

WHEN MEDICATION SWITCHING THREATENS CARE OF CHILDREN WITH ASTHMA

CHILDREN WITH ASTHMA CAN SUFFER BECAUSE OF FREQUENT AND UNNECESSARY CHANGES TO THEIR MEDICATION COVERAGE.

Insurers often use a tactic known as non-medical formulary switching (NMFS)—changing coverage to similar drugs for which they can negotiate a lower price—as a way to reduce prescription drug prices. While we should applaud efforts to reduce the high cost of prescription drugs generally, the use of NMFS is frequently misguided. It can have direct impacts on patients and their care, often forcing families to either switch to a different, newly covered medication that might result in negative health outcomes or pay much more out of pocket to keep the medication that is working for them. Exacerbating the problem, insurers frequently switch medications because the lower price for an alternative brand-name drug is temporary, requiring another change in medication when that deal ends. Children with asthma – the most common chronic medical condition in children – rely on regular use of medication to stay healthy and are especially vulnerable to negative health impacts resulting from these changes.

This brief identifies the challenges associated with NMFS, their consequences for children with asthma, and guidance on ways to improve practices to ensure stable, continuous medication management so children with asthma and others who rely on regular medication can stay healthy.

BACKGROUND ON NON-MEDICAL FORMULARY SWITCHING (NMFS).

NMFS is a common practice for both private insurance plans and in programs like the Children's Health Insurance Program (CHIP) and Medicaid. In theory, NMFS is intended to reduce the cost of medical care by shifting prescriptions to equally effective but less costly medications (e.g. newly introduced generics), a practice that we encourage when new medications are actually equally effective and less costly. In reality, pharmacy benefit managers often negotiate with pharmaceutical companies for short-term discounts, which can lead to temporary promotion of another brand name medicine instead of generic medicines that have more price stability. The resulting frequent changes to drug coverage can cause negative health outcomes and greater costs in the long run.^{1,2}

Yet, NMFS has become routine for those who make decisions about which medications to cover, even though the evidence does not suggest it is a clinically or cost-effective practice.

KEY TAKEAWAYS



Non-medical formulary switching (NMFS) is used by insurers to limit coverage of prescription drugs to medications for which they can negotiate a lower price.



Frequently changing which drugs are covered without a medical reason can disrupt patient care, lead to worse health outcomes and, ultimately, increase health care costs.



Children with asthma are particularly vulnerable to negative health consequences caused by NMFS.



Thoughtful policies can inform the appropriate use of NMFS to help patients stay healthy and save health care dollars.

NMFS OFTEN CREATES MORE PROBLEMS THAN IT SOLVES.

Focused solely on short-term cost to the insurer, NMFS typically limits patients to similar but different drugs without taking into account the reasons why providers and patients have selected their specific medication regimens.

NMFS causes disruption in care.

- Patients with chronic conditions who are doing well and responding to their current therapy are forced to use unfamiliar medications that may not have the same dosing, delivery systems, side effects or efficacy.
- Prescribers, pharmacists, nursing staff and families may be unfamiliar with the new medications and devices, leading to confusion in the communication between patients and their providers and, ultimately, the patient's inability to use the medication correctly.
- Daily adherence to long-term medications is already difficult, especially for children with asthma who have been found to only adhere to their prescribed controller medicine doses 50 percent of the time.³

Figure 1

NON-MEDICAL FORMULARY SWITCHING (NMFS) IMPACT ON OUTCOMES FOR PATIENTS DOING WELL ON CURRENT MEDICATIONS

	Negative	Neutral	Positive
 Clinical	63.6%	36.4%	0%
 Economic	57.1%	42.9%	0%
 Resource Utilization	72.7%	27.3%	0%
 Medication Taking Behavior	100%	0%	0%

Specific outcomes included: **Clinical** = Disease flare-ups, adverse events; **Economic** = All medical costs; **Resource Utilization** = Inpatient stays, ER visits, outpatient visits; **Medication-Taking Behavior** = Adherence, Discontinuation

Source: Nguyen E, et al. Impact of non-medical switching on clinical and economic outcomes, resource utilization and medication-taking behavior: a systematic literature review. *Curr Med Res Opin.* 2016.

NMFS rarely leads to beneficial outcomes.

- NMFS does not lead to any clinical, economic or health services utilization improvements 90 percent of the time, according to a systematic review on the subject.¹
- For patients in this same review who were doing well on their current medications, NMFS never resulted in positive outcomes. Instead, for the majority of patients, it led to worse clinical, economic and resource utilization outcomes. For 100 percent of these patients, NMFS led to poorer medication adherence (see Figure 1).¹

PATIENT STORY 1: SIX-YEAR-OLD JORDAN*

Jordan has moderate persistent asthma. Although he is only six years old, Jordan plays an important role in managing his condition. His doctor worked closely with him and his parents to find a medication regimen that worked for them – the medications were effective, easy to adhere to and had successfully kept him out of the hospital. Under this plan, Jordan and his family knew that every morning when he woke up and every night when he went to bed he needed to use the “orange inhaler,” his controller medication. But when he felt an asthma attack coming on, they knew he needed to use the “blue inhaler” – his rescue medication – to help him breathe. This simple rule of thumb is especially important to Jordan's asthma care because he is cared for by both his parents (who work multiple jobs) and grandparents, so every change in his routine involves re-education of his entire family.

Last month, Jordan's insurance company changed its medication formulary to cover a different controller medication that has not been shown to be safer or more effective. He is no longer able to get his “orange inhaler”; it has been replaced with another blue one. Although his family did their best to adjust to a new routine, in the panic that came with one of his recent asthma attacks they accidentally grabbed the wrong “blue inhaler” – his new controller medicine – thinking it was his rescue medicine. It took too long to realize this mistake, so Jordan needed to be rushed to the emergency department to receive more intensive, and more expensive, care.

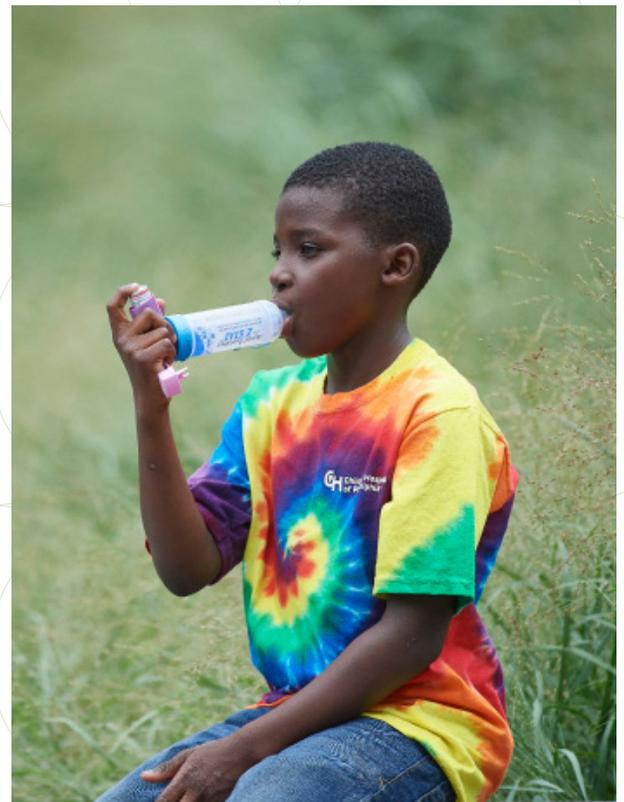
PATIENT STORY 2: THREE-YEAR-OLD LAUREN*

Lauren has persistent asthma that was poorly controlled until three months ago when she began using a daily controller inhaler. With this inhaler, she could use a device called a “spacer” to make it easier for her to breathe in the medicine. Since starting this new medication, her family noticed that she hadn’t had a flare up and rarely needed her rescue medicine. They started to trust the medicine and made it part of her morning and evening routines. However, her insurance company recently renegotiated medications on their formulary and left out this particular drug that seemed to help Lauren so much. Instead of replacing it with a similar generic or well-studied brand name medication that Lauren could use the same way (a metered dose inhaler), they included only one medication option in this class (a dry-powdered inhaler). This medication needs to be taken differently (without a spacer) and isn’t reliable for kids her age as it requires a strength of inhalation and level of coordination that they rarely have.

When Lauren used this new inhaler, the medication ended up in her mouth and her digestive system instead of her lungs, essentially leaving her without any therapeutic effect. Within two weeks of starting this new medicine, her mother called the pharmacy and doctor’s office multiple times concerned that Lauren doesn’t seem to be able to use the inhaler. A week later she had a flare up and, despite her mother’s best efforts to treat her symptoms with her rescue inhaler, she was admitted to the hospital with a severe asthma attack.

NMFS IS PARTICULARLY PROBLEMATIC FOR CHILDREN WITH ASTHMA.

- **It takes time and effort for children and their caregivers to familiarize themselves with medication protocols to manage childhood asthma.** Switching to a different medication device may require learning two different inhalation techniques, which can make it difficult for children to take their medicine. But even seemingly small changes to medications, such as the color, shape or size could confuse caregivers, disrupt a child’s routine, lead to mixing up medications and result in poor medication adherence. (See Patient Story 1)
- **Formulary changes often do not consider whether medications are approved for use in children, leaving prescribers and families without coverage of any age-appropriate options.** For instance, an entire class of asthma medication-delivery systems (dry-powdered inhalers) cannot be reliably used in most children under age 10 because they are physically incapable of using them appropriately. (See Patient Story 2)
- **Asthma disproportionately affects low-income and minority populations,⁴** who tend to have fewer resources and the hectic schedules common to busy working families. These factors can make it even more difficult for families of children with asthma to keep track of medications and properly manage their condition.



**Based on actual patients for whom we have provided care, but names and minor details have been modified to protect patient privacy. While these are individual stories, they reflect the challenges that we see every day in our practices and emergency departments.*

GUIDING PRINCIPLES FOR FORMULARY SWITCHING

Changes to medication formularies should not be made without considering the following three key factors:

- Overall value of medical care, including health and costs
- Children's continued access to medications they are physically able to take
- Communication needed between providers and families to prevent disruptions in care

LOOKING FORWARD: REDUCING THE RISK OF HARM FOR CHILDREN WITH ASTHMA

Although formulary switches are usually intended to help reduce health care costs, the way in which insurers use them can be short-sighted – putting patients' health at risk and often leading to even higher long-term health care costs. We've developed the following guiding principles that are critical to reducing the risk of harm for asthma patients who rely on regular medication to stay healthy and, if universally applied in formulary decision making, could improve outcomes for all patients with chronic conditions:

- Those who negotiate asthma medication prices and those who evaluate the health outcomes of patients must communicate with each other to ensure that the disruptions in medications resulting from NMFS do not worsen the overall value of medical care, including negative health outcomes and higher overall costs. For instance, when a medication switch is made to a different type of device, pharmacists should receive a notification that patients may need to be taught how to use the new device and provide that education before dispensing the medication.
- When formularies are being developed or modified, decision makers should consider the unique needs of children to make sure their formularies contain at least one class of each asthma medication that has either been studied in younger children or, at a minimum, that children are physically able to take.
- When a formulary change is medically indicated and appropriate for children, prescribers, pharmacists, insurers and families must communicate seamlessly to ensure that the change leads to as little disruption in a child's asthma care as possible.

Rising health care costs and prescription drug prices are complex challenges that will require thoughtful solutions involving stakeholders from all areas of the health system. While the practice of NMFS may be intended to help curb these growing costs, if used indiscriminately, its unintended consequences can actually have the opposite effect. Patient health should always be the first priority, with the cost of paying for quality care as a close second. Unfortunately, as it is currently practiced, NMFS can harm both. We need meaningful policy changes to improve health outcomes while simultaneously reducing preventable health care utilization and costs.

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