State Medicaid and CHIP Improving Asthma Control Driver Diagram and Change Ideas

Background

A driver diagram shows the processes or systems that affect the aim of your quality improvement (QI) project and determine what you need to do or manage to improve outcomes. States that opt to implement improvement activities related to asthma can use the state Medicaid and CHIP (MAC) improving asthma control driver diagram on the next slide to plan a QI project. Here are some suggestions to begin:

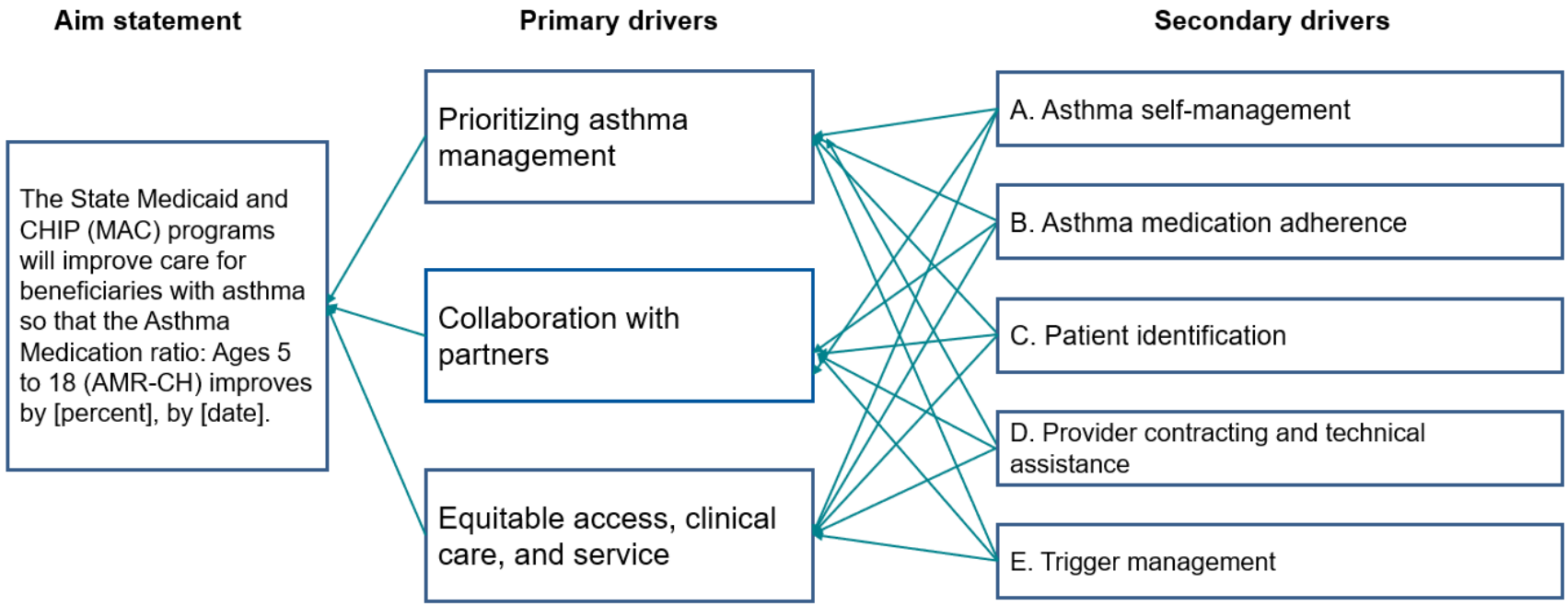
- Develop an aim statement for your state's asthma-related QI work. A good aim statement is specific, measurable, and answers the questions, "For whom, how much, and by when?" It should be brief, easy to understand, and not include background or side issues. An example aim statement is given on the driver diagram.

- Add primary drivers. Primary drivers are the high-level processes, structures, or norms in the system that must change to achieve your aim. While all the primary drivers are necessary to achieve your aim, begin your QI project by focusing on one or two primary drivers and then expand your activities over time to address the other drivers.

- Add secondary drivers. Secondary drivers expand an understanding of the primary drivers and are action-oriented, addressing the places, steps in a process, time-bound moments, or norms where changes are made to bring about improvement. Secondary drivers will help lead you to testable change ideas.

- Develop change ideas tables. Change ideas describe the specific, testable actions that can be taken to impact the secondary driver, the related primary driver, and achieve your aim. Change ideas should be evidence- or experience-based. The change ideas on the following tables were gathered from research, case studies, expert opinions, and other resources. Where available, the resources have been referenced. Short descriptions accompany Medicaid-specific experiences. Where no reference has been provided, the change idea comes from subject matter experts consulted to develop this driver diagram.

Figure. State Medicaid and CHIP Improving Asthma Control Driver Diagram



The driver diagram has the following relationships:

- Aim Statement: The State Medicaid and CHIP (MAC) programs will improve medication management for beneficiaries with asthma so that the Asthma Medication Ratio: Ages 5 to 18 (AMR-CH) improves by [percent], by [date]. The aim statement is affected by three primary drivers. Each primary driver is affected by several secondary drivers.
  - Primary Driver 1: Prioritizing asthma management. This primary driver is affected by five secondary drivers:
    - Asthma self-management.
    - Asthma medication adherence.
    - Patient identification.
    - Provider contracting and technical assistance.
    - Trigger management.

- Primary Driver 2: Collaboration with partners. This primary driver is affected by four secondary drivers:
  - Asthma self-management.
  - Asthma medication adherence.
  - Patient identification.
  - Trigger management.
- Primary Driver 3: Equitable access, clinical care, and service. This primary driver is affected by five secondary drivers:
  - Asthma self-management.
  - Asthma medication adherence.
  - Patient identification.
  - Provider contracting and technical assistance.
  - Trigger management.

Table: State Medicaid and CHIP Improving Asthma Control Change Ideas

Secondary Driver

A. Asthma self-management. National guidelines highlight asthma self-management education as an important strategy in controlling asthma. Asthma self-management education includes basic facts about asthma, the roles of medication, how to use medications correctly, what to do when asthma symptoms worsen, and how to reduce exposure to asthma triggers. Medicaid and CHIP (MAC) agencies and managed care organizations (MCOs) can improve access to asthma self-management education by reimbursing a range of providers for this service in a variety of settings.

Change Activity	Evidence, Resources, & Case Studies
A1. Reimburse providers for home visits for asthma self-management	**Puerto Rico Medicaid (ASES)** partnered with its public health department and managed care plans to provide virtual home visits to children with uncontrolled asthma. This project was conducted as part of **CMS' Improving Asthma Control Affinity Group**. **Michigan Medicaid** reimburses the Managing Asthma through Case-Management in Homes (MATCH) program for adults and children with severe or difficult-to-control asthma. Social workers visit qualifying beneficiaries to develop asthma action plans and provide education and case management. **Resources:** • **Economic Evidence of US Asthma Self-Management Education and Home-Based Interventions** • **Home Visits are Needed to Address Asthma Health Disparities in Adults** • **Home Visits for Children with Asthma Reduce Medicaid Costs** • **Asthma Home Visit Programs** • **Home Visits for Trigger Reduction and Asthma Self-Management Education**
A2. Reimburse additional provider types (e.g., school nurses, community health workers [CHWs], respiratory therapists, asthma educators, care managers) to provide asthma self-management education	Recommended by subject matter experts. **Resources:** • **Community Health Worker Home Visits for Adults with Uncontrolled Asthma** • **Medicaid Payment Innovations to Financially Sustain Comprehensive Childhood Asthma Management Programs** • **Medicaid Coverage of Asthma Self-Management Education**
A3. Require MCOs to improve the delivery of asthma self-management education using performance improvement projects (PIPs)	**Maryland Medicaid** initiated the Asthma Medication Ratio PIP that sought to increase the percentage of beneficiaries 5-64 years of age with poorly controlled asthma. As part of the PIP, MCOs provided member education and outreach via case managers and health coaches, developed provider care opportunity reports, and offered transportation for office appointments. **District of Columbia Medicaid** required its three MCOs to engage in a collaborative PIP - IMPACT DC – working on asthma self-management and to measure and address outcomes for pediatric asthma.

Change Activity	Evidence, Resources, & Case Studies
A4. Engage school nurses in the provision of asthma care and asthma self-management education	**Maryland Medicaid** engaged school nurses to identify and refer children to asthma home visits and self-management education programs.

Secondary Driver

B. Asthma medication adherence. Guidelines-based asthma medical management is not routine, leading to inadequate asthma control. Medicaid and CHIP (MAC) agencies and managed care organizations (MCOs) can improve medical management by strengthening system support and improving access to asthma medications.

Change Activity	Evidence, Resources, & Case Studies
B1. Create an asthma medication therapy management (MTM) program with pharmacists	**Missouri Medicaid (HealthNet)** reimburses pharmacists for delivering medication and disease management education and counseling. **Resources:** • **Pediatric Asthma Medication Therapy Management Through Community Pharmacy and Primary Care Collaboration** • **Pharmacist Involvement in Improving Asthma Outcomes in Various Healthcare Settings** • **Can a Self-Management Programme Delivered by a Community Pharmacist Improve Asthma Control?** • **Pharmacist-led Intervention Study to Improve Inhalation Technique in Asthma and COPD Patients**
B2. Develop a disease management program that focuses on controller medication use	**Oregon Medicaid (Oregon Health Plan)** implemented an asthma disease management program. Beneficiaries enrolled in the program had significantly fewer emergency room visits and higher office visits.
B3. Eliminate or reduce copays for asthma medications and devices	Recommended by subject matter experts. For example, **a brief report** on barriers to guidelines-based care in asthma examines the copays in Medicaid programs.
B4. Provide medication management support during home visits	Recommended by subject matter experts. For example, the Centers for Disease Control and Prevention provides **evidence supporting this strategy** as part of **EXHALE**, a set of six strategies that contribute to better asthma control.
B5. Offer mail order asthma medication programs	**New Hampshire Medicaid MCO** offers a mail order pharmacy program that provides 90-day supplies of asthma maintenance medications.
B6. Alert providers when a beneficiary has not filled to their medication	**Massachusetts Medicaid (MassHealth)** MCO developed an asthma disease management program that produces quarterly reports on members using asthma services and sends a summary to primary care providers (PCPs). PCPs work with their patients to improve their asthma control. Additionally, the MCO sends a Trigger Report to physicians when members have not filled an asthma controller drug prescription. Within a five-year period, there was a 9% increase in asthma adhering to their prescribed medication.

Secondary Driver

C. Patient Identification. Medicaid and CHIP (MAC) agencies and managed care organizations (MCOs) can use data to identify patients who could benefit from asthma control interventions. The burden of asthma is often unequally distributed. For example, Black Americans are approximately two times more likely to die from asthma than white Americans, and asthma is also more common with worse outcomes among people with more exposure to air pollutants. To address disparities in asthma care, MAC agencies and MCOs should stratify data (e.g., by race/ethnicity, rural/urban, and/or other relevant characteristics).

Change Activity	Evidence, Resources, & Case Studies
C1. Collect, analyze, and use claims data to identify beneficiaries who can benefit from asthma supports, including self-management education and trigger reductions	**Missouri Medicaid (MO HealthNet)** and its partners conducted a quality improvement project in which Medicaid pharmacy claims data were analyzed to identify beneficiaries with asthma whose medication did not appear to follow guidelines. These individuals were notified by mail. In one year, the program increased the guidelines-based use of asthma medications.
2. Send providers feedback reports on beneficiaries with poor medication management or asthma-related emergency department (ED) visits	**Massachusetts Medicaid (MassHealth**) MCO developed an asthma disease management program that produces quarterly reports on members using asthma services and sends a summary to primary care providers (PCPs). PCPs work with their patients to improve their asthma control. Additionally, the MCO sends a Trigger Report to physicians when members have not filled an asthma controller drug prescription. Within a five-year period, there was a 9% increase in asthma adhering to their prescribed medication.
C3. Use community health workers (CHWs) or care coordinators to conduct telephone outreach to members who have been identified to have poorly controlled asthma or had a recent asthma-related hospital stay or ED visit	**California Medicaid (Medi-CAL)** MCO identified beneficiaries with low Asthma Medication Ratios and had care coordinators conduct outreach to understand the barriers the beneficiary faced and connect them with asthma resources. This project was conducted as part of **CMS' Improving Asthma Control Affinity Group**.

Secondary Driver

D. Provider Contracting and Technical Assistance (TA). Medicaid and CHIP (MAC) agencies and managed care organizations (MCOs) can use contracts to require providers to offer asthma support. They can also work directly with providers and offer training related to best practices that affect the health of Medicaid or CHIP beneficiaries with asthma.

Change Activity	Evidence, Resources, & Case Studies
D1. Establish Medicaid Health Homes for people with asthma	**Missouri Medicaid (MO HealthNet)** offers a Primary Care Health Home (PCHH) Initiative which focuses on care coordination via selected local healthcare providers for children with asthma.
D2. Create incentives that reward high-quality asthma care (e.g., value-based payments, provider bonuses)	**North Carolina Medicaid's Partners for Kids Accountable Care Organization (ACO)** is required to meet certain benchmarks on pediatric health outcome performance indicators in order to be eligible for shared saving payments, including having fewer asthma-related emergency department (ED) visits. **Arkansas Medicaid** offers an asthma exacerbation bundle for all care delivered within 30 days of exacerbation of asthma.
D3. Offer interactive seminars to providers on national asthma guidelines, communication skills, and key educational messages	**Missouri Medicaid (MO HealthNet)** offered trainings to medical residents on how to use teach-back when providing asthma medication via the ECHO program.
D4. Train a range of providers to provide asthma self-management education	**New Jersey Medicaid** partnered with the Department of Public Health to expand a successful community health worker training to include asthma control management support. This project was conducted as part of **CMS' Improving Asthma Control Affinity Group.**

Secondary Driver

E. Trigger management. Strategies addressing asthma triggers can improve conditions in homes, schools, workplaces, and other settings. Medicaid and CHIP (MAC) agencies and managed care organizations (MCOs) can improve access to trigger management services and education.

Change Activity	Evidence, Resources, & Case Studies
E1. Provide home visits and assessments for asthma trigger reduction and allergen elimination services	**Louisiana Medicaid** partnered with its Department of Public Health and other partners to expand an existing program that provides virtual home visits for children under age 19 living with poorly controlled asthma and environmental concerns in the home. During home visits, children and their families received education on clinical and environmental approaches to asthma management. This project was conducted as part of **CMS' Improving Asthma Control Affinity Group**. **Missouri Medicaid (MO HealthNet) and Maryland Medicaid** cover home environmental visits for asthma patients. **Resources:** • **Economic Value of Home-Based, Multi-Trigger, Multicomponent Interventions with an Environmental Focus for Reducing Asthma Morbidity** • **A Cost-Benefit Analysis of a State-Funded Healthy Homes Program for Residents with Asthma** • **Results of a Home-Based Environmental Intervention among Urban Children with Asthma**
E2. Reimburse community-based professionals who conduct home assessments for asthma triggers and allergen elimination	**Massachusetts Medicaid (MassHealth)** managed care plan reimburses nurses for conducting home inspections for asthma patients.
E3. Provide tobacco cessation counseling or cessation medications to parents or caregivers of children with asthma	Recommended by subject matter experts. **Resources:** • **Integrating Asthma Education and Smoking Cessation for Parents: Financial Return on Investment**
E4. Connect beneficiaries with asthma to integrated pest management (IPM) and home weatherization services	Recommended by subject matter experts. **Resources:** • **A Randomized Trial of a One-Time Pest Intervention: Impact on Childhood Asthma Outcomes** • **Asthma Community Network: Integrated Pest Management** • **Weatherization Assistance Program**

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