



ANNUAL RESEARCH MEETING

TODAY'S RESEARCH DRIVING TOMORROW'S OUTCOMES

Estimating the Potential Impact of California Assembly Bill 391: Asthma Preventive Services

Analysis by the California Health Benefits Review Program
(CHBRP)

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Policy Context

In 2017, the California Assembly Committee on Health requested the California Health Benefits Review Program (CHBRP) conduct an evidence-based assessment of the medical and public health impacts of AB 391, Medi-Cal: Asthma Preventive Services

- “Qualified asthma preventive service providers” = any individual who provides evidence-based asthma preventive services, including asthma education and environmental asthma trigger assessments for individuals with asthma.
- Required the Department of Health Care Services to approve at least two governmental or nongovernmental accrediting bodies with expertise in asthma to review and approve training curricula for qualified asthma preventive services providers.



Preventive Services Rule Change

In 2014 CMS allowed **state Medicaid agencies to reimburse** for preventive services delivered by non-licensed health care providers, such as a community health workers, when the service is recommended by a physician or other licensed provider

- Assembly Bill 391 proposed a state plan amendment to cover non-licensed providers for the provision of asthma preventive services
- To date, only Missouri has used a state plan amendment for asthma preventive services (2016)

Asthma in California

Among Medi-Cal enrollees:

- 17% of have had an asthma diagnosis in their lifetime (\cong 2 million)
- 11% currently have asthma (\cong 1.3 million)
- 21% of enrollees with current asthma have poorly controlled asthma (\cong 270,000)

Principles of Asthma Control

- There is no cure for asthma; symptoms may be controlled with proper management and treatment
- The National Heart, Lung, and Blood Institute's four key components of asthma control:
 1. Objective diagnosis and clinical assessment of severity
 2. Medication
 3. Asthma education
 4. Control of environmental triggers

Asthma Preventive Services

Asthma Education

(NHLBI guidelines)

- Inhaler use, proper dosage, self- monitoring techniques
- Written asthma action plan that includes goals for daily management & how to recognize and manage worsening asthma symptoms
- Identifying and remediating environmental triggers at home, school, or work

Environmental Trigger Assessment

(no standardized criteria, but some guidance from Community Preventive Services Task Force)

- Written documentation of asthma triggers at home, e.g. dust mites, mold, moisture, pests, smoke, asbestos, wood stoves
- Remediation of exposures, e.g. air filter, mattress covers
- Patient & caregiver education on reducing home triggers

Methods

CHBRP reviewed literature on the medical effectiveness and cost of asthma education and home assessment interventions conducted by community health workers or other unlicensed personnel who would likely become qualified asthma preventive service providers if AB 391 were enacted

Methods, cont.

- Medical Effectiveness team identified randomized controlled trials (RCTs) completed in the U.S on asthma education and home environmental assessment interventions conducted by community health workers or other unlicensed personnel
 - Outcomes: asthma management behaviors, levels of allergens, asthma control, quality of life, physiologic outcomes, use of health care, productivity
- Cost team extracted unit cost, cost effectiveness, and return on investment (ROI) from the RCTs

Medical Effectiveness Findings

17 RCTs met inclusion criteria

Summary of findings

1. A preponderance of evidence from 8 RCTs suggests that asthma education (alone) provided by unlicensed personnel increases the likelihood that people will use asthma medications properly and improves caregiver quality of life
 - Conflicting evidence regarding effects of this type of intervention on other outcomes - frequency of asthma symptoms, hospitalizations, ED visits, and unscheduled clinic visits
 - No RCTs have assessed the impact of this type of intervention on levels of allergens in the home or lung function

Medical Effectiveness Findings, cont.

2. A preponderance of evidence from 9 RCTs suggests that asthma education + environmental assessment in homes by unlicensed personnel increases the likelihood that caregivers will perform behaviors that: reduce exposure to home asthma triggers, levels of allergens, frequency of asthma symptoms and activity limitations, & improves quality of life

- Conflicting evidence about the impact of this type of interventions on frequency of asthma exacerbations, absences from school or work, and hospitalizations, ED visits, and unscheduled clinic visits
- The evidence suggests that this type of intervention has no effect on lung function

Cost Findings

- Unit cost of asthma-related interventions available in 7 of the studies identified in Medical Effectiveness review
 - Unit cost ranged from \$135 to \$293 per home visit
- 1 study examined cost effectiveness, reported intervention cost of \$27.57 per additional asthma symptom-free day gained

Cost Findings, cont.

Two studies provided ROI estimates for asthma education and home assessment interventions conducted by CHWs or other unlicensed personnel

- ROI of \$1.30 and \$1.90 in savings per \$1.00 spent on the intervention
- Cost savings stem largely from estimated reductions in asthma-related hospitalizations and emergency department visits

Conclusions

Findings suggest that the provision of asthma education and home environmental assessment by unlicensed personnel has the **potential to positively impact asthma outcomes**

Implications for Policy and Practice

- Traditional patient visits to licensed providers have had limited success reducing the burden of poorly controlled asthma
- States looking for policy solutions to improve asthma outcomes may consider requiring Medicaid programs and other insurers to pay for the provision of asthma education and environmental assessment in the home and by unlicensed personnel
- AB 391 was vetoed by Governor Brown, saying DHCS could make this change without legislation

Acknowledgements

California Health Benefits Review Program (CHBRP)

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