospital discharge among Medicare beneficiaries. *Journal of the American Geriatrics Society* 2025;DOI: 10.1111/jgs.19496. [ Context Link 1 ] View abstract...
56. Zimmermann CJ, Lidor A. Endoscopic and surgical management of gastroesophageal reflux disease. *Gastroenterology Clinics of North America* 2021;50(4):809-823. DOI: 10.1016/j.gtc.2021.07.005. [ Context Link 1 ] View abstract...
57. Harding MM. Substance use disorders in acute care. In: Harding MM, Kwong J, Hagler D, Reinisch C, editors. *Lewis's Medical-Surgical Nursing: Assessment and Management of Clinical Problems*. 12th ed. St. Louis, MO: Mosby; 2023:162-178. [ Context Link 1 ]
58. Management of patients with dermatologic disorders. In: Hinkle JL, Cheever KH, Overbaugh KJ, editors. *Brunner & Suddarth's Textbook of Medical-Surgical Nursing*. 15th ed. Wolters Kluwer; 2022:1815-1864. [ Context Link 1 ]
59. Centers for Medicare and Medicaid Services. "Admissions." 42 CFR 412.3 Washington, DC 2025 Jul [accessed 2025 Jul 22] Accessed at: <https://www.ecfr.gov/current/title-42/chapter-IV/subchapter-B/part-412>. [ Context Link 1 ]
60. Centers for Medicare and Medicaid Services. "Hospital services excluded from payment under the hospital outpatient prospective payment system." 42 CFR 419.22 Washington, DC 2023 Jul [accessed 2025 Jul 22] Accessed at: <https://www.ecfr.gov/>. [ Context Link 1 ]

61. Centers for Medicare and Medicaid Services. "Requirements relating to basic benefits." 42 CFR 422.101 Washington, DC 2025 Jun 03 [accessed 2025 Jul 23] Accessed at: <https://www.ecfr.gov/>. [ Context Link 1 ]
62. Centers for Medicare and Medicaid Services. Medicare Benefit Policy Manual. Chapter 1 - Inpatient Hospital Services Covered Under Part A Rev. 10892 [Internet] Centers for Medicare and Medicaid Services. 2021 Aug Accessed at: <https://www.cms.gov/manuals/>. [accessed 2025 Sep 09] [ Context Link 1 ]
63. Centers for Medicare and Medicaid Services. Medicare Benefit Policy Manual. Chapter 6 - Hospital Services Covered Under Part B Rev. 12425 [Internet] Centers for Medicare and Medicaid Services. 2023 Dec Accessed at: <http://www.cms.gov/manuals/>. [accessed 2025 Sep 09] [ Context Link 1 ]
64. Centers for Medicare and Medicaid Services. Medicare Benefit Policy Manual. Chapter 15 - Covered Medical and Other Health Services Rev. 13108 [Internet] Centers for Medicare and Medicaid Services. 2025 Apr 11 Accessed at: <https://www.cms.gov/manuals/>. [accessed 2025 Sep 09] [ Context Link 1 ]
65. Centers for Medicare and Medicaid Services. Medicare Program Integrity Manual. Chapter 6, Section 6.5 - Medical Review of Inpatient Hospital Claims for Part A Payment Rev. 10365 [Internet] Centers for Medicare and Medicaid Services. 2020 Oct 02 Accessed at: <https://www.cms.gov/medicare/regulations-guidance/manuals/internet-only-manuals-ioms>. [accessed 2025 Sep 09] [ Context Link 1 ]
66. Medicare Coverage Database. [Internet] Centers for Medicare and Medicaid Services. Accessed at: <https://www.cms.gov/medicare-coveredatabase/search.aspx>? Updated 2025 [accessed 2025 Oct 23] [ Context Link 1 ]

## 5. Public Accessibility

**Transparency Tool URL:** <https://akido.access.mcg.com/index>

**Coverage Summaries URL:** <https://www.myfamilymg.com/medical-necessity-supplementation-criteria/documents>

**Navigation Instructions:** To access these coverage summaries, navigate to the UM Criteria page, scroll to the bottom of the page, and click the Medical Necessity Supplementation Criteria link. All summaries are organized alphabetically by category.