“The U.S. population aged 65 to 85 years is increasing rapidly, and the population aged 85 years and older is expected to double by 2030.” This statistic comes from SHEA/APIC Guideline: Infection Prevention and Control in the Long-Term published in 2008. It goes on to advise that of this population, a majority can be expected to spend at least some time in Long Term Care Facilities (LTCF). Indeed, Long Term Care is an exploding segment of the healthcare industry.

With this increase comes the added risk of healthcare-associated infections (HAIs). The website Infection Control Today reports that infections are the leading cause of deaths in LTCFs -- almost 400,000 annually -- “with best estimates suggesting that up to 2.8 million infections can occur in this population.” It also states that in a recent study by the University of Pittsburgh’s Graduate School of Public Health, “fifteen percent of U.S. nursing homes receive deficiency citations for infection control per year.”

HAIs are already a focus of attention in acute-care hospitals, prompting stricter infection control guidelines and processes. However, the LTC segment has not been equally addressed in this issue and “application of hospital infection control guidelines to the LTCF is often unrealistic in view of the differences” between the two.

While LTCFs encounter the same HAIs as hospitals, the nature of the environment presents a different set of challenges. Dr. Fontaine Sands, DrPH, MSN, CIC, Associate Professor at Eastern Kentucky University, points out that because LTC residents are mobile, as opposed to being confined to rooms as is most often the case in hospitals, infections can spread rapidly. For example, the norovirus can spread within 24-48 hours, easily before nursing staff can detect its presence. Factor in that residents sit together to eat and socialize, share bathrooms, or have other close contact, and it is even easier for such an infection to spread.

In Your Guide to Choosing a Nursing Home, published by the Centers for Medicare and Medicaid Services (CMS), one of the rights listed for residents is “to keep and use your personal belongings and property as long as they don’t interfere with the rights, health, or safety of others.” In addition, Residents’ Rights are guaranteed by the federal 1987 Nursing Home Reform Law which includes the right to “make personal decisions, such as what to wear and how to spend free time.” This means that unlike most hospital patients, LTC residents will generate clothing of vastly differing fabrics and colors.
Adding to the challenge, residents in LTCFs are more likely to have issues with incontinence, trouble swallowing, and other conditions that, to put it bluntly, result in bodily fluids on clothing, which may not be able to withstand high temperatures and/or bleaching.

Isolation is the first measure in controlling an infection and preventing a rapid spread through the facility. However, even that can be problematic. “CMS [Center for Medicare and Medicaid Services] requires that residents have socialization,” says Dr. Sands, even when isolated for infections. Because many LTCFs have a low staff to resident ratio, they may be reluctant or unable to adequately isolate a patient, exacerbating the risk of infections spreading.

From a laundry standpoint, the challenges are even more complex. Since patients have the right to wear their own clothing, the staff must consider that which cannot be washed with the same processes as standard healthcare linens. This gives the servicing laundry the added challenge of not only making sure these items are hygienically clean, but also retain their original condition. Some residents who are in the LTCF for short term rehab may do their own laundry as part of their rehab in home-grade washers and dryers. Some families prefer to do the laundry of their loved one themselves. This situation makes removing potentially infectious flora from their clothing difficult.

The CMS, in its Revisions to Appendix PP – “Interpretive Guidelines for Long-Term Care Facilities F tag 441 Infection Control,” gives the following standard for laundering textiles: “Hot water washing at temperatures greater than 160 degrees F for 25 minutes and low temperature washing at 71 to 77 degrees F (22-25 degrees C) with a 125-part-per-million (ppm) chlorine bleach rinse remain effective ways to process laundry.” However, when a patient’s clothing is taken home by family, these two criteria may not be met. This may also be true if a patient is doing his own laundry within the facility. Even if commercial grade equipment and processes are being used, a resident’s clothing may not be made of materials that can handle hot water and/or chlorine bleach.

Taking this into consideration is vital when designing an effective infection control plan for the LTCF. Dr. Sands suggests some practical measures that go above and beyond the required minimum, such as requesting that family bring in clothing that can sustain high temperatures and/or chlorine bleach; bagging clothing and textiles in the room of patient suspected of having an infection, as opposed to carrying it down the hallway to a common soil cart; and consider processing the laundry of the wing of a suspected infectious patient separately from the rest of the facility.

Education of laundry staff is essential, from management to frontline workers. It is not enough that they understand the mechanics of their job; they must be trained as to the nature of the possible infections they are dealing with so that they may take appropriate actions. It is these practical steps that will make the difference in an infection control plan that works and one that isn’t worth more than the paper it is written on.
Dr. Sands emphasizes that the time to take all these factors into consideration is before a major outbreak of an infectious illness. LTCFs are required to have a designated Infectious Control Preventionist; however, because of low staff, many times this person has multiple jobs and is not able to focus enough attention on the matter until a problem occurs. There is of yet no industry-wide standardized policy or guideline for LTCFs to follow, leaving them to figure it out on their own.

It is impossible to eliminate infections completely. The majority of the infections enter the LTCF from the hospital, either through newly admitted patients or existing residents who are sent to the hospital for illness or a procedure. It is keeping these infections from spreading out of control that LTCFs need to worry about. The time to do so is now, before the LTCF population increases, bringing with it more and more infections.

Centers for Medicare and Medicaid Services, Clarification of Interpretive Guidance at F Tag 441-Laundry and Infection Control, January 25, 2013

Footnotes
5 http://www.theconsumervoice.org/resident/nursinghome/residents-rights