Nurse delegation of medication administration for older adults in assisted living

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Assisted living (AL) is a relatively new form of long-term care that offers residents personal care services and more independence in a home-like environment. Introduced to the United States in the 1980s, AL is changing the conventional thinking about how to care for frail older adults. One important issue to explore is registered nurse (RN) delegation to unlicensed assistive personnel (UAP), particularly for medication administration. This study provides a national perspective on medication delivery in AL settings from the perspectives of state Board of Nursing (BON) executives. Qualitative interviews using semi-structured interview guides were conducted with BON executives to validate a legal summary of AL regulations and nurse practice acts, and to identify nursing issues pertaining to medication management in AL across the United States. In this study, there was considerable variation across states regarding medication administration and the role of both the RN and the UAP. BON executives displayed a range of knowledge about nursing practice issues in AL, with many reporting low familiarity with this setting. Mechanisms for systematic review of quality of delegation were not in place. Medication administration and nurse delegation were dynamic issues, with practice and policy evolving concurrently. This study highlights the limited articulation of policies between agencies and across states in the important and growing setting of assisted living. Nurses have the opportunity to shape this evolving practice arena and to enhance awareness of the professional and clinical issues inherent in working with UAP in medication delivery.

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Assisted living (AL) is the fastest growing long-term care (LTC) option for older adults. States regulate both nursing practice and AL, and regulation for each varies considerably across the country.[1] With an emphasis on a home-like environment and a population characterized by increasing frailty and functional need, issues of registered nurse (RN) delegation and medication administration by unlicensed assistive personnel (UAP) are important issues to examine. The purposes of this research were to validate current state policies that affect nurse delegation and medication administration for frail older adults in the AL setting, and to explore the views of executive staff of the state Boards of Nursing (BON) regarding the implementation of rules and regulations governing nurse delegation of medications. The findings of this descriptive research will inform future multistate studies of medication safety and quality of care in this LTC setting. They may also help shape health policy, particularly at the state level where regulations governing both nursing practice and AL are promulgated.

BACKGROUND AND SIGNIFICANCE

AL offers a more home-like environment than traditional forms of care, such as nursing homes. Because AL is intended to emphasize a more social model of care, and ideally provide a less expensive LTC alternative, there is rarely 24-hour on-site coverage by licensed nurses. In the AL setting, issues of nurse delegation and administration of medications by UAP are particularly salient. UAP assist elders with personal care and health maintenance activities such as skin care, nutrition, and exercise. In addition, many older adults in AL settings also need help with medications. AL residents take about the same number of medications as nursing home residents,[2] and require assistance ranging from "reminding" the elder to take medications to actual "administration of medications."

Medication management in AL is significant for several reasons, including the health status of AL residents, the number and types of medications they take, the delivery of medications by UAP, and the lack of structures and processes to monitor medication safety in this setting. AL residents are a population at risk for negative health outcomes by virtue of their advanced age, frailty, and number of health conditions.[3] Nationwide, AL predominately serves a frail, older population: more than half of residents are older than 85 years; approximately 25% have significant cognitive impairment; 51% receive help with bathing; and 77% receive help with medications.[3]

Most residents in AL are taking medications to manage chronic illnesses, and medication regimens may be complicated and subject to change over time.[4] Estimates of the extent of medication use in AL range from 3.8 to 6.2 regularly scheduled daily medications,[4-7] which fall midway between the level of medication use among older adults residing independently in the community (average 2.7-3.9) and skilled nursing facilities (average 8.9).[8] There is also a relatively high prevalence of several groups of high-risk medications (eg, psychotropics, cardiovascular agents, anticoagulants) in AL settings.[4-7] Psychotropic use (eg, antidepressants, benzodiazepines, antipsychotics) ranges from 35% to 58% in the AL setting.[4,6,9,10]

There is a lack of consistency in the delivery and monitoring of medication administration in AL settings. There are several reasons for this. First, delivery and monitoring of medications is largely conducted by residents themselves or by the UAP, both of whom lack a professional background in drug interactions, medication administration guidelines, health assessment, and identification of adverse drug events.[11,12] Continuity is disrupted with the characteristically high UAP turnover in AL settings.[11] Finally, few structures and processes exist to monitor quality in medication management.[13,14] A better understanding of medication management issues could lead to recommendations for improving quality.

Whether non-nurses can administer medications to AL residents is a clinical practice and state policy issue that has significant practical consequences for consumers who seek long-term care outside of nursing homes. Without substantial help with medications outside of institutional settings, older adults who may otherwise be able to live in community-based settings could be forced to go to nursing homes. Without a mechanism to provide for this help safely, many will have little real choice.

AL has been growing rapidly, and there is a nationwide trend towards increasing resident acuity in AL,[15] yet there is scant information about nursing practice in this setting. Kane and her colleagues[16] conducted case studies of nurse delegation in 20 states that were promoting home and community-based care, including AL. They found considerable ambiguity, confusion, and interstate variation regarding delegation of tasks (including medication administration) to non-nurses. In states allowing nurse delegation, nurses report confusion about what can be delegated and are concerned about their liability. Leaders in the American Assisted Living Nurses Association (AALNA) are trying to address these concerns on a state-by-state basis.[17] Nurses have also raised these concerns at a national conference on delegation and consumer-directed care[18] and during the first national conference for nurses in AL sponsored by the Assisted Living Federation of America (ALFA) in April 2000.

Clearly, this is a clinical issue that significantly affects the practice of nurses in AL settings, the quality of care that older adults receive, and state policy development. There is little research available to inform the clinical and public policy dialogue, but two recent studies provide some interesting findings. First, in a national survey of state licensing agencies that oversee AL facilities, Mollica[19] found that 30 states (64%) allow UAP who have completed training to administer medications, and 98% allow UAP to "assist with self-administration of medications" (eg, remind the person). This is a 200% increase from Mollica's 2000 survey in which only nine states allowed trained aides to administer medications, and another 12 states permitted aides to assist with self-administration.[20] More than half (51%) of the state licensing directors reported that state surveyors found problems with medications frequently or very often, but the frequency of problems was not related to the states' policies about who is permitted to administer medications. Some states permit trained aides to administer medications and report few problems, whereas other states report many problems.

A second study offered initial findings on quality in one state. Young and Sikma[21,22] led a legislatively mandated descriptive study in Washington. They found no evidence of significant harm or adverse outcomes for consumers receiving delegated care, including the administration of medications by non-nurses in AL. Although limited to one state, this study informed many of the issues explored in this current study.

In addition to these findings, dialogue with stakeholders engaged in AL regulation and financing, quality oversight, and nursing practice underscores the need for further investigation of nurse delegation of medications in AL. Roundtables and panels conducted by the principal investigator at conferences held by ALFA, the AALNA, the National Academy for State Health Policy, the Centers for Medicare and Medicaid Services, the American Academy of Nursing, and the National Council of State Boards of Nursing confirm broad interest in this issue. The Assisted Living Workgroup, formed in 2001 to make recommendations to the US Special Committee on Aging about how to ensure

quality of care for AL residents, identified medication management as a critical area for study and policy development.

Based on the "Systems of Professions" conceptual framework,[23] it is clear that this is the time for the nursing profession to consider its jurisdictional control over its work, and those who perform it, in a way that balances consumer safety and autonomy. Delegation of nursing tasks has the potential to broaden the reach of nursing and strengthen its jurisdictional control, but legitimate processes are needed to ensure safe yet flexible delegation.[24] The nursing profession and state regulators need to balance consumers' preference to live in environments that can support their autonomy with states'mandates to protect vulnerable consumers. Nurses in AL need more clinical and regulatory guidance, and state agencies are seeking research data to guide practice and regulation.[25]

Recently, Reinhard completed a legal analysis and summary of the 50-state nurse practice acts and rules/regulations.[26] This analysis revealed substantive interstate variation in relation to nurse delegation policies. Because of the dynamic nature of service delivery and the varied interpretations of regulations, a confirmation of this legal analysis with state nurse policy leaders was indicated. Thus, the previous analysis of nurse practice acts served as a springboard for this study and further exploration with executive staff of the state BON.

METHODS

This exploratory study examined perspectives of state BON executives or their nurse practice consultants about medication administration in AL. All BON executive directors were contacted with an introductory letter, including an analysis of their state nurse practice acts and regulations,[26] and a sample set of questions. Follow-up phone calls were made to schedule a telephone interview appointment. The interviews were conducted with the BON Executive Director or a designated executive staff member in charge of nursing practice. More than one executive staff member from each board participated in several states. The interviews took place over a four-month period from July 2002 through January 2003. BON executive staff member interviews were conducted in 42 of the states, and another two states completed an abbreviated version of the interview protocol. Two states declined to participate, and four states did not respond to the invitation. Interviews ranged from 30 to 90 minutes.

The semistructured interviews were designed to obtain confirmation of Reinhard's 2001 analysis of the laws and regulations related to nurse delegation in each state, with a particular focus on AL and the extent to which the BON permits delegation of medication administration to UAP. The interviews also sought to determine the respondents' concerns, if any, with the state's current nurse practice or AL regulations as they are implemented in the AL setting.

Analysis of the interviews included descriptive statistics and categorization of data into four areas. In the first section, we asked about states' nurse delegation policies in relation to care settings (with a focus on AL), specific limits on care tasks, UAP training and supervision requirements, and RN accountability for the process and/or outcome of delegation.

In the second area we summarized the extent to which nurses could delegate sample care tasks in AL. For medications, we examined both the route of administration (oral, subcutaneous, prefilled insulin, and other injections) and the exercise of judgment used in delegating *pro re nata* medications. Other sample care tasks ranged from simple activities, such as applying nonsterile dressings, to more complex care tasks, such as applying sterile dressings or working with tube feedings, bladder catheters, and bowel treatments. Sample care tasks were used to explore the range and limits of nurses' legal authority to delegate to UAP, particularly in AL settings. We compared responses to the sample care task list to respondents' answers about specific limits to delegating according by setting or list of care tasks in the law (previously discussed here).

For the third area we summarized BON executives' concerns about how consumers receive help taking their medications in AL, including indications of resident harm. Finally, we summarized the respondents' assessment of current state policies for how consumers can receive help taking their medications. Here we sought the extent to which BON executives were aware of how BON rules interact with other state agency AL licensing rules, and whether they had any concerns about how those regulations affect both nurses and consumers.

FINDINGS

Delegation Policy in General

Confirming the findings reported by Reinhard,[26] all states except New York and Pennsylvania had laws and/or regulations that permit nurses to delegate to UAP. Among states that did permit delegation, almost all permitted delegation in any setting and most did not specify a list of tasks that could be delegated. Some states, such as California, Connecticut, and Delaware, specifically ruled out the delegation of medication administration. Training of UAP for delegation purposes was highly variable. Although many BON executives stated that the nurse may determine the degree of training required, they often indicated that state AL licensing regulations had more specific training requirements for UAP, especially if they administered medications. Many states required UAP to be certified nursing assistants or to obtain training to be medication aides. The frequency and form of nursing supervision was also quite variable and somewhat setting-specific. In many cases, supervision was detailed in regulations

outside of the BON. The state agency that licensed the AL residences determined the extent to which the RN must supervise the UAP.

The majority of states that permitted delegation had some statutory or regulatory language that addressed nurses' accountability for delegating. Exceptions were California, Florida, Kansas, Maine, Minnesota, Missouri, New Hampshire, Rhode Island, South Carolina, and Wisconsin. Several of the BON executives in these states reported that nurses were held accountable, at least for the process of delegation, although their laws did not specify accountability. Most BON executives stated that nurses were held accountable for both the process and outcomes of delegation. A few BON executives indicated nurses were held accountable only for the delegation process. Oregon provided a noteworthy example, stating that the nurse who followed the regulations was not subject to an action for civil damages for the performance of a UAP, unless the UAP was acting upon the nurse's specific instructions, or no instructions are given when they should have been provided. Hawaii also had language that clarified that the nurse was accountable for the delegation process. Hawaii's regulations state that the nurse is accountable for the decision to delegate and the adequacy of the nursing care to the client provided that the UAP performed the task as instructed and delegated by the delegating nurse. These distinctions were important because nurses often fear that the "UAP is operating under my license" and are afraid to delegate.

Delegation of Medications in AL

In general, BON executives viewed broad discretion to delegate to UAP only in terms of traditional activities of daily living (ADLs), such as bathing, dressing, toileting, transferring, and eating. They interpreted anything outside of these ADLs as care tasks that require the skill and judgment of a nurse. There was a considerable range in tasks that could be delegated, with the most conservative BON policies restricting delegation of nonsterile dressings and the least conservative BON policies permitting delegation of more "invasive procedures," such as insertion of bladder catheters. Certain states permitted delegation of some complex tasks and not other tasks. Some states, such as Florida and Idaho, permit nurses to delegate complex care tasks, such as managing tube feedings and inserting and changing bladder catheters, but did not allow nurses to delegate medication administration. Although the rationale for these delegation parameters was not always clear, in some states the statute was the limiting factor. For example, Connecticut allowed broad discretion in delegating care tasks, but the statute specified that nurses could not delegate medication administration.

Regarding delegation of medications, the states appeared to be almost evenly divided on the issue (Figure 1).

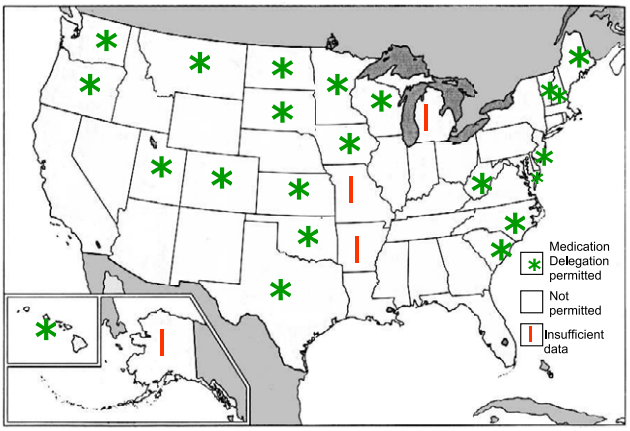

Figure 1. Nurse delegation of medications in AL.

Twenty-two states permitted nurses to delegate medications (at least oral medications) and 24 states did not. It is unclear what is permitted in the remaining four states either because we were not able to interview representatives, or contradictory information was provided. It is important to note that even in states that did not permit nurses to delegate medication administration to UAP, the state could permit trained aides to administer medications, presumably outside of the nurse delegation model.

Finally, the BON executives who indicated that nurse delegation of medication administration was not permitted also stated that UAP were only able to assist with self-administration of medications. That is, the UAP could remind the resident to take their medications and remove the medications from the packaging, but the resident must physically ingest the medication without assistance.

Concerns of BON Executives

Some BON executives appeared to be very familiar with AL in their states, and they exhibited knowledge of the rules and regulations, the other state agency staff most involved, how consumers were assisted with their medications, and concerns that nurses and others express. However, in many cases, it was evident that the BON executive was not conversant about AL, had difficulty discussing how consumers obtained help in receiving their medications, and referred the investigator to another state agency to obtain that information. These BON executives stated that nurses were permitted to practice nursing in AL, but reported they did not have a sense of how many nurses were practicing in this setting, nor did they have an understanding of setting-specific issues.

This lack of knowledge about AL was most evident when discussing how consumers received help with their medications and, in BON opinions, about how well current state policies supported consumer safety. One reason that some BON executives may have been unaware of medication errors or other care problems

associated with UAP is that these aides were regulated by another state agency. Because these licensing agencies had jurisdiction over UAP, they did not regularly report quality problems to the BON.

Many of the BON executives who were familiar with state policies on AL did voice their concerns about the safety of AL residents. These respondents had the impression that many residents had needs that could not be met in AL, with a primary concern being that their acuity levels exceeded the capacity of AL staff to provide the extent of help that consumers needed. One executive stated "Assisted living facilities are taking in too many high needs patients that should be in skilled nursing facilities." This practice could be related to admission criteria (the AL was allowing individuals to be admitted when they should have been in a skilled nursing facility) and/or aging-in-place (they entered at an appropriate level but needed more care as they aged and became more frail).

In the area of medication administration, respondents who said the only help consumers receive is "assistance with self-administration" (the stated policy in 18 states) often expressed concern about that policy. Some expressed the opinion that UAP were really administering medications without appropriate training and thought that supervision and problems were likely to occur. Some respondents also expressed the concern that residents often did not receive their medications on time or some were not given all of their medications. In states that did permit UAP to administer medications, some were concerned that there was not enough training, that nurses did not understand their responsibilities in delegation, or that UAP might replace nurses. One respondent noted that the BON needed to pay much more attention to AL and achieve consistency in regulation between the BON and the state licensing agency for AL.

Awareness of Outcomes in AL

Despite the concerns just described, few BON executive directors stated that there was any evidence of harm to residents in AL in relation to medication administration policies and practice, irrespective of whether the UAP could administer medications or only assist with self-administration. Across the states, there were no data systems in place for collecting this kind of information in a systematic way. The BON executives suggested a number of mechanisms for obtaining this information. They might hear from nurses, another state agency, or the media. Few received complaints from residents, and stated "it is difficult to know what is going on" but "there is no deluge of complaints." A few respondents commented that residents were often going to the hospital for being overmedicated or undermedicated, or for reasons related to receiving medications that had been discontinued. Despite the variation in state policies in how consumers receive help with taking their medications and the BON executives' concerns about the UAP role in administering medication, executives from only seven states reported they did not think their current state policies were working well. Those states where the BON had spent much time working with their state AL licensing agencies on this issue were the most comfortable with existing policies. It is important to note that 15 BON executives stated that they did not know how their existing state policies on medication administration in AL were working for consumers.

DISCUSSION

Although specific practices vary across states, in almost all states RNs were permitted to delegate certain tasks to UAP in selected settings. The typical regulatory framework provided language that permitted delegation, and then that authority was circumscribed by a limitation on the kinds of care tasks the nurse could delegate and/or a limitation on the settings in which delegation could occur. After those two major limitations, there were further limits imposed by training and supervision requirements. In general, it appeared that state law often permitted more delegation discretion than that with which the BONs were comfortable.

Many BON executives interpreted "delegation" as help with ADLs, which we did not include *a priori* in our definition of nursing tasks to be delegated. The lack of clarity regarding the statutory and regulatory scope of delegation, and the BON interpretation of that scope, was an important finding. In some cases, the BON executive acknowledged that the statutory limits on medication administration was inconsistent with the BON's evolving regulations that permitted nurses to delegate tube feedings based on their assessment of a persons' needs and a UAP's ability to carry out that delegated task. Even when the BON's interpretation changes, legislative action may be required to codify that changed thinking.

Many, if not most, of the BON executives were unfamiliar with AL. The majority (58%) of respondents referred the investigators to other state agencies to ask about medication administration policies in AL. It is not clear how nurses in states where the BON was not familiar with AL would receive guidance from their regulatory agency on nursing practice issues in AL. In the absence of BON guidance, nurses turned to their AL employers and/or state facility licensing agencies to learn parameters for delegation in AL. It is clear that nursing practice is evolving in AL with insufficient guidance from BONs and state policymakers in general. In this void, staff may experience role conflict and confusion.[22]

BONs could play a greater role in establishing procedures for new settings in which consumers and nurses interact. Indeed, as state legislatures are considering issues in AL, more state BONs are becoming

involved in AL policy development. The findings of this study highlighted the limited articulation of policies between BONs and AL regulations, as well as limited understanding across regulatory bodies regarding overlapping jurisdiction.

A survey of licensing directors, conducted simultaneously with the BON interviews, revealed that 30 states permit trained aides to administer medications[19]; another 18 permitted aides to assist with self-administration of medications. We found some discrepancies between the data provided by BON executive staff and the responses from state AL licensing directors. Some states did not permit nurses to delegate medication administration, but trained aides could perform this task via regulations promulgated by another state agency. The most logical explanation for these discrepancies is that UAP in these states are not administering medications within a nurse delegation model. Rather they are exempted from the nurse practice act either explicitly or through rules promulgated by another state agency.

The most important finding of this study was that states are grappling with identifying the best way to balance consumers' desire for a more home-like "social" model of LTC while operating within the reality that many individuals who want this option also require assistance with health care needs, such as medication administration. Community-based options like AL are expanding across the country, with growing public funds allocated to these programs. Medications are the flashpoint of the social versus medical model debate within the AL industry. AL residents take multiple medications—usually for chronic, stable conditions—and many of them need assistance or actual administration of these medications.

States are wrestling with policy questions to determine how to best deliver services safely to consumers in the least restrictive environment possible, including issues of appropriate setting parameters, staff mix, and quality monitoring. This is a controversial and fluid state policy issue that has captured the attention of Congress, and which is driven in part by a desire to assure quality and safety for consumers in AL. Many experts sorted through the issues and developed recommendations to the US Senate Committee on Aging in April 2003. Unfortunately, there is little research to support any of these recommendations. In this study, some professionals were concerned about safety, yet there was limited anecdotal evidence of harm related to medication administration. It would be most helpful to examine multistate data on medication errors that result from resident self-administration, medication reminders, and medication administration by UAP. It would also be useful to contrast these data with medication errors made by RNs. Oregon and New Jersey have years of experience in this area, and there is some research from the Washington state that could provide some guidance. It is important to note that medication administration is only one aspect of care that is important for older adults and individuals with disabilities in the AL setting. Other care tasks, such as tube feedings, bowel care, and catheters are also important to residents who need help with these needs. This is true in AL, as well as in other home and community-based settings. It is not feasible to imagine that all of these tasks would be performed by an RN given the resources available in these settings. Some form of delegation, or "working through others," is needed. Many states are also wrestling with nurse delegation of complex tasks in homecare settings, such as the emerging issue of RN delegation of medications in home care. Although we did not examine issues in home care, this should be another area of inquiry in subsequent research.

Nurses practice in many settings. Policies that are designed for acute care, such as restrictions on medication administration by UAP, may not translate well to home and community-based settings. Nursing practice in AL is evolving as this setting becomes more established as a LTC option and as resident acuity increases. Nurses have the opportunity to shape this evolving practice and to define the appropriate professional response to the demands of this practice setting, including identifying the merits and implications of alternate models for medication delivery (eg, nurse delegation, supervision of certified aides outside of a delegation model) and requisite education and support for implementation of these models. There is much potential benefit to thoughtful policy development, improved communication, education, and regulatory coordination around this important practice issue.

Consumer preferences are also changing. Individuals desire settings that are less institutional in appearance and practice, and they are entering AL settings in growing numbers. Critical questions emerge: To what extent can the nursing profession participate in developing new care models that balance this preference with promoting quality of care? Can the delegation framework provide that structure, and if so, what implications does this have for professional RN roles? If not, should nursing advocate that medication administration by UAP in AL and other nontraditional settings be implemented outside a delegation model, making it a responsibility of other state agencies and providers?

States are grappling with these challenging issues now. It is an opportune time for BON and nurses to learn more about AL and other home and community alternatives to acute and long-term care because individuals are less likely to receive care in traditional settings in the future. Nurses have the opportunity to enhance awareness of the professional and clinical issues inherent in working with unlicensed personnel in medication delivery. Nursing scientists can contribute by conducting research to help guide community-based practice today and tomorrow.

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REFERENCES

1. Munroe D. Assisted living issues for nursing practice. Geriatr Nurs 2003;24:99-105.
2. Clark T. Medication use in assisted living: a review of published reports. The Consultant Pharmacist 2001;16:1036-44.
3. Department of Health and Human Services. High service or high privacy assisted living facilities, their residents and staff: results from a national survey. US Department of Health and Human Services. Available at: http://aspe.hhs.gov/daltcp/reports/hshpes.htm. Accessed August 25, 2003, 2003.
4. Armstrong E, Rhoads M, Meiling F. Medication usage patterns in assisted living facilities. The Consultant Pharmacist 2001;16:65-9.
5. Garrard J, Cooper S, Goertz C. Drug use management in board and care facilities. Gerontologist 1997;37:748-56.
6. Spore D, Mor V, Larrat P, Hawes C, Hiris J. Inappropriate drug prescriptions for elderly residents of board and care facilities. Am J Public Health 1997;87:404-9.
7. Sloane P, Zimmerman S, Brown L, Ives T, Walsh J. Inappropriate medication prescribing in residential care/assisted living facilities. J Am Geriatr Soc 2002;50:1001-11.
8. Hanlon J, Ruby C, Shelton P, Pulliam C. Geriatrics. In: DiPiro J, Talbert R, Yee G, et al, eds. Pharmacotherapy: a pathophysiological approach. Stamford (CT): Appleton & Lange; 1999. p. 79-90.
9. Spellbring A, Ryan J. Medication administration by unlicensed caregivers. J Gerontol Nurs 2003;29:48-54.
10. Williams B, Nichol M, Lowe B, Yoon P, McCombs J, Margolies J. Medication use in residential care facilities for the elderly. Ann Pharmacother 1999;33:149-55.
11. Mitty E. Assisted living and the role of nursing. Am J Nurs 2003;103:32-43.
12. Reinhard S, Young H, Kane R, Quinn W. Final report: nurse delegation of medication administration for elders in assisted living. Baltimore (MD): American Nurses Foundation; 2003.
13. US General Accounting Office. Assisted living: quality-of-care and consumer protection issues in four states. Washington (DC): US Government Printing Office; 1999. GAO Publication Number. HEHS-97-93.
14. IOM Committee on Improving Quality in Long-Term Care.
15. Gelhaus L. More reasons to stay. Increasing services such as medication management and extra assistance with ADLs leads assisted living providers into uncharted territory. Provider 2001;27:18-28.
16. Kane R, O'Connor C, Baker M. Delegation of nursing activities: implications for patterns of long-term care. Washington (DC): American Association for Retired Persons; 1995.
17. Flores S. Personal communication. In: Association PotAALN, editor. Vista (C): 2000.
18. Wagner D, Nadash P, Sabatino C. Autonomy or abandonment: changing perspectives on delegation. Washington (DC): National Institute on Consumer-Directed Long-term Care Services. National Council on Aging; 1997.
19. Mollica R. State assisted living policy: 2002. Portland (ME): National Academy for State Health Policy; 2002.
20. Mollica R. State assisted living policy: 2000. Portland (ME): National Academy for State Health Policy; 2000.
21. Sikma S, Young H. Balancing freedom with risks: the experience of nursing task delegation in community based residential care settings. Nurs Outlook. 2001;49:193-201.
22. Young H, Sikma S. Nurse Delegation Study Research Report (2003). Washington State Department of Health. Available at: http://www.doh.wa.gov/hsqa/uwstudy.doc. Accessed: January 10, 2003.
23. Abbott A. The system of professions. Chicago (IL): Chicago University Press; 1988.
24. Reinhard S. Jurisdictional control: the regulation of nurses' aides. Nurs Health Care 1988;9:372-5.
25. Reinhard S. Summit on consumer directed care and nurse delegation. New Brunswick (NJ): Rutgers Center for State Health Policy; 2000.
26. Reinhard S. Consumer directed care and nurse practice acts. New Brunswick (NJ): Rutgers Center for State Health Policy; 2001.