

Medication Management: Integrating the Social and Medical Models

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The topic of medication safety in assisted living (AL) typically dominates discussions of medication management policies and procedures among AL providers and regulators. In general, state policy discussions and regulations on medications appear to require AL providers to exert control over medication management for residents through increased clinical and regulatory oversight, standardization, and training/certification of AL medication staff.¹ Within this context, AL providers feel pressured to implement medication management programs guided by either a strictly social model or strictly medical model of service delivery. For example, AL providers and advocates who promote a social model of care argue that resident choice, autonomy, and dignity can be safely supported by permitting capable individuals to self-administer their own medications. Other advocates cite medication safety risks and the need for increased clinical oversight to justify a medical model of medication management, usually administered exclusively by the AL staff.

Because it is a concrete issue directly impacting resident health status, medication management policies are often at the core of debates regarding broader AL policies, practices, and regulations. We suggest that decisions regarding medication management would be strengthened by recognizing that rather than subscribing to a



simple dichotomy of a social model or medical model of care, policy and practice would benefit from dialogue that integrates key elements of both social and medical models to specifically address medication management in AL. After reviewing the definition of the social and medical models and providing case-based data that summarize how some AL staff, residents, and families describe their own medication management experiences, we will articulate a stance on the proper intersection of the medical and social models of care for medication management in AL.

Models of Care in AL

Assisted living is often described as a program of care that follows a social model philosophy.^{2,5} Early proponents of this approach defined it as a way of responding to adults with disabilities as whole persons rather than as discrete biological components or medical diagnoses.⁶ As an example, rather than referring to an older woman as a hip fracture patient, the social model describes

her as a person with unique interests and abilities, a past history and future goals, who has broken her hip but who wants to make personal decisions and engage in meaningful activities. The social model approach does not ignore medical conditions, but they are not treated as primary care needs. This philosophical approach to long-term care (LTC) attracted many people who sought an alternative to the perceived overemphasis on the medical model in the nursing home environment. Early promoters of AL argued that several values were integral to a social model of care—these values included autonomy, privacy, choice, independence, dignity, and a home-like setting. Above all, AL strove to be noninstitutional and to move away from a “medical model” associated with hospitals and nursing homes.² Many states openly advocate a social model approach to AL by including this phrase in regulatory definitions, though few provide guidance in how to implement this model of care.⁷ AL proponents have

relied on social model tenets to influence the building design (eg, private, home-like units), organizational strategies (eg, service planning instead of care management), and regulations (eg, negotiated risk agreements).⁸ However, organizational and regulatory practices for medication management have a less certain status within a social model and actually seem to be uncritically guided by a strictly medical model. Consequently, AL residents, their families, and direct-care staff sometimes remain uncertain about the rules and rights regarding medications in AL.

For better or worse, many who work in, study, or regulate AL interpret social model to mean *nonmedical*, suggesting that there is little or no place for medical oversight and treatment in AL. Yet, considering the social model to be synonymous with *nonmedical* conflicts with the implementation of goals such as aging in place, public policy requirements to provide nursing-home level of care to Medicaid recipients, and the actual physical, functional, and cognitive capacity of AL residents.⁹ Two prior *ALC* articles echo this view by discussing how social model canons like independence, choice, and home-like setting may directly contradict standard approaches to medication management.^{10,11} Thus, medication management in AL, the focus of this article, remains in a tenuous position at the artificial boundary between the social and medical models, resulting in a range of congruence (from low to high) between resident choice and ability and facility rules.

The Role of Medication Management in AL

Most individuals move into AL because they need assistance conducting their daily activities, including managing their medications. As many as 50% to 80% of residents require assistance with medication administration; most take an average of 6.2 different medications, and 25% take 9 or more.¹²⁻¹⁵ Another study found 12 medications (OTC

and prescription) on average per resident.¹⁶ Many settings have significant numbers of residents with some level of cognitive impairment¹⁷; thus, providers are challenged to implement strategies that meet the needs of a heterogeneous group of individuals who have varying needs, capabilities, and preferences.

Consistent with prevalence and need, in 2003 the Assisted Living Workgroup (ALW) identified medication management as 1 of 8 critical areas requiring policy, research, and practice attention.¹⁸ ALW participants argued that medication management relates to social model values like resident independence, choice, and

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privacy, as well as more traditional concerns such as quality of care, type and number of staff, and overall delivery of and affordability of services.

What is medication management? From the clinical perspective, the answer to this question is rather straightforward. Medication management means ensuring that the right medication is administered to the right resident at the right time in the right dosage, and that adverse effects and drug interactions are anticipated, monitored for, and minimized. In practice, this rather broad mandate requires accountable and safe use of medications, ranging from acquisition to storage and disposition; administration in accordance with physician orders; resident assessment and monitoring; record keeping; and medication review. Many AL operators want to enact a social model, but lack

guidance on how to merge it with the medical aspects of medication management.

States take a variety of approaches in determining the type and level of medication management AL settings may provide, by whom, and under what conditions. On the liberal end, Oregon, Maryland (Table 1), and New Jersey permit nonlicensed but trained direct-care staff to administer medications after receiving resident-specific training from a delegating nurse. On the conservative side, Alabama requires AL residents to manage their own medications or for a licensed nurse to administer them. Critics argue that the latter approach means that AL cannot meet the changing needs of current residents and limits the type of people who can move into this setting as it increases the cost of care.¹⁹ Between these two sides are states that define a range of permitted practices, such as allowing unlicensed staff to open and close medication containers but not touch the contents, or to remind and observe the resident taking medication. Not surprisingly, states have reported that the line between medication *assistance* and *administration* is murky at best.⁷ The data that follow illustrate medication administration as it is actually practiced in 6 AL settings.

A 5-Year Study

This case study is based on a 5-year ethnographic study of 6 licensed AL settings in Maryland.²⁰ The facilities included 2 small board-and-care settings, 2 traditional residential care settings, and 2 new-model AL residences.²¹

Maryland regulations permit capable residents to self-administer medications and to keep medications in a locked container within their living unit. Two of the 6 settings we studied permitted residents to do so, and had a strategy in place to support self-administration. The managers in the other settings explained that they did not allow self-administration because most (but not all) resi-

**Table 1.
Maryland Medication Management Regulations
for Licensed AL Facilities**

Delegation Policy and Procedures	<ul style="list-style-type: none"> • Medication administration must be delegated and supervised by a licensed nurse who may or not be an employee of the AL facility. • A nurse may delegate to a trained certified medication aide (CMA) or medication technician (MT) when the nurse has provided instruction and direction and when the aide or technician is on site on a continuing basis. • A nurse may delegate to a CMA or MT the administration of medications by a wide variety of routes excluding topical applications for stage III and IV pressure ulcers and by intravenous route.
Self-administration	<ul style="list-style-type: none"> • CMAs, MTs, and untrained aides can assist AL residents with self-administration. • Management must arrange for quarterly, on-site reviews by a designated clinician for each resident who self-administers medication.
Training	<p><i>Qualifications to become a CMA include:</i></p> <ul style="list-style-type: none"> • Active Certified Nursing Assistant certification in good standing • Current employment and prior work experience as a CNA or GNA (Geriatric Nursing Assistant) • Recommendation to attend the Board-approved 60-hour medicine aide training program taught in a Maryland community college • An 8-hour clinical update every 2 years at a Board-approved community college <p><i>Qualifications to become a MT include:</i></p> <ul style="list-style-type: none"> • Completion of a Board-approved 20-hour training program taught by a RN • A 4-hour clinical update every 2 years at a Board-approved community college

Based on information available at Maryland Board of Nursing, <http://www.mbon.org/main.php>

sometimes differs. For example, Mrs. Malone (low congruence) explains that the facility's requirement to centrally store medications is for the protection of the facility operators who might be held accountable should a resident "overdose or something." A clinical notion of medication safety is expressed by Mrs. Williams, Mrs. Roberts, Mr. Vaughn, and Ms. Cortez (high congruence). That is, a resident, possibly due to memory impairment, needs assistance managing her medications and it is for this reason that the facility administers them. Mrs. Kane (low congruence) describes the mismatch between the policies permitting residents to have alcohol but not keep over-the-counter medications in their rooms.

Implications

This qualitative research identified heterogeneity in medication management policies and resulting levels of congruence between resident choice and ability and facility rules. We suggest that the range of congruence results, at least in part, from conflict between the guidance of the medical and social models in regard to medication management for AL residents. The study participant statements that reflect low congruence between resident choice and ability and facility rules indicate a medical model approach, while those with high congruence represent social model values like choice, independence, and individuality.

It might be ideal to present here a set of best practices for medication management in AL, but such standards do not yet exist. As indicated in Table 1, efforts undertaken thus far in Maryland tend to reflect medical model norms but do allow for some flexibility in the amount of staff oversight. Yet AL operators can and do choose to implement rules that are more strict than those permitted. We suggest that AL staff, residents, and families would be well served by research on best policies and practices in medication management that incorporate aspects of both the social

dents had memory impairment, because they lacked proper storage units in resident rooms, or because they worried that surveyors would penalize them for permitting residents to self-administer.

We noticed a wide range of congruence between residents' preferences and abilities and facility policies. Representing high congruence were situations in which residents stated that they needed and received assistance with their medications and those who wanted to self-administer and were permitted to do so. Representing low congruence

were those residents who wanted to control some or all of their medications but were not permitted to do so because of facility rules.

Selected excerpts from resident, staff, and family interviews (using pseudonyms) are provided in Table 2, organized into examples that represent either high or low congruence between resident preferences and abilities and facility rules for medication management.

Regardless of the extent of congruence, safety is a concern for providers, residents, and their family members, but how they define safety

Table 2. AL Resident, Family, and Staff Remarks about Medication Management

Low Congruence

Mrs. Malone [Resident]: "If I want something, I've got to go to the nurse. In fact, everybody does. You can't just give yourself medication. I guess that's for their protection."

Interviewer: "Their protection?"

Mrs. Malone: "Because you might overdose or something. But they took everything that I had. Little things that I had—I could get in the drug store and bring it. That's one thing I don't like. Because there were things that I'd do—my toe was hurting—I had a corn on my toe and I used to put something on so it wouldn't hurt, but they took all of that."

Interviewer: "Can you take any of your own medications?"

Mr. Brown [Resident]: "No."

Interviewer: "Why not?"

Mr. Brown: "It's against rules and regulations. That's one of the things I don't like."

Mrs. Zdenic [Resident]: "Well, your medications are automatically taken away from you. I mean, we can't have those things. I'm not even supposed to have Vicks or Campho-Phenique [pointing toward these two products on the shelf next to her seat], but the label came off the Campho-Phenique bottle so I'm hoping the inspectors don't see that [laughing]. I find that very disconcerting. Because it's like, before you came in here, you had a brain, and you left your brain at the door when you arrived. So that takes away independence on my part, you know, it makes me more dependent."

Mrs. Kane [Resident's daughter]: "They play BINGO and they give them little prizes here—one of the things they give for prizes is—it floors me—now they won't let them have Vicks or anything. They give them little miniature shots of booze.... You can't have an aspirin in your room, but you can have a shot of booze."

High Congruence

Mrs. Silverman [Resident]: "No, they don't have to give it to me because I take very little. But if I do, I can do it myself. No use paying \$8.00 a day, if you can do it yourself."

Mrs. Williams [Resident]: "That was one thing that [my son] and I just talked about recently. I was forgetting to take it [medications] and so that's why I ended up with—that was before I came here even. You know you get busy and I was doing things and then I'd forget to take it."

Mr. Roettger [Resident]: "I have permission to self-medicate, which I am extremely glad about because it's a whole lot cheaper. That way I can take it when I feel I need it. Like to wake up at 2:00 o'clock and need a couple Tylenol and not be able to get it right away so you can go back to sleep, would complicate life."

Mrs. Roberts [Resident's daughter]: "So, I mean she could have 3 meals a day, plus snacks, just know that all of that is provided for, that her medication is administered to her. There's a huge relief in knowing that that's taken care of."

Mr. Vaughn [Administrator]: "And certainly if someone is capable of doing anything, we want them to do it because the more independent they are, that means actually the more active they are going to be because they are doing these things for themselves. For him to take his own medications he every day has to read what they are, double-check, make sure he's doing these things. So that in itself is an activity and it's keeping him independent and active, so that's a good thing."

Ms. Juarez [Direct-care staff]: "Well, if it [alcohol use] becomes a problem, we involve doctors. We get doctors' orders. Freedom of choice is one of the principles of service here. So we just monitor very closely. We look at the medications to see if they're going to interact with the medications that they're on."

and medical models. Many AL providers who want to implement social model concepts might fall short of their goals when it comes to the domain of medication management. For example, global policies by an AL provider that treat all residents as incapable of managing any aspect of their medications clearly conflict with social model goals like choice and individuality that are routinely honored in terms of food preferences, privacy, bathing, and mobility. However, in facilities that specialize in dementia care, it would be negligent to apply principles of self-medication. Other settings, though, have mixed populations, albeit with significant numbers of residents with some level of cognitive impairment.¹⁷ Thus, within any setting, some residents might be capable of and prefer to manage their medications, while others will not. The practitioner (eg, medical doctor or nurse practitioner) who prescribes medical treatments has a duty to assess whether the individual is capable of following the orders, while the AL staff has the duty to monitor each resident over time, observe changes, and alert the resident and his or her healthcare provider if warranted.

For these reasons, managing medications in AL involves merging aspects of the social and medical models. Defining the resident's living unit as "home" is one place to start. The two settings in this study that permitted self-administration were buildings with a majority of private units with lockable cabinets, and an organizational commitment to promoting resident choice and independence. Conversely, the provider of a small board-and-care home told us that when she allowed 1 resident to keep over-the-counter medicated skin creams in her unlocked room, she was cited by a state surveyor. This conflicts with notions of consumer choice and respect for the individual, the basic principles of the social model philosophy.

Some knowledge of medication is required for optimal management,

but the amount needed is likely to differ depending on the resident and the regimen. Given that the complexity of medical regimens is increasing²² and that many medications place patients at risk for adverse effects or drug interactions, quality care in AL must include attention to the specifics of medication safety, administration, and monitoring. Ideally, as is done by families and other informal caregivers, AL staff should tailor the degree of supervision and control provided to the individual needs and capabilities of the care recipient and complexity and risk associated with each specific regimen. In this manner they will serve most effectively as resident advocates.

Managing medications in AL involves merging aspects of the social and medical models.

This in-depth study of a small number of AL settings led us to question the motivations behind medication management rules at both the facility and the state regulatory level. For example, in Maryland, policy discussions have emphasized the use of nursing standards and the need for more training and oversight but have not given weight to issues like resident choice, privacy, and independence. Many variables influence medication management decisions, including uncertainty about resident capability, resident preferences, perceived risks, staff knowledge, the role of medical practitioners, and oversight responsibility. As states develop and revise AL regulations and AL providers set organizational policies and train staff, they have the opportunity to strategize how best to merge the medical and social models to achieve a high level of congruence between resident choice and ability

and facility rules. One project currently underway, funded by the Agency for Healthcare Research and Quality (AHRQ), is gathering data to inform the degree to which medical errors are increased when medication management is less medicalized; if findings indicate no difference in error rates, then the case for a social model will be strengthened. Regardless of the findings, however, the voices of AL residents, such as those presented here, should be part of any effort to define, implement, and monitor medication management policies at both the state and individual facility level. ALC

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