EBP Critically Appraised Topic (CAT): Dexamethasone vs. Prednisolone Dosing for Acute Asthma Exacerbation in Children

Specific Care Question

In a child greater than 2 years old with an acute asthma exacerbation, are 1-2 doses of dexamethasone (DEX) as effective as a 3-5-day course of prednisolone/prednisone (PSL) in the prevention of symptom recurrence?

Recommendations from the Asthma Clinical Pathway Committee

Based on the best available evidence and additional considerations (see Appendix), a conditional recommendation is made for DEX as the preferred treatment for an acute asthma exacerbation in children greater than 2 years of age being treated in non-intensive care settings at Children's Mercy.

Two meta-analyses found no significant difference between DEX and PSL in treating acute asthma exacerbations for the outcome of symptom recurrence. Both meta-analyses reported less vomiting in children receiving DEX compared to PSL. The overall certainty of evidence for the two meta-analyses was low to very low based on risk of bias (underpowered comparisons; open-label studies), indirectness (lack of data for children under 5; studies from other countries), and imprecision (low number of events).

Rationale for Question Asked

Acute asthma exacerbations are a leading cause for patients seeking emergent medical care at acute care centers (Kirkland et al., 2018). Although most patients are discharged on the same day, relapse of symptoms is common, necessitating additional medical care and a return to an acute care center (Kirkland et al., 2018). Systemic corticosteroids are a primary part of the treatment regimen for moderate to severe asthma exacerbations, with DEX and PSL most often prescribed (Reddel et al., 2022). Despite the proven efficacy of DEX and PSL, these steroids require a balance of benefits against potential adverse events such as nausea, vomiting, or gastrointestinal distress (Normansell et al., 2016). Patient compliance with the treatment regime must also be considered. The Global Initiative for Asthma (GINA) reports that both DEX and PSL are acceptable options for the treatment of children with acute asthma exacerbation (Reddel et al., 2022). Despite this, evidence is limited to which medications and dosing provide maximum recovery from acute exacerbations in children, specifically to decrease relapse in symptoms. This review summarizes the identified literature to answer the specific care question.

Study characteristics.

This review is an update from a previously completed CAT from 2021. The search for suitable studies was completed on June 30, 2025, looking to identify any new literature on this previously reviewed specific care question. K. Berg and J. Dusin reviewed the 14 titles and/or abstracts found in the search and identified two systematic reviews that answered the question. Of note, studies included in the previous CAT from 2021 were part of at least one or both meta-analyses identified for this review.

Overview of Evidence

Two systematic reviews and meta-analyses were identified that compared DEX versus PSL in the treatment of acute asthma exacerbation (Amagasa et al., 2025; Dahan et al., 2022).

In the 2025 systematic review and network meta-analysis by Amagasa et al. (2025), six oral corticosteroid regimens were compared for treating acute asthma exacerbations in children and adolescents under 21 years: three DEX regimens—0.3 mg/kg/day for 1 day, 0.6 mg/kg/day for 1 day, and 0.6 mg/kg/day for 2 days—and three PSL regimens—1.0 mg/kg/day for 3 days, 1.0–1.5 mg/kg/day for 5 days, and 2.0 mg/kg/day for 5 days. Across 11 randomized controlled trials (RCTs) (n = 2,353), no regimen significantly reduced the rate of relapse within 14 days. Hospital readmission, assessed in five studies (n = 1,643), also showed no significant differences. However, vomiting was significantly less frequent with DEX 0.6 mg/kg for 2 days compared to PSL 1.0–1.5 mg/kg for 5 days, RR = 0.50, 95% CI [0.29, 0.89].

In the 2022 systematic review and network meta-analysis by Dahan et al. (2022), 17 studies (RCTs and observational) were analyzed to compare DEX and PSL in treating pediatric acute asthma exacerbations. Across outcomes, including hospital admissions (n = 5,816), relapse rates (n = 1,106), and symptom resolution, no significant differences were found between DEX and PSL, indicating comparable efficacy. However, DEX showed significantly better tolerability, with reduced vomiting (OR = 0.24, 95% CI [0.11, 0.51], $p < 0.001$) and improved treatment compliance (OR = 0.12, 95% CI [0.04, 0.34], $p < 0.001$), likely due to its shorter dosing regimen. Subgroup analyses confirmed results across RCTs and cohorts.

Certainty of Evidence

The overall certainty of evidence for the two meta-analyses was low to very low based on the risk of bias (underpowered comparisons, open-label studies), indirectness (lack of data for children under 5; studies from other countries), and imprecision (low number of events).

Amagasa et al. (2025) reported the certainty of evidence as low to very low for all outcomes due to imprecision and risk of bias, with limitations including underpowered comparisons, lack of data for children under 5, and variability in study design and corticosteroid formulations.

Dahan et al. (2022) did not assess the overall risk of bias or certainty of evidence. Also, this meta-analysis combined RCTs and observational studies, which can introduce bias and confounding due to differences in study rigor and methodology. There was heterogeneity in DEX and PSL dosing (e.g., single vs. two doses, different mg/kg), which may affect comparability across studies. The methods used to measure the severity of respiratory symptoms varied across studies, which limits the comparability of symptom improvement. Definitions for outcomes such as relapse, vomiting, and adverse events varied across studies, potentially affecting the pooled estimates. Additionally, studies were conducted in different countries and healthcare settings, which may limit the generalizability of the findings to all pediatric populations.

Table 1
Included Studies

Author (year)	Study Type	Population	Number of Studies	Intervention	Control	Results
Amagasa et al. (2025)	SR/MA	Children and adolescents under 21 years with acute asthma exacerbations	*N = 15 RCTs*	• DEX 0.3 mg/kg/day for 1 day • DEX 0.6 mg/kg/day for 1 day • DEX 0.6 mg/kg/day for 2 days	• PSL 1.0 mg/kg/day for 3 days • PSL 1.0–1.5 mg/kg/day for 5 days • PSL 2.0 mg/kg/day for 5 days	• Relapse (within 14 day): Not significant • Hospital Readmission (within 14 day): Not significant • **Vomiting: Significantly less vomiting with DEX 2 days versus PSL 5 days**
Dahan et al. (2025)	SR/MA	Pediatric patients under 18 years with acute	*N* = 17 RCTs & Observational	DEX	PSL	• Baseline Characteristics between DEX and PSL ○ Age – Not significant ○ Sex – Not significant ○ Baseline PRAM– Not significant ○ Previous Corticosteroid – Not significant

		asthmatic exacerbations				○ Previous Beta-Agonist Use – Not significant ○ Oxygen Saturation - Not significant • ED-Related Outcomes ○ Hospital Admission – Not significant ○ Time Spent in ED – Not significant ○ Frequency of Relapses – Not significant ○ Subsequent Hospital Admission – Not significant ○ PRAM Score – Not significant ○ **Frequency of Vomiting – Significantly less vomiting with DEX** ○ **Noncompliance – Significantly better compliance with DEX**

Identification of Studies
Search Strategy and Results
"Status Asthmaticus"[Mesh] OR "Asthma/drug therapy"[Mesh] OR "asthma exacerbation*") AND ("Dexamethasone/administration and dosage"[Mesh] OR "Prednisolone/administration and dosage"[Mesh] OR "Prednisone/administration and dosage"[Mesh]) AND (child OR children OR pediatr* OR paediatr* OR infant OR adolescenc
Search Dates: 2021-Current
Records identified through database searching *n* = 14
Additional records identified through other sources *n* = 2

Question Originator
Asthma Clinical Pathway Committee
Medical Librarian Responsible for the Search Strategy
K. Swaggart, MLIS, AHIP
EBP Medical Director Responsible for Reviewing the Literature
K. Berg, MD, FAAP
EBP Team Member Responsible for Reviewing, Synthesizing, and Developing this Document
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Characteristics of Intervention Studies

Amagasa et al., 2025

Design	Systematic Review and Network Meta-analysis
Objective	To compare the efficacy of different oral corticosteroid regimens by type, dosage, and duration for treating acute asthma exacerbations in children and adolescents (<21 years)

Methods	**Criteria for considering studies for this review**
	• **Types of studies**: RCTs
	• **Participants**: Children and adolescents under 21 years with acute asthma exacerbations
	• **Target Condition(s):** Acute asthma exacerbations
	
	Search methods for identification of studies
	• **Electronic databases searched:** Four databases- Cochrane Central Register of Controlled Trials and MEDLINE via Ovid for eligible published clinical trials, WHO's International Clinical Trials Platform search portal, and ClinicalTrials.gov
	• **Search strategy employed:** The MEDLINE search was structured in three main conceptual blocks:
	  • **Population: (Pediatrics with Asthma)**
	  ○ Asthma was identified using both MeSH terms and keyword variations
	  ○ Pediatric populations were captured using a combination of MeSH terms
	  • **Intervention (Corticosteroids):**
	  ○ MeSH terms for specific corticosteroids (exp Dexamethasone/, exp Prednisone/, exp MethylPrednisolone) were used alongside keyword searches (corticosteroid, PSL, etc.).
	  • **Study Design (RCTs and Comparative Studies):**
	  ○ Filters for RCTs were applied
	• **Searching other resources:** Reference lists from included studies.
	
	Data collection and analysis
	• **Inclusion criteria:** RCTs comparing oral corticosteroid regimens in children with acute asthma
	• **Exclusion criteria:**
	  ○ Individual study exclusions found in the supplemental materials
	  ○ Conference abstracts were excluded from the synthesis
	  ○ Acute asthma exacerbation treatment in an inpatient setting was excluded
	• **Setting:** Outpatient or emergency department settings
	• **Data collection process:**
	  ○ Two authors used a pre-piloted standardized form to extract the data from each study independently. Discrepancies were discussed with a third reviewer
	  ○ A risk of bias assessment was completed by each reviewer for each study using the Cochrane Risk of Bias 2.0 tool.
	  ○ Disagreements for risk of bias assessment between the two reviewers were resolved through a discussion with a third author
	• **Assessment of the certainty of the evidence:**
	  ○ The certainty of the evidence was assessed using the Confidence in Network Meta-Analysis (CINeMA) framework and the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) framework for the meta-analyses.
	• **Data Synthesis:**
	  ○ Random Effects
	  ○ Overall Effect Size: Relative Risk (RR), Confidence Intervals (CI)
	  ○ Heterogeneity: If the CI for a study's effect estimate crossed below 0.75 or above 1.33, it was considered clinically important heterogeneity.
	
	• **Six Regimens Compared:**

- DEX 0.3 mg/kg/day for 1 day
- DEX 0.6 mg/kg/day for 1 day
- DEX 0.6 mg/kg/day for 2 days
- PSL 1.0 mg/kg/day for 3 days
- PSL 1.0–1.5 mg/kg/day for 5 days
- PSL 2.0 mg/kg/day for 5 days

- Additional Sensitivity Analysis
  - Comparing DEX vs. PSL: Dosages and durations of the same drug were pooled and compared
  - Comparing Treatment Duration: Different dosages of the same drug were pooled and compared based on duration of the drug's use
  - Comparing Different Dosages: Different treatment durations of the same drug were pooled and compared based on dosage

Study Selection (actual results/data)

Number of articles identified: *N* = 2380

Full-text articles assessed for eligibility: *n* = 46

- **Studies included in qualitative synthesis:** *n* = 15

Synthesis of quality of evidence:

- Authors reported certainty of evidence was very low for most comparisons, primarily due to 'serious concerns' about imprecision.
  - Small number of cases and events in each RCT, resulting in wide confidence intervals for effect sizes.
  - The risk of bias in each trial also reduced the certainty of the evidence, with most of the studies having some to major bias concerns (e.g., concerns with the randomization process, deviations from intended interventions, or missing outcome data).

Synthesis of quantitative evidence:

Outcome	No. of Studies	Number of pts	Key Comparisons (RR, 95% CI)	Significant Findings
Relapse (within 14 days)	11	2353	15 regimen comparisons: No regimen significantly reduced **relapse**	No significant differences
Hospital Readmission (within 14 days)	5	1643	10 regimen comparisons: No regimen significantly reduced **readmission**	No significant differences
Vomiting	5	1581	10 regimen comparisons: DEX 0.6 mg/kg × 2d vs PSL 1.0–1.5 mg/kg × 5d: RR = 0.50, 95% CI [0.29, 0.89]	Significantly less vomiting with DEX 2 days versus PSL 5 days

- **Heterogeneity:** The authors reported no concern for heterogeneity; no statistics. There was heterogeneity between the different types of studies, but it was statistically reduced due to the detailed breakdown of the regimens that were compared. This decreased heterogeneity but also decreased the power of each comparison.

Discussion

- This network meta-analysis evaluated 6 oral corticosteroid regimens for treating acute asthma exacerbations in children and adolescents.
- Across 11 RTCs (n = 2,353), no significant differences were found in the primary outcome of relapse within 14 days among the regimens. While the total number of patients is reported as 2353 for this outcome, each comparison represents a smaller number of patients analyzed.
- Hospital readmission, reported in five studies (n = 1,643), also showed no significant differences between regimens.

	• Vomiting, a secondary outcome reported in five studies (n = 1,581), was significantly less frequent with DEX 0.6 mg/kg × 2 days compared to PSL 1.0–1.5 mg/kg × 5 days (RR = 0.50, 95% CI: 0.29–0.89), suggesting a tolerability advantage for DEX. • The certainty of evidence was rated low to very low due to imprecision (low number of events per outcome) and risk of bias in several included studies. **Limitations** • Underpowered comparisons: Detailed breakdown of regimens (drug, dose, duration) led to small subgroups, reducing statistical power. • Low certainty of evidence • The lack of data specific to children under 5 years • Heterogeneity of study design (variability in inclusion criteria, outcome definition, and follow-up protocols • Differences in corticosteroid formulation and palatability may affect outcomes
Funding	None reported

EBP Critically Appraised Topic (CAT): Dexamethasone vs. Prednisolone Dosing for Acute Asthma Exacerbation in Children

Dahan et al., 2022

Design	**Systematic Review and Network Meta-analysis**
Objective	Compare DEX and PSL in managing pediatric patients with acute asthmatic exacerbations
Methods	• **Types of studies**: RCTs and non-randomized studies • **Participants**: Pediatric patients with acute asthmatic exacerbations • **Target Condition(s):** Acute asthma exacerbations • **Search methods for identification of studies:** The review adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. o **Electronic databases searched:** MEDLINE**,** Cochrane, Embase, PubMed, Scopus, Web of Science o **Search strategy employed:** Keywords were used to search for studies that described the use of DEX and PSLe in pediatric patients with acute asthmatic exacerbations (full search strategy available in Supplementary Item 1) o **Time Frame**: The search covered articles from the inception of each database to August 2022. • **Data collection and analysis** o **Inclusion criteria:** Studies comparing DEX and PSL in pediatric asthma reporting at least one outcome of interest (admission rate, length of stay, respiratory assessment, revisit) o **Exclusion criteria:** Case reports, case series, abstracts, conference abstracts, and articles not reported in English. o **Setting:** Various geographic regions, Emergency Departments (ED), Hospitals, Outpatient Departments, Single-Center and Multi-center studies. o **Data collection process:** ▪ Measures were collected and standardized to create forest plots ▪ The following baseline characteristics were collected: • Sex • Baseline PRAM score • Previous corticosteroid use • Previous beta-agonist use • O_2 saturations (%) ▪ The following outcome measures were collected: • Hospital admissions • Time spent in ED • Frequency of relapses • Subsequent hospital admissions or unscheduled ED visits • PRAM score post-discharge • Frequency of vomiting • Noncompliance with treatment ▪ **Verification**: Two authors independently reviewed the extracted data to ensure accuracy and completeness, minimizing errors and biases. • **Assessment of the certainty of the evidence:** o No overall certainty of evidence measured o **Risk of Bias Assessment**: ▪ Two authors assessed quality independently using the Newcastle-Ottawa Scale • **Data Synthesis:** o **Random and Fixed Effect** o **Overall Effect Size: Odds Ratio (OR), Confidence Intervals (CI)** ▪ Determined using RevMan software to create forest plots o **Heterogeneity**: Quantified using the Q statistic and I^2 index, with random-effects models applied for $I^2 > 50\%$ and fixed-effects models for $I^2 < 50\%$. o **Funnel plots**: To assess publication bias

- **Sensitivity Analysis**: Conducted using a leave-one-out method to assess each study's influence on the pooled estimate

Study Selection (actual results/data)

Number of articles identified: *N* = 317

Full-text articles assessed for eligibility: *n* = 26

- **Studies included in qualitative synthesis:** *n* = 17

Synthesis of quality of evidence:

- The authors determined all RCTs and cohorts to be of good quality according to the Newcastle-Ottawa Scale
  - The case definition and selection of study groups were deemed adequate
  - The controls represented a treatment (PSL) and not a placebo
  - Comparability of cases vs. controls, measurement of outcome, and length of follow-up were deemed adequate

Synthesis of quantitative evidence:

Pooled estimate of baseline characteristics between DEX and PSL groups

Outcome	Number of Studies	Number of Patients	Results	*p*-value
Age	14	3769	*MD* = -0.06 years, 95% CI (-0.27, 0.14)	0.55
Sex (Female)	17	5787	*OR* = 1.10, 95% CI (0.99, 1.23)	0.06
Baseline PRAM Score	3	480	*MD* = -0.05, 95% CI (-0.29, 0.18)	0.67
Previous Corticosteroid Use	6	2766	*OR* = 1.10, 95% CI (0.79, 1.52)	0.57
Previous Beta-Agonist Use	6	2337	*OR* = 0.94, 95% CI (0.77, 1.15)	0.56
Oxygen Saturation (%)	5	1420	*MD* = -0.15%, 95% CI (-0.49, 0.19)	0.38

Pooled estimate of ED-related outcomes between DEX and PSL groups

Outcome	**Number of Studies**	**Total Number of Patients**	**Results**	***p*-value**
Hospital Admissions	6	5816	*OR* = 0.83, 95% CI (0.58, 1.19)	0.31
Time Spent in ED	5	3074	*MD* = -0.11 hours, 95% CI (-0.52, 0.30)	0.60
Frequency of Relapses	8	1106	*OR* = 0.67, 95% CI (0.30, 1.49)	0.32
Subsequent Hospital Admissions or Unscheduled ED Visits	11	4306	*OR* = 1.16, 95% CI (0.86, 1.58)	0.33
PRAM Score Post Discharge	3	470	*MD* = -0.10, 95% CI (-0.24, 0.04)	0.17
Frequency of Vomiting	11	2012	*OR* = 0.24, 95% CI (0.11, 0.51)	<0.001

Noncompliance to Treatment	5	1359	*OR* = 0.12, 95% CI (0.04, 0.34)	<0.001

- **Heterogeneity:**
  - **Clinical Characteristics:**
    - Sex: I^2 = 0%
    - Age: I^2 = 28%
    - PRAM: I^2 = 20%
    - Oxygen saturation: I^2 = 41%
    - Previous corticosteroid use: I^2 = 58%
    - Previous beta-agonist use: I^2 = 0%
  - **Outcomes**
    - Relapse Rate: I^2 = 52%
    - Hospital admission: I^2 = 15%
    - Subsequent hospital admissions or unscheduled ED visits: I^2 = 26%
    - PRAM score post-discharge: I^2 = 0%
    - Vomiting: I^2 = 58%
    - ED stay duration: I^2 = 82%
    - Noncompliance to treatment: I^2 = 0%
- **Subgroup Analyses**
  Subgroup analyses for RCTs vs. observational studies were performed as part of this review for the analyses that combined RCTs and cohorts (Performed by the CM Department of EBP).
  - Clinical characteristics:
    - Age: no observed difference
      - RCTs: *MD* = -0.013, 95% CI [-0.39, 0.14]
      - Cohorts: *MD* = 0.03, 95% CI [-0.29, 0.35]
    - Gender: no observed difference
      - RCTs: *OR* = 1.12, 95% CI [0.95, 1.33]
      - Cohorts: *OR* = 1.09, 95% CI [0.95, 1.25]
    - Previous corticosteroid use: no observed difference
      - RCTs: *OR* = 1.02, 95% CI [0.77, 1.34]
      - Cohorts: *OR* = 1.15, 95% CI [0.93, 1.42]
    - Previous beta-agonist use: no observed difference
      - RCTS: *OR* = 0.94, 95% CI [0.73, 1.22]
      - Cohorts: *OR* = 0.94, 95% CI [0.67, 1.32]
  - Outcomes:
    - Hospital admission
      - All included cohorts were admitted participants and therefore could not be estimated and did not affect the effect size
    - ED length of stay: no observed difference in RCTs; cohorts alone showed significantly shorter ED length of stay ($p < 0.001$)
      - RCTs: *OR* = 0.00, 95% CI [-0.57, 0.56]
      - Cohorts: *OR* = -0.28, 95% CI [-0.43, -0.13]
    - Subsequent hospital admissions or unscheduled ED visits: no observed difference
      - RCTs: *OR* = 1.16, 95% CI [0.81, 1.68]
      - Cohorts: *OR* = 1.17, 95% CI [0.68, 2.00]

Discussion

Relapse Rates
- No significant difference between DEX and PSL.
- Suggests comparable efficacy in preventing the return of symptoms after initial treatment.

Hospital Readmissions
- No significant difference between the two groups.
- Indicates that both medications are equally effective in preventing severe relapses requiring hospitalization.

Vomiting (Tolerability)
- DEX significantly reduced vomiting compared to PSL:

	○ Vomiting is a common side effect of oral corticosteroids, and this difference supports better tolerability of DEX. *Treatment Compliance* • DEX is typically given as a single dose or two doses over 2 days, compared to a 5-day course of PSL. • This simpler regimen improves adherence, especially in children who may resist taking bitter-tasting medications over multiple days. *Symptom Resolution* • Both treatments were equally effective in resolving acute asthma symptoms. • No significant differences in clinical improvement scores or time to symptom relief. **Limitations:** The meta-analysis did not assess the overall risk of bias or certainty of evidence. Also, meta-analysis combined RCTs and observational studies, which can introduce bias and confounding due to differences in study rigor and methodology. There was heterogeneity in DEX and PSL dosing (e.g., single vs. two doses, different mg/kg), which may affect comparability across studies. The methods used to measure the severity of respiratory symptoms varied across studies, which limits the comparability of symptom improvement. Definitions for outcomes like relapse, vomiting, and adverse events varied across studies, potentially affecting pooled estimates. Additionally, studies were conducted in different countries and healthcare settings, which may limit the generalizability of the findings to all pediatric populations.
Funding	No funding conflicts reported

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EBP Critically Appraised Topic (CAT): Dexamethasone vs. Prednisolone Dosing for Acute Asthma Exacerbation in Children

Appendix

QUESTION

In a child greater than 2 years old with an acute asthma exacerbation, are 1-2 doses of dexamethasone (DEX) as effective as a 3-5-day course of prednisolone (PSL) in the prevention of symptom recurrence?	
POPULATION:	Children greater than 2 years old with an acute asthma exacerbation
INTERVENTION:	1-2 doses of dexamethasone
COMPARISON:	3-5 day course of prednisolone
MAIN OUTCOMES:	Relapse of symptoms; Readmission; Adverse Events (vomiting)

ASSESSMENT

Certainty of evidence
What is the overall certainty of the evidence of effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ **Low to Very Low**	Based on two meta-analyses, dexamethasone and prednisolone are equivalent for the outcomes of relapse and readmission. For the outcome of adverse events, dexamethasone had lower rates of vomiting compared to prednisolone.	

Resources required
How large are the resource requirements (costs)?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ **Moderate savings**	Outside of CM, prednisolone costs for a five-day course can range from $18.00 to $48.00, compared to dexamethasone pricing for a one-to-two- day course costs $11.00 to $32.00 based on insurance and pharmacy. Overall, dexamethasone cost for the treatment course is less than that of prednisolone. According to CM standard charges for 2022, the self-pay costs per unit are as follows: • Dexamethasone 12mg/12ml oral solution - $11.77 • Dexamethasone 4mg tablet - $8.29 • Prednisolone 3mg/ml oral solution - $4.16 x 5 days • Prednisone 10mg tab - $3.88 x 5 days Prednisone 20mg tab - $3.97 x 5 days Additional costs include the time, effort, and transportation needed to get a prednisolone prescription filled at a pharmacy, compared to receiving dexamethasone in the care setting prior to discharge.	

Cost effectiveness
Does the cost-effectiveness of the intervention favor the intervention or the comparison?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS

○ **Favors dexamethasone**	The cost effectiveness would favor the dexamethasone (intervention) with average of $7.00 to $16.00 less, depending on insurance and pharmacy. Additional cost savings for dexamethasone include no need for time or transportation to go to a pharmacy.	
Equity What would be the impact of the intervention on health equity?		
JUDGEMENT	**RESEARCH EVIDENCE**	**ADDITIONAL CONSIDERATIONS**
○**Probably increased**	Fifty percent to 70% of participants were either of black race or Hispanic ethnicity. The majority of initial visits were through a medical care setting's emergency department. The use of dexamethasone allows for equal efficacy (based on relapse of symptoms) without the impact of inequalities potentially posed by prednisolone. Some subpopulations may have more challenges related to transportation to a pharmacy and medication costs/medical insurance. Literacy or language barriers may impact the efficacy of prescription instructions.	
Acceptability Is the intervention acceptable to key stakeholders (including patients and families)?		
JUDGEMENT	**RESEARCH EVIDENCE**	**ADDITIONAL CONSIDERATIONS**
○ **Yes**	It is acceptable to key stakeholders to use an equally effective, yet less expensive medication. Stakeholders also value the increased ease of administration (fewer doses, better palatability) of the intervention (dexamethasone) which may improve compliance.	
Feasibility Is the intervention feasible to implement?		
JUDGEMENT	**RESEARCH EVIDENCE**	**ADDITIONAL CONSIDERATIONS**
○ **Yes**	The intervention is feasible to implement. It is available in CM urgent care, emergency department, and inpatient settings. The first dose of systemic corticosteroid has already been given in the care setting, so the use of dexamethasone does not create additional processes. Medication access and administration of dexamethasone is more feasible than prednisolone for patients and their families.	

TYPE OF RECOMMENDATION

Strong recommendation against the intervention	Conditional recommendation against the intervention	Conditional recommendation for either the intervention or the comparison	**Conditional recommendation for dexamethasone**	Strong recommendation for the intervention
○	○	○	○	○