California Association of Long Term Care Medicine

Promoting quality patient care through medical leadership and education

Assisted Living Delphi Medication Optimization White Paper
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Safe and effective medication use in assisted living (AL) communities is an important policy and practice topic that affects the well-being of the nearly one million AL residents.

The California Association of Long-Term Care Medicine's AL Delphi Group (the Group) has been convening since the fall of 2020. Composed of national and international experts in geriatrics and long-term care medicine and subject matter experts with specific interests in AL, the Group has collaborated at the state and national levels to successfully serve as a resource for AL professionals and policymakers, provide education and establish best practices.

The purpose of this Paper is to summarize the benefits of and barriers to medication optimization, identify processes to improve how medications are prescribed, and stimulate additional efforts to improve the quality of care for residents in AL communities.

CONCEPT OF MEDICATION OPTIMIZATION

Practitioners and policymakers are largely familiar with the concepts and practices for Medication Management, Medication Reduction and Deprescribing. This commonly involves review of all the medications an individual takes including prescribed medications, topicals or over-the-counter products [OTC] (including vitamins, supplements, herbal products, etc.), considering any potential adverse drug interactions and side effects, and educating the consumer about potential risks, benefits, interactions, and harms. This effort typically leads to elimination of several unnecessary medications and supplements, hence the terms "Deprescribing" or "Medication Reduction" are often used. However, the process is more than that. It may also create recommendations on starting new medications and optimize the timing and dosing of existing medications. Therefore, Medication Optimization is the preferable term used for this paper.

NEED FOR MEDICATION OPTIMIZATION IN AL SETTINGS

Regardless of terminology, proper medication use is an important goal in health care, especially in the older adult population. There has been considerable research and best practices around antipsychotic medication use and polypharmacy, both of which present many potential harms to older adults. Numerous published articles describe successful strategies to optimize medications, and valuable initiatives such as the Society for Post-Acute and Long-Term Care Medicine [AMDA] Drive2Deprescribe have focused on specific best practices and resources.

Potential benefits of Medication Optimization include reduction of adverse drug reactions, cognitive impairment, falls, loss of appetite, increased anxiety, fatigue or drowsiness, unnecessary emergency room visits, hospitalizations, and death.

Unfortunately, very few research or best practices have specifically focused on Medication Optimization in AL settings, or on the psychological and social burdens that come with complex medication regimens, which have an incredibly unique set of challenges when compared to health care settings.

UNIQUE CHARACTERISTICS OF ASSISTED LIVING RESIDENTS AND COMMUNITIES

As opportunities to promote Medication Optimization in the AL setting are identified and developed, it is important to keep in mind fundamental features of the AL model of care. These include:

Assisted Living as a Community-based Setting.

Assisted living communities are considered to be “community-based settings;” that is, they are not health facilities as are skilled nursing facilities or hospitals. This model of care was designed to be communities giving older adults personalized care in a residential setting, versus remaining in their own homes. Assisted Living communities are generally for those residents who choose to live in a supportive setting but require little or no assistance and also can include seniors whose functional or cognitive status may require a higher level of support, which is determined through an evaluation by the community according to state regulations.

As most individuals would prefer to “age in place” and avoid more institutional health care settings, the acuity and complexity of health conditions and medication management has increased. An important service that is provided in AL is staff assisting with medication management. This service can take different forms, depending on the state licensing requirements. Some states permit a medication aide to actually administer medications after completing a certification course. Other states permit assistance with self-administration and cannot administer medication unless they are within a licensed healthcare professional’s scope of practice. There has been little national attention to date on best practices of assistance with medication administration in ALs.

Heterogeneity of Assisted Living Residents and Varying Level of Care Needs

Unlike residents of skilled nursing facilities or hospitals, assisted living residents do not need 24/7 skilled or acute care. Residents may be completely independent and not require any personal care from the community. Other residents have varying degrees of care needs that are permitted to be provided in an assisted living setting.

The level of care considerations and the costs of care can vary widely and are based in part on the level of staff needed for basic services such as: Assistance with activities of daily living [bathing, dressing, personal grooming, toileting, mobility/transferring, dining, etc.], arranging for transportation to medical appointments, activities, housekeeping, laundry, and varying levels of medication management. Assisted living communities may also arrange for care provided by home health agencies and/or hospice programs.

The varying levels of medication management include residents who can safely and accurately take their medications as prescribed so long as they are reordered, while others require escalating levels of assistance setting up pill boxes once weekly, providing dosing reminders, and up to and including preparing medications for each scheduled dose. Implementing a Medication Optimization program must meet the needs for residents with differing levels of care and recognize the size, competencies, and resources of the community.

Size of and Resources Available to Assisted Living Communities

An Assisted living community can be state licensed for as few as 4-6 beds or be larger communities with hundreds of beds. When considering the implementation of a Medication Optimization program, the size and available staff and other resources are a key factor to consider.

Licensed and/or Certified Health Care Providers Not Required in AL Communities

While some assisted living communities may have an individual with a healthcare-related professional license such as a nurse on staff, states do not require assisted living communities to have licensed healthcare professionals on staff. Some states do permit unlicensed medication aides to help with self-administration or administration of medication after satisfactorily completing required training.

Some states offer special certification for unlicensed staff to be trained to assist residents with self-administration of medication or other specific tasks. If an assisted living community does have licensed healthcare professionals on staff, that individual may directly administer medications within their scope of practice, as determined by each state's professional licensing board for health conditions permitted in AL settings.

Concepts related to Direct Administration vs. Assistance with Self-Administration vs. Self-Administration of Medications in Assisted Living

Key to this discussion is the fact that some residents retain all abilities to manage and self-administer their own medication regimen and may keep medications and supplements in their own rooms, usually in a locked drawer or cabinet. Others may have the ability to "self-administer" medication with some assistance from staff. Some communities will store medications for the resident if the resident agrees, if the medication requires refrigeration which is not available in the resident's room, if the resident's primary care physician attests to a resident's inability to manage or safely store their own medication, or according to the risk posed by virtue of the type of medication prescribed. As mentioned above, state facility licensing requirements specify the qualifications of the individual permitted to self-administer medications.

Multiple Sources of Prescribed and OTC Medications and Supplements and Multiple Practitioners for Individual Residents.

There may be multiple pharmacies used by the residents of a single AL community. Residents may also receive their medications through mail order. Medications that arrive in bulk may have to be repackaged in order to better manage resident medications, which AL communities are not permitted to do. This provides consumer choice but presents additional challenges of medication monitoring, safety, and data collection. Documentation of medication administration and identification of medication errors may be challenging when a variety of medication distribution systems are in place.

Residents may purchase OTC medications and supplements directly without realizing possible interactions with other medications. Family and visitors may bring in supplements or topicals without realizing the potential risk. Residents, family, and staff may be unaware of food interactions with certain medications.

AL residents may have numerous healthcare providers, including specialists, and typically see them outside of the community. Their own primary care doctor may not be aware of the medications prescribed by specialists, or supplements used. Residents and physicians may not provide updated, clear instructions to AL staff so that they can properly assist with medication management. AL communities may not have formal or even informal medical directors who lead quality committees that review standard metrics like antibiotic stewardship programs. The risk to residents must be balanced against their right to purchase items of their choosing and their right to designate their own prescriber(s) or pharmacy with potential negative outcomes. Therefore, a lot of thought must be put into determining methods for medication optimization in AL communities.

Oversight of Assisted Living Communities is the Responsibility of each State

Each state has responsibility for the licensing and oversight of assisted living communities. There are no federal standards, mainly because assisted living care is largely private pay, with no federal government funding as is the case for nursing homes and other health facilities.

State surveyors may not review medications to determine if best practices are followed, and many surveyors may not have a health care background. Most often, surveyors review stored medications for medication that has expired or had unauthorized changes to the label and ensure that there is a log of medications as they are provided to the resident. Surveyors may also ask to review medication orders to compare to the list of medications taken by the resident

Oversight by each state also means that any Medication Optimization program must also be flexible enough to be accommodated in accordance with respective state licensing requirements.

CONSIDERATIONS FOR MEDICATION OPTIMIZATION IN ASSISTED LIVING

Potential benefits of medication optimization include reduction of adverse drug events, unnecessary emergency room visits and hospitalizations, and death. Few studies have focused on the impact medication costs have on older adults, and even fewer discuss the psychological and social burdens complex medication regimens have on older adults. Aside from residents, medication optimization also may benefit both AL communities and staff.

Understanding Assisted Living -- it is well recognized in the AL industry that many healthcare professionals do not understand what AL is. Not only do community practitioners not realize what services AL can and cannot perform, but hospitals, emergency departments and first responders frequently seem to conflate AL with nursing homes. Since there are no federal regulations for AL, federal legislators are also undereducated regarding many AL-specific problems.

Transitions of care – Many credible studies show that transitions of care are high-risk events for medication errors and adverse drug reactions, both when individuals are discharged to a nursing facility or home after a hospitalization and when discharged from a SNF to an AL or their home. Although less studied than transitions from hospitals, there would likely be benefits in AL to reducing transition-associated adverse events with a Medication Optimization program.

Use of preventive medications – Some AL residents are younger and less frail than those in nursing homes. It is likely that there will be benefits to correctly prescribing preventive medications in this population. For many years, little research was published on the value of preventive medications for older adults. Over the last few years, more trials with older participants have been performed. These studies have shown that certain medications can effectively prevent disease even for the oldest old (>80 years old), such as high-intensity management of hypertension.

The heterogeneity among older adults complicates preventive treatment and the daily time constraints on primary care doctors may pose additional barriers to determining when preventive medications should be started or stopped in older adults. Therefore, additional resources have the potential to improve clinical practice.

Use of supplements AL residents may take multiple OTC vitamins, minerals, supplements, and herbal products and topicals, often without the knowledge of their physicians. These products can have significant interactions with prescribed medications and put individuals at risk for serious complications, especially during more vulnerable periods, e.g., if taken prior to a surgical procedure. Medication

Optimization will reduce the potential harm of these products that may be unnecessary and that are often not identified by other means.

Cost Considerations for Medication – Regulators and Skilled Nursing Facilities (SNFs) have focused on reducing unnecessary medications in SNFs. Many SNF residents do not have medication copays, so the cost saving benefits of these efforts are predominately for the facility and the insurer. In some state's AL, residents and families may have significant copays or pay privately for medications, leading to an inability to afford other essential items or even the cost of remaining in the AL community. As noted earlier, the cost of care in an assisted living setting is largely private pay, unless a resident has previously purchased Long-Term Care insurance that covers AL or in places where there are Medicaid waivers. Older adults should not feel the need to discontinue medications due to cost. Expanding Medication Optimization in AL may provide a cost savings benefit to those on a low fixed income or with limited savings, allowing the vulnerable and less financially secure to purchase essential items they otherwise might not be able to afford. One member of our Group told the story of a Holocaust survivor living in a state other than California who stopped going to the AL dining room because he was embarrassed about his stained and torn clothes. He had chosen to pay for his medications and was unable to afford new clothing.

Decreasing inappropriate psychoactive drug use – Assisted living communities are required to follow physician's orders for medication prescribed to residents and are not in a position to question those orders. Medication Optimization with its evidence-based strategies should be a goal at all levels of care, including AL settings.

The strategy of using Gradual Dose Reductions (GDR) to systematically attempt to reduce potentially inappropriate psychoactive medications to the minimal effective dose or taper them off completely has been well described in literature and is widely used in nursing home settings. However, there is no federal or state mandate for GDRs in AL, and no requirement outside of nursing homes for informed consent prior to prescribing potentially dangerous medications such as antipsychotics and other high-risk medications.

Many older adults admitted to nursing homes from AL communities, or from home to AL communities, or re-admitted after an acute hospital stay, may already be on numerous recently prescribed and/or long-term psychoactive medications. There remains debate about using GDR for well stabilized psychiatric disorders or long term prophylaxis. However, the focus on potentially inappropriate psychoactive medications mostly centers on those psychoactive medications that have been started for short term symptoms potentially of transient nature that should not require long term treatment.

Through a concerted national effort to eliminate unnecessary use of psychoactive drugs in SNFs, recent years have seen a significant drop in these prescriptions there. According to the Centers for Medicare and Medicaid Services [CMS], in 2011Q4, 23.9 percent of long-stay nursing home residents were receiving an antipsychotic medication; since then, there has been a decrease of 39.1 percent to a national prevalence of 14.5 percent in 2021Q4. However, there is evidence that the policy focus on antipsychotic medications may have resulted in an increase in anxiolytics, sedative-hypnotics, mood stabilizers and other categories in place of antipsychotics.

Improving Medication Management for Residents with Dementia Diagnoses - Many AL communities either focus on, or have designated sections (e.g., floors or separate buildings) for residents with significant cognitive impairment, including dementia. Individuals who live in these settings might not be able to adequately describe their symptoms that require treatment, and some experience behavioral

symptoms such as aggression that might lead to unnecessary use of antipsychotic or other psychoactive medications.

Medication Optimization as an Infection Prevention Approach - Published articles describe the benefits when SNFs reduced medications as a temporary mitigation strategy during COVID-19 lockdowns to lower risks of COVID transmission. Reducing nurse or med tech interactions with residents solely to give them a pill decreases exposure to a possible asymptomatic carrier of the virus that has been particularly devastating in AL. Decreasing physical contacts through Medication Optimization can help reduce outbreaks of any type and protect both AL residents and staff.

Preserve the Ability to Remain in a Residential Setting, rather than Transferred to an Institutional Setting – Polypharmacy can lead to falls, fractures, and subsequent loss of independence. It is associated with increased emergency department visits and hospitalizations. Ambulance services and EMTs transfer countless older adults from AL communities daily, and that burden may be decreased by Medication Optimization. When these events occur, they can lead to an AL resident having to move to a higher level of care. That creates more cost to government payors, a lower bed occupancy for AL providers, and may increase the risk of resident transfer trauma. Conversely, medication that is effectively managed by the prescribing physician can result in the health of a resident remaining stable for an extended period of time and in an AL level of care.

Potential Increased Ease of Medication Self-Management – Many AL communities have a la carte pricing, where residents pay more to receive assistance with taking medications. Medication Optimization reduces the complexity of the medication regimen and reduces the frequency with which medications are taken during the day. This may lead to residents being able to manage their own medications without assistance for a longer period of time.

Diversity –Verbal and nonverbal communication norms and abilities may vary in diverse populations and thus may influence perception or interpretation of need. For example, overprescribing and under prescribing are significant issues for all older adults, but older women and non-white individuals are at higher risk than other groups. AL communities have become more diverse. Studies have shown that gender-related and sociocultural factors influence the decision to stop a medication. Paying for costly drug therapy can be especially problematic for people of color. Individuals with certain medical conditions are at higher risk of polypharmacy and some of these conditions, including heart failure and diabetes, are seen in higher prevalence in people of color. Medication Optimization can have an ongoing growing impact as AL communities become more diverse.

OPPORTUNITIES TO PROMOTE MEDICATION OPTIMIZATION

Focusing on Medication Optimization to overcome the barriers discussed above should provide great benefits for AL residents, staff, and providers, including:

1. *Education, Toolkits and Training* – this could include development of a list of AL-specific resources and/or adjusting pre-existing nursing home Medication Optimization tools for AL. In-services or webinars could be developed and shared, with dissemination of existing and added resources. This information could be developed in partnership with major clinical, provider and research groups.

2. *Adjusting Current/Successful Initiatives for AL* – There are excellent examples of successful initiatives in other care settings that could successfully be modified to include consideration of Assisted Living communities. A few examples are:

   - Project ECHO (an all-teach, all-learn peer support model) could be used for this.
   - AMDA Drive2Deprescribe (D2D) could be adjusted to focus on the AL setting.
   - The American Society of Consultant Pharmacists (ASCP) has partnered on AMDA D2D and provides meaningful deprescribing resources.
   - Choosing Wisely provides resources directed to both clinicians and older adults from multiple medical and pharmacy organizations which could be implemented among long-term care providers.

3. *Explore Opportunities for Consultant Pharmacist Medication Regimen Review in AL* – Consultant pharmacists can provide a similar level of service in AL to what they do in other settings, such as providing medication safety education to AL staff at appropriate intervals, and directly with residents self-administering annually and when new meds are initiated or discontinued. They can also assist in development of medication error identification and the remediation process. In California, ALs with sixteen beds or more are required to have a consulting pharmacist review the community's medication management program at least two times per year.

   Transitions of care both to and from AL would benefit from comprehensive medication review by a pharmacist with geriatrics expertise. Arranging for a periodic review of each resident's medication regimen could also be considered by the prescribing physician, primary care physician, or pharmacy filling the medication orders. Recognizing what may be the prohibitive cost of contracting with a dedicated consultant pharmacist, facilities without the resources to provide these services independently may want to consider joining with other communities in arranging for this service. In addition, communities that provide both skilled nursing and AL level of care may be able to leverage consulting pharmacist services. It is also time to consider advocating to allow pharmacists to bill Medicare directly for such services.

4. *Explore Opportunities to Better Engage Physicians* - Having active, medication-informed medical involvement is key to improving medical care in AL and would be valuable in establishing and implementing successful Medication Optimization initiatives. Some options include the use of a medical professional with geriatrics expertise as either a consultant or medical director, collaborating with a resident's personal physician(s), and/or engaging physicians with whom the AL community already has a relationship. A well-rounded Medication Optimization program must include some level of physician engagement.

5. *Research on AL medication optimization* – the body of literature regarding medication use in AL should be correlated, and national experts should collaborate on research that helps develop metrics and best practices. Communities are available and eager to participate in research studies, or pilot projects, and funding should be actively sought.

6. *Use of Information Technology (IT) in AL to optimize medication use* – as IT, Electronic Health Records (EHR) and other technologies gain a foothold in AL, making sure they are constructed to

obtain and accommodate medication data would be beneficial. To promote evidence-based care delivery, the potential role of Artificial Intelligence should be explored.

7. *Advocacy on federal and state levels* – the federal and state government[s] should be well informed about the AL industry and understand opportunities to contribute to Medication Optimization, including data on the use of medications for beneficiaries who live in AL settings. Although AL is not regulated at the federal level, there is federal funding for Medicare beneficiaries through Medicare Part D, in addition to funding for medication for Medicaid beneficiaries at the state level. While it is in the resident's best interest to implement Medication Optimization programs, it is also in the federal and state government's best interest to eliminate unnecessary medications and supplements. Doing so may lower the cost of medications paid for by the government and prevent adverse events that require costly hospitalization. More work is needed to help federal and state governments understand the unique role of the AL industry in the continuum of care.

8. *Communication best practices* – there should be development of materials for each community to give written explanations to prescribers, residents, and families regarding options for prescribing and procuring prescription and over-the-counter medications, e.g., via specialty pharmacy, long-term care pharmacy, mail-order, or local drugstore, and for obtaining the current medication list, including the practical logistics such as EHR systems, phone, fax, and email addresses.

RESOURCES:

Deprescribing:

- Bruyere Research Institute's Deprescribing in LTC initiative has worked on engaging staff, clinicians, pharmacy, residents, and caregivers.
  - The Bruyere website: Deprescribing.org - Optimizing Medication Use
  - The Canadian Deprescribing Network: Do I still need this medication? Is deprescribing for you? (deprescribingnetwork.ca)
  - The Institute for Safe Medication Practics (ISMP) "Five questions to ask" 5 Questions to Ask - ISMP Canada (ismp-canada.org)
  - Our initiative: Deprescribing in Ontario Long-Term Care - Deprescribing.org
  - Information for healthcare providers "Talking About Medications" Materials - Deprescribing.org

Contact CALTCM with any questions:

- **Email: info@caltcm.org**
- **Phone: (888) 332-3299**