


Head and Neck Surgery or Procedure GRG

GRG: SG-HNS (ISC GRG)

MCG Health
General Recovery
Care
28th Edition
Surgical Admission Case
Management GRG  GRG

Note: An appropriate Optimal Recovery Guideline (ORG) should be identified and used whenever possible. This General Recovery Guideline (GRG) is intended to aid only in situations in which no ORG appears applicable.

- Care Planning - Inpatient Admission and Alternatives
 - Clinical Indications for Procedure
 - Alternatives to Procedure
 - Operative Status Criteria
- Hospitalization
 - General Recovery Course
 - Evaluation and Treatment
 - Benchmark Length of Stay - **Access diagnosis and procedure code-specific BLOS via Search functions.**
 - Discharge Criteria
- Case Management
- Discharge Destination
- Evidence Summary
 - Criteria
 - Rationale
 - Related CMS Coverage Guidance
- References
- Footnotes
- Definitions

Care Planning - Inpatient Admission and Alternatives

Clinical Indications for Procedure

- Surgery or other procedure covered by this guideline is indicated for **1 or more** of the following:
 - Eye disease surgery needed, as indicated by **1 or more** of the following(1):
 - Cataract(2)(3)(4)
 - Glaucoma(5)(6)(7)
 - Corneal lesion(8)(9)
 - Other ophthalmologic pathology
 - Eye trauma surgery needed (eg, laceration, lens repair, cornea repair)(1)(10)
 - Reconstruction procedure needed for eye, head, or neck abnormalities, as indicated by **1 or more** of the following:
 - Cleft palate or lip(11)
 - Maxillofacial deformities(12)
 - Eye muscle palsy(13)
 - Congenital atresias, cysts, or sinus remnants
 - Other pathology of eye, head, or neck
 - Biopsy or resection procedure needed, as indicated by **1 or more** of the following(14)(15):
 - Skull mass
 - Neck mass(16)
 - Oropharyngeal mass
 - Skin mass or lesion
 - Laryngeal lesions or masses(17)
 - Other mass or lesion
 - Tonsillectomy or adenoidectomy needed(18)(19)(20)
 - Drainage or debridement procedure needed, as indicated by **1 or more** of the following(18)(21)(22)(23):
 - Abscess (eg, peritonsillar abscess)(24)
 - Sinusitis(25)

- Otitis(26)(27)
- Mastoiditis(28)(29)
- Other head and neck pathology requiring drainage or debridement
- ☐ Head and neck trauma surgery needed, as indicated by **1 or more** of the following(30)(31)(32)(33)(34)(35):
 - Fractures(36)
 - Lacerations
 - Laryngeal or tracheal injury
 - Other traumatic injury of head or neck
- Epistaxis control procedure needed (eg, arterial ligation, endovascular embolization, repair of vascular malformation)(37)(38)
- Vocal cord or related structure operation needed (eg, polyps, vocal cord paralysis)(39)(40)
- Salivary or parotid gland resection needed for refractory sialolithiasis(41)(42)
- Foreign body removal (eg, aspiration)
- Operation for hearing loss needed (eg, ear reconstruction, implants)
- Surgical procedure needed for sleep apnea (eg, palatal, nasal, maxillomandibular advancement, supraglottoplasty)(43)(44)(45)(46)
- Complex dental procedure needed(47)
- ☐ Tracheostomy procedure needed, as indicated by **1 or more** of the following(48)(49):
 - Tracheostomy creation
 - Tracheostomy repair
 - Surgery for complications(50)

Alternatives to Procedure

- Alternatives may include:
 - Medical treatment for eye, ear, nose, and throat diseases; examples include(1):
 - Medications for glaucoma(5)(6)(7)
 - Local treatment for corneal disease(8)(9)(51)
 - Antimicrobials for ocular infection, sinusitis, or otitis(8)(9)(27)(51)(52)(53)
 - Nonsurgical treatment for obstructive sleep apnea(43)(44)
 - Speech and swallow therapy (eg, for vocal cord paralysis)
 - Injection laryngoplasty for vocal cord paralysis(54)
 - Anti-inflammatory medications for ocular disease
 - Retrobulbar injections of alcohol or chlorpromazine for blind painful eye
 - Needle aspiration of tonsillar or peritonsillar abscess(55)
 - Outpatient epistaxis control (eg, anterior cauterization or packing)(38)(52)
 - Radiation or chemotherapy for neoplasms(14)
 - Conservative care for hearing loss or craniofacial deformities
 - Office-based treatment for most dental problems
 - Extracorporeal shock wave lithotripsy for parotid gland calculi or sialolithiasis(42)
 - Outpatient cochlear implantation(56)
 - Palliative care as appropriate

Operative Status Criteria

Search by CPT® code for specific procedure Benchmark Length of Stay (BLOS).

Note: The definition of an ambulatory procedure depends on payer-provider contractual agreement or regulatory language (eg, CMS' Two-Midnight Rule). An ambulatory procedure may include one postoperative overnight stay in a facility; therefore, a Benchmark Length of Stay (BLOS) of ambulatory refers to patients discharged the day of or the day after the procedure. Depending on various patient and procedural factors, some patients undergoing a procedure with an ambulatory BLOS require inpatient care (eg, medical necessity for hospital-based care across 2 or more postoperative midnights). The Ambulatory Surgery Exception Criteria [GRG](#) can help with this determination.

- Ambulatory: Benchmark Length of Stay (BLOS) = A
- Inpatient, as indicated by **1 or more** of the following:
 - Benchmark Length of Stay (BLOS) = 2 or more days postoperative (eg, medical necessity for hospital-based care across 2 or more postoperative midnights)
 - Procedure is usually performed on ambulatory basis, but inpatient stay is needed. See Ambulatory Surgery Exception Criteria [GRG](#).
 - Medicare patient, and specific procedure is on CMS Inpatient Only List

Hospitalization

General Recovery Course

Stage	Level of Care	Clinical Status	Interventions
1	<ul style="list-style-type: none"> OR to ICU or intermediate care[A] Social Determinants of Health Assessment Discharge planning. See General Discharge Planning Tool GRG. 	<ul style="list-style-type: none"> Clinical Indications met[B] Procedure completed 	<ul style="list-style-type: none"> Inpatient interventions as needed
2	<ul style="list-style-type: none"> Floor Social Determinants of Health Assessment 	<ul style="list-style-type: none"> No ICU or intermediate care needs 	<ul style="list-style-type: none"> Inpatient interventions continue Transition to oral routes
3	<ul style="list-style-type: none"> Activity level acceptable Social Determinants of Health Assessment Floor to discharge Complete discharge planning 	<ul style="list-style-type: none"> Hemodynamic stability Operative site and other wounds acceptable Pain and nausea absent or adequately managed Temperature status acceptable No infection, or status acceptable Ocular status acceptable Orbital edema or inflammation absent or controlled Airway and swallowing status acceptable General Discharge Criteria met 	<ul style="list-style-type: none"> Intake acceptable No inpatient interventions needed

(2)(8)(9)(22)(43)(44)(51)

Recovery Milestones are indicated in **bold**.

Evaluation and Treatment

- Common treatments and tests include(8)(9)(14)(51):
 - Aspiration precautions and elevation of head of bed to 45 degrees
 - Topical, oral, and IV antibiotics(29)
 - Analgesics(22)(44)
 - NG tube until acceptable swallowing evaluation completed
 - Topical and IV steroids
 - Intraocular pressure monitoring(2)(5)
 - Wound management(43)
- Commonly scheduled interventions include:
 - Ophthalmologic examination and related procedures (eg, gonioscopy, dilated eye examination, intraocular pressure measurement)(2)(5)(8)(9)(51)
 - Laryngoscopy(14)(22)(44)
 - CT, MRI, or PET scan(14)(57)(58)
 - Arteriography or CT angiogram(57)
 - Swallowing study
 - Esophagram
 - Speech evaluation
 - Tracheostomy evaluation and care plan(54)
 - Auditory testing
 - Medical or radiation oncology consultation

Benchmark Length of Stay (BLOS): Access diagnosis and procedure code-specific BLOS via Search functions.

Discharge Criteria

- Continued inpatient stay is needed until **1 or more** of the following are present:
 - Acceptable patient status for next level of care is achieved.
 - ALL** of the following are present:

- ☐ Hemodynamic stability, as indicated by **1 or more** of the following:
 - Hemodynamic abnormalities at baseline or acceptable for next level of care
 - Patient hemodynamically stable, as indicated by **ALL** of the following(59)(60)(61)(62)(63):
 - Tachycardia absent
 - Hypotension absent
 - No evidence of inadequate perfusion (eg, no myocardial ischemia)
 - No other hemodynamic abnormalities (eg, no Orthostatic hypotension)
- ☐ Operative site and other wounds acceptable, as indicated by **1 or more** of the following(64):
 - Wounds absent
 - Wound site clean and intact, with minimal to no drainage and without signs of infection
 - Current wound care performable at next level of care
- ☐ Pain and nausea absent or adequately managed, as indicated by **1 or more** of the following(65)(66)(67)(68)(69)(70):
 - No pain or nausea
 - Minimal discomfort on oral medications
 - Pain and nausea managed on regimen performable at next level of care
- ☐ Temperature status acceptable, as indicated by **1 or more** of the following(71)(72)(73):
 - Temperature less than 100.5 degrees F (38.1 degrees C) (oral) and greater than 96.8 degrees F (36 degrees C) (rectal)
 - Temperature as expected for disease process and appropriate for management at next level of care
- ☐ No infection, or status acceptable, as indicated by **1 or more** of the following(74)(75)(76)(77):
 - No infection present
 - Infection status acceptable for next level of care, as indicated by **ALL** of the following(78):
 - WBC count normal, stable, or declining with treatment
 - Adequate treatment performable at next level of care
 - Organism and sensitivities identified, or adequate clinical response to empiric therapy
 - Repeat cultures negative or not needed
- ☐ Ocular status acceptable, as indicated by **1 or more** of the following:
 - No ocular problems
 - **ALL** of the following(1)(79):
 - Ocular abnormalities (eg, hemorrhage, orbital fracture) acceptable for management at next level of care
 - Intraocular pressure less than 21 mm Hg or acceptable for management at next level of care(80)
 - Orbital edema or inflammation absent or controlled
- ☐ Airway and swallowing status acceptable, as indicated by **ALL** of the following:
 - Aspiration absent or manageable at next level of care(81)(82)
 - No stridor, or at anticipated baseline
 - Tracheostomy absent or functioning adequately for next level of care(83)
 - Posterior nasal packs absent(84)
- ☐ Activity level acceptable, as indicated by **1 or more** of the following:
 - Patient ambulatory and can perform ADL as appropriate for age and development
 - Activity at baseline
 - Activity level acceptable for next level of care
- ☐ Intake acceptable, as indicated by **1 or more** of the following(85):
 - Oral hydration, medications, and diet
 - Enteral hydration, medications, and diet
 - Administration routes performable at next level of care
- ☐ No inpatient interventions needed; examples include:
 - Urgent laryngoscopy
 - Monitoring for stridor or other airway difficulties
 - Wound care needed not feasible at next level of care
 - Surgery for hemorrhage or other procedural complications
 - Drain care requiring continuing observation and care that cannot be managed at next level of care
- ☐ General Discharge Criteria [GRG met](#) or Pediatric General Discharge Criteria [GRG met](#) (if either is relevant or necessary for patient's condition)

Case Management

See Surgical Admission Case Management [GRG](#) [GRG](#) for further information.

Discharge Destination

- Post-hospital levels of admission may include:

- o Home.
- o Home healthcare. See Surgical Admission Home Care GRG [HC](#) or Geriatric Admission Home Care GRG [HC](#) for further information.
- o Recovery facility care. See Surgical Admission Recovery Facility Care GRG [RFC](#) or Geriatric Admission Recovery Facility Care GRG [RFC](#) for further information.

Evidence Summary

Criteria

The evidence for the clinical indications found in this guideline includes 23 published peer reviewed articles, 7 specialty society or other evidence-based guidelines, and 20 book sections.

Rationale

Use of this MCG care guideline helps the clinician identify, for a given procedure, which patient-specific factors and clinical conditions are appropriate for that procedure. The evidence-based clinical indication criteria assist the clinician in the decision to appropriately perform a procedure, evaluating whether the potential benefits of a procedure outweigh the potential risks. For Medicare enrollees, surgical MCG care guidelines also identify which procedures CMS has designated as inpatient only.

Use of these evidence-based clinical criteria to support decision making around the need for a given procedure is of benefit to the patient, as all procedures come with inherent risk that must be balanced by anticipated clinical benefit. Utilizing evidence-based clinical criteria enables a more accurate and patient-specific decision-making process. In addition, the use of evidence-based guidelines can help reduce unwarranted variation in care, such as divergent clinical thresholds to perform a procedure for clinically similar patients that vary across geographic regions, between facilities, and among individual clinicians.

Related CMS Coverage Guidance

This guideline supplements but does not replace, modify, or supersede existing Medicare regulations or applicable National Coverage Determinations (NCDs) or Local Coverage Determinations (LCDs).

Code of Federal Regulations (CFR): 42 CFR 412.3(86); 42 CFR 419.22(87); 42 CFR 422.101(88)

Internet-Only Manual (IOM) Citations: CMS IOM Publication 100-02, Medicare Benefit Policy Manual, Chapter 1 - Inpatient Hospital Services Covered Under Part A(89); CMS IOM Publication 100-02, Medicare Benefit Policy Manual, Chapter 6 - Hospital Services Covered Under Part B(90); CMS IOM Publication 100-02, Medicare Benefit Policy Manual, Chapter 15 - Covered Medical and Other Health Services(91); CMS IOM Publication 100-08, Medicare Program Integrity Manual, Chapter 6, Section 6.5 - Medical Review of Inpatient Hospital Claims for Part A Payment(92)

Medicare Coverage Determinations: Medicare Coverage Database(93)

References

1. Guluma K, Lee JE. Ophthalmology. In: Walls RM, editor. Rosen's Emergency Medicine: Concepts and Clinical Practice. 10th ed. Philadelphia, PA 19103-2899: Elsevier; 2023:750-780.e4. [Context Link 1, 2, 3, 4]
2. Werner L. Secondary cataract. In: Yanoff M, Duker JS, editors. Ophthalmology. 6th ed. Elsevier; 2023:386-390. [Context Link 1, 2, 3, 4]
3. Adams W, Steel DH. Phacoemulsification fluidics. In: Yanoff M, Duker JS, editors. Ophthalmology. 6th ed. Elsevier; 2023:348-351. [Context Link 1]
4. Olitsky SE, Marsh JD. Abnormalities of the lens. In: Kliegman RM, St. Geme JW, Blum NJ, Shah SS, Tasker RC, Wilson KM, editors. Nelson Textbook of Pediatrics. 21st ed. Philadelphia, PA: Elsevier; 2020:3372-3375.e1. [Context Link 1]
5. Aquino MCD, Lim DKA, Koh VTC, Chew PTK. Angle-closure glaucoma. In: Yanoff M, Duker JS, editors. Ophthalmology. 6th ed. Elsevier; 2023:1001-1009. [Context Link 1, 2, 3, 4]
6. Gedde SJ, et al. Primary Open-Angle Glaucoma Suspect. Preferred Practice Pattern [Internet] American Academy of Ophthalmology. 2020 Nov Accessed at: <https://www.aao.org/>. [accessed 2023 Sep 26] [Context Link 1, 2]
7. Madu A, Rhee DJ. Which therapy to use in glaucoma. In: Yanoff M, Duker JS, editors. Ophthalmology. 5th ed. Elsevier; 2019:1117-1119.e1. [Context Link 1, 2]
8. Keenan JD, McLeod SD. Bacterial keratitis. In: Yanoff M, Duker JS, editors. Ophthalmology. 6th ed. Elsevier; 2023:197-203. [Context Link 1, 2, 3, 4, 5, 6]
9. Keenan JD, McLeod SD. Fungal keratitis. In: Yanoff M, Duker JS, editors. Ophthalmology. 6th ed. Elsevier; 2023:204-206. [Context Link 1, 2, 3, 4, 5, 6]
10. Lee GD, Kitchens JW, Rubsam PE. Posterior segment ocular trauma. In: Yanoff M, Duker JS, editors. Ophthalmology. 6th ed. Elsevier; 2023:614-619. [Context Link 1]

11. Bonanathaya K, Jalil J. Management of the nasal deformity in the unilateral cleft of the lip and nose. *Journal of Maxillofacial and Oral Surgery* 2020;19(3):332-341. DOI: 10.1007/s12663-020-01412-0. [Context Link 1] View abstract...
12. Pluijmers BI, et al. Surgical correction of craniofacial microsomia: evaluation of interventions in 565 patients at three major craniofacial units. *Plastic and Reconstructive Surgery* 2019;143(5):1467-1476. DOI: 10.1097/PRS.0000000000005554. [Context Link 1] View abstract...
13. Braaksma-Besselink Y, Jellema HM. Orthoptic evaluation and treatment in orbital fractures. *Atlas of the Oral and Maxillofacial Surgery Clinics of North America* 2021;29(1):41-50. DOI: 10.1016/j.cxom.2020.10.002. [Context Link 1] View abstract...
14. Pfister DG, et al. Head and Neck Cancers. NCCN Clinical Practice Guideline in Oncology [Internet] National Comprehensive Cancer Network (NCCN). v. 2.2023; 2023 May 15 Accessed at: <https://www.nccn.org/>. [accessed 2023 Jun 07] [Context Link 1, 2, 3, 4, 5]
15. Goel AN, et al. Readmission after surgery for oropharyngeal cancer: An analysis of rates, causes, and risk factors. *Laryngoscope* 2019;129(4):910-918. DOI: 10.1002/lary.27461. [Context Link 1] View abstract...
16. Ajagbe O. Neck masses. In: Gershel JC, Rauch DA, editors. *Caring for the Hospitalized Child: A Handbook of Inpatient Pediatrics*. 3rd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2023:151-158. [Context Link 1]
17. Anis MM. Correlating laryngoscopic appearance of laryngeal lesions with histopathology. *Laryngoscope* 2019;129(6):1308-1312. DOI: 10.1002/lary.27585. [Context Link 1] View abstract...
18. Buckley J, Harris AS, Addams-Williams J. Ten years of deep neck space abscesses. *Journal of Laryngology and Otology* 2019;133(4):324-328. DOI: 10.1017/S0022215119000458. [Context Link 1, 2] View abstract...
19. Patel R, Patel NA, Stoffels G, Silverman J, Smith L. Adenoidectomy: Inpatient criteria study. *American Journal of Otolaryngology* 2021 Jan - Feb;42(1):102765. DOI: 10.1016/j.amjoto.2020.102765. [Context Link 1] View abstract...
20. Mitchell RB, et al. Clinical practice guideline: tonsillectomy in children. *Otolaryngology Head and Neck Surgery* 2019;160(1-suppl):S1-S42. DOI: 10.1177/0194599818801757. (Reaffirmed 2022 Jul) [Context Link 1] View abstract...
21. Chole RA, Sharon JD. Chronic otitis media, mastoiditis, and petrositis. In: Flint PW, et al., editors. *Cummings Otolaryngology Head and Neck Surgery*. 7th ed. Philadelphia, PA: Elsevier; 2021:2118-2134.e4. [Context Link 1]
22. Allen CT, Nussenbaum B, Merati AL. Acute and chronic laryngopharyngitis. In: Flint PW, et al., editors. *Cummings Otolaryngology Head and Neck Surgery*. 7th ed. Philadelphia, PA: Elsevier; 2021:897-905.e2. [Context Link 1, 2, 3, 4]
23. Harounian JA, Patel VA, Carr MM. An analysis of perioperative outcomes following cervical abscess drainage in children under 2 years. *International Journal of Pediatric Otorhinolaryngology* 2019;116:125-129. DOI: 10.1016/j.ijporl.2018.10.038. [Context Link 1] View abstract...
24. Akhavan M. Ear, nose, throat: beyond pharyngitis: retropharyngeal abscess, peritonsillar abscess, epiglottitis, bacterial tracheitis, and Postoperative Tonsillectomy. *Emergency Medicine Clinics of North America* 2021;39(3):661-675. DOI: 10.1016/j.emc.2021.04.012. [Context Link 1] View abstract...
25. Okafor S, Kelly KM, Halderman AA. Management of sinusitis in the cystic fibrosis patient. *Immunology and Allergy Clinics of North America* 2020;40(2):371-383. DOI: 10.1016/j.iac.2019.12.008. [Context Link 1] View abstract...
26. Schilder AGM, Rosenfeld RM, Venekamp RP. Acute otitis media and otitis media with effusion. In: Flint PW, et al., editors. *Cummings Otolaryngology Head and Neck Surgery*. 7th ed. Philadelphia, PA: Elsevier; 2021:2956-2969.e4. [Context Link 1]
27. Rosenfeld RM, et al. Clinical practice guideline: tympanostomy tubes in children (update). *Otolaryngology Head and Neck Surgery* 2022;166(1_suppl):S1-S55. DOI: 10.1177/01945998211065662. (Reaffirmed 2022 Feb) [Context Link 1, 2] View abstract...
28. Baker J, Jennings S. Mastoiditis. In: Gershel JC, Rauch DA, editors. *Caring for the Hospitalized Child: A Handbook of Inpatient Pediatrics*. 3rd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2023:147-150. [Context Link 1]
29. Kaufmann MR, Shetty K, Camilon PR, Shetty A, Levi JR, Devaiah AK. Management of acute complicated mastoiditis: a systematic review and meta-analysis. *Pediatric Infectious Disease Journal* 2022;41(4):297-301. DOI: 10.1097/INF.0000000000003452. [Context Link 1, 2] View abstract...
30. Papa L, Goldberg SA. Head trauma. In: Walls RM, editor. *Rosen's Emergency Medicine: Concepts and Clinical Practice*. 10th ed. Philadelphia, PA 19103-2899: Elsevier; 2023:294-322.e6. [Context Link 1]
31. Mayersak RJ. Facial trauma. In: Walls RM, editor. *Rosen's Emergency Medicine: Concepts and Clinical Practice*. 10th ed. Philadelphia, PA 19103-2899: Elsevier; 2023:323-339.e2. [Context Link 1]
32. Newton K, Claudius I. Neck. In: Walls RM, editor. *Rosen's Emergency Medicine: Concepts and Clinical Practice*. 10th ed. Philadelphia, PA 19103-2899: Elsevier; 2023:368-375.e3. [Context Link 1]
33. Upper airway obstruction. In: Marcdante KJ, Kliegman RM, Schuh AM, editors. *Nelson Essentials of Pediatrics*. 9th ed. Elsevier; 2023:536-539. [Context Link 1]
34. Al-Ali MA, Hefny AF, Abu-Zidan FM. Head, face and neck camel-related injuries: Biomechanics and severity. *Injury* 2019;50(1):210-214. DOI: 10.1016/j.injury.2018.11.029. [Context Link 1] View abstract...
35. Gebran SG, et al. Characterization of age-related injury patterns and surgical treatment of pediatric facial fractures: analysis of the national trauma data bank. *Journal of Craniofacial Surgery* 2019;30(7):2189-2193. DOI: 10.1097/SCS.0000000000005789. [Context Link 1] View abstract...
36. Liu FC, et al. Pediatric pedestrian facial fracture patterns and management following motor vehicle collisions. *Journal of Craniofacial Surgery* 2020;31(1):265-268. DOI: 10.1097/SCS.0000000000006034. [Context Link 1] View abstract...
37. Tunkel DE, et al. Clinical practice guideline: nosebleed (epistaxis). *Otolaryngology Head and Neck Surgery* 2020;162(1_suppl):S1-S38. DOI: 10.1177/0194599819890327. (Reaffirmed 2022 Jul) [Context Link 1] View abstract...
38. Ni JS, Kohn J, Levi JR. Inpatient pediatric Epistaxis: management and resource utilization. *Annals of Otolaryngology, Rhinology and Laryngology* 2018;127(11):829-835. DOI: 10.1177/0003489418797946. [Context Link 1, 2] View abstract...

39. Bertelsen C, Jacobson L, Osterbauer B, Hochstim C. Safety and efficacy of Early injection laryngoplasty in pediatric patients. *Laryngoscope* 2019;129(7):1699-1705. DOI: 10.1002/lary.27436. [Context Link 1] View abstract...
40. M Dominguez L, Villarreal R, Simpson CB. Voice outcomes of lipoinjection versus medialization laryngoplasty for nonparalytic glottic insufficiency. *Laryngoscope* 2019;129(5):1164-1168. DOI: 10.1002/lary.27573. [Context Link 1] View abstract...
41. Daniels KE, Schaitkin BM. An update on nontumorous disorders of the salivary glands and their management for internists. *Medical Clinics of North America* 2021;105(5):839-847. DOI: 10.1016/j.mcna.2021.05.006. [Context Link 1] View abstract...
42. Koch M, Mantsopoulos K, Muller S, Sievert M, Iro H. Treatment of sialolithiasis: what has changed? An update of the treatment algorithms and a review of the literature. *Journal of Clinical Medicine* 2021;11(1):Online. DOI: 10.3390/jcm11010231. [Context Link 1, 2] View abstract...
43. Goldstein NA. Evaluation and management of pediatric obstructive sleep apnea. In: Flint PW, et al., editors. *Cummings Otolaryngology Head and Neck Surgery*. 7th ed. Philadelphia, PA: Elsevier; 2021:2798-2807.e3. [Context Link 1, 2, 3, 4]
44. Sarber KM, Lam DJ, Ishman SL. Sleep apnea and sleep disorders. In: Flint PW, et al., editors. *Cummings Otolaryngology Head and Neck Surgery*. 7th ed. Philadelphia, PA: Elsevier; 2021:215-235.e4. [Context Link 1, 2, 3, 4, 5]
45. Pabla L, Duffin J, Flood L, Blackmore K. Paediatric obstructive sleep apnoea: is our operative management evidence-based? *Journal of Laryngology and Otology* 2018;132(4):293-298. DOI: 10.1017/S002221511800021X. [Context Link 1] View abstract...
46. Kent D, et al. Referral of adults with obstructive sleep apnea for surgical consultation: an American Academy of Sleep Medicine clinical practice guideline. *Journal of Clinical Sleep Medicine* 2021;17(12):2499-2505. DOI: 10.5664/jcsm.9592. (Reaffirmed 2022 Jan) [Context Link 1] View abstract...
47. Nyirjesy SC, et al. The role of computer aided design/computer assisted manufacturing (CAD/CAM) and 3- dimensional printing in head and neck oncologic surgery: A review and future directions. *Oral Oncology* 2022;132:105976. DOI: 10.1016/j.oraloncology.2022.105976. [Context Link 1] View abstract...
48. Holevar M, et al. Practice management guidelines for timing of tracheostomy: the EAST Practice Management Guidelines Work Group. *Journal of Trauma* 2009;67(4):870-874. DOI: 10.1097/TA.0b013e3181b5a960. (Reaffirmed 2022 May) [Context Link 1] View abstract...
49. Doherty C, et al. Multidisciplinary guidelines for the management of paediatric tracheostomy emergencies. *Anaesthesia* 2018;73(11):1400-1417. DOI: 10.1111/anae.14307. [Context Link 1] View abstract...
50. Escandon JM, et al. Definitive closure of the tracheoesophageal puncture site after oncologic laryngectomy: a systematic review and meta-analysis. *Archives of Plastic Surgery* 2022;49(5):617-632. DOI: 10.1055/s-0042-1756347. [Context Link 1] View abstract...
51. Lin A, et al. Bacterial Keratitis. Preferred Practice Pattern [Internet] American Academy of Ophthalmology. 2018 Accessed at: <https://www.aao.org/>. [accessed 2023 Sep 25] DOI: 10.1016/j.ophtha.2018.10.018. [Context Link 1, 2, 3, 4, 5]
52. Matlock AG, Pfaff JA. Otolaryngology. In: Walls RM, editor. *Rosen's Emergency Medicine: Concepts and Clinical Practice*. 10th ed. Philadelphia, PA 19103-2899: Elsevier; 2023:781-793.e2. [Context Link 1, 2]
53. Rosenfeld RM, et al. Clinical practice guideline: acute otitis externa. *Otolaryngology Head and Neck Surgery* 2014;150(1 Suppl):S1-S24. DOI: 10.1177/0194599813517083. (Reaffirmed 2023 Jul) [Context Link 1] View abstract...
54. Thorpe RK, Kanotra SP. Surgical management of bilateral vocal fold paralysis in children: a systematic review and meta-analysis. *Otolaryngology Head and Neck Surgery* 2021;164(2):255-263. DOI: 10.1177/0194599820944892. [Context Link 1, 2] View abstract...
55. Battaglia A, Burchette R, Hussman J, Silver MA, Martin P, Bernstein P. Comparison of medical therapy alone to medical therapy with surgical treatment of peritonsillar abscess. *Otolaryngology Head and Neck Surgery* 2018;158(2):280-286. DOI: 10.1177/0194599817739277. [Context Link 1] View abstract...
56. Patel TA, Nguyen SA, White DR. Clinical indicators of admission for pediatric cochlear implant procedures. *Annals of Otolaryngology, Rhinology and Laryngology* 2018;127(7):470-474. DOI: 10.1177/0003489418778880. [Context Link 1] View abstract...
57. Expert Panel on Neurologic Imaging, et al. ACR Appropriateness Criteria® orbits vision and visual loss. *Journal of the American College of Radiology* 2018;15(5S):S116-S131. DOI: 10.1016/j.jacr.2018.03.023. [Context Link 1, 2] View abstract...
58. Parsons MS, et al. Imaging of Facial Trauma Following Primary Survey. ACR Appropriateness Criteria [Internet] American College of Radiology (ACR). 2021 Accessed at: <https://www.acr.org>. [created 2021; accessed 2023 Oct 05] [Context Link 1]
59. Puskarich MA, Jones AE. Shock. In: Walls RM, editor. *Rosen's Emergency Medicine: Concepts and Clinical Practice*. 10th ed. Philadelphia, PA 19103-2899: Elsevier; 2023:34-41.e1. [Context Link 1]
60. Lewis J, Patel B. Shock. In: Gershel JC, Rauch DA, editors. *Caring for the Hospitalized Child: A Handbook of Inpatient Pediatrics*. 3rd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2023:107-114. [Context Link 1]
61. Ingbar DH, Thiele H. Cardiogenic shock and pulmonary edema. 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; 2022:2250-2257. [Context Link 1]
62. Brant EB, Seymour CW, Angus DC. Sepsis and septic shock. 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; 2022:2241-2249. [Context Link 1]
63. Singer M, et al. The Third International Consensus definitions for sepsis and septic shock (Sepsis-3). *Journal of the American Medical Association* 2016;315(8):801-810. DOI: 10.1001/jama.2016.0287. [Context Link 1] View abstract...
64. Yepuri N, Pruekprasert N, Cooney RN. Surgical complications. In: Townsend CM, Beauchamp RD, Evers BM, Mattox KL, editors. *Sabiston Textbook of Surgery*. 21st ed. Elsevier; 2022:238-283. [Context Link 1]
65. Swarm RA, et al. Adult Cancer Pain. NCCN Clinical Practice Guidelines in Oncology [Internet] National Comprehensive Cancer Network (NCCN). v. 2.2023; 2023 Jul 31 Accessed at: <https://www.nccn.org/>. [accessed 2023 Aug 21] [Context Link 1]
66. Zeltzer LK, Krane EJ, Levy RL. Pediatric pain management. In: Kliegman RM, St. Geme JW, Blum NJ, Shah SS, Tasker RC, Wilson KM, editors. *Nelson Textbook of Pediatrics*. 21st ed. Philadelphia, PA: Elsevier; 2020:469-490.e2. [Context Link 1]

67. Abdel-Aziz S, Adams MC. Pain. In: McKean SC, Ross JJ, Dressler DD, Scheurer DB, editors. Principles and Practice of Hospital Medicine. 2nd ed. New York, NY: McGraw-Hill Education; 2017:701-708. [Context Link 1]
68. Correll DJ. Perioperative pain management. In: McKean SC, Ross JJ, Dressler DD, Scheurer DB, editors. Principles and Practice of Hospital Medicine. 2nd ed. New York, NY: McGraw-Hill Education; 2017:313-322. [Context Link 1]
69. Ettinger DS, et al. Antiemesis. NCCN Clinical Practice Guidelines in Oncology [Internet] National Comprehensive Cancer Network (NCCN). v. 2.2023; 2023 May 24 Accessed at: <https://www.nccn.org/>. [accessed 2023 Jun 08] [Context Link 1]
70. Fourth consensus guidelines for the management of postoperative nausea and vomiting: erratum. *Anesthesia and Analgesia* 2020;131(5):e241. DOI: 10.1213/ANE.0000000000005245. [Context Link 1] View abstract...
71. Surana NK, Dinarello CA, Porat R. Fever. 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; 2022:130-144. [Context Link 1]
72. Miller CS, Wiese JG. Hyperthermia and fever. In: McKean SC, Ross JJ, Dressler DD, Scheurer DB, editors. Principles and Practice of Hospital Medicine. 2nd ed. New York, NY: McGraw-Hill Education; 2017:647-656. [Context Link 1]
73. Nield LS, Kamat D. Fever. In: Kliegman RM, St. Geme JW, Blum NJ, Shah SS, Tasker RC, Wilson KM, editors. Nelson Textbook of Pediatrics. 21st ed. Philadelphia, PA: Elsevier; 2020:1386-1388.e1. [Context Link 1]
74. Hooper DC, Shenoy ES, Elshaboury RH. Treatment and prophylaxis of bacterial 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; 2022:1148-1163. [Context Link 1]
75. Blum FC, Biro MH. Fever in the adult patient. In: Walls RM, editor. Rosen's Emergency Medicine: Concepts and Clinical Practice. 10th ed. Philadelphia, PA 19103-2899: Elsevier; 2023:90-95.e1. [Context Link 1]
76. Oxman DA. Undiagnosed fever in hospitalized patients. In: McKean SC, Ross JJ, Dressler DD, Scheurer DB, editors. Principles and Practice of Hospital Medicine. 2nd ed. New York, NY: McGraw-Hill Education; 2017:1659-1664. [Context Link 1]
77. Mick NW. Pediatric fever. In: Walls RM, editor. Rosen's Emergency Medicine: Concepts and Clinical Practice. 10th ed. Philadelphia, PA 19103-2899: Elsevier; 2023:2067-2077.e2. [Context Link 1]
78. Singh M, Fernandez-Frackelton M. Bacteria. In: Walls RM, editor. Rosen's Emergency Medicine: Concepts and Clinical Practice. 10th ed. Philadelphia, PA 19103-2899: Elsevier; 2023:1586-1609.e3. [Context Link 1]
79. Shah SM, Khanna CL. Ophthalmic emergencies for the clinician. *Mayo Clinic Proceedings* 2020;95(5):1050-1058. DOI: 10.1016/j.mayocp.2020.03.018. [Context Link 1] View abstract...
80. Weinreb RN, Aung T, Medeiros FA. The pathophysiology and treatment of glaucoma: a review. *Journal of the American Medical Association* 2014;311(18):1901-11. DOI: 10.1001/jama.2014.3192. [Context Link 1] View abstract...
81. DiBardino DM, Wunderink RG. Aspiration pneumonia: a review of modern trends. *Journal of Critical Care* 2015;30(1):40-48. DOI: 10.1016/j.jccr.2014.07.011. [Context Link 1] View abstract...
82. Troll C, Trapl-Grundschober M, Teuschl Y, Cerrito A, Compte MG, Siegemund M. A bedside swallowing screen for the identification of post-extubation dysphagia on the intensive care unit - validation of the Gugging Swallowing Screen (GUSS)-ICU. *BMC Anesthesiology* 2023;23(1):Online. DOI: 10.1186/s12871-023-02072-6. [Context Link 1] View abstract...
83. Mitchell RB, et al. Clinical consensus statement: tracheostomy care. *Otolaryngology Head and Neck Surgery* 2013;148(1):6-20. DOI: 10.1177/0194599812460376. (Reaffirmed 2022 Jun) [Context Link 1] View abstract...
84. Seikaly H. Epistaxis. *New England Journal of Medicine* 2021;384(10):944-951. DOI: 10.1056/NEJMcp2019344. [Context Link 1] View abstract...
85. Hoffer LJ, Bistrrian BR, Driscoll DF. Enteral and parenteral nutrition. 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; 2022:2539-2546. [Context Link 1]
86. Centers for Medicare and Medicaid Services. "Admissions." 42 CFR 412.3 Washington, DC 2023 Jul [accessed 2023 Oct 30] Accessed at: <https://www.ecfr.gov/current/title-42/chapter-IV/subchapter-B/part-412>. [Context Link 1]
87. 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 2023 Oct 30] Accessed at: <https://www.ecfr.gov/>. [Context Link 1]
88. Centers for Medicare and Medicaid Services. "Requirements relating to basic benefits." 42 CFR 422.101 Washington, DC 2023 Jun 05 [accessed 2023 Oct 30] Accessed at: <https://www.ecfr.gov/>. [Context Link 1]
89. 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 2023 Sep 08] [Context Link 1]
90. Centers for Medicare and Medicaid Services. Medicare Benefit Policy Manual. Chapter 6 - Hospital Services Covered Under Part B Rev. 10541 [Internet] Centers for Medicare and Medicaid Services. 2020 Dec Accessed at: <http://www.cms.gov/manuals/>. [accessed 2023 Nov 09] [Context Link 1]
91. Centers for Medicare and Medicaid Services. Medicare Benefit Policy Manual. Chapter 15 - Covered Medical and Other Health Services Rev. 12171 [Internet] Centers for Medicare and Medicaid Services. 2023 Aug 03 Accessed at: <https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/>. [accessed 2023 Oct 25] [Context Link 1]
92. 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/regulations-and-guidance/regulations-and-guidance>. [accessed 2023 Oct 20] [Context Link 1]
93. Medicare Coverage Database. [Internet] Centers for Medicare and Medicaid Services. Accessed at: <https://www.cms.gov/medicare-coverage-database/search.aspx>? Updated 2023 [accessed 2023 Oct 20] [Context Link 1]

Footnotes

[A] See Intensive, Intermediate, and Telemetry Care Guidelines [ISC](#). [A in Context Link 1]

[B] See Clinical Indications for Procedure in this guideline. [B in Context Link 1]

Definitions

Activity level acceptable

- Activity level acceptable, as indicated by **1 or more** of the following:
 - Patient ambulatory and can perform ADL as appropriate for age and development
 - Activity at baseline
 - Activity level acceptable for next level of care

Airway and swallowing status acceptable

- Airway and swallowing status acceptable, as indicated by **ALL** of the following:
 - Aspiration absent or manageable at next level of care(1)(2)
 - No stridor, or at anticipated baseline
 - Tracheostomy absent or functioning adequately for next level of care(3)
 - Posterior nasal packs absent(4)

References

1. DiBardino DM, Wunderink RG. Aspiration pneumonia: a review of modern trends. *Journal of Critical Care* 2015;30(1):40-48. DOI: 10.1016/j.jcrc.2014.07.011.
2. Troll C, Trapl-Grundschober M, Teuschl Y, Cerrito A, Compte MG, Siegemund M. A bedside swallowing screen for the identification of post-extubation dysphagia on the intensive care unit - validation of the Gugging Swallowing Screen (GUSS)-ICU. *BMC Anesthesiology* 2023;23(1):Online. DOI: 10.1186/s12871-023-02072-6.
3. Mitchell RB, et al. Clinical consensus statement: tracheostomy care. *Otolaryngology Head and Neck Surgery* 2013;148(1):6-20. DOI: 10.1177/0194599812460376. (Reaffirmed 2022 Jun)
4. Seikaly H. Epistaxis. *New England Journal of Medicine* 2021;384(10):944-951. DOI: 10.1056/NEJMcp2019344.

General Discharge Criteria met

- General Discharge Criteria met or Pediatric General Discharge Criteria met (if either is relevant or necessary for patient's condition)

Hemodynamic stability

- Hemodynamic stability, as indicated by **1 or more** of the following:
 - Hemodynamic abnormalities at baseline or acceptable for next level of care
 - Patient hemodynamically stable, as indicated by **ALL** of the following(1)(2)(3)(4)(5):
 - Tachycardia absent
 - Hypotension absent
 - No evidence of inadequate perfusion (eg, no myocardial ischemia)
 - No other hemodynamic abnormalities (eg, no Orthostatic hypotension)

References

1. Puskarich MA, Jones AE. Shock. In: Walls RM, editor. *Rosen's Emergency Medicine: Concepts and Clinical Practice*. 10th ed. Philadelphia, PA 19103-2899: Elsevier; 2023:34-41.e1.
2. Lewis J, Patel B. Shock. In: Gershel JC, Rauch DA, editors. *Caring for the Hospitalized Child: A Handbook of Inpatient Pediatrics*. 3rd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2023:107-114.
3. Ingbar DH, Thiele H. Cardiogenic shock and pulmonary edema. 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; 2022:2250-2257.
4. Brant EB, Seymour CW, Angus DC. Sepsis and septic shock. 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; 2022:2241-2249.
5. Singer M, et al. The Third International Consensus definitions for sepsis and septic shock (Sepsis-3). *Journal of the American Medical Association* 2016;315(8):801-810. DOI: 10.1001/jama.2016.0287.

Hypotension absent

- Hypotension absent^[A], as indicated by **1 or more** of the following(1)(2)(3)(4):
 - SBP greater than or equal to 90 mm Hg in adult or child 10 years or older
 - Mean arterial pressure^[B] greater than or equal to 70 mm Hg in adult or child 10 years or older

- Mean arterial pressure^[B] at patient's baseline (eg, healthy adult with low SBP), at intentional therapeutic goal (eg, patient with heart failure), or acceptable for next level of care (eg, blood pressure stable and no significant signs or symptoms due to low blood pressure)
- SBP greater than or equal to sum of 70 mm Hg plus twice patient's age in years in child 1 to 9 years of age
- SBP greater than or equal to 70 mm Hg in infant 1 to 11 months of age

References

1. Jones D, Di Francesco L. Hypotension. In: McKean SC, Ross JJ, Dressler DD, Scheurer DB, editors. Principles and Practice of Hospital Medicine. 2nd ed. New York, NY: McGraw-Hill Education; 2017:657-64.
2. Massaro AF. Approach to the patient with shock. 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; 2022:2235-2241.
3. Horeczko T. Pediatric cardiac disorders. In: Walls RM, editor. Rosen's Emergency Medicine: Concepts and Clinical Practice. 10th ed. Philadelphia, PA 19103-2899: Elsevier; 2023:2109-2131.e1.
4. Singh S, Holmes JF. Pediatric trauma. In: Walls RM, editor. Rosen's Emergency Medicine: Concepts and Clinical Practice. 10th ed. Philadelphia, PA 19103-2899: Elsevier; 2023:2052-2066.e3.

Footnotes

- A. Criteria based upon clinician-acquired numeric values (eg, vital signs, oxygen saturation) should be used if they are accurate reflections of the patient's condition. Transitory findings (eg, abnormal only upon initial emergency department intake or only one time out of multiple readings) that rapidly improve with no or minimal treatment usually do not reflect disease severity or risk for deterioration. This does not imply that an initial or one-time reading cannot ever be applicable. The goal is to separate erroneous or incidental findings from those that truly represent the patient's clinical picture.
- B. The mean arterial pressure takes into account both systolic and diastolic blood pressure readings and is calculated as Mean Arterial Pressure (MAP) = $1/3 \text{ SBP} + 2/3 \text{ DBP}$.

Intake acceptable

- Intake acceptable, as indicated by **1 or more** of the following(1):
 - Oral hydration, medications, and diet
 - Enteral hydration, medications, and diet
 - Administration routes performable at next level of care

References

1. Hoffer LJ, Bistran BR, Driscoll DF. Enteral and parenteral nutrition. 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; 2022:2539-2546.

No infection, or status acceptable

- No infection, or status acceptable, as indicated by **1 or more** of the following(1)(2)(3)(4):
 - No infection present
 - Infection status acceptable for next level of care, as indicated by **ALL** of the following(5):
 - WBC count normal, stable, or declining with treatment
 - Adequate treatment performable at next level of care
 - Organism and sensitivities identified, or adequate clinical response to empiric therapy
 - Repeat cultures negative or not needed

References

1. Hooper DC, Shenoy ES, Elshaboury RH. Treatment and prophylaxis of bacterial 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; 2022:1148-1163.
2. Blum FC, Biros MH. Fever in the adult patient. In: Walls RM, editor. Rosen's Emergency Medicine: Concepts and Clinical Practice. 10th ed. Philadelphia, PA 19103-2899: Elsevier; 2023:90-95.e1.
3. Oxman DA. Undiagnosed fever in hospitalized patients. In: McKean SC, Ross JJ, Dressler DD, Scheurer DB, editors. Principles and Practice of Hospital Medicine. 2nd ed. New York, NY: McGraw-Hill Education; 2017:1659-1664.
4. Mick NW. Pediatric fever. In: Walls RM, editor. Rosen's Emergency Medicine: Concepts and Clinical Practice. 10th ed. Philadelphia, PA 19103-2899: Elsevier; 2023:2067-2077.e2.
5. Singh M, Fernandez-Frackelton M. Bacteria. In: Walls RM, editor. Rosen's Emergency Medicine: Concepts and Clinical Practice. 10th ed. Philadelphia, PA 19103-2899: Elsevier; 2023:1586-1609.e3.

No inpatient interventions needed

- No inpatient interventions needed; examples include:
 - Urgent laryngoscopy
 - Monitoring for stridor or other airway difficulties
 - Wound care needed not feasible at next level of care
 - Surgery for hemorrhage or other procedural complications
 - Drain care requiring continuing observation and care that cannot be managed at next level of care

Ocular status acceptable

- Ocular status acceptable, as indicated by **1 or more** of the following:
 - No ocular problems
 - **ALL** of the following(1)(2):
 - Ocular abnormalities (eg, hemorrhage, orbital fracture) acceptable for management at next level of care
 - Intraocular pressure less than 21 mm Hg or acceptable for management at next level of care(3)

References

1. Guluma K, Lee JE. Ophthalmology. In: Walls RM, editor. Rosen's Emergency Medicine: Concepts and Clinical Practice. 10th ed. Philadelphia, PA 19103-2899: Elsevier; 2023:750-780.e4.
2. Shah SM, Khanna CL. Ophthalmic emergencies for the clinician. Mayo Clinic Proceedings 2020;95(5):1050-1058. DOI: 10.1016/j.mayocp.2020.03.018.
3. Weinreb RN, Aung T, Medeiros FA. The pathophysiology and treatment of glaucoma: a review. Journal of the American Medical Association 2014;311(18):1901-11. DOI: 10.1001/jama.2014.3192.

Operative site and other wounds acceptable

- Operative site and other wounds acceptable, as indicated by **1 or more** of the following(1):
 - Wounds absent
 - Wound site clean and intact, with minimal to no drainage and without signs of infection
 - Current wound care performable at next level of care

References

1. Yepuri N, Pruekprasert N, Cooney RN. Surgical complications. In: Townsend CM, Beauchamp RD, Evers BM, Mattox KL, editors. Sabiston Textbook of Surgery. 21st ed. Elsevier; 2022:238-283.

Orthostatic hypotension

- Orthostatic hypotension,^{[A][B]} as indicated by **1 or more** of the following(1)(2)(3):
 - Fall in SBP of 20 mm Hg or more 1 to 3 minutes after patient sits or stands from recumbent position
 - Fall in DBP of 10 mm Hg or more 1 to 3 minutes after patient sits or stands from recumbent position

References

1. Shibao C, Lipsitz LA, Biaggioni I, American Society of Hypertension Writing Group. Evaluation and treatment of orthostatic hypotension. Journal of the American Society of Hypertension 2013 Jul-Aug;7(4):317-324. DOI: 10.1016/j.jash.2013.04.006.
2. Dalal AS, Van Hare GF. Syncope. In: Kliegman RM, St. Geme JW, Blum NJ, Shah SS, Tasker RC, Wilson KM, editors. Nelson Textbook of Pediatrics. 21st ed. Philadelphia, PA: Elsevier; 2020:566-571.e1.
3. Fang JC, O'Gara PT. History and physical examination: an evidence-based approach. In: Libby P, Bonow RO, Mann DL, Tomaselli GF, Bhatt DL, Solomon SD, editors. Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine. 12th ed. Elsevier; 2022:123-140.

Footnotes

- A. Concomitant measurements of the heart rate are important to measure to help diagnose subtypes of orthostatic hypotension (eg, the lack of a compensatory increase in heart rate is typical of autonomic failure and an exaggerated tachycardia may be reflective of volume depletion). However, the heart rate is not a component of the definition of orthostatic hypotension which relies upon blood pressure alone.(1)(2)(3)
- B. Criteria based upon clinician acquired numeric values (eg, vital signs, oxygen saturation) should be used if they are accurate reflections of the patient's condition. Transitory findings (eg, abnormal only upon initial emergency department intake or only one time out of multiple readings) that rapidly improve with no or minimal treatment usually do not reflect disease severity or risk for deterioration. This does not imply that an initial or one-time reading cannot ever be applicable. The goal is to separate erroneous or incidental findings from those that truly represent the patient's clinical picture.

Pain and nausea absent or adequately managed

- Pain and nausea absent or adequately managed, as indicated by **1 or more** of the following(1)(2)(3)(4)(5)(6):
 - No pain or nausea
 - Minimal discomfort on oral medications
 - Pain and nausea managed on regimen performable at next level of care

References

1. Swarm RA, et al. Adult Cancer Pain. NCCN Clinical Practice Guidelines in Oncology [Internet] National Comprehensive Cancer Network (NCCN). v. 2.2023; 2023 Jul 31 Accessed at: <https://www.nccn.org/>. [accessed 2023 Aug 21]
2. Zeltzer LK, Krane EJ, Levy RL. Pediatric pain management. In: Kliegman RM, St. Geme JW, Blum NJ, Shah SS, Tasker RC, Wilson KM, editors. Nelson Textbook of Pediatrics. 21st ed. Philadelphia, PA: Elsevier; 2020:469-490.e2.
3. Abdel-Aziz S, Adams MC. Pain. In: McKean SC, Ross JJ, Dressler DD, Scheurer DB, editors. Principles and Practice of Hospital Medicine. 2nd ed. New York, NY: McGraw-Hill Education; 2017:701-708.
4. Correll DJ. Perioperative pain management. In: McKean SC, Ross JJ, Dressler DD, Scheurer DB, editors. Principles and Practice of Hospital Medicine. 2nd ed. New York, NY: McGraw-Hill Education; 2017:313-322.
5. Ettinger DS, et al. Antiemesis. NCCN Clinical Practice Guidelines in Oncology [Internet] National Comprehensive Cancer Network (NCCN). v. 2.2023; 2023 May 24 Accessed at: <https://www.nccn.org/>. [accessed 2023 Jun 08]
6. Fourth consensus guidelines for the management of postoperative nausea and vomiting: erratum. Anesthesia and Analgesia 2020;131(5):e241. DOI: 10.1213/ANE.0000000000005245.

Social Determinants of Health Assessment

- Risk of poor health outcomes may be increased by the presence of **1 or more** of the following social determinants of health(1)(2)(3)(4):
 - Housing insecurity, as indicated by **1 or more** of the following:
 - Individual or caregiver's current living situation is **1 or more** of the following(5):
 - Does not have own housing (eg, staying in a hotel, shelter, or with others)
 - Has own housing (eg, house, apartment), but at risk of losing it in the future (ie, behind on rent or mortgage)
 - Has own housing (eg, house, apartment), but has lived in 3 or more places in past year
 - Current housing has **1 or more** of the following:
 - Electrical appliances (eg, stove, refrigerator) not working or unavailable
 - Insufficient heating or cooling
 - Insufficient ventilation
 - Lead paint or pipes
 - Mold
 - Pests (eg, bugs) or rodents
 - Smoke detectors not working or unavailable
 - Food insecurity, as indicated by **1 or more** of the following(6):
 - In the past year, individual or caregiver ran out of food and did not have money to buy more food.
 - In the past year, individual or caregiver worried that they would run out of food before they received money to buy more food.
 - Insufficient transportation, as indicated by **1 or more** of the following(7):
 - In the past year, individual or caregiver missed medical appointments or could not get medications due to lack of transportation.
 - In the past year, individual or caregiver missed nonmedical activities, work, or could not get things needed for daily living due to lack of transportation.
 - Insufficient utilities, as indicated by **1 or more** of the following(8):
 - Utilities (eg, electricity, water, gas, or oil) are currently shut off or unavailable.
 - In the past year, electric, water, gas, or oil company threatened to shut off services.
 - Personal safety risk, as indicated by **2 or more** of the following(6):
 - Individual is sometimes or frequently physically hurt by another person (including family member).
 - Individual is sometimes or frequently insulted or talked down to by another person (including family member).
 - Individual is sometimes or frequently threatened with physical harm by another person (including family member).
 - Individual is sometimes or frequently screamed or cursed at by another person (including family member).
 - Insufficient dependent care, as indicated by **1 or more** of the following:
 - In the past year, individual or caregiver was unable to work due to lack of dependent care.
 - In the past year, individual or caregiver was unable to work more (additional) hours due to lack of dependent care.
 - In the past year, individual or caregiver missed medical appointments or could not get medications due to lack of dependent care.
 - In the past year, individual or caregiver missed nonmedical activities (eg, school, church, social activity) due to lack of dependent care.

- Depression risk, as indicated by **ALL** of the following:
 - In the past 2 weeks, individual had little interest or pleasure in normal activities on at least several days.
 - In the past 2 weeks, individual felt down, depressed, or hopeless on at least several days.

References

1. Scanlon A, Reinisch C. Social determinants of health. 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; 2023:18-20.
2. Moen M, Storr C, German D, Friedmann E, Johantgen M. A review of tools to screen for social determinants of health in the United States: a practice brief. *Population Health Management* 2020;23(6):422-429. DOI: 10.1089/pop.2019.0158.
3. Daniel-Robinson L, Moore JE. Innovation and Opportunities to Address Social Determinants of Health in Medicaid Managed Care. [Internet] Institute for Medicaid Innovation. 2019 Jan Accessed at: <https://medicaidinnovation.org/emerging-topics/>. [accessed 2023 Oct 20]
4. Billioux A, Verlander K, Anthony S, Alley D. Standardized Screening for Health-Related Social Needs in Clinical Settings: the Accountable Health Communities Screening Tool. [Internet] National Academy of Sciences. 2017 May Accessed at: <https://nam.edu/>. [accessed 2023 Sep 18]
5. Sandel M, et al. Unstable housing and caregiver and child health in renter families. *Pediatrics* 2018;142(2):e20172199. DOI: 10.1542/peds.2017-2199.
6. Children's HealthWatch Survey. Screening Instrument [Internet] Children's HealthWatch. 2020 Sep Accessed at: <https://childrenshealthwatch.org/>. [accessed 2023 Sep 11]
7. PRAPARE®: Protocol for Responding to and Assessing Patient Assets, Risks, and Experiences Screening Tool. [Internet] Association of Asian Pacific Community Health Organizations (AAPCHO) and National Association of Community Health Centers (NACHC). 2016 Sep Accessed at: <https://prapare.org/the-prapare-screening-tool/>. [accessed 2023 Sep 21]
8. Cook JT, et al. A brief indicator of household energy security: associations with food security, child health, and child development in US infants and toddlers. *Pediatrics* 2008;122(4):e867-75. DOI: 10.1542/peds.2008-0286.

Tachycardia absent

- Tachycardia^{[A][B]} absent, as indicated by **1 or more** of the following(1)(2):
 - Heart rate less than or equal to 100 beats per minute in adult or child 6 years or older
 - Heart rate less than or equal to 115 beats per minute in child 3 to 5 years of age
 - Heart rate less than or equal to 125 beats per minute in child 1 or 2 years of age
 - Heart rate less than or equal to 130 beats per minute in infant 6 to 11 months of age
 - Heart rate less than or equal to 150 beats per minute in infant 3 to 5 months of age
 - Heart rate less than or equal to 160 beats per minute in infant 1 or 2 months of age

References

1. Southmayd GL. Tachycardia. In: McKean SC, Ross JJ, Dressler DD, Scheurer DB, editors. *Principles and Practice of Hospital Medicine*. 2nd ed. New York, NY: McGraw-Hill Education; 2017:729-739.
2. Pediatric parameters and equipment. In: Kleinman K, McDaniel L, Molloy M, editors. *The Harriet Lane Handbook: A Manual for Pediatric House Officers*. 22nd ed. 202: Elsevier; 2021:frontpiece tables.

Footnotes

- A. Criteria based upon clinician acquired numeric values (eg, vital signs, oxygen saturation) should be used if they are accurate reflections of the patient's condition. Transitory findings (eg, abnormal only upon initial emergency department intake or only one time out of multiple readings) that rapidly improve with no or minimal treatment usually do not reflect disease severity or risk for deterioration. This does not imply that an initial or one-time reading cannot ever be applicable. The goal is to separate erroneous or incidental findings from those that truly represent the patient's clinical picture.
- B. Interpretation of heart rate requires clinical judgment and consideration of several patient-specific factors, such as the patient's baseline heart rate, medications, and clinical impact. For example, an elderly patient on a beta-blocker medication with a baseline resting heart rate of 60 beats per minute may be clinically tachycardic at a heart rate of 94 beats per minute. Likewise, a patient who is upset, in pain, or nervous in the emergency department with a heart rate of 106 beats per minute may meet the technical definition of tachycardia, but this tachycardia (absent associated findings such as chest pain or hypotension) may not be clinically important. The numeric values included in this definition are provided to allow for consistency in terms of a technical definition of the term tachycardia. Whether a heart rate above or below the technical threshold is clinically meaningful is a matter of persistence, context, and clinical judgment.

Temperature status acceptable

- Temperature status acceptable, as indicated by **1 or more** of the following(1)(2)(3):
 - Temperature less than 100.5 degrees F (38.1 degrees C) (oral) and greater than 96.8 degrees F (36 degrees C) (rectal)
 - Temperature as expected for disease process and appropriate for management at next level of care

References

1. Surana NK, Dinarello CA, Porat R. Fever. 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; 2022:130-144.
2. Miller CS, Wiese JG. Hyperthermia and fever. In: McKean SC, Ross JJ, Dressler DD, Scheurer DB, editors. Principles and Practice of Hospital Medicine. 2nd ed. New York, NY: McGraw-Hill Education; 2017:647-656.
3. Nield LS, Kamat D. Fever. In: Kliegman RM, St. Geme JW, Blum NJ, Shah SS, Tasker RC, Wilson KM, editors. Nelson Textbook of Pediatrics. 21st ed. Philadelphia, PA: Elsevier; 2020:1386-1388.e1.

MCG Health
General Recovery Care 28th Edition
Copyright © 2024 MCG Health, LLC
All Rights Reserved

Last Update: 3/14/2024 1:15:00 AM
Build Number: 28.1.20240313235330.016020