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Priscilla T. Ryder

Butler University, pryder@butler.edu

Melanie Joseph

Marnie Zuckermann

Ilene H. Zuckermann

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## Administrators' Perceptions of Medication Management in Assisted Living Facilities: Results from Focus Groups

Priscilla T. Ryder<sup>1,2</sup>, Melanie Joseph<sup>2</sup>, Marni Zuckerman<sup>2,3</sup>, and Ilene H. Zuckerman<sup>2</sup>

<sup>1</sup>Department of Pharmacy Practice, School of Pharmacy, Butler University, Indianapolis, IN

<sup>2</sup>Lamy Center on Drugs and Aging, Department of Pharmaceutical Health Services Research, University of Maryland School of Pharmacy, Baltimore, MD

<sup>3</sup>Department of Sociology, University of Maryland, Baltimore County, Baltimore, MD

### Abstract

**Objective**—Assisted Living (AL) residents are vulnerable to adverse events due to their use of numerous medications and frequent need for assistance in medication administration. Very little, however, is known about the ways in which medications are managed within this level of care.

**Design**—AL administrators from the metropolitan Baltimore area were invited to participate in focus groups held to explore issues involved in medication management.

**Setting and Participants**—Four administrators from smaller (15 beds or fewer) and six from larger (more than 15 bed) certified AL facilities serving primarily older residents participated. Administrators must have served in their position at least 6 months.

**Results**—Administrators described interactions with residents, physicians, and pharmacists as well as issues of regulations and their enforcement. We uncovered themes regarding challenges faced in negotiating needs of residents, providers, and regulatory bodies.

**Conclusions**—Administrators often feel torn between competing requirements of their position and experience some degree of conflict in allowing residents' to retain autonomy in the face of demands of family, providers and regulators. Small facility administrators especially report being a position to allow them to monitor residents' medication reactions and needs. Large facility administrators sometimes find their actions hampered by decisions made at higher ownership levels. Administrators want AL to remain an intermediate level of care, with less stringent regulations than for skilled nursing care, but would also like more consistency in enforcement of regulations. Qualitative assessment of medication-related issues in AL can help to guide policy in this area.

### Keywords

Assisted living; medication management; polypharmacy; autonomy; qualitative research; focus groups

### Introduction

Assisted living (AL) is a level of care generally providing 24-hour supervision, housekeeping, meal preparation, and assistance with activities of daily living for residents. The Assisted Living Federation of America estimates that more than a million U.S. residents

live in assisted facilities.<sup>1</sup> AL facilities are a fairly new concept and industry compared to other formal services such as nursing homes and hospital facilities.<sup>2;3</sup> It has been intended as an intermediate level of care for people with some functional deficits.

The AL movement was formed as a response to a need for alternative housing options for elderly adults who require a more supportive lifestyle yet do not meet criteria for a nursing home.<sup>4</sup> Currently, AL facilities vary greatly in size and operate many service models, including facilities that provide long term care to their residents. AL facilities commonly combine housing, supportive services, personal assistance, as well as some form of healthcare services for residents.<sup>4</sup> Assisted living has evolved from an original social or 'hospitality' model, in which personal care is provided to residents in home-like settings, to a more medically oriented model closely resembling skilled nursing care.<sup>5</sup> Most AL facilities fall between informal independent home settings with some care provided by family members to formal nursing home-type settings with highly dependent residents.<sup>6</sup> Recent studies have shown that AL residents closely resemble skilled nursing facilities (SNF) residents in function and comorbidity.<sup>7</sup> One difference between AL and SNF care is that, in general, AL is less closely regulated and legal requirements originate with individual states while much SNF policy is federal in origin. Lack of consistency in rules makes it difficult to make nationally useful generalizations about care practices in AL.

Medication management is a critical but understudied aspect of AL. The Medical Management in Assisted Living working group convened by the American Society of Consulting Pharmacists concluded that "(o)ne challenge faced by the [Medication Management Topic] group is the serious lack of research to guide policy decisions in this [medication management] area."<sup>8</sup> One study found that pharmaceutical undertreatment of chronic conditions was highly prevalent and that this undertreatment was more closely related to facility rather than resident characteristics.<sup>7</sup> Another study found that 16% of AL residents were receiving inappropriately prescribed medications.<sup>9</sup>

In this report, AL administrators describe their interactions with providers, regulatory bodies, and residents and their families. As an exploratory qualitative study, it is hypothesis-generating rather than hypothesis-testing. It provides information that will be useful as a foundation for larger-scale, quantitative studies of medication management in AL facilities and to inform regulators and policy makers.

## Methods

Qualitative focus group methodology was employed in this study. This method allows in-depth data elicitation that can be particularly useful as an exploratory tool to identify relevant issues and questions for topics about which little is known.<sup>10</sup> Assisted living facilities were identified from a list of licensed facilities in Baltimore City and Baltimore County provided by the Maryland Department of Health and Mental Hygiene Office of Health Care Quality. Facilities were categorized as small (15 or fewer bed) or large (more than 15 beds), since experiences and practices were anticipated to differ by facility size. All 51 of the large facilities listed were contacted. In order to avoid systematic bias, the first small facility appearing on each page of the 44-page alphabetic list was called for recruitment, since the entire list contained name and contact information for 483 small facilities. Facility administrators were invited to attend one of two focus groups according to the size of the facility. In order to participate, the facility must have been state-certified, serving primarily elderly residents, and the administrator must have been employed in that capacity at that facility for at least six months.

Investigational procedures were reviewed and approved by the University of Maryland, Baltimore's Institutional Review Board. Discussion was directed using a moderator's guide prepared through reviews of published and unpublished research and discussions with researchers and practitioners familiar with assisted living settings (Table 1). Each participant was asked to give consent and to complete a brief anonymous questionnaire describing themselves and their facilities. All sessions were audio taped and transcribed verbatim. Notes were taken by the assistant moderator to aid in identifying speakers for transcription and to record nonverbal responses (e.g., facial expressions). Transcripts were independently reviewed by two researchers to identify broad themes and narrower sub-themes. Transcribed text was then coded by allocating statements to themes identified.

## Results

Nine administrators from small facilities and 8 from large facilities agreed to participate. Ultimately, however, the small-facility and large-facility groups consisted of 4 and 6 participants respectively because of no-shows. Participants and the facilities they represented are described in Table 2. Both group sessions lasted approximately ninety minutes. All participants were female and had been in their position from 2 to 18 years, with small-facility administrators being employed at their respective facilities for a longer time. Administrators from small facilities were largely non-Hispanic White, while all but one from larger facilities were non-Hispanic White. Small-facility administrators were either young (30-34 years old) or older (> 65 years) while those from larger facilities were in their middle years (30-64 years). All 4 large facility administrators had nursing backgrounds while only one among the small facilities was a licensed professional, a PhD-level psychologist. All 4 of the small facilities were individually owned and operated on a for-profit basis, while most of the large facilities were owned by corporations and/or affiliated with other AL facilities.

Administrators addressed the questions from the moderator's guide in a straightforward way, acknowledging the importance of medication management in their facilities, and sometimes sharing stories about the difficulties they have faced trying to ensure compliance with the 'five rights' (right patient, right time and frequency of administration, right dose, right route of administration, right drug) in the face of conflicting demands of residents and their families, health care providers, and regulatory requirements. They described methods of educating themselves about medications and their management.

Our review identified three main topic areas: (1) relationships with healthcare and pharmacy providers; (2) relationships with regulatory agents; and (3) relationships with residents and their families. Examples of field quotations related to each topic are listed in Table 3.

### Relationships with providers

Small AL facility administrators advocate for their residents within a complex medical system. They interact with physicians, pharmacists and nurses, and monitor and administer medications. These administrators deal with complexity in all of these activities as they coordinate healthcare for their residents.

Physicians, pharmacists and small AL facility administrators rely on each other when caring for AL residents. Administrators express the residents' medical needs to the physicians. Physicians order prescription and over-the-counter (OTC) medications for the residents. Pharmacists provide drug information to administrators. Physicians rely upon AL administrators to notice adverse medication effects in residents. Finally, nurses employed by the State of Maryland enforce regulations in the AL facility and provide checks on residents' health, living conditions and medication adherence. These small ALF administrators also

require all drugs (with the exception of psychiatric medications) to be ordered by the resident's primary care physician; the goal of this process is to decrease medication abuse and misuse by the resident and increase medication safety.

Small AL administrators report complexities in dealing with health professionals. They often have difficulty contacting doctors. Sometimes an administrator will talk to a pharmacist, who, in turn, communicates with the doctor. Small AL facility administrators also express that having a relationship with a single pharmacy decreases the complexity of dealing with medications. Close pharmacist-administrator rapport increases communication (e.g., regarding drug recalls or dispensing of a different brand of drug resulting in change in medication appearance) and individualizes the residents' medication packaging (e.g., bubble packs used when residents attend daycare).

Small AL administrators spend much of their time monitoring medications. They compare the medication administration record (MAR) sheet, physician's order sheet and appearance of the medication prior to administration to the resident. Different facilities use various types of packaging (including blister packs, bubble packs and normal prescription bottles) to decrease complications associated with each, with most employing more than one form of packaging. Blister packs, assembled by the pharmacy, decrease the chance of a medication error by the administrator but may be complicated to deal with when a resident discontinues or starts a medication. Bubble packs are ideal for residents that need to take medications off-site, such as to daycare programs. Standard-type prescription bottles allow for changes in medications, but require more time for daily administration and may be more subject to administration error. Administrators make the choice of packaging type to use in their facilities, but all forms require daily vigilance on the part of administrators.

Large AL facility administrators report far less interaction with healthcare providers. Their efforts are spent coordinating medication refills, medication administration procedures and ensuring medication safety. Medication refills for large facility residents may be required to come from the pharmacy stipulated by the facility or its corporate ownership, from other community pharmacies, or from mail order pharmacies. Residents' prescription drug plans may require residents to use mail order pharmacies or to order 90 days medication at a single time. AL facility administrators need to order these medications at the appropriate interval or to depend on family members to order and deliver the residents' medications. Complications occur when family members do not manage the medications appropriately and residents run out of medications. Some residents who use Veterans Administration benefits may use a VA facility or other pharmacy, and packaging of their medications, such as in bingo packages or medication bottles, depends upon the pharmacy that supplies the medication. Large AL facilities often use multiple types of medication packaging as a result. Administrators indicate they would prefer to use a single pharmacy in order to reduce complexity, but are unable to do so because of requirements of residents' prescription drug plans. They also do not report relationships with dispensing pharmacists at particular pharmacies, but often form a relationship with a single pharmacy liaison attached to a pharmacy that supplies medications to institutions such as AL facilities or nursing homes. This liaison helps the administrators manage prescriptions. Finally, administrators also work with physicians to meet residents' wishes, such as when a resident wishes to keep over-the-counter (OTC) products at bedside.

### **Relationships with regulatory bodies**

Small AL facility administrators express differing opinions regarding state regulation of assisted living facilities. On the one hand, one administrator feels that the rules are in place to protect the AL residents and are simple to follow. This administrator does not believe the regulations are deficient or overly bureaucratic. On other hand, some administrators think

that existing rules are better suited to large facilities and are not always appropriate for smaller ones. Administrators, for the most part, agreed that small AL facilities need more influence with regulatory bodies and more input in regulations governing AL facilities.

A primary concern expressed by large AL facility administrators is lack of consistency in enforcement of regulations. Administrators report instances in which state inspectors interpret the equivalent rules very differently. Large facility administrators want more detailed explanations of requirements. Additionally, they expressed not wanting the same regulations as nursing homes but ones tailored to reflect the distinctive natures of AL facilities. Administrators state that current operations of their facilities are based upon the strictest interpretation of regulations as provided by previous inspections.

Large AL facility administrators feel that some regulations are needlessly complicated yet do not provide adequate and reasonable safety measures for residents. For example, administrators spend much time obtaining physician's order for each OTC product that a resident may wish to use, including items such as mouthwash or nasal saline drops. Administrators report having been cited for residents keeping such products at bedside without a physician's order. Administrators agree that not all of the regulations are synchronous with sensible protections for residents.

Large AL facility administrators are not always able to implement regulations in the ways the State wants them carried out. For example, the State wants each OTC product to be labeled from the pharmacy in addition to usual product labeling. One pharmacy refused to give an additional label because the pharmacy was not dispensing the medication. The administrator reports having been cited for maintaining improperly labeled bottles. In another situation a facility was cited for inadequate instructions on a prescription medication. The State said the labeling was inappropriate, yet the pharmacy maintained that their labeling was within legal parameters. Administrators are often caught between usual business practices employed by a pharmacy and State regulations.

### **Relationships with residents and their families**

Small AL facility administrators seek a balance between protecting their residents' health and safety and allowing their residents to act autonomously. Administrators set boundaries to clarify what is preferred by residents and their families, and what the administrators' requirements and responsibilities. These boundaries also relate to medications and their management.

The purpose of boundaries established by regulations and AL facilities is to protect both residents and facility administrators. AL facilities require each resident (or other responsible party) to sign a contract. This contract protects the facility and administrator, and facility policies protect the residents. For example, small AL facility administrators state that medication mismanagement is a frequent cause of mental, behavioral, or cognitive problems in their residents. AL residents are required to have their medications managed, unless the resident is deemed capable by the facility and a regulatory nurse. This policy is in place to protect residents, and administrators state that very few residents are permitted to manage their own medications. In addition, all medication orders, even OTC products, must be ordered by a physician. These policies help promote the safe use of medications in a vulnerable population. Policies and boundaries set by state regulations and AL facilities reduce the autonomy of AL residents. Use of OTC or herbal products purchased by a resident or family member may be severely restricted. Family members may not be allowed to administer herbal or OTC products to the AL residents while residents are in the facilities. Some residents are allowed to self-administer medications, but they are not usually allowed

to keep the medications in their rooms; instead, medications must be locked up by the facility.

Small AL facility administrators face additional resident-and-family-related issues. Administrators note that family members, while they may be required to purchase or otherwise supply residents' medications, do not participate with their administration. Family members are principally concerned with the overall health of the resident but not usually with day-to-day resident care and may be critical of medication management practices in the AL facility. Facility administrators often have difficulties with maintaining residents' compliance with dosage and timing, especially for residents with cognitive impairment. Effective communication plays a large part in maintaining adherence to medication regimens. Residents have the right to reject a medication, but administrators feel charged with ensuring compliance. Some residents pretend to take a medication but actually hide it for later secret disposal. This behavior can result in compromised health, and increased dosages of medications that the doctors incorrectly believe the residents are taking. Administrators report developing practices such as providing pieces of banana or applesauce to ensure that a resident has swallowed the medication.

Finally, small AL facility administrators perceive health concerns that residents may not report or family members don't notice. Administrators may become aware of drug allergies or other side effects of medications simply because they live with the residents, or at least see them daily, and manage their medication regimens.

Large AL facility administrators report that inability to self-administer medications properly is a primary reason to enter assisted living care. The administrators discussed their methods for determining whether a resident should be allowed to self-medicate. Regulations allow the facilities to work with residents to assist them in administering their own medications. Administrators of all sizes of facilities rarely allow this practice. Occasionally residents may be permitted to manage all their medications, but in general facility employees manage all medications, whether prescription or OTC. Residents are assessed for their ability to self-medicate by a nurse upon entering care. The process includes making certain all medications are properly secured in locked storage (in a resident's room if permitted to keep them at bedside), that a resident can name all of his or her medications, the medications' indications and proper method of administration. The reviewing nurse completes a pill count to check that the medications have been taken appropriately. In addition, these residents are not allowed to use reminder systems or to seek assistance from family members. Residents who are allowed to self-medicate are assessed every 60 days by a visiting nurse to make certain that they are self-administering properly. Finally, when changes in mental status are noted for self-administering residents, they will be assessed sooner than 60 days. Administrators state medication management techniques are top priorities in resident care.

## Discussion

This study is one of the first to address issues of medication management in AL facilities from the perspective of facility administrators. It identifies themes concerning relationships between AL facility administrators, residents and families, providers, and regulatory bodies, with administrators often feeling caught between conflicting needs and requirements of each group. Administrators spend much of their time resolving issues of managing residents' medications within and beyond their facilities.

In smaller facilities administrators fulfill multiple roles. These administrators report taking a very 'hands-on' approach to managing medications. They are the ones responsible for ordering, tracking, storing and administering medications, or coordinating medication

procurement with families. Because they have direct and personal relationships with residents (often referring to them as 'clients'), they also monitor residents for adverse drug events. One small-facility administrator illustrated her vigilance with this example: "Yes, I have a resident that was allergic to an antibiotic and did[n't] know she was allergic to an antibiotic until she started taking it. And she didn't break out in hives where like you could see on my hand. The hives were on her lower belly and her lower back – but they weren't anywhere else. And I noticed she was scratching like, and I'm, why are you scratching like this? And I happened to look at her and she was allergic to the antibiotic."

Small facility administrators, especially, feel caught between their role in maintaining a home-like environment for residents and carefully following what they sometimes feel are overly prescriptive regulations. One administrator expressed her frustration with state requirements in this way: "You check your MAR sheet, you check your physician's order sheet, you check your bottle – because they'll doing it ... with a bottle, you check your bottle and you have to look at the name of the person, you check the dosage, you check the directions – everything has to match. And if it – there are sometimes it might say –one and a half pills – but now the State is saying 'don't let the Pharmacy fill that prescription with a half.' If he is going to do it he's going to have to – for example – if you have one and a half pill that may be ten-milligram and instead of him giving you two ten-milligram pills you're asking for ten-milligrams and then give you a five-milligram in a different bottle ... Then also now it may have on there the physician's order or on the MAR or even on the pill, it says do not crush. Now suppose you have a client – or resident – who will not swallow – what are you going to do?"

Even in larger facilities, with larger staff that may be differentiated by function (e.g., nurses for administering medications, assistants for personal care), administrators spend significant amounts of time dealing with medication administration issues. In large facilities, another layer of complexity may exist when a facility is one of several operated by a parent company. One administrator expressed her frustration with the medication packaging process required by her facility's ownership: "We hate it at the home. It was our corporation that chose it and sometimes it goes by weight as it's going through the pharmacy and sometimes there's errors with the medications because some of them might weigh the same, so it's been a real challenge."

Some of the stress experienced by facilitators of larger facilities may originate in conflict between demands of staff, responsibility for interpretation of regulations, and the need to operate at a profit for the owners. Administrators who participated in the large-facility group all had nursing backgrounds and they expressed ambivalence about having Certified Medication Aides (CMAs) administer residents' medications rather than using more highly trained staff: "The down side to it is that do not have the nursing knowledge to be able to recognize... that a medication looks a little different, or if they've switched over to a new bingo card and they've changed manufacturers, the pill is a different color and a lot of registered nurses know their pills by sight. CMAs, they don't know that kind of stuff, so that's where you find errors."

This study has several limitations. First, only administrators from one area of one state participated. Since AL facilities are regulated at the state level, their experiences may not be generalizable to other areas of the United States. Only eight administrators participated in the groups, so important themes related to medication management may have been excluded. We have however, identified several threads (e.g., difficulty with remaining compliant with regulations, satisfaction with providing care to residents) that require more extensive inquiry.



In conclusion, we found that administrators' relationships with health care providers, regulatory bodies, residents and families are important themes related to medication management in AL facilities. With a paucity of information about how medications are managed in AL facilities, qualitative studies can provide direction about future need for research and policy related to medication management in the AL settings.

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## References

1. Assisted living Federation of America. [Accessed August 1, 2008] About Assisted Living. <http://www.alfa.org/i4a/pages/index.cfm?pageid=3285>
2. Kaldy J. Assisted living research: Still in its infancy but beginning to grow. *Assisted Living Consult.* 2005; 1(3):22–26.
3. Reinhard SC, Young HM, Kane RA, Quinn WV. Nurse delegation of medication administration for older adults in assisted living. *Nurs Outlook.* Mar-Apr;2006 54(2):74–80. [PubMed: 16597525]
4. Podrazik PM, Stefanacci RG. Negotiating the Complexities of the Long-Term Care Continuum. *Assisted Living Consult.* Mar-Apr;2005 1(2):8–17.
5. Mitty E, Flores S. Assisted Living Nursing Practice: Medication Management: Part 1 Assessing the Resident for Self-Medication Ability. *Geriatric Nursing.* 2007; 28(2):83–89. [PubMed: 17430743]
6. Spillman, BC.; Liu, K.; McGilliard, C. Trends in Residential Long-Term Care: Use of Nursing Homes and Assisted Living and Characteristics of Facilities and Residents. Department of Health and Human Services; Nov 25. 2002
7. Sloane PD, Gruber-Baldini AL, Zimmerman S, et al. Medication undertreatment in assisted living settings. *Arch Intern Med.* Oct 11; 2004 164(18):2031–2037. [PubMed: 15477439]
8. American Society of Consulting Pharmacists. Medication Management in Assisted Living: Introduction. Vol. 2003. Alexandria, VA: Assisted Living Workgroup; p. 1-10.
9. Sloane PD, Zimmerman S, Brown LC, Ives TJ, Walsh JF. Inappropriate medication prescribing in residential care/assisted living facilities. *J Am Geriatr Soc.* Jun; 2002 50(6):1001–1011. [PubMed: 12110058]
10. Stewart, DW.; Shamdasani, PN.; Rook, DW. Focus groups: theory and practice. second. Vol. 20. Thousand Oaks, CA: Sage Publications; 2007.

**Table 1**  
**Medication Management in Assisted Living Moderator's Guide**

<b>TOPIC 1. General Introduction to topic</b>	<b>TOPIC 2. Acquiring and tracking medications</b>	<b>TOPIC 3. Residents and medications</b>
1.1 In thinking about all the aspects of running a facility and taking care of your residents, how important are issues around managing medications?	2.1 Who provides medications?	3.1 Do you allow residents the option to self-administer their medications? How do you decide whether a resident can self-administer? Do you use an assessment tool or specific process?
1.2 How much of your time does dealing with medications take up?	2.2 What kind of relationship do you have with the pharmacies that you use? Do you use only one pharmacy or do you allow multiple pharmacy providers?	3.2 How do you monitor residents' medications when they self-administer
1.3 Who is the person most responsible for medication management in your facility?	2.3 Do you or your staff assist with prescription access issues such as dealing with or prescription refills?	3.3 Can you tell me about a time when medication issues have played a part in residents transitioning into and out of AL?
1.4 Do you use unlicensed personnel to administer medications? What are the problems and benefits?	2.4 Has the issue of Medicare Part D come up with any of your residents?	3.4 Do you ever keep information from residents for their own good?
1.5 What regulations do you need to follow for medication management? What issues regarding medication management do you wish were better spelled out in regulations?	2.5 How do you track medications?	3.5 Have you had any experience with residents using or wanting to use supplements?
1.6 How important are medication issues to people you need to report to?	2.6 Do you use special packaging devices?	3.6 Do family members' wishes around medications come into conflict with the residents' wishes or facility policies?
	2.7 How do you handle medication issues when a resident enters the facility? How are residents' medication regimens reviewed? Who does this? How often/When do you know that it's time for review?	3.7 How do you monitor for medication misuse or abuse?
	2.8 Have you ever hired a pharmacist or pharmacy provider to oversee medication management in your ALF? Would you ever consider this?	
	2.9 How do you stay abreast of medication safety issues like medication recalls?	

**Table 2**  
**Characteristics of Participants and their Facilities (N=10)**

	Small Facilities (N=4)	Large Facilities (N=6)	Total (N=10)
<i>Participant Characteristics</i>			
Age group			
30-34 years	2	1	3
44-49 years		2	2
55-59 years		1	1
60-64 years		2	2
65 years and older	2		2
Race			
White		4	4
Black	2	1	3
Asian	1		1
Not answered	1	1	2
Years as administrator in this facility Median (range)	8.3 (2-18.2)	5.5 (2.4-9.3)	9.7 (2-18)
Years in the assisted living field Median (range)	10.0 (2-18)	9.5 (6-13)	9.7 (2-18)
<i>Facility Characteristics</i>			
Number of rooms Median (range)	4 (3-4)	58 (24-151)	
Current number of residents Median (range)	3.5 (3-5)	55 (22-218)	
Number of staff on payroll Median (range)	1.5 (1-4)	32 (26-100)	
Ownership type			
For-profit, individually owned	4	-	4
For-profit, partnership	-	1	1
For-profit, corporation	-	2	2
Non-profit, church-related	-	1	1
Non-profit, corporation	-	2	2
Facility is owned/operated with other facilities	-	3	3
At least one resident on a subsidized care option	3	2	5

**Table 3**  
**Examples of Field Quotations**

<b>Small AL Facilities</b>	
	<p>“So when you get the medication you’re used to seeing a particular pill, with a particular number and a particular size, and then when you get a new pill [...] do I have to send this whole blister pack back because something is wrong [...] So I think that definitely in smaller facilities such as myself, I have a rapport with the pharmacy.”</p>
	<p>“I get the hospital to fax the physician’s orders to my pharmacy, so that if there’s discrepancies when the pharmacy calls me before the patient even leaves, we can get it all cleared up. Because a lot of times once the patient is in the home, it’s hard to call back and get [...] the doctors to redo those scripts. It’s really hard.”</p>
	<p>“I’d just call their physician and ask their physician to give me a physician order – and usually whatever I ask the doctors to do they’ll do it.”</p>
	<p>“I think [the rules are] simple. I don’t think there’s anything extra that can be added or anything that can be deleted. I think that it’s at a point that you won’t harm the residents.”</p>
	<p>“I don’t have 50 houses, or even a big house with 50 rooms, but they need to ease up on us and stop making all these rules, because I think it’s ridiculous.”</p>
	<p>“I do think that your smaller homes need to be a part of the decision making and [...] making these regulations because they don’t hear from the little people.”</p>
	<p>“Once you leave my premises, if I’m not accompanying you, you’re out there on your own. It’s in my agreement.”</p>
	<p>“None of my [...] residents’ families are concerned about their medication – all they seem to be concerned about is how do they look, what do they look like as far as if they’re healthy looking, etc., those kinds of things.”</p>
	<p>“I have a resident that is pretty much on her own and if she wants to [...] buy a bottle of Tylenol, aspirin, or whatever she chooses, cough syrup – she does it.”</p>
<b>Large AL Facilities</b>	
Relationships with providers	<p>“I have a gentleman who likes to use peroxide, so I actually have physician’s orders to keep his peroxide at bedside.”</p>
	<p>“So there is no order – there’s a relationship that you have with the pharmacy, there’s the family bringing it in, there’s people going to the VA.”</p>
	<p>“[Y]ou get the bill and it will say on there, can be reordered at such and such time, so it’s up to you to call the mail order, get the medication and bring it in and it causes a problem sometimes. Then when you go to order it – say the family doesn’t bring it, they’re on vacation somewhere and you try to order it from our pharmacy to keep – you know to – you know they’ll say well, they can’t...”</p>
Relationships with regulatory bodies	<p>“It has resident’s name, it has the medication and the frequency, or the amount that they were taking but it didn’t have the specific directions – take one tab a day. All it said was ‘See MD’ orders. So now I’m in a fight with the pharmacy, the pharmacy is saying it’s perfectly legal to do that. The State is saying absolutely not, you must have the directions for use on the label [...] So right now I’m sitting in a fight with the State because the regulations are not clear as to what is supposed to be on that label. It just says that you have to have that information available. I have it available on my MARs.”</p>
	<p>“I had residents on the over the counter medications. [The State was] not taking us writing the name across it [...] The State] wanted us to get a label from the pharmacy. That pharmacy will not give you a label – because at that point you’re dispensing medication.”</p>
	<p>“Tell us exactly what you want every single time so that when the inspectors come in there is no – if this inspector likes it’s okay, if this inspector doesn’t – it’s not. This is the way it has to be every single time all the time.”</p>
Relationships with residents and their families	<p>“Those who need any [medication] assistance at all, we don’t do that. It’s either all or nothing. Either we do them or you’re responsible for all of it. I know one of the regulations is you can assist people with administering their own medications but in our community we don’t do that.”</p>
	<p>“Medication administration, meal preparation, are probably the two things, the largest two things that bring people to assisted living is that they no longer eat what they are supposed to eat and they don’t take the medications.”</p>