

# Antimicrobial stewardship

Challenges and solutions in long-term care

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**Omnicare**<sup>®</sup>, a **CVS Health**<sup>®</sup> company  
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## Too frequently, antimicrobial medications are prescribed unnecessarily.

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Although all antimicrobials, including antibiotics, are important in treating infections in long-term care residents, they should be used with great care, and many times they are not the best answer. The Centers for Medicare and Medicaid Services (CMS) now requires skilled nursing facilities/nursing homes to implement antimicrobial stewardship programs that include prescribing protocols, proactive monitoring of utilization, and action steps to reduce inappropriate use of these medications.

A pharmacy partner can help with each of these requirements, ensuring that antimicrobials are used appropriately for the individual, and in the best interests of all residents in a facility.

### Challenges with antimicrobial use

Too frequently, antimicrobial medications are prescribed unnecessarily, too long, or in a way that duplicates the effect of other medications. The Centers for Disease Control has cited studies estimating that up to 70 percent of residents in post-acute settings receive courses of antibiotics in a year, and that 40-75 percent of the antibiotics being used in post-acute facilities may be unnecessary or inappropriate. Because overuse and inappropriate use can lead to the development and spread of antimicrobial-resistant infections, secondary illnesses and even death, this represents a threat to the safety of vulnerable residents.<sup>1</sup>

Comprehensive antimicrobial stewardship programs (ASPs) address not only the use of antibiotics, but

also that of other antimicrobial medications including antifungals, antivirals and antiparasitics. These programs have been shown to help ensure that antimicrobials are only used when necessary, limiting the spread of resistant bacteria, secondary infections and rehospitalizations, and therefore providing cost savings.<sup>2</sup> The initial work to create an ASP can be organized into three simple steps: tracking, education and partnerships.

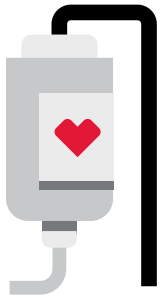


Omnicare<sup>®</sup> experts can assist in identifying patterns with antibiotic use and infections

### The first three steps in creating a stewardship program

The first step should be a system-wide tracking of antimicrobials to identify trends in prescribing patterns and resistance. Pharmacy partners such as Omnicare,

## Antibiotic use among post-acute residents



**70%**  
Receive course of  
antibiotics in a year

**45-70%**  
May be unnecessary

a CVS Health<sup>®</sup> company, are perfectly suited to help with this task. Account managers can help to explain the tracking process, and consultant pharmacists are available upon request to talk with facility leadership about current trends. With a baseline established, the facility will have an easier time tracking progress against its goals in a stewardship program.

Education is also important, and it needs to be extended to not only clinical, but also non-clinical staff. Non-clinical staff may be the first to notice key symptoms, such as watery stool that may indicate the spread of *Clostridium difficile* bacteria (C. diff). Educating them on key symptoms to watch for can make the entire facility's effort more effective, while simultaneously reducing the spread of infection among staff and residents. Furthermore, ongoing rates of high turnover among post-acute staff<sup>3</sup> require a consistent communication program so new employees are prepared to help in this area, too. As with tracking, pharmacy partners can help with staff education upon request.

The third simple step is to establish partnerships, both inside and outside the facility, to help identify signs of antimicrobial resistance. Inside the facility, an antimicrobial stewardship team is required by facilities that accept funding from CMS. As of November 2019, an infection preventionist is required to be on that team, but it is never too early to start training someone to fill or assist with that position. Outside the facility, pharmacists, prescribers, referring hospitals and the laboratory can each play an important role in ASPs.

### Leveraging Omnicare's expertise to customize a plan

Because Omnicare believes that the entire post-acute facility can be involved in an ASP, it provides a flexible collection of resources and tools so those facilities can choose only the items that support their individual needs. These resources and tools focus on several key areas:

- Judicious use of antimicrobials
- Preventing infections or reducing microbial resistance
- Decreasing infections resulting from drug-resistant organisms
- Improving patient outcomes and
- Lowering the cost of care

The major factor in Omnicare's resource network is its team of consultants. These experts can assist the facility in identifying patterns with antibiotic use and infections. They are also available to perform in-service trainings upon request. Each consultant has received eight hours of training on CDC stewardship guidelines for post-acute facilities. As a result, they are well prepared to be proactive in helping customers with their own ASPs.

Furthermore, experts at Omnicare can help clinical staff read a culture and sensitivity report (C&S), seek indications for use, identify trends in prescribing and monitoring at a facility, recommend stop dates

for medications, decrease medication duplications and identify when it's possible to move a resident from intravenous (IV) to oral medications (PO). All are important steps to ensure appropriate use of antimicrobial medications, and to ultimately promote better patient safety and outcomes.

## **Omnicare's tools for antimicrobial stewardship**

As a leader in providing pharmacy technology solutions, Omnicare also makes convenient reporting functions available from its Omniview<sup>®</sup> online platform, where customers can track utilization and prescribing patterns for all antimicrobials, including antibiotics. The Omniview dashboard aligns with CDC guidelines for stewardship. Reports can be broken down by individual residents and medications, or take a global look at all antimicrobials in the facility. The resulting data-driven insights can provide an important big-picture view that can help a facility track its performance against the benchmarks it established at the beginning of the plan.

Omnicare also provides specific clinical tools and guidance for facilities to craft their own programs. Drug utilization guides from Omnicare represent best practices to avoid overusing particular antimicrobials and move away from those that are susceptible to resistance. Empowered with this knowledge, nurses can talk to a pharmacist or prescriber about switching to a more appropriate medication. This step can save

money and prevent the development of resistance in the facility.

Additional decision aids include an IV to PO document that helps the care team find opportunities to move residents to oral doses and decrease risk of infection from an intravenous line. Omnicare also offers a guide for monitoring antibiotic use, both per resident and also for the facility as a whole. And it makes available a quick reference guide for common antibiotic and antimicrobial interactions. All can be useful when staff want to start an ASP but are short on time.

For physicians, physicians' assistants and nurse practitioners, Omnicare's empiric therapy algorithms walk prescribers through best practices to treat common conditions in long-term care. The habit may be to prescribe a "default" antibiotic, but these patterns can lead to overuse of inappropriate antibiotics and, over time, growth of antimicrobial resistance. Omnicare's clinical tools and guidance can help prescribers move away from such practices.

## **Summary**

The prospect of starting or improving an ASP in a long-term care setting does not need to be daunting. Involving a pharmacy partner such as Omnicare, with its flexible offerings of expertise and tools, can help leaders at the facility to quickly establish a customized program that delivers measurable improvements.

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## **Sources**

<sup>1</sup> Centers for Disease Control, [cdc.gov](https://www.cdc.gov); [CDC.gov/longtermcare/prevention/antibiotic-stewardship.html](https://www.cdc.gov/longtermcare/prevention/antibiotic-stewardship.html)

<sup>2</sup> Centers for Disease Control, [cdc.gov](https://www.cdc.gov); [CDC.gov/antibiotic-use/healthcare/implementation/core-elements.html](https://www.cdc.gov/antibiotic-use/healthcare/implementation/core-elements.html)

<sup>3</sup> American Health Care Association 2012 Staffing Report, p2