

# Safer Pediatric Asthma Telephone Triage in a Rural Tribal-Serving Primary Care Network

Reality

## Background

- Telephone triage → 1<sup>st</sup> clinical contact for pediatric asthma concerns; decisions rely on caregiver report and rapid risk assessment.
- Rural barriers ↑ risk when triage is inconsistent.
  - Distance, limited same-day access, wildfire smoke exposure, and workforce shortages.
- American Indian/Alaska Native children were **42% more likely to have asthma** compared to U.S children; AI/AN children experience disproportionate asthma burden in many rural settings.
  - Local snapshot (Humboldt County)**
    - 12% children (1-17) ever diagnosed.
    - ED visits: 110 / 10,000.
    - Hospitalizations: 8.6 / 10,000.

## Importance of Issue

### Practice Disparity (estimated)

- Variation in triage assessment questions, documentation, and disposition decisions across staff/sites.
- Limited standard prompts for red flags, triggers, and response to home meds.
- Follow-up steps not consistently scheduled or documented (closed-loop gaps).

## Framework

Iowa Model Revised (EBP to Promote Quality Care)

1. Identify problem / priority trigger

2. Form interprofessional team

3. Appraise evidence & adapt to context

4. Pilot change & evaluate

5. Integrate, sustain & disseminate

Applied to standardize RN triage, asthma action-plan education, and closed-loop follow-up.

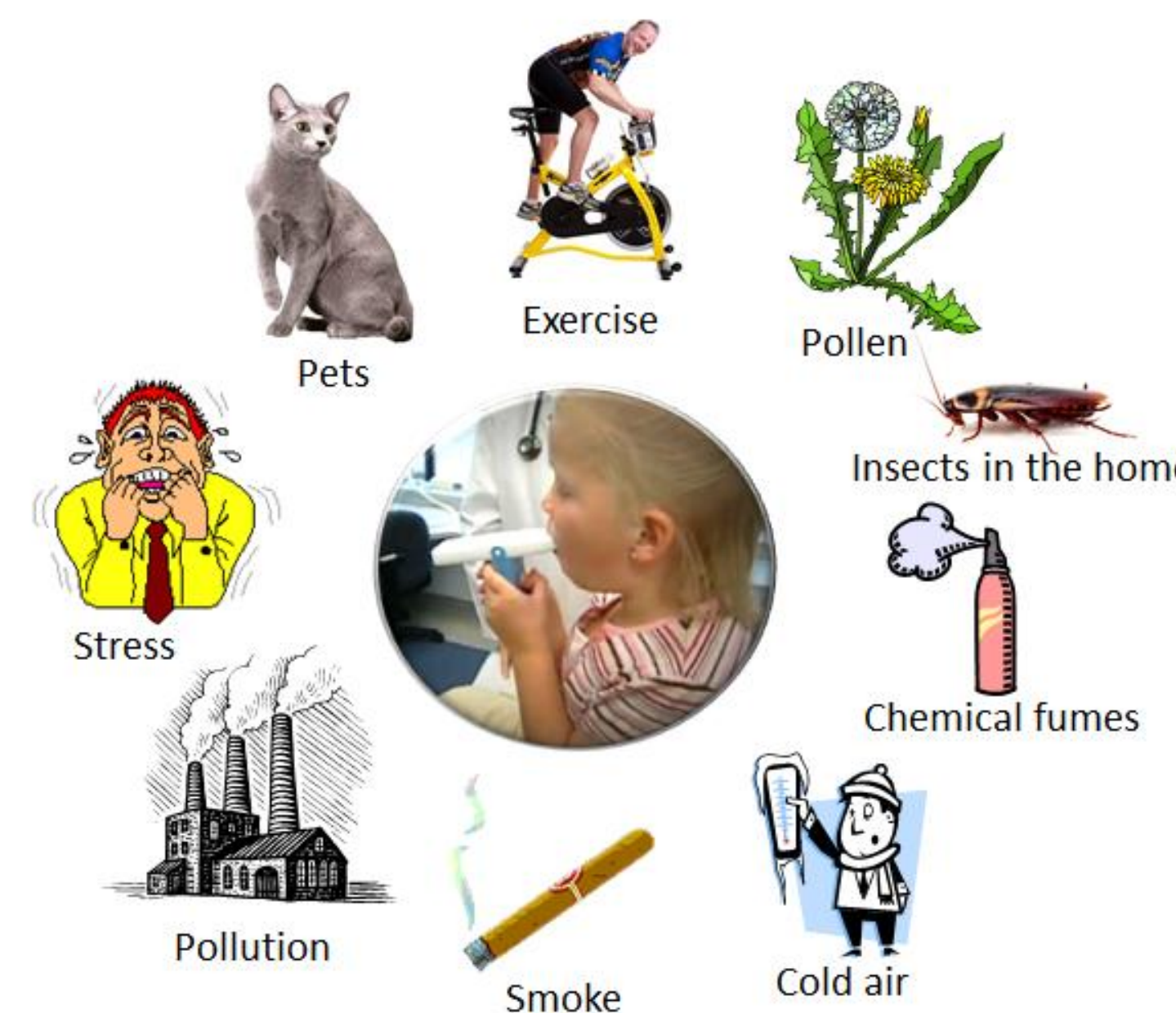
Theoretical

## Key Concepts & Outcomes

**Overall Outcome:** Safer, more consistent pediatric asthma triage across rural clinic network.

### SMART targets (12 months)

- ≥80% complete documentation of required assessment elements.
- ≥75% protocol-concordant triage disposition.
- ≥75% completed same-day or next-day follow-up for eligible contacts.
- Improved caregiver understanding of red flags and action steps.



Asthma Triggers

## Interventions & Solutions

### Individual / Family

- Provide Asthma Action Plan (AAP) for eligible contacts; culturally responsive teach-back.
- Reinforce red flags & home-care steps; document understanding.
- Medication + spacer technique coaching; written after-visit instructions.

### Clinic / Unit

- Standard RN triage algorithm + required EHR template fields (severity, red flags, response to meds).
- RN competency training + refreshers; decision support prompts.
- Audit & feedback: chart review + coaching to reduce variation.

### Policy / Protocol

- Closed-loop follow-up standard: schedule follow-up before closure; reminders/outreach; telehealth option.
- Shared escalation & documentation expectations across sites.
- Sustainment: QI dashboard, leadership review, and onboarding workflow.

## Key Players

- Children with asthma & families/caregivers.
- Triage RN (assessment, disposition, education, documentation).
- Primary care providers (clinical backup, treatment plan alignment).
- Nurse supervisor / clinical educator (competency training, coaching).
- Informatics / EHR team (template + decision support build).
- QI team (audit, feedback, dashboard, sustainment).
- Clinic leadership (policy adoption, resourcing).
- Community partners (school nurses, community health workers, pharmacies).

## Evaluation

### Process measures (implementation)

- % triage calls using standardized EHR template.
- % documentation complete (required assessment elements composite).
- % RNs completed competency training + refresher.
- % AAP provided and teach-back done.
- % follow-up scheduled and outreach completed.

### Impact measures (patient & system)

- % protocol-concordant dispositions (spot-check double review).
- % same-day/next-day follow-up completed (eligible contacts).
- 30-day repeat urgent asthma contacts / ED visits / hospitalizations.
- Caregiver confidence/knowledge (brief pre/post or follow-up survey).

## References

### References

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### Photo Credit

- 7mike5000. (2013, February 27). Asthma triggers [PNG image]. Wikimedia Commons.

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