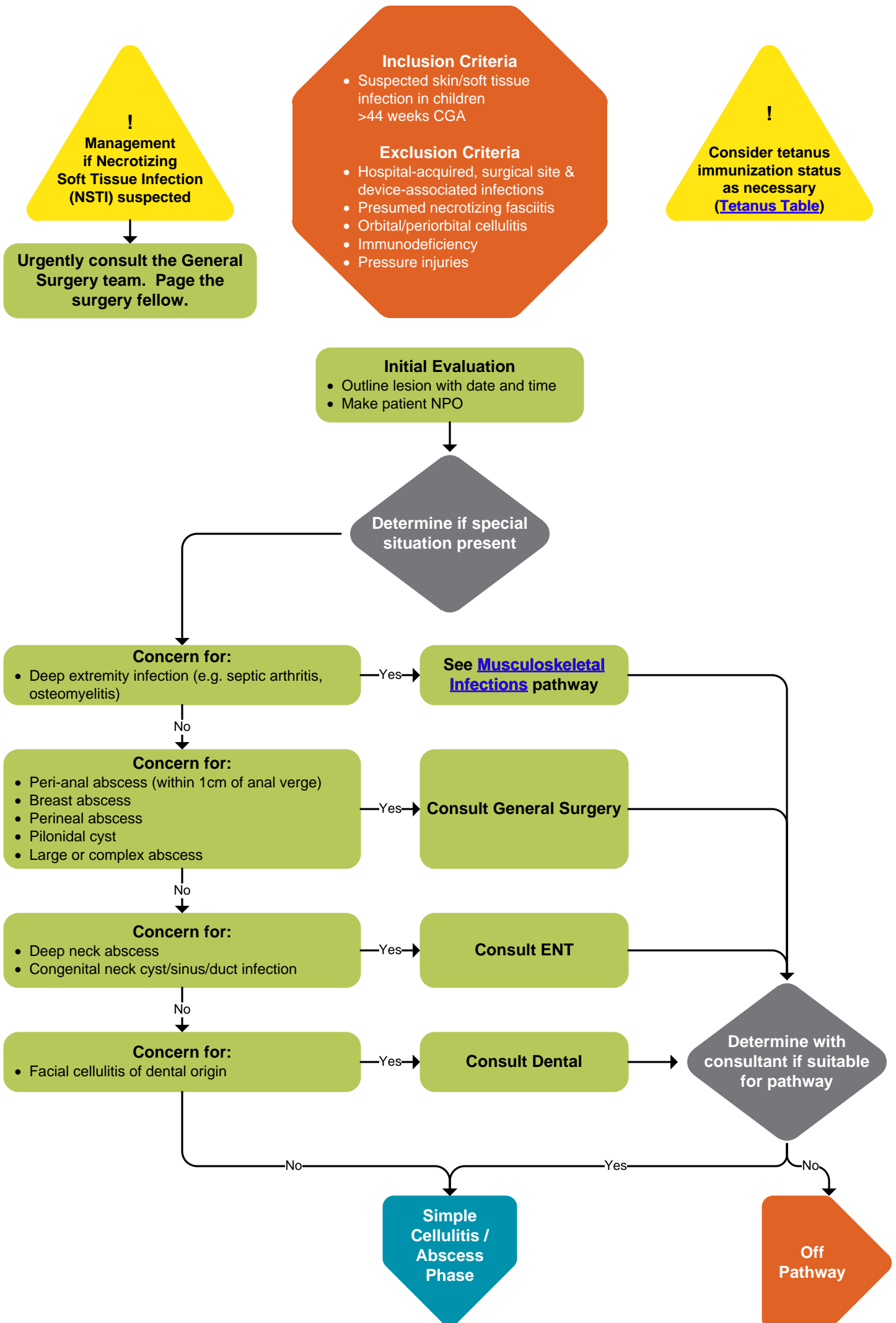


Cellulitis and Abscess v3.0: Initial ED Phase

[Approval & Citation](#)

[Summary of Version Changes](#)

[Explanation of Evidence Ratings](#)

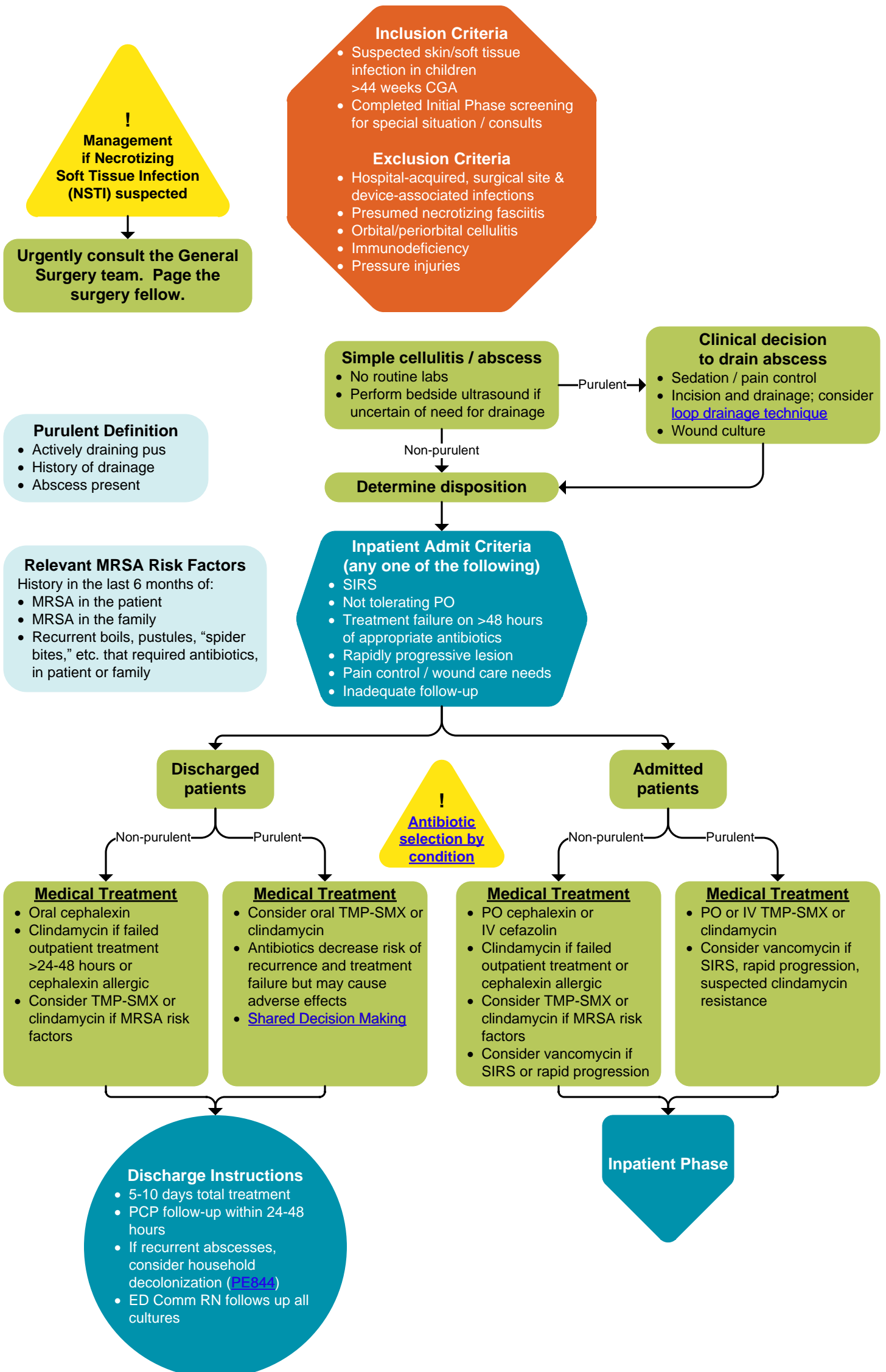


Cellulitis and Abscess v3.0: ED Simple Cellulitis/Abscess

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[Summary of Version Changes](#)

[Explanation of Evidence Ratings](#)

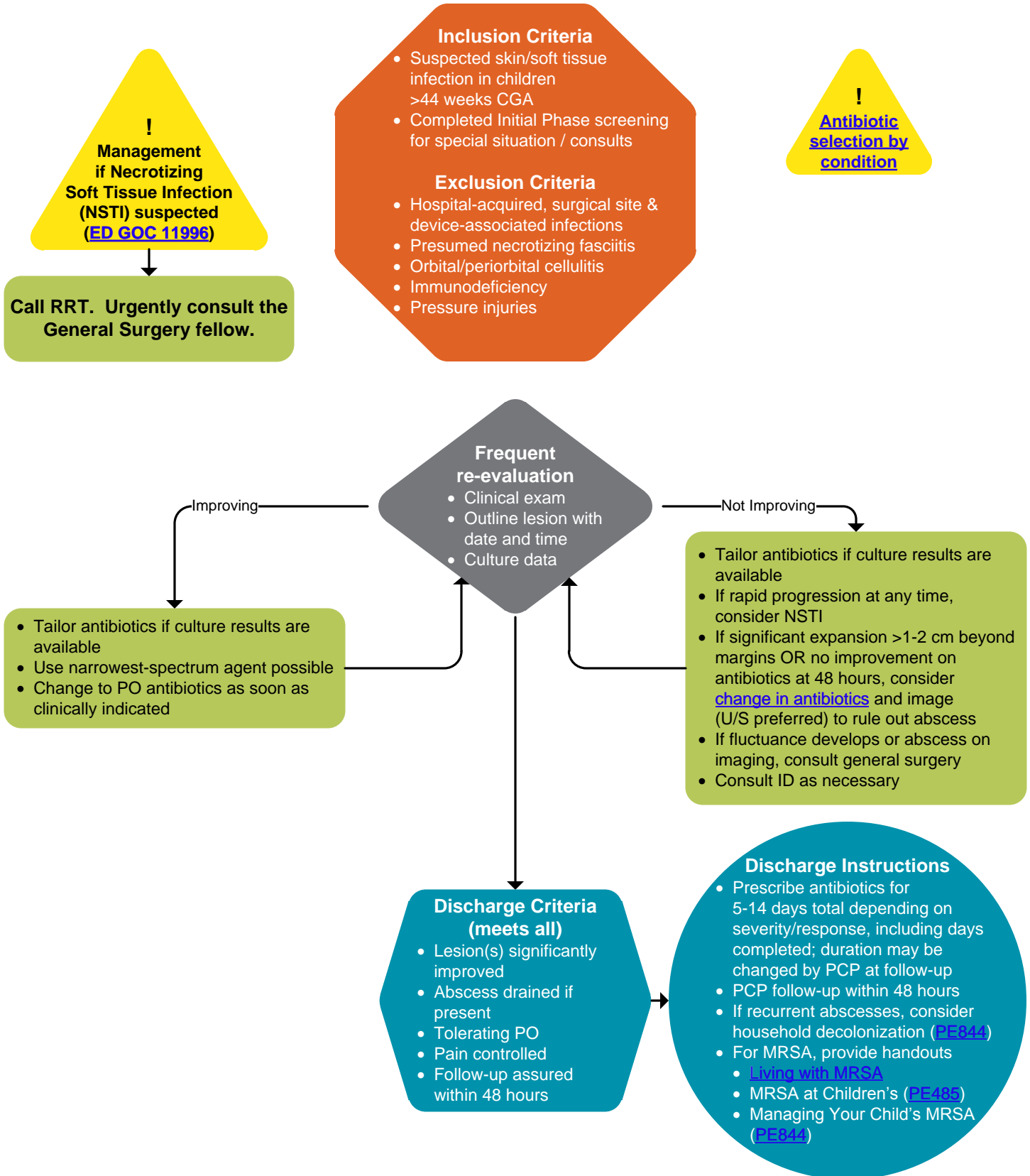


Cellulitis and Abscess v3.0: Inpatient Phase

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Tetanus Table

Tetanus prophylaxis in routine wound management

(Adapted from the Red Book: 2018 report of the Committee on Infectious Diseases, p. 796)

History of tetanus toxoid (doses)	Clean, minor wounds		All other wounds	
	DTaP, Tdap, or Td	TIG	DTaP, Tdap, or Td	TIG
Fewer than 3 or unknown	Yes	No	Yes	Yes
3 or more	No - if < 10 years since last tetanus- containing vaccine dose.	No	No if < 5 years since last tetanus- containing vaccine dose.	No
	Yes if \geq 10 years since last tetanus- containing vaccine dose	No	Yes if \geq 5 years since last tetanus- containing vaccine dose.	No

TIG = Tetanus immune globulin. Immune globulin IV should be used if TIG not available.

Other wounds = Such as, but not limited to, wounds contaminated with dirt, feces, soil, and saliva; puncture wounds; avulsions; and wounds resulting from missiles, crushing, burns, and frostbite

Note: DTaP is used for children <7 years of age. Tdap is preferred to Td for underimmunized children 7 years of age or older who have not received Tdap previously.

Antibiotic Table

Oral antibiotics are preferred.
 TMP-SMX, clindamycin, and amox-clav
 all have comparable bio-availability to IV.

	Condition		
	Non-Purulent Cellulitis	Purulent SSTI / Abscess	Bite Wound
PO Choice	Cephalexin Consider TMP-SMX or clindamycin if MRSA history	TMP-SMX or clindamycin if antibiotics are elected by Shared Decision Making	Amoxicillin/clavulanate
PO Alternatives	Clindamycin if cephalexin allergic (see Beta-Lactam Antibiotic Allergy Reference)	Call ID	Reference Red Book
IV Choice	Cefazolin Consider TMP-SMX or clindamycin if MRSA history	TMP-SMX or clindamycin	Ampicillin/sulbactam
IV Alternatives	Clindamycin if cefazolin allergic (see Beta-Lactam Antibiotic Allergy Reference) Consider vancomycin if SIRS, rapid progression, suspected clindamycin resistance, and no concern for necrotizing fasciitis	Consider vancomycin if SIRS, rapid progression, suspected clindamycin resistance, and no concern for necrotizing fasciitis	Reference Red Book

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Shared Decision Making

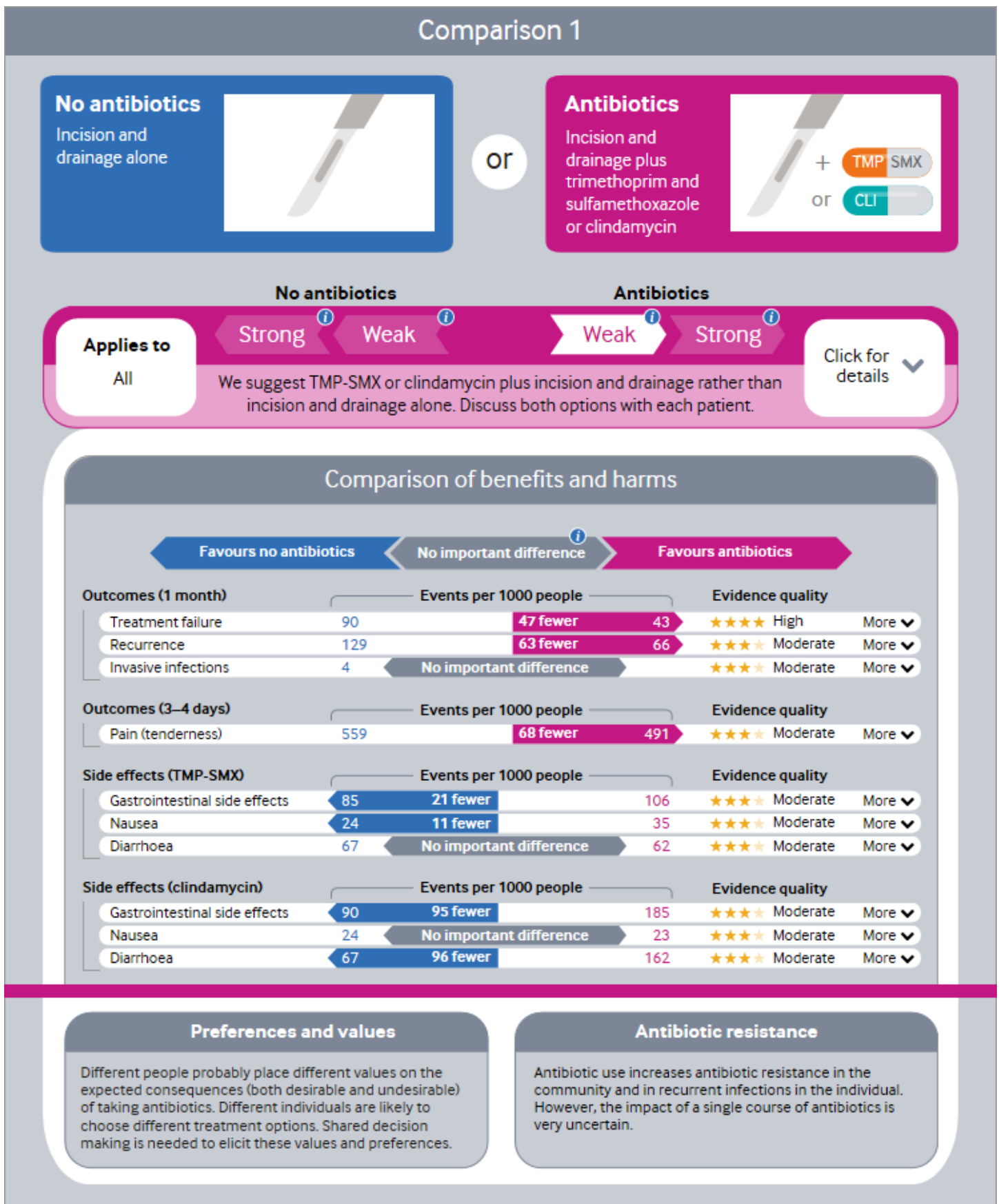
Shared Decision Making for Antibiotics after Drainage

Antibiotics provide a modest reduction in the risk of treatment failure, recurrence, additional surgical procedures and hospitalization, and reduce pain during treatment.

Antibiotics increase the risk of resistance and gastrointestinal side effects, such as nausea (TMP-SMX) and diarrhea (clindamycin). The decision whether or not to use antibiotics should take into account clinical factors (age, size, severity, systemic symptoms, recurrences) and individual values and preferences (reasons to avoid diarrhea, medication allergies, preferences about antibiotic use).

Example Tool

<https://www.bmj.com/content/360/bmj.k243>



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CSW Cellulitis and Abscess Pathway Approval & Citation

Approved by the CSW Cellulitis and Abscess Pathway team for September 25, 2019, go-live

CSW Cellulitis and Abscess Pathway Team:

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Retrieval Website: <https://www.seattlechildrens.org/pdf/cellulitis-and-abscess-pathway.pdf>

Please cite as:

Seattle Children's Hospital, Caglar, D., Kazmier, K., Fenstermacher, S., Turner, A., Migita, D., 2019 September. Cellulitis and Abscess Pathway. Available from: <https://www.seattlechildrens.org/pdf/cellulitis-and-abscess-pathway.pdf>.

Evidence Ratings

This pathway was developed through local consensus based on published evidence and expert opinion as part of Clinical Standard Work at Seattle Children's. Pathway teams include representatives from Medical, Subspecialty, and/or Surgical Services, Nursing, Pharmacy, Clinical Effectiveness, and other services as appropriate.

When possible, we used the GRADE method of rating evidence quality. Evidence is first assessed as to whether it is from randomized trial or cohort studies. The rating is then adjusted in the following manner (from: Guyatt G et al. J Clin Epidemiol. 2011;4:383-94, Hultcrantz M et al. J Clin Epidemiol. 2017;87:4-13.):

Quality ratings are *downgraded* if studies:

- Have serious limitations
- Have inconsistent results
- If evidence does not directly address clinical questions
- If estimates are imprecise OR
- If it is felt that there is substantial publication bias

Quality ratings are *upgraded* if it is felt that:

- The effect size is large
- If studies are designed in a way that confounding would likely underreport the magnitude of the effect OR
- If a dose-response gradient is evident

Certainty of Evidence:

★★★★ High: The authors have a lot of confidence that the true effect is similar to the estimated effect

★★★○ Moderate: The authors believe that the true effect is probably close to the estimated effect

★★○○ Low: The true effect might be markedly different from the estimated effect

★○○○ Very low: The true effect is probably markedly different from the estimated effect

Guideline: Recommendation is from a published guideline that used methodology deemed acceptable by the team

Expert Opinion: Based on available evidence that does not meet GRADE criteria (for example, case-control studies).

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Summary of Version Changes

- **Version 1.0 (8/15/2013):** Go live.
- **Version 1.1 (11/6/2013):** Clarified which patients should receive Orthopedic consultation in the ED. Recommended laboratory studies to be performed prior to Orthopedic consultation. Excluded patients with solitary dental abscess from the ED phase.
- **Version 1.2 (7/3/2018):** Clarified management for Necrotizing Soft Tissue Infections (NSTI) and emphasized importance of surgical urgency.
- **Version 2.0 (9/25/2019):** Periodic review go live. Overhauled entire document: removed all references to dental abscesses as they are not SSTI; revised suspected NSTI plan; edited special situations for consultations; removed size restriction for drainage; removed ages from admit criteria; updated medical treatment (noted preference for oral antibiotics, added TMP-SMX option, added shared decision making for antibiotic treatment after I&D, removed confusing list of alternative antibiotics, and widened total treatment duration depending on severity); edited discharge criteria; and added consideration of household decolonization.
- **Version 3.0 (1/31/2020):** Added details to Version 2.0 summary of version changes. Added link to new NSTI ED GOC 11996. Changed inpatient escalation if NSTI suspected.

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Medical Disclaimer

Medicine is an ever-changing science. As new research and clinical experience broaden our knowledge, changes in treatment and drug therapy are required.

The authors have checked with sources believed to be reliable in their efforts to provide information that is complete and generally in accord with the standards accepted at the time of publication.

However, in view of the possibility of human error or changes in medical sciences, neither the authors nor Seattle Children's Healthcare System nor any other party who has been involved in the preparation or publication of this work warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such information.

Readers should confirm the information contained herein with other sources and are encouraged to consult with their health care provider before making any health care decision.

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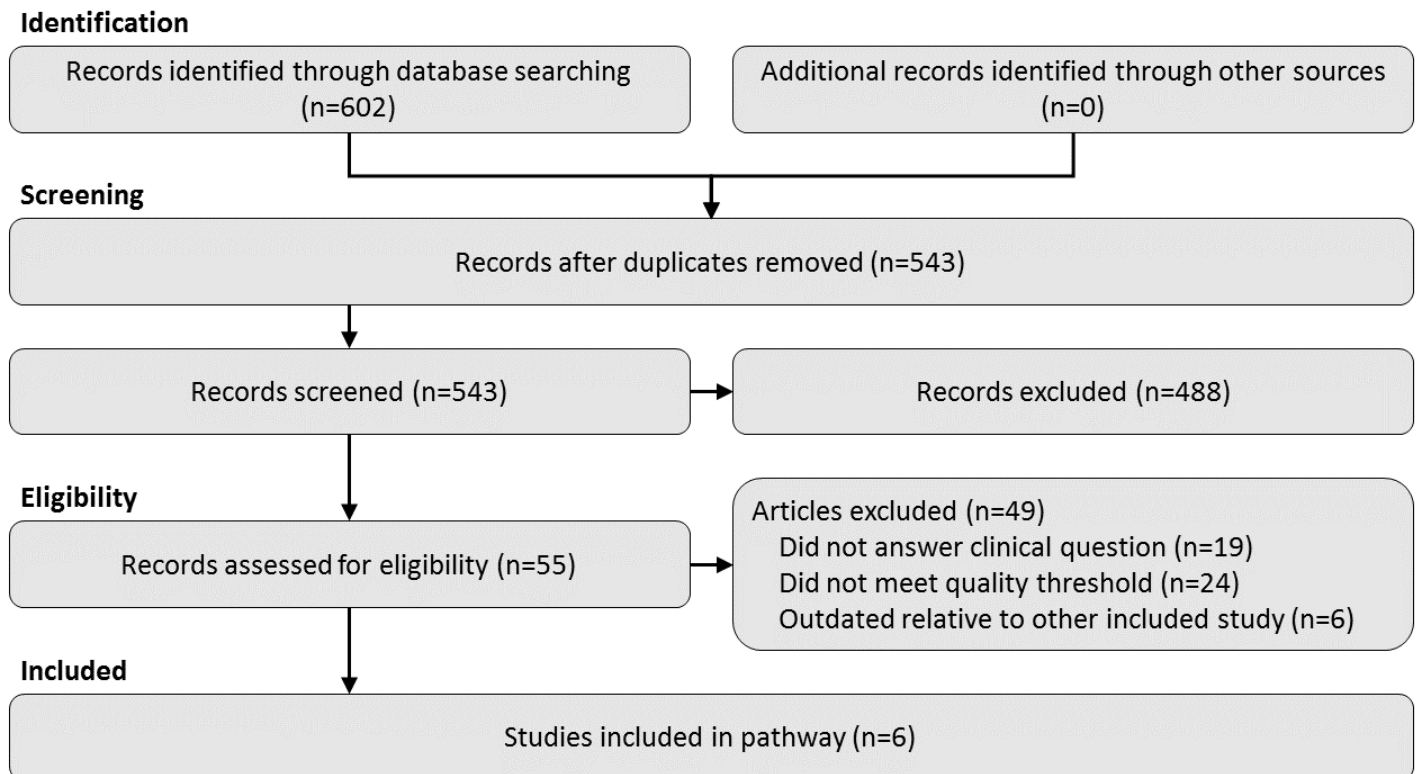
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Bibliography

Methods

For this update, we revised the search strategies in line with current Library practices. A literature search was conducted in February 2019 to target synthesized literature on skin and soft tissue infections, cellulitis and skin abscess from January 2014 to current and limited to English and humans. The search was executed in Ovid Medline, Embase, Cochrane Database of Systematic Reviews (CDSR) and Turning Research into Practice (TRIP) databases.

Two reviewers independently screened abstracts and included guidelines and systematic reviews that addressed optimal diagnosis, treatment, and prognosis of patients who meet pathway inclusion/exclusion criteria. One reviewer extracted data and a second reviewer quality checked the results. Differences were resolved by consensus.



Flow diagram adapted from Moher D et al. BMJ 2009;339:bmj.b2535

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