



How to Discuss the Return on Investment of Guidelines-Based Asthma Care Coverage

Medicaid provides healthcare coverage to over 68 million low-income individuals, and research shows that the program provides important economic benefits for individuals and communities as well.¹ These include job creation, income for the healthcare sector and increased federal and state tax revenue.²

Similarly, Medicaid coverage of guidelines-based asthma care has the potential to improve patient outcomes while also reducing costs. Evidence suggests that the correct use of long-term control medicines, allergen immunotherapy, home-based asthma services and self-management education has a positive return on investment (ROI). Therefore, by improving coverage of guidelines-based asthma care, state Medicaid programs can simultaneously promote improved asthma management, better health outcomes and economic benefits.

Here are some key points and recent research to highlight when educating state Medicaid offices, managed care plans and other stakeholders about the return on investment of guidelines-based asthma care coverage.

Coverage of guidelines-based asthma care reduces healthcare costs for payers. For example, an evaluation of a home-based asthma intervention that included environmental remediation and asthma education found that the program led to over \$882,000 in avoided healthcare costs in the 12 months after the intervention.³ Additionally, a recent review of 270 randomized control trials found that supported asthma self-management yields significant savings, by reducing unscheduled care and improving asthma control for roughly the same cost as standard care.⁴

Multiple programs that use guidelines-based asthma care in Medicaid have produced a positive ROI. One program in Chicago where community health workers made home visits for children with asthma to provide asthma education resulted in a ROI of \$5.58 per dollar invested over one year.⁵ Another home visiting program in New York produced an ROI of \$3.58 (see box).⁶ Finally, an analysis modeling the impact of a low-cost intervention to improve adherence to asthma controller medication by 40 percent found that it could return \$95 per child per year.⁷

The New York State Healthy Neighborhoods Program

In this program, children and adults with asthma received home visits that included home environmental assessments, low-cost interventions to address asthma triggers, and self-management education. For individuals with poorly controlled asthma (an asthma attack within the past three months and/or one or more medical encounters due to asthma within the last twelve months), the return on investment was \$3.58 per dollar invested over one year.

Adherence to evidence-based care results in improved asthma management and better health outcomes. These include outcomes with significant potential for cost savings, including fewer hospitalizations and emergency department visits,⁸ fewer asthma rescue medication refills⁹ and fewer days of missed school and work.¹⁰

Medicaid recipients currently face multiple barriers to guidelines-based asthma care, resulting in lost opportunities for program savings. Barriers to guidelines-based asthma care, such as copayments and prior authorization, are common, particularly among low-income families of children with asthma in Medicaid.¹¹ Interventions that address barriers to adherence would likely reduce the risk of emergency department visits and other avoidable costs while promoting the use of necessary preventive care, especially among children in Medicaid.^{12,13,14}

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¹Centers for Medicare and Medicaid. (2017). December 2017 Medicaid and CHIP Enrollment Data Highlights. Available at: <https://www.medicaid.gov/medicaid/program-information/medicaid-and-chip-enrollment-data/report-highlights/index.html>

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³Shuler MS, Yeatts KB, et al. The Regional Asthma Disease Management Program (RADMP) for low income underserved children in rural western North Carolina: a National Asthma Control Initiative Demonstration Project. *Journal of Asthma*. 2015; 52(9):881-8.

⁴Pinnock H, Parke HL, et al. Systematic meta-review of supported self-management for asthma: a healthcare perspective. *BMC Medicine*. 2017;15:64.

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⁶Gomez M et al. A cost-benefit analysis of a state-funded healthy homes program for residents with asthma: findings from the New York State Healthy Neighborhoods Program (2017). *Journal of Public Health Management and Practice*, 23(3), 229-238.

⁷Rust G, Zhang S, et al. Potential Savings From Increasing Adherence to Inhaled Corticosteroid Therapy in Medicaid-Enrolled Children (2015). *American Journal of Managed Care*. 21(3): 173-180.

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¹¹Fung V, Graetz I, et al. Financial barriers to care among low-income children with asthma: health care reform implications (2014). *JAMA Pediatrics*. 168(7):649-56.

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¹⁴Fung V, Graetz I, et al. Financial barriers to care among low-income children with asthma: health care reform implications. *JAMA Pediatrics*. 2014;168(7):649-56.

