A Report from the 2006 CEAL Quality Summit

More than 200 individuals attended the recent 2006 Quality Summit organized by The Center for Excellence in Assisted Living (CEAL). To facilitate a dialogue on the changing landscape of assisted living (AL), the 2-day conference, titled "Assisted Living: The Next Generation Opportunities and Challenges," brought together consumers, providers, professionals, researchers, regulators, and policy makers. *Assisted Living Consult* attended the conference and in this issue brings you a synopsis of the key sessions. Plenary session co-moderators provided notes summarizing each session, highlighting key topics, and identifying actionable steps that resulted from the panelists' presentations and discussions. There was a lively collegial spirit to the proceedings with open microphones to encourage questions and comments from the audience.

As you will learn from the coverage on these pages, there is great diversity in the AL industry. Overall, the conference revealed that resident satisfaction appears to be high, and that, on the whole, AL has done reasonably well in achieving its core values of autonomy and choice, privacy and dignity, homelike environment, and aging in place. You will also see evidence of a shift from the earlier social model of service to a more catered, specialized and enhanced medical model of care with an increased presence of healthcare professionals on staff or providing on-site services. Another important component of the conference was the camaraderie fostered through networking among the broad spectrum of professionals who work in AL. Comments from some conference attendees include:

"…a wonderful Summit—very high level of information. Even more important was the opportunity of sharing with diverse stakeholder attendees. Only a group with such a wide base of support can do what CEAL is doing."
– Joan Hyde, CEO, Ivy Hall Senior Living

"The CEAL Summit is an ideal forum to bring fresh thinking at every level of assisted living. I applaud your efforts in making the Summit a very thought-provoking event."
– Bill Thomas, President, Senior Star Living

"It is great to see so many people and organizations representing a wide spectrum of stakeholders gather together to better the assisted living industry."
– Roger Bernier, President & CEO, Chelsea Senior Living

About CEAL

The Center for Excellence in Assisted Living (CEAL) is a nonprofit collaborative of 11 national organizations that aims to promote high-quality AL and serve as an objective national clearinghouse and convener for research, practices, and policies that foster quality and affordability in AL. CEAL is the outgrowth of a recommendation contained in the *2003 Assisted Living Workgroup (ALW): A report to the US Senate Special Committee on Aging* (available at: www.aahsa.org/alw/intro.pdf). Drawing on a diverse membership of provider, consumer, and professional organizations, CEAL's mission is to foster access to high-quality AL by:

- Creating resources and acting as an objective resource center to facilitate quality improvement in AL
- Increasing the availability of research on quality in AL
- Providing a national clearinghouse for information on AL
- Building on the work of the ALW
- Promoting availability of and innovation for high-quality affordable AL
- Providing information, tools, and technical expertise to facilitate the development and operations of high-quality affordable AL programs to serve low- and moderate-income individuals

To accomplish this, CEAL will:

- Provide reports regarding the state of AL quality utilizing objective measures and data
- Develop a means of disseminating information on quality about AL residences in ways that are useful to various constituents
- Identify and promote areas for AL research
- Develop and disseminate:
  - Specific performance measures, including measures of quality of life, clinical outcomes, functional outcomes, and staff/resident/family satisfaction
  - A compendium of effective practices for use in AL operations, regulations, programs, and development
  - Practice protocols to address identified problem areas
- Provide technical assistance to states on policy, programs, effective practices, and the integration of outcome measures and ALW recommendations into state policies and programs

For more information, visit www.theceal.org.

CEAL Board of Directors

CEAL's Board of Directors is comprised of representatives from the following 11 national organizations:

Organization	Representative
Alzheimer's Association (www.alz.org)	Jane Tilly
American Assisted Living Nurses Association (www.alnursing.org)	Sandi Flores
American Association of Homes and Services for the Aging (www.aahsa.org)	Susan Weiss
American Association of Retired Persons (www.aarp.org)	Don Redfoot
American Seniors Housing Association (www.seniorshousing.org)	Rachelle Bernstecker
Assisted Living Federation of America (www.alfa.org)	Paul Williams
Consumer Consortium on Assisted Living (www.ccal.org)	Kathy Cameron
National Center for Assisted Living (www.ncal.org)	Dave Kyllo
NCB Capital Impact (www.ncbdc.org)	Robert Jenkens
Paralyzed Veterans of America (www.pva.org)	Fred Cowell
Pioneer Network (www.pioneernetwork.net)	Joe Angelelli

CEAL Advisory Council

CEAL's Advisory Council, representing a wide diversity of stakeholders, meets 4 times annually to help shape and inform CEAL's goals and objectives.

Organization	Representative
American Academy of Home Care Physicians (www.aahcp.org)	Constance Row
American College of Health Care Administrators (www.achca.org)	Marianna Grachek
American Dietetic Association Gerontological Nutritionists (www.gndpg.org)	Shirley Chao
American Institute of Architects (www.aia.org)	Martin Cohen
The Gerontological Society of America (www.americangeriatrics.org)	Barbara Resnick
American Society of Consultant Pharmacists (www.ascp.com)	Carla Saxton
American Medical Directors Association (www.amda.com)	Jonathan Musher and Daniel Haimowitz
Commission on Accreditation of Rehabilitation Facilities, Continuing Care Accreditation Commission (CARF-CCAC) (www.carf.org)	Susan Ganson
Consortium for Citizens with Disabilities (www.thearc.org)	Marty Ford
Government Accountability Office (GAO) (observer) (www.gao.gov)	Eric Anderson
The John A. Hartford Foundation Institute for Geriatric Nursing (www.hartfordign.org)	Ethel Mitty
Gerontological Society of America (www.geron.org)	Sheryl Zimmerman and Joan Hyde
Long Term Care Insurance Education Foundation (www.ltcedfoundation.org)	John Cutler
National Adult Family Care Organization (www.nafco-afc.org)	Connie McKenna
National Association of Activity Professionals (www.thenaap.com)	Sandy Dole and Bonnie Ruechel
National Association of Professional Geriatric Care Managers (GCM) (www.caremanager.org)	Linda Aufderhaar
National Association of State Units on Aging (www.nasua.org)	Mark Miller
National Association of Social Workers (www.naswdc.org)	Karyn Walsh
National Association of Boards of Examiners of Long Term Care Administrators (NAB) (www.nabweb.org)	Randy Lindner
National Association of Home Builders, Senior Housing Council (www.nahb.com)	Leslie Marks
National Association of Home Care (www.nahc.org)	Mary St. Pierre
National Conference of Gerontological Nurse Practitioners (www.ncgnp.org)	Karen Kauffman
National Hospice and Palliative Care Organization (NHPCO) (www.nhpco.org)	Cherry Meier
National Multiple Sclerosis Society (www.nmss.org)	Dorothy Northrop
United States Department of Health and Human Services (DHHS)	
Agency for Healthcare Research and Quality (AHRQ) (www.ahrq.gov)	Bill Spector and D. E. B. Potter
Assistant Secretary for Planning and Evaluation (ASPE) (observer) (http://aspe.hhs.gov)	Gavin Kennedy
The Centers for Medicare and Medicaid (CMS) (www.cms.gov)	Dan Timmell
Veterans Administration (www.va.gov)	Christa Hojlo

Accountability: Competing Priorities

Co-Facilitators
Don Redfoot, Senior Policy Advisor, AARP Public Policy Institute, Washington, DC, and Chair, CEAL Board
Neeraj Uppal, President, ERM Strategies, Atlanta, GA

Presenters
Jerry Cooper, Executive Director, North Carolina Assisted Living Association, Raleigh, NC
Barbara Ryan, Chief, North Carolina Adult Care Homes Licensure, Raleigh, NC

Different stakeholders can have competing priorities that at times create unintentional challenges. For example, the assisted living (AL) philosophy supports residents' independence and right of choice, but state regulators may adopt a "no harm" philosophy that may directly conflict with those goals.

North Carolina's 172 AL complaint investigators present an organizational challenge to the state level administrator, resulting in inconsistent regulation throughout the state. Providers are challenged to operate in multiple counties with differing regulatory protocols. Therefore, North Carolina implemented a common training initiative to foster consistency in county inspections. This is just one approach to dealing with competing priorities.

Potential Action Steps

The following action steps are suggested as possible methods to tackle the priority challenge:

- Examine the potential effects on accountability of Certificate of Need (CON) restrictions. CONs have a useful purpose because overall quality can decrease when licensure is too simple to attain. On the other hand, CONs can interfere with a provider's ability to accommodate consumer choice.
- More effectively tap the opinions of residents, staff, and families by developing surveys for each of these diverse groups.
- Move to an outcomes-based inspection and make family issues part of the regulatory process.
- Develop more collaborative interactions and training sessions between state regulators and providers:
  - In North Carolina, county and state staff train together twice annually and include providers in the sessions.
  - In New Jersey, regulators collaborate with groups of providers on specific quality issues to reach decisions akin to best practice programs that focus on specific challenges such as medication management, falls, or assessments.
  - In Wisconsin, the regulatory agency holds provider forums in which trends and statistics are shared.
- Make information available to the public by posting inspection reports on the Internet.
  - Maryland is an example of successful dissemination of information to consumers online.
- Use individual care managers more effectively to "follow the person," as is done in the mental health model.
  - Kansas created a new social work regulatory body to address AL needs.
- Run a consumer-focused monitoring system.
  - Tap experiences of residents' children who often are those who complain to state authorities.
  - Use a customer satisfaction survey as part of the regulatory paradigm (eg, Washington, DC, and Ohio).
  - Force accountability onto consumers via surveys.
  - Create thorough consumer needs assessment.
  - Effectively disclose the limitations of care that the facility can provide.
- Focus on quality improvement, not assurance.
  - Develop and use quality indicators.
  - Promote continuous quality improvement (CQI).
- Allow providers to invest in training, not fines.
- Pay for performance based on outcomes.
- Base staffing ratios and reimbursement rates on resident needs.
- Examine limitations of contract tenancy clauses that limit the level of AL resident acuity in AL facilities.
- Make accommodations for those with higher levels of disability. For example, in North Carolina, a physician can determine that a patient should remain in AL temporarily, as long as the care staff can be trained to accommodate the required level of care.
- Use multidisciplinary assessment.
- Use general compliance standards to allow providers latitude in demonstrating compliance (as is done in Australia).
- Improve end-of-life care by negotiating and following advance directives.
- Make accountability to consumers a higher standard than minimum government regulations.
- Use risk-management strategies to deal with torts as more effective forms of accountability.
- Develop individual goals for improving specific settings (eg, money, recognition, technical assistance, or plans of correction tied to improvement goals).
- Promote "new beginnings" with wellness and health enhancements.
- Separate housing and services to enhance consumer choice. ALC

Effective Behavior Management for Residents with Dementia

Co-Facilitators:
Jane Tilly, DrPH, Director, Quality Care Advocacy, The Alzheimer's Association, Washington, DC; Vice Chair, CEAL Board
Sheryl Zimmerman, PhD, Co-Director and Senior Research Scientist, Program on Aging, Disability, and LTC, Cecil G. Sheps Center for Health Services Research, University of North Carolina, Chapel Hill, NC; member of the CEAL Advisory Board

Presenters
Beth Goethe, PhD, assisted living consumer; member of the CEAL Advisory Board, Consumer Consortium on Assisted Living; Managing Partner, Dignity First, San Antonio, TX
Anne Ellet, NP-C, MSN, Vice President, Health Services, Silverado Senior Living, San Juan Capistrano, CA

Challenges	Opportunities
Recruiting good staff	Recruit those with compassion and patience.
Promoting good quality of life for residents	Know residents and use person-centered care. Use a quality-of-life scale to measure resident quality of life.[1] Train all staff to interact with residents more than just during daily activities. Ensure good grooming for residents. Ensure that residents who spend time together are compatible.
Training staff	Educate staff on dementia, its symptoms, and how to properly care for residents with dementia. Use peer-modeling techniques with new staff and monitor all staff performance. Require staff to speak English unless they speak the same language as the resident.
Working with family	Educate the family about residents' conditions and condition changes. Involve the family in resident care planning. Create family support groups.
Handling sexual activity among residents	Allow consensual activity and ensure privacy. Work with the family to decide which activities are acceptable. Be alert to signs of unwanted sexual advances or activities. Signs include body language and anxious behavior. Some activities are assaults and may require legal redress through adult protective services, ombudsman, or police.
Monitoring resident behaviors	Conduct behavior mapping: monitor residents' reactions to the environment, and review medications. Keep on top of and manage resident health conditions. Use person-centered care and keep residents engaged in the facility's community life to the extent that they wish. Monitor television viewing for potential causes of resident upset.
Reducing staff turnover	Monitor staff and provide them with the tools and training they need to provide good care. Involve direct-care staff in care planning for residents. Do not retain staff who do not measure up.
Preventing overmedication	Review medications. Use antipsychotics as a last resort.
Assessing pain	Most older people have pain, so it is reasonable to expect that most residents with dementia do too. Assess possible causes and signs of pain.
Providing end-of-life care	Ensure availability of hospice on floors and apartments. Track residents' conditions carefully and consult with the family about bringing in hospice. Train staff about end of life for people with dementia.

1. Zimmerman S, Sloane PD, Williams CS, et al. Dementia care and quality of life in assisted living and nursing homes. *The Gerontologist*. 2005;45:133-146.

Affordability in Assisted Living

Co-Facilitators
Robert Jenkins, Vice President, Coming Home and Green House Projects, NCB Capital Impact, Washington, DC
Bernadette Wright, PhD, Policy Research Analyst, AARP Public Policy Institute, Washington, DC

Presenters
Mauro Hernandez, PhD, Research Associate, Department of Social & Behavioral Sciences, University of California, San Francisco, CA
William Harris, Senior Housing Consultant, Alexandria Commission on Aging, Alexandria, VA

Can Medicaid support the philosophy of affordable assisted living (AL) that seeks to ensure privacy, autonomy, and aging in place? If not, what needs to change?

- The general consensus was that Medicaid can support the philosophy of affordable AL, but only if reimbursement is adequate.
- AL has done quite well in Oregon; very few AL businesses have failed.

Private rooms are an economic issue.

- Availability of private rooms is an economic issue. If the Medicaid reimbursement rate is not high enough, providers will not make private rooms available to Medicaid clients.
- If providing Medicaid funding for AL is going to save a state money, affordable AL needs to include aging in place (ie, serving people who would otherwise be in more expensive nursing homes).
- Virginia does not have a Medicaid waiver. The state had one, but the federal government took it away, and the state has not reapplied for a waiver.
- In Michigan, Medicaid is available only in nonlicensed settings (eg, private homes, apartments, and independent senior housing). Consumers must contract independently for services under the Medicaid waiver.
- Medicaid pays for 66% of the costs of nursing home residents, while AL is primarily private pay.
- If reimbursement rates are not high enough, providers will not be interested in participating in the Medicaid program.
- Medicaid does not pay for room and board in AL.
- Inadequate funding impacts a facility's ability to deliver privacy, autonomy, and aging in place.
- It seems discriminatory to say that AL delivers privacy, autonomy, and aging in place, when some people do not have the money to pay for a setting that provides these values. Some providers cannot afford to provide these things.
- Nevada does not pay for a "bed hold" under the Medicaid program. This makes it hard for providers to hold a resident's bed if the resident goes to the hospital.

Different regulatory levels may facilitate reimbursement.

- It sometimes helps to have different regulatory levels to facilitate paying different levels of reimbursement based on the residents' needs and the services provided.
- In New York, payment levels are adequate. AL programs receive $100 to $150 per day, which is half the nursing home rate. In New York, affordable AL programs do not have to build; they provide services in existing subsidized housing where residents already live.
- Sometimes AL is created in nursing homes.
- Regulating AL facilities like nursing homes are regulated can also affect the ability to carry forth the mission of AL (eg, regulations that oppose using negotiated risk agreements and letting residents choose to take risks in what they eat, etc.).
- Most AL costs (65%-70%) are for the physical plant. By comparison, 70% of skilled nursing facility costs are labor.
- In some states, AL providers only accept Medicaid payments for clients who "spend down" their money. New clients must pay privately, but if they spend down their money, they can then go on Medicaid and remain in the AL residence.

What are barriers to increasing Medicaid funding for affordable AL?

- In Virginia, there is no discussion of bringing back the Medicaid waiver. Other political issues have priority in the state.
- Information on the cost-effectiveness of Medicaid funding for AL is limited.
- Leadership is missing in state agencies that are fo-

cused on this issue. A champion is needed to push for change.

- Federal incentives for states to do a better job of funding affordable AL are missing.
- There is a perception that AL residents are less frail than nursing home residents.
- Ways to increase the funding of affordable AL include:
  - Reassessing residents' needs every year
  - Establishing cost-of-living allowances (COLAs)
  - Providing a capital cost component in the Medicaid reimbursement rate
  - Reimbursing for room and board in AL
  - Instituting managed care
- In New Jersey funding has been increased to $30 million for home and community-based services (HCBS), and in June 2006 the Independence Dignity and Choice in long-term care (LTC) law passed:
  - Rates will increase to $75/day for AL.
  - The state will start closing nursing home beds that are on hold.
  - Some AL providers also own nursing homes. When residents becomes eligible for nursing homes, these providers tell them that their needs can no longer be met in AL and that they need to move to a nursing home (so the provider can get nursing home Medicaid reimbursement).
  - The organizations that worked together to draft the Independence Dignity and Choice legislation are now a task force.

Workgroups are effective in implementing or expanding Medicaid.

- Convening workgroups is a very effective model to implement or expand Medicaid programs. California, Arkansas, and New Jersey are examples of states that have effectively convened workgroups.
  - Providers can appear to be self-interested if they advocate for affordable AL alone. Workgroups can help build trust.
- This issue is emotional. Ask legislators, "What's going to happen when you or your parents get old and need care?"
  - Emotional connection is often an effective route to new legislation.
- In Oregon, the "woodwork" effect occurred: when the state paid for apartment living for people with mental retardation/developmental disability (MR/DD), many moved to apartment living from the homes where they had been cared for by family.

States play games to force federal funding.

- States play games to pay less and force the federal government to pay more. Should Medicaid be federalized?
- In Washington, affordable AL facilities with private rooms admit only private-pay residents. Residents may move to a small studio if they run out of money, and Medicaid does not cover that cost.
- The Coming Home Program provides private apartments for affordable AL, but they need housing subsidies and getting them is a very complex process. Only a few people are willing to navigate the very complex system.

What research is needed to address affordable AL?

- Ways to limit Medicaid funding to a single source or shift the source solely to the federal government
- Public regulation of AL
- Cost-benefit analysis of a single source for Medicaid—very expensive to study total societal costs
- Adequacy rates to develop the quality of care that people need
- The woodwork effect
- How to provide services for less money
- How to meet people's needs when funding is unavailable (some states are without funding)
- Alternative models of managed care (eg, Program of All-inclusive Care for the Elderly [PACE])

How successful are housing subsidies in affordable AL?

- In 1998 the Alexandria Commission on Aging applied to the Department of Housing and Urban Development (HUD) for Section 202 new construction funding for housing with services and received $5.3 million of the total $8 million cost. It received another $1.3 million, and the Board raised the remaining money. The agency also had some free land.
- For a second project, the Commission also applied for Section 202 and 811 new construction and substantial rehabilitation project funding, but HUD rejected the request for 202 funding if the building would be licensed as AL. An application for a Low Income Taxpayer Clinic (LITC) grant did not work, and the Commission could not get Section 232 Mortgage Insurance for Residential Care Facilities. Fairfax County was offering low-interest loans. The AL residence contains only 1-bedroom units. Housing vouchers can only be provided for apartments with kitchens. The Commis-

sion financed the project through a combination of rent assistance from the government, money from the county, money raised by the Board, and contributions from family members to the endowment fund.

- In 1999 the AL Conversion Project allowed use of AL Conversion funds to convert housing not only to AL, but also to "unused commercial property." To subsidize affordable AL, organizations and agencies must be creative and "stretch the envelope." Public-private partnership is essential.
- Funding sources are available if you paint a compelling picture and are not totally dependent on state and federal funding.
- Creative funding requires layering 2 to 5 sources together, but very few projects are willing to do that.
- Building new affordable AL facilities is hampered by:
  - Numerous conflicts of interest
  - Multiple sources for public funding
  - Cost-shifting between states and the Centers for Medicare and Medicaid (CMS)
  - Requirements for cooking facilities (as in Nevada), which can be very dangerous for residents
  - Government housing subsidies that were created for a very different purpose than AL

Recommendations for Consideration

- More funding
- Increased and expanded state supplements to Supplemental Security Income (SSI)
- Coordinated work with other groups in the White House Conference on Aging
- Longer-term budgets
- Possible role of churches in AL (Leaders in the Green House Project are mission-driven, faith-based groups who are willing to take risks.)
- Incentives for for-profit providers to support affordable AL
- Inclusion of affordable AL case studies in the CEAL Clearinghouse (www.theceal.org/clearinghouse.php)

ALC

Workforce Considerations: Better Jobs, Better Care

Co-Facilitators

Kathleen Cameron, MPH, Chair, Board, Consumer Consortium on Assisted Living, Falls Church, VA; member of the CEAL Board

Randy Lindner, Executive Director, National Association of Boards of Examiners of Long Term Care Administrators (NAB), Washington, DC; member of the CEAL Advisory Board

Presenters

Susan Gilster, PhD, Executive Director, The Alois Alzheimer Center, Cincinnati, OH

Linda Noelker, PhD, Director, Margaret Blenker Research Center; Associate Director for Research, The Benjamin Rose Institute, Cleveland, OH

There is a workforce crisis—not enough qualified assisted living (AL) administrators, nurses, and direct-care staff are available to meet the growing need.

General Points

- Retention is the real issue for direct-care workers; recruitment is not the primary problem.
- Leadership in recruitment and retention is key to improving the workforce situation in AL. AL facilities must embrace the culture-change movement like that of nursing homes to improve worker conditions in AL.
- AL leadership (as a profession) must address licensure, regulatory issues, and training.
- Since 1998 40% fewer people have taken the long-term care (LTC) administrator licensure exam.

What are some action steps to address workforce issues?

General Action Steps

- Better communication between research and academia is needed to integrate with practice.
- Researchers need to teach practitioners how to sustain the results of research over the long term, including making interventions affordable.
- More research is needed to determine why LTC workers are leaving their jobs.

Leadership Action Steps

- Many leaders and administrators are trained in nursing homes, not in AL facilities; thus, they are not prepared for the AL setting and often do not have experienced mentors to provide training and feedback.
- Raise the expectations for administrators to lead.
- Leaders and administrators need mentors! Pick experienced mentors and incentivize them.
- Train and mentor other AL staff.
- Experience is key to success as an AL administrator; those with more experience do better on licensing exams.
- The SERVICE (service, education, respect, vision, in-

clusion, communication, enrichment) model developed by Susan Gilster and Associates is one approach to improving AL leadership; the concepts embodied in the SERVICE model are not new and can be easily implemented in AL if the commitment is present. (See www.careleadership.com/serviceFirst.htm for more information.)
- AL administrators need guidance to implement quality care concepts.
- Administrators must more thoroughly screen potential employees to eliminate those who are not well-matched for jobs in AL.
- Administrators should avoid hiring job candidates who have a poor job history (eg, many jobs for short periods).
- Chief executive officers, chief financial officers, and other leaders who spend time "in the trenches" are more likely to understand all aspects of caregiving that direct-care workers experience in AL facilities.
- Better Jobs, Better Care has created an excellent coaching and supervision training program that is implemented in small groups; the focus of the training is communication. (See www.bjbc.org/ for more information.)

Worker Action Steps
- Consistent, permanent assignments for workers are one approach for improving conditions for direct-care workers; this approach can improve retention and may help deal with "problem residents."
- Research conducted by Ejaz and Noelker[1] showed that home health agency workers have higher job satisfaction because of the flexibility, autonomy, and one-on-one, hands-on practice that enriches the work experience. These concepts can be applied to the AL environment.
- Direct-care workers should be involved in hiring other direct-care workers to improve future working relationships.
- All worker orientation programs need to include a mentorship component.
- Short (30-minute) training programs are what workers want; training and education should always be provided for night staff and repeated frequently.
- Training should integrate relationship building.
- Health insurance is an issue for workers; if LTC does not provide these benefits to its workforce, then workers will not be recruited and retained.
- Similarly, adequate wages are needed to recruit and retain workers.
- Giving comprehensive facility tours to workers more fully prepares them for their jobs throughout the facility.
- Tuition reimbursement programs may be helpful for staff recruitment and retention; these also build a career ladder or pathway for employees.
- Direct-care workers should determine their own schedules and come to agreement among themselves about who works when; workers can fill in for each other. There is no need to have a separate scheduler.
- AL facilities must provide a chain of command for employees to use in voicing concerns or complaints. Workers should not feel that their jobs are threatened if they "complain," and the problem should be dealt with at the appropriate level.
- Conducting exit interviews with direct-care staff helps determine specifically why they are leaving so that improvements in the work environment can be made, if appropriate.
- Some employees who quit in the early months of employment may not have the life and communication skills to be successful. Many of these workers should have been screened out before hiring. The key is to keep the good workers through mentoring and thorough job orientation.
- Providing workers with the rationales behind decisions maintains a collegial spirit, especially when workers are not part of the decision-making process.

Communication
- Communication is critical in LTC because of the variety of stakeholders who affect quality. Good communication and listening skills are critical for leaders. Communication is improved through daytime and nighttime staff meetings and management retreats.
- "Phantom agendas" for staff meetings limit the opportunity for all staff to participate.

Suggested Next Steps
- Dissemination of best practices (in addition to the CEAL Clearinghouse) before "best practices" are imposed on AL
- Development of programs that apply research into practice
- Development of PowerPoint presentations that can be taken into the field (eg, leadership training)
- AL facility providers (ie, owners and administrators) sharing their knowledge with other AL providers, including small providers. CEAL could create a mechanism for providers to network and support one another and share knowledge. ALC

Reference
1. Ejaz FK, Noelker LS. Tailored and ongoing training can improve job satisfaction. Executive Summary on the Better Jobs Better Care Initiative submitted to the Institute for the Future of Aging Services, American Association of Homes and Services for the Aging (AAHSA); June 2006. Available on the Margaret Blenkner Research Institute, Benjamin Rose, Web site at: www.benrose.org/Research/BetterJobsBetterCareSummary.pdf.

Will Technology Enhance Resident Services?

Co-Facilitators

Fred Cowell, Associate Director of Health Policy, Paralyzed Veterans of America, Washington DC; member of the CEAL Board

Chris Mason, Chairman and Chief Executive Officer, Vigilan Inc., Wilsonville, OR

Presenters

George Boyajian, PhD, Executive Vice President, Strategy, R&D, Living Independently Group Inc., New York

Jack York, Founder and Chief Executive Officer, It's Never 2 Late, Englewood, CO

Barriers to Technology Implementation

- The major barrier to technology is cost. A proven cost-benefit analysis is necessary to justify expenses associated with new technology (ie, reductions in staff, a safer environment, management efficiencies such as less staff time spent on paper work.)
- A secondary barrier is becoming more knowledgeable about new products coming into the market place (ie, how to find new products).
- Another barrier is operational. How does a facility keep a specific type of technology operational? The presenters suggested identifying a staff person from the very beginning who is given oversight authority for the particular project. This person should have technology skills and be available for involvement throughout the life cycle of the product or system. Offering bonus incentives or pay increases for the selected individual is helpful.

The major barrier is cost; the major challenge is selection.

Challenges of Technology Implementation

- The major challenge in implementing technology is knowing how to select a specific type of technology.
- In general, management is responsive and open to learning more about new technology and its application for the assisted living (AL) setting.
- Purchasing and implementing technology are a different matter. ALC

Intuitive System Monitors Resident Behavior Patterns

David J. Stern

Introduction

Today technology is playing an increasingly pivotal role in the lives of older individuals and no place more so than in residential care settings. According to a 2005 Polisher Research Institute study for those in such facilities (funded by the US Department of Health and Human Services), "Technology can potentially improve the efficiency of care delivery while enhancing the quality of that care and improving individuals' quality of life."[1] Although nursing homes have led the way in the use of technologies, a growing number of assisted living (AL) providers are adopting these technologies to help address issues such as residents' safety, wandering, incontinence, medication compliance, and staff accountability. In doing so, these AL leaders are working to blend the traditional principles of caring, compassion, and service with modern technology and enhanced responsiveness.

One of the newest of these technologies is QuietCare® (Living Independently Group, Inc.; www.quitecare.com), a behavioral telemonitoring system that helps caregivers assist older adults to remain independent, safer, and connected to the rest of the world. QuietCare does this by providing information and insights about an individual's functioning that has never before been available. Unobtrusive wireless motion sensors, strategically placed in a resident's home, provide the technology. Virtually invisible, these sensors only track motion—there is no video or audio monitoring. The resident does not have to wear any devices or operate any equipment. The system is completely passive, allowing for 100% compliance.

Using sophisticated algorithms, the QuietCare system analyzes the raw motion data and automatically develops a baseline of each individual's normal daily routines. It then identifies and reports noteworthy changes in these patterns—changes that can indicate the emergence of health issues or the need for additional levels

Table 1.
QuietCare's Contribution to Resident Health and Safety Issues

Fall detection and prevention	• Measures bathroom falls by length of uninterrupted time in bathroom • Generates care provider alert after stay in bathroom of 1 hour; alert reaches care providers within 2–3 minutes • Enables adjustments to "fall windows" for individual residents and/or facilities • Enables identification of other potentially problematic behaviors such as increased nighttime bathroom activity, medication side effects (dizziness), and inadequate nutrition
Medication compliance	• Determines if resident has reached for medications by monitoring activity in the area where pills are kept (lack of interaction may indicate noncompliance) • Notes behaviors and behavior changes reflective of side effects of particular medications (eg, patients on diuretics such as Lasix have continual nighttime bathroom activity; lack of nighttime bathroom visits may indicate noncompliance) • Documents provision of medication management in some AL settings where medications are stored in a secure location in resident's apartment
Depression	• Monitors behavioral changes that may indicate depression including drop in appetite, sleeplessness, lowered activity levels, and seclusion
Urinary tract infection (UTI)	• Documents increased bathroom activity (providing early indications of a UTI)
Gastrointestinal (GI) disease	• Detects frequency and length of bathroom visits (may indicate GI problem; in one AL, staff tracked spread of Novovirus using such new technologies)
Diabetes	• Monitors refrigerator usage to help determine compliance with diabetes dietary regimens

of care. Such information better enables facilities to provide care in response to scheduled, as well as unscheduled, needs. Such timely, accurate, and actionable information can enable caregivers to prevent health problems from becoming health emergencies; and in the event of emergencies, such as bathroom falls, the information enables prompt and, at times, life-saving responses to occur (Table 1). All this contributes to residents' abilities to live with a greater level of independence, while preserving their privacy.

Advantages of a "Smart" System

The system is continually "mindful" of each resident and his or her unique behaviors and needs. This mindfulness allows for a previously unattainable level of individual care. At the same time, such monitoring eases the concerns of caregivers and reduces burnout. Although initially designed for in-home care, the system has evolved in response to specific concerns of its AL users to incorporate features such as wander management, nighttime motion detection, monitoring of bed checks and assisted bathroom visits, and measures of staff responsiveness. AL providers are continually developing new ways to use the QuietCare technology. For example, a number of facilities use this technology with new residents to better assess their functional capacities and determine the most appropriate level of care. AL facilities have found that when such independent documentation is presented to family members, they are more likely to agree to and support the proposed care plan. This technology allows AL settings to:

- Better fulfill their organizational missions
- Increase their competitiveness
- Improve staff productivity
- Strengthen relations with family caregivers
- Address governance and compliance issues
- Avoid litigation and improve risk management
- Improve staff accountability
- Strengthen the management and oversight of multiple facilities (see Table 2)

The use of technology to aid decision making becomes particularly important in the current environment with more than 50% of AL residents having deficits in 3 or more activities of daily living (ADLs) and 40% suffering from some form of dementia. Increasingly, family members and their older relatives are turning to the AL setting as a means to avoid nursing home placement. The AL community is faced with the challenge of responding to this need while also preserving the uniqueness and mission of their programs—ie, providing residents with the independence and privacy they desire. To say the least, this is a significant challenge made more formidable by significant budgetary constraints, staff shortages, and high turnover rates.

It is noteworthy that Hawes and Phillips entitled their comprehensive and insightful 2000 study of the industry, *High Service or High Privacy Assisted Living Facilities, Their Residents and Staff: Results from a National Survey.*[2] The suggestion that high service and high privacy are an either/or proposition is understandable but not inevitable. Through new residential design, enhanced safety features, improved staff training and accountability, AL settings can respond to changing needs while preserving the independence and privacy of their residents.

How QuietCare Works

The system uses strategically placed motion sensors in the senior's home to detect motion on a 24/7 basis. Data from these sensors are wirelessly sent to a receiver and base station that periodically transmits the information to a centralized secure file server through standard phone lines over a toll-free number (Figure 1). Sophisticated algorithms analyze the data, compiling each individual's normal patterns of behavior including bathroom usage, sleep disturbance, meal preparation, medication interaction, and general levels of activity. Deviations from these norms can be important early warning signs of emerging health problems and can enable caregivers to intervene early in a disease process before problems become crises. QuietCare data has provided AL caregivers early warning of health problems such as urinary tract infections (UTIs), sleep disorders, depression, and medication noncompliance.

Figure 1.
Components of QuietCare.

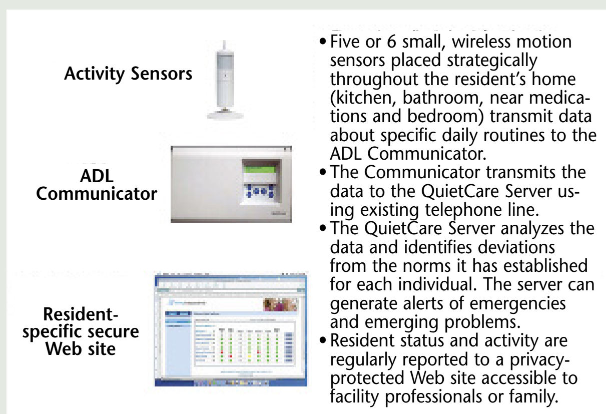


Table 2.
ALs Can Improve Management with QuietCare System

Management Objective	System's Contribution
Increase competitiveness	• Helps preserve residents' privacy and independence • Provides increased safety • Helps monitor and measure quality of services
Improve staff productivity	• Permits a responsive and efficient provision of care on as-needed basis (eg, room checks can be made as needed, not per schedule)
Address governance and regulation compliance	• Provides documentation of service needs and provision of care • Encourages staff to fulfill responsibilities
Strengthen risk management	• Identifies staff or resident behavioral issues to allow proactive resolutions and avoid possible liabilities • Demonstrates staff performance of duties (providing protection against unfounded accusations by residents or others)
Strengthen relations with family members	• Provides data as basis of care decisions, thereby improving family responsiveness to increasing care levels
Strengthen centralized management of multiple facilities	• Allows comparison of levels of service and utilization

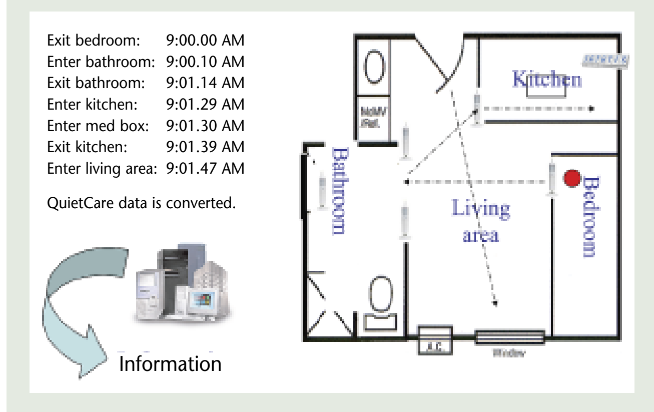
The system can also detect situations requiring more urgent intervention and immediately alert designated caregivers. Such situations may include failure to leave the bedroom in the morning or come out of the bathroom within a reasonable period or dangerously low or high household temperature. The system also provides alerts when a resident leaves the bed during the night (night motion) or leaves the apartment. QuietCare is also able to document staff responsiveness to resident falls, wandering, and nighttime motion, and it can track assisted bathroom visits and bed checks.

Although at first glance installation of the system may seem remarkably simple, strategically positioning the sensors requires a good deal of training and expertise. Some AL facilities designate staff whom QuietCare professionals train in the installation and maintenance of the system. More commonly, facilities rely on QuietCare staff for installation and support. The average apartment requires 5 or 6 sensors that are snapped into brackets secured to the walls with two small screws. An antenna/receiver is mounted nearby and plugged

into the base station/communicator. The base station is connected to an electrical outlet and a telephone line. After a brief test and identifying data entry, the system is immediately operational. Within a week to 10 days the system has calculated behavioral norms and is reporting deviations. Emergency alerts, such as bathroom falls, are reported immediately on system activation.

Figure 2 shows the level of detail captured by the system. Note how the resident moved about his home during a 107-second period. Multiplying the details of such events over the day would provide an overwhelming amount of information for any user. The genius of QuietCare is that it distills a vast amount of data into accurate and usable information.

Figure 2.
The system captures movement and converts it to usable information about behavior.



Converting QuietCare Data into Information

Caregivers access QuietCare-generated information through a password-protected Web site, E-mail alerts, text messaging, and phone calls. The Web page, as shown in Figure 3, displays the various activities in an intuitive color-coded format: *red* for urgent situations and noteworthy changes in behavior; *yellow* for changes that warrant ongoing monitoring; and *green* for normal activity levels. In home-based installations where family members may be the primary caregivers and respondents, access to an individual client Web site is provided. In residential settings where the staff members are the responders, information is usually provided in weekly or monthly summaries, documenting the status of the resident and, perhaps, their need for changes in care levels. Longer-term trend charting such as shown in Figure 4 is also available.

The various alerts direct the user to those residents most requiring attention. In Figure 3, one resident failed to exit the bedroom in his normal time; another had a bathroom fall during the nighttime; and still another had activity levels that were dramatically below her norm. Finally, one resident's behavior triggered a yellow alert indicating reduction in meal preparation activity that suggested watching her for further developments.

Figure 3.
Web site summary of several residents' activities.

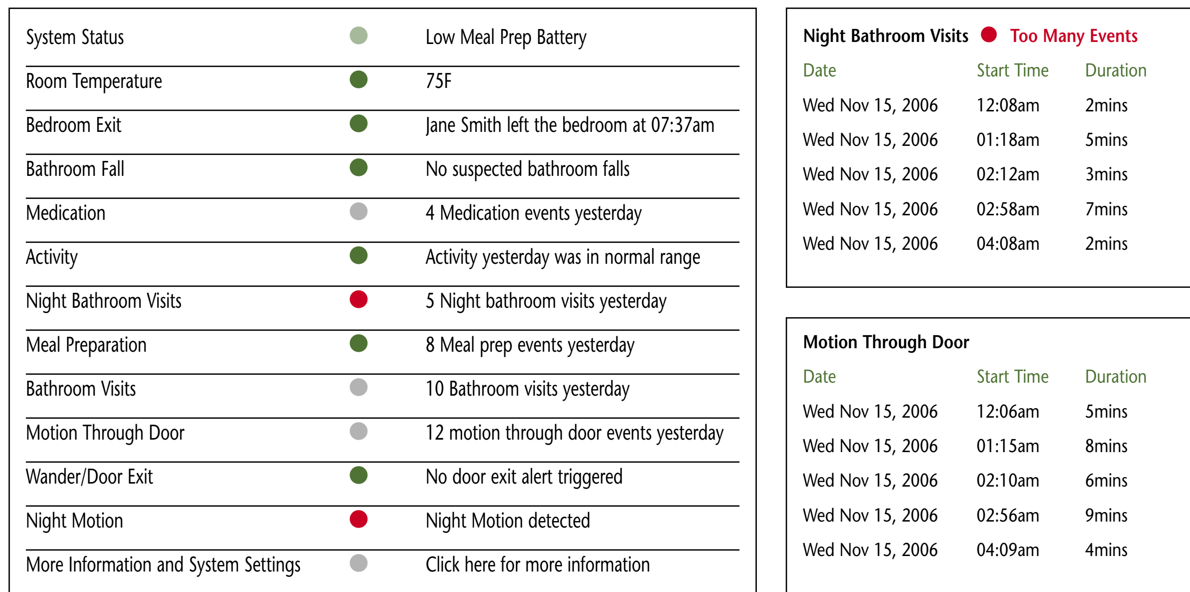
Resident #	Wake Up	Bath Falls	Meds	Meals	Activity	Sleep	Night Bath	
Jane Doe 101	gray	gray	gray	gray	gray	gray	gray	View
John Doe 102	green	green	gray	green	green	green	green	View
Susan Smith 103	green	green	gray	green	green	green	green	View
Dan Right 104	green	green	gray	green	green	green	green	View
David Tanner 105	red	green	gray	green	red	green	green	View
Alice Smith 106	green	red	gray	yellow	green	green	green	View
Catharine Cullen 107	green	green	gray	green	green	green	green	View

Green light means everything is normal.
Yellow light means keep an eye on this.
Red light means immediate attention necessary!
Gray light means the resident is "on vacation" or the behavior being measured is not appropriate for an automatic alert determination.

Although one of the distinct values of QuietCare is its ability to distill a great deal of data into actionable, timely information, users may require the details to better understand the basis for an alert and perhaps the precipitating causes. In such instances users can drill down into the QuietCare system (Figure 4) where a wealth of information is provided on the resident's individual Web site screen.

The time of the report in Figure 4 is 2:02 PM (the page is updated every 2 hours); the temperature in the apartment at that time was 75°F, and most of the behavior patterns (bedroom exit, general activity levels, and meal preparation) were within the normal range. However, a red alert indicates a significant increase in nighttime bathroom visits, and the time and duration of these visits are listed. Given the QuietCare algorithms, it is likely that this resident's norm for nighttime bathroom usage is 1 or fewer per night. Another red alert for "night motion" indicates that the resident left her bed and was moving about her apartment. The "motion through door" information demonstrates that a staff member entered the apartment before each of the bathroom visits and assisted the resident to the bathroom. Nursing staff will use this information to document the problem and monitor staff responsiveness. They may also drill down further to review patterns over the last few days to determine if this is a sudden increase or a more gradual change in behavior. There may have been a change in medication or diet or the resident may have a UTI or prostate problem. The data cannot answer these questions, but they can focus staff on the care issues that need attention. The Web site not only provides data for the previous

Figure 4.
Screen showing one resident's status and alerts



System Status		Low Meal Prep Battery
Room Temperature		75F
Bedroom Exit		Jane Smith left the bedroom at 07:37am
Bathroom Fall		No suspected bathroom falls
Medication		4 Medication events yesterday
Activity		Activity yesterday was in normal range
Night Bathroom Visits		5 Night bathroom visits yesterday
Meal Preparation		8 Meal prep events yesterday
Bathroom Visits		10 Bathroom visits yesterday
Motion Through Door		12 motion through door events yesterday
Wander/Door Exit		No door exit alert triggered
Night Motion		Night Motion detected
More Information and System Settings		Click here for more information

Night Bathroom Visits — Too Many Events

Date	Start Time	Duration
Wed Nov 15, 2006	12:08am	2mins
Wed Nov 15, 2006	01:18am	5mins
Wed Nov 15, 2006	02:12am	3mins
Wed Nov 15, 2006	02:58am	7mins
Wed Nov 15, 2006	04:08am	2mins

Motion Through Door

Date	Start Time	Duration
Wed Nov 15, 2006	12:06am	5mins
Wed Nov 15, 2006	01:15am	8mins
Wed Nov 15, 2006	02:10am	6mins
Wed Nov 15, 2006	02:56am	9mins
Wed Nov 15, 2006	04:09am	4mins

day, but also features a 7-day summary page and a detailed event screen that documents all daily activities by sensor triggering in 10-minute increments. Bar graphs that detail events can help determine the overall level of total activity for each hour of the day.

Such information not only provides valuable insights into the behaviors and needs of residents, but also helps administrators determine the responsiveness of staff. Following is a QuietCare-generated report that details the time of a fall alert and the time an individual entered the resident's apartment in response. Given that the alert was computer generated at 4:03 AM, it probably was received at the AL facility via text messaging on a pager at about 4:05 AM. It is gratifying to see the staff member responded in 6 minutes or less.

Client	ADL ID	Message Time Start (client) Our Activity Time (server)	First Resident Door Activity Following Alert
Karen M	Possible Bathroom Fall (4)	11/15/2006 04:03 AM 11/15/06 05:03 Eastern Time	11/15/2006 04:11AM

This is just one example of how QuietCare is enabling AL settings to measure staff performance and better target scarce human resources.

Telemonitoring is one way AL facilities are evolving to provide care and immediate response to residents while honoring seniors' desires for independence and freedom. QuietCare is at the forefront of the technological evolution to streamline the process of communication between caregivers, family members, and seniors. ALC

David J. Stern, Chief Professional Officer at QuietCare, has more than 3 decades of experience in social work. Stern began working with QuietCare in 2003. A year later he joined the firm as Chief Professional Officer.

Stern previously served as Chief Executive Officer of the Jewish Association for Services for the Aged (JASA) and its 8 housing and home care affiliates. He has served on a variety of not-for-profit boards and advisory committees including the Council of Senior Centers and Services, Association of Jewish Aging Services, the Elder Law Committee of the Bar Association of the City of New York, and the National Council of Consumer Organizations for the Aged. He is a fellow of the Brookdale Center on Aging and a recipient of the Family of New York State Award.

References

1. Freeman VA, Calkins M, DeRosiers R, Van Haitsma K; on behalf of the Polisher Research Institute. Barriers to implementing technology in residential long-term care settings. Executive summary. US Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, Office of Disability, Aging, and Long-Term Care Policy (ASPE) and Research Triangle Institute; December 10, 2005. Available at: http://aspe.hhs.gov/daltcp/reports/techbarres.htm. Accessed January 11, 2007.

2. Hawes C, Phillips CD; on behalf of the Miriam Rose, Myers Research Institute. High service or high privacy assisted living facilities, their residents and staff: results from a national survey. Washington, DC: US Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, Office of Disability, Aging, and Long-Term Care Policy (ASPE) and Research Triangle Institute; November 2000. Available at: http://aspe.hhs.gov/daltcp/reports/hshp.htm. Accessed January 11, 2007.

Technology to Enhance the Resident Experience

Jack York

When we think of technology in the assisted living (AL) setting, we usually think of technology to improve the efficiency of data collection and distribution—eg, electronic medical records, Health Insurance Portability and Accountability Act (HIPAA), compliance, Minimum Data Set (MDS) documentation and assessments, incident reporting software, infection control monitoring, and benchmarking. But while the staff of AL facilities improve production through technology, are the facility residents being left behind?

Yes, says Jack York, the Founder and Chief Executive Officer of It's Never 2 Late (IN2L), Englewood, CO. During the past 6 years, IN2L has strived to develop and supply adaptive computer labs to AL facilities. These labs provide activities, engagement tools, and unique experiences for residents with physical and/or cognitive disabilities.

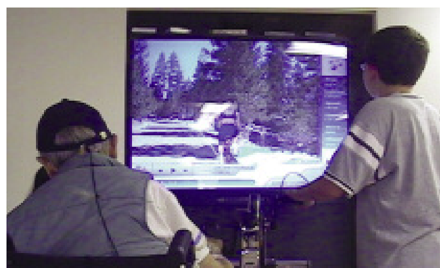
Piñon Management, based in Lakewood, CO, is a multisite facility that uses IN2L programs to provide residents access to the Internet, educational programs, music, and other learning opportunities. Says Piñon's Vice President of Life Enhancement Beth Irtz, "Piñon has a culture of change that resonates throughout all of our communities. A person-centered model of care provides access to the outside world for elders living in AL. An elder can E-mail family and friends, stay in touch with grandchildren, receive photographs, find fun or educational Web sites, listen to his or her favorite music, and continue to grow and learn."

IN2L's activity program consultant Barb Hartman adds, "Adaptive computer equipment provides successful means for persons with disabilities to not only communicate with family and friends, but also to engage in lifelong interests and learning opportunities. We're seeing examples of how those experiences positively impact the health and well-being of these individuals."

According to Deborah Perry, Director of Assisted Living at Volunteers of America, headquartered in Alexandria, VA, "Elders we serve in our AL communities have much to gain from the connectivity benefits of computers and the Internet. Research is increasingly telling us that staying mentally active promotes healthy aging. Conventional computer technology challenges many of our residents, and so we have partnered with IN2L to provide adaptive computer systems at selected AL facilities. Designed for individuals who may or may not have computer experience, the technology engages them physically, emotionally, mentally, and socially. We believe that this technology has significantly enriched the lives of our residents."

A primary goal of IN2L is to find creative ways to use technology to enhance the environment of residents with dementia. Says York, "The exploding world of high-tech multimedia (integrating pictures, video, and music) provides limitless opportunities for enhancing the quality of life for the 'greatest generation.' Our touchscreen systems allow users to simply touch pictures of Frank Sinatra for the crooning to start, touch a picture of their granddaughter to hear her singing 'Happy Birthday,' or touch a picture of a waterfall to launch a musical screensaver of waterfalls. The possibilities are endless." The Christian Living Campus (CLC) in Denver, CO, uses IN2L's computer lab for dementia patients and has had resounding success, especially from the residents' families who now can interact with their family members through the computer lab.

The Myers Research Institute, Beachwood, OH, and the partner of IN2L, is beginning to develop outcomes-



based research from these systems. Says Dr. Jeanne Mattern, Senior Research Associate at Myers, "Adaptive technology systems have provided long-term care residents opportunities for activities that go beyond the standard group format in that they are easily customizable and allow for individual activities as well as group activities. Residents can stay connected with family and friends and interests through high-touch systems."

As IN2L is showing, the lives of AL residents, even those with dementia, can be enhanced through use of technologies. However, cautions York, the technologies only work when the AL staff and management are committed to initially spending extra work and time to put these technologies in place. The key is not to set up a donated computer on a shoestring budget and then have one or two staff attempt to engage residents. This leads to resident frustration and eventual disinterest in the computer, and claims by the staff and management that the residents are not interested in technology.

The technologies only work when the AL staff and management are committed to initially spending extra work and time to put these technologies in place.

It's time that AL facilities direct some technology dollars and staff time and effort towards the generation of elders who first developed the infrastructure of technology. Let the "greatest generation" reap what they sowed. ALC

Jack York is Founder and CEO of It's Never Too Late (IN2L), Englewood, CO. IN2L is a high-tech, high-touch program for enhancing quality of life and quality of care for seniors, particularly those with physical or cognitive disabilities.

Assisted Living's Impact on Long-Term Care and a Look at the Future

Moderator

Dave Kyllo, Executive Director, National Center for Assisted Living, Washington, DC; Treasurer, CEAL Board

Presenters

Larry Polivka, PhD, Professor, University of South Florida, Tampa, FL

Joan Hyde, PhD, Senior Fellow, Gerontology Institute University of Massachusetts, Boston; CEO, Ivy Hall Senior Living, Boston, MA; Principal Investigator, AlphaPLAN Assisted Living Resident Information and Service Planning Software; Former Executive Director and Current Advisory Board member, Massachusetts Alzheimer's Association; Chair, Massachusetts Assisted Living Foundation of America (ALFA) Board; Advisory Board member, CEAL; Board member, American Society of Consultant Pharmacists; Fellow of the Gerontological Society of America; Coconvener, Assisted Living Workgroup

Patrick Flood, Commissioner, Vermont Department of Disabilities, Aging and Independent Living, Waterbury, VT

Assisted Living: What Do We Know?

Larry Polivka, PhD

- Assisted living (AL) has experienced rapid growth since 1990.
- Monthly costs for AL range from $1500 to $5000 compared to the average nursing home care of $2900 to $5000 or more.
- Availability of affordable AL varies by state and community, but more than 40 states now have Medicaid Home and Community Based Services (HCBS) waivers for AL. Florida has:
  - 4500 waiver beds ($1750 per month) with long waiting lists

- 3000 to 4000 AL beds (40%-50% of those served) in the Diversion Program (Managed Long-Term Care [MLTC] waiver)

Very few states are meeting needs for AL.

- Very few states, however, are meeting the needs for AL although they are attempting to create more balanced long-term care (LTC) systems.
- The capacity of AL to serve a wide range of residents is demonstrated by research findings showing that the average number of impairments in activities of daily living (ADLs) among residents is 2.5 to 3.0 (30% have 3 or more), and 30% to 40% have some level of cognitive impairment.
- Fifty percent or more of AL residents need assistance with bathing, dressing, and personal hygiene, including incontinence care.
- Assistance for instrumental activities of daily living (IADLs) ranges from 90% (housekeeping) to 77% (medication assistance). In many facilities, more than 50% of residents use walkers or wheelchairs.

AL's capacity to support aging in place is increasing.

- The capacity of AL to support "aging in place" appears to be increasing as the provision of ADL assistance and health care increases. The most recent literature survey (12 studies) found that, on average:
  - 32% of residents died in the AL facility and 5% during hospitalization from an AL residence.
  - 36% went to a nursing home and 16% to another AL residence.
  - Average length of stay was 33 months.
- Cognitive decline and behavioral problems were often cited as reasons for moving a resident to a nursing home.
- Hawes and colleagues[1] found that the presence of a registered nurse (RN) helped reduce movement to a nursing home.
- Zimmerman and coworkers[2] found the opposite effect, which may reflect differences in state regulatory standards.
- AL resident satisfaction appears to be generally high with scores on various measures ranging from 60% to 90%+.
- These findings indicate that AL, on the whole, has done reasonably well in achieving the core values of the original vision for AL (autonomy and choice, privacy and dignity, homelike environment, and aging in place).
- Success in achieving these values accounts for much of the appeal of AL, which is also 25% to 50% less expensive than nursing home care.
- AL has played a major role in reducing nursing home use over the last 15 years (500,000 fewer nursing home residents).

Implications of What We Know for AL Regulation

- AL should be based on a continuing commitment to core values that the available research literature shows are achievable and should be embedded in the regulatory framework for AL.
- AL should be supported by regulations explicitly designed to express the values of autonomy, privacy, and aging in place in an affordable setting.
- ***Disclosure.*** Every prospective resident and his or her family should be fully informed about the services the facility offers, their costs, and how their costs change in response to changes in resident need, institutional policies regarding aging in place, physical environments, and other issues.
  - Adequate disclosure of services available for dementia patients is particularly important and should be addressed explicitly in regulation.
- ***Admission and retention criteria and staffing levels.*** To maximize consumer choice and fulfill the preference of many residents to age in place as long as possible, admission and retention criteria should be inclusive and flexible
  - Regulations that impose highly specific, restrictive criteria for admission and retention would keep many frail elders out of AL, forcing them into nursing homes, and diminishing the quality of life for those who no longer would be allowed to remain in AL.
  - Ball and colleagues[3] note that aging in place is a complex phenomenon and suggest that there may be as many ways of aging in place as there are AL residents.
- ***Negotiated risk.*** If clear, noncoercive conditions are met, negotiated risk agreements should be widely permitted in AL.
  - These agreements have the potential to become an important vehicle for consumer choice, giving residents greater opportunity to define for themselves the conditions for their aging in place.
  - Special provisions must be made for those who are cognitively impaired.

- ***Dementia care.*** The AL industry and advocates should collaborate in the development and implementation of model guidelines for dementia care for states to use in developing regulatory standards for ensuring an acceptable level of care for residents with dementia. Dementia-care programs must be prepared to address the residents' evolving needs as their cognitive condition changes and deteriorates. These preparations should include:
  - Staff training about cognitive impairment and procedures for assessing and reassessing residents' cognitive status, abilities, and needs
  - Direct-care staff who are able to understand and respond effectively to residents' behavioral symptoms
  - Specialized activities that are appropriate for residents with cognitive impairment or dementia
  - Procedures for designating and working with surrogate decision makers, if residents are not capable of making decisions for themselves
  - Policies and procedures to protect residents who wander or are at risk for physical harm
  - Regular monitoring to ensure resident safety and healthcare status
  - Policies and procedures for involving and supporting family members
- ***Physical plant/environmental design.*** Regulations governing physical plant and environmental design should focus on creating homelike living environment (as much as possible), ensuring privacy, and enhancing autonomy.

Privacy is a high-priority value.

  - Many current and prospective residents of AL place a high priority on privacy as a quality-of-life value.[4,5]
  - Privacy is important for exercising one's autonomy, maintaining dignity, and achieving an acceptable quality of life, whatever the level or type of one's impairment. Regulations governing the physical plant and environment of AL facilities should support the provision of private space as a value.
  - But, privacy may be less important than other values, such as a homelike environment, that favor small, more affordable facilities.
- ***Staffing levels and training.*** Staffing levels should be sufficient to meet the needs of each resident. Staffing levels should be based on assessed resident needs and regulated accordingly.

Staffing at assessed needs is a more challenging regulatory approach.

  - Staffing at assessed need levels is a more challenging regulatory approach than relying on simple, uniform staffing standards.
  - However, the affordability benefits of this approach outweigh downside risks at this point.
- ***Quality-of-life outcome measures.*** Priority should be given to the development and use of resident-oriented outcomes measures based on quality-of-life considerations.
  - This approach to performance accountability would emphasize systematic consumer feedback on such variables as enjoyment, opportunity for meaningful activity, quality of relationships, spiritual well-being, autonomy, privacy, and dignity, as well as the resident's sense of security and physical comfort.[6]
  - Even in the absence of regulatory requirements, AL providers should use these measures as essential components of an internal quality-monitoring program.
- ***Nurse delegation and medication management.*** Allow nonnursing staff, when supervised by nurses, to assist in administering medications.
  - One of the principal purposes of nurse delegation in AL is to create an effective balance between cost and risk in medication management.

Balance cost and risk in delegation of medication management.

  - Most informants from state boards of nursing report few consumer complaints in regard to nurse delegation, although there are no formal mechanisms for reporting errors.[7]
- ***Accommodating small facilities.*** Policies, financing, and regulatory strategies should reflect our awareness of and support for the different forms of AL and the need to provide the consumers with as many options as possible to choose from, consistent with the values of the AL philosophy and basic safety requirements. Small residences should not be held to precisely the same standards as are the larger, purpose-built, "new model" properties.

Small residences should not be held to same standards as larger properties.

- The value of small facilities is evident in the findings of two recently reported studies.
- Morgan and colleagues[8] found that larger and newer properties are better able to provide services and meet the privacy and autonomy desires of residents, but small residences may provide more familial, homelike settings, which many impaired elderly residents seem to prefer and for which they are willing to give up some privacy, autonomy, and level of services.
- In a follow-up study, Zimmerman and colleagues[9] found that small properties (averaging 8.9 beds) fared as well as "new model" properties in terms of medical outcomes and nursing home transfers, and better in terms of functional and social decline and social withdrawal.

Smaller properties more willingly accept Medicare and SSI residents.

- Other studies have found that small or mid-size properties are often more willing to accept Medicaid and Supplemental Security Income (SSI)-supported residents than are larger properties,[10,11] a finding that has major implications for state LTC policy and the use of Medicaid-waiver funds to expand community-based alternatives to nursing homes.
- Staffing issues generally, and nurse delegation in particular, are critical to the expansion or even the survival of small AL facilities.
- Staffing is a major cost factor for all AL residences and plays an important role in determining affordability.
- However, in the absence of the economies of scale that benefit larger facilities, small facilities are especially vulnerable to the costs of regulation that prescribes staffing levels and precludes or greatly limits the delegation of certain nurse practices, including medication management.
- Zimmerman and colleagues[12] note that if regulation and funding turn on adherence to the parameters of "new model" facilities, it may mean the demise of smaller properties.
- Eschewing uniform standards for facilities regardless of size will undoubtedly complicate the way AL is regulated, but if it results in supporting the expansion of the range of community-based options available to consumers of housing with services, it should be considered worth the additional complexity.
- An appropriate regulatory framework would recognize the unique value of small facilities through supportive initiatives designed to prevent abuse or neglect without imposing standards that would force the closing of facilities favored by many consumers for their affordability and homelike features.
- The affordability issue is also important from the perspective of policy makers and advocates interested in expanding the availability of publicly supported AL for lower income residents and maximizing the potential of AL to help contain nursing home utilization.
- In short, small facilities are too important to let them become extinct without a comprehensive and committed effort to save them.

Conclusion

- The best available information indicates that with the support of policy makers and the regulatory community, the AL industry has built a sound foundation for serving residents who have a wide range of LTC needs in a manner largely consistent with the values of the original vision for AL.
- The record shows that the growth of AL has helped to promote the preferences and interests of consumers to prominence across the entire spectrum of LTC.

Lack of access to AL for less affluent seniors is the biggest challenge for the future of AL.

- The biggest problem for the future of AL is not insufficient regulation, but rather the lack of access for less affluent seniors who require public support, have limited access to community resources, and want to avoid ending up in a nursing home.
- For many of these individuals, AL offers the optimal LTC setting, not only for receiving the physical care they need, but also for achieving a quality of life that may not be available to them in their own homes.
- Our primary goals for AL should be to expand access for publicly supported residents and other low-income residents and avoid regulatory schemes that would undermine the quality-of-life features that

constitute the fundamental appeal of AL as a LTC program (AL Workgroup). Initiatives should include:

- Increasing the affordability of AL for low-income persons through expansion of the AL Medicaid waiver and Department of Housing and Urban Development (HUD)–funded programs related to AL
- Increasing SSI payments to cover the room and board costs of AL, allowing family members to provide supplemental support for AL residents, and creating national- and state-level public and private initiatives to enhance incentives (tax credits) for affordable AL development
- Developing AL reimbursement formulas, similar to those for nursing homes, based on solid cost and outcomes data
- As a general guideline, setting AL reimbursement at 65% of nursing home care, with higher level funding for residents with extensive healthcare needs
- Campaigning for public support of AL

- AL is sustained largely by the fact that many older people very much prefer it to nursing home care and may, in many cases, find it preferable to home care.
- It would not take the application of very many nursing home–style regulations, however, to make AL substantially less affordable and far less attractive than it has proven to be over the last 10 years.
- Every effort should be made to contain these risks by putting the perspective of the consumer foremost in developing regulation and by supporting rigorous research to support sound, rational policy development.
- The research on AL is already more extensive than for nursing homes and in-home care at similar stages in their development, and it is better able to inform policy.
- This research and the appeal of the AL philosophy is influencing nursing home (culture change) and in-home (consumer direction) policies. AL is a great LTC success story, but we cannot be complacent.
- Maintaining an appropriate balance in AL policy, especially regulation, will always be a demanding task, but continuing research and adhering to the consumer perspective can provide essential guidance.

References

1. Hawes C, Phillips CD, Rose M, Holan S, Sherman M. A national survey of assisted living facilities. *Gerontologist.* 2003;43(6):875-882.

2. Zimmerman S, Sloane PD, Williams CS, et al. Dementia care and quality of life in assisted living and nursing homes. *Gerontologist.* 2005;45 Spec No 1(1):133-146.

3. Ball MM, Perkins MM, Whittington FJ, et al. Managing decline in assisted living: the key to aging in place. *J Gerontol B Psychol Sci Soc Sci.* 2004;59(4):S202-S212.

4. Hawes C, Phillips CD. High service or high privacy assisted living facilities. Their residents and staff: results from a national survey. Report prepared for the US Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, Office of Disability, Aging, and Long-Term Care Policy (ASPE) and Research Triangle Institute. November 2000. Available at: http://aspe.hhs.gov/daltcp/reports/hshp.htm. Accessed January 5, 2007.

5. Kane R, Baker M, Veazie W, Solomon J. Consumer perspectives on private versus shared accommodations in assisted living settings. Washington, DC: American Association of Retired Persons, Public Policy Institute; 1998.

6. Kane RL, Bershadsky B, Kane RA, et al. Using resident reports of quality of life to distinguish among nursing homes. *Gerontologist.* 2004;44(5):624-632.

7. Reinhard SC, Young H, Kane RA, Quinn WV. Nurse delegation of medication administration for elders in assisted living. New Brunswick, NJ: Rutgers Center for State Health Policy. The Institute for Health, Health Care Policy, and Aging Research; June 2003. Available at: www.cshp.rutgers.edu/PDF/Nurse%20Delegation%20of%20Med%20Admin%20for%20Elders%20in%20AL.pdf. Accessed January 5, 2007.

8. Morgan LA, Eckert JK, Gruber-Baldini AL, Zimmerman S. Policy and research issues for small assisted living facilities. *J Aging Soc Policy.* 2004;16(4):1-16.

9. Zimmerman S, Sloane PD, Eckert JK, et al. How good is assisted living? Findings and implications from an outcomes study. *J Gerontol B Psychol Sci Soc Sci.* 2005;60(4):S195-S204.

10. Salmon JR. Affordable assisted living facilities: government-sponsored benefits for reimbursing assisted living services, room, and board. Report conducted for the Department of Elder Affairs, Committee on Affordable Assisted Living Facilities. Tampa, FL: Florida Policy Exchange Center on Aging; April 2003. Available at: www.fpeca.cas.usf.edu/chltc/PDF_Files/Affordable_Assisted_Living_Facilities_%20Final_Report_April_2003.pdf. Accessed January 4, 2007.

11. Stearns S, Morgan L. Economics and financing. In: Zimmerman S, et al., eds. *Needs, Practices and Policies in Residential Care for the Elderly.* Baltimore: Johns Hopkins University Press; 2001:78-91.

12. Zimmerman S, Eckert J, Morgan L, Gruber-Baldini A, Mitchell C, Reed P. Promising directions in assisted living research. Paper presented at: 55th Annual Meeting of the Gerontological Society of America; 2002; Boston, MA.

AL Resident Assessment and the Future of LTC

Joan Hyde, PhD

A preliminary survey of state-mandated assessment tools for AL finds a variety of tools in use. Seventeen states use uniform resident assessment tools (Table 1).

Varieties of Assessment Domains and Tools

- Variants of the Minimum Data Set (MDS)
- Physician assessments, primarily targeted at certifying that a resident is appropriate for AL as codified in that state
- "Leveling" for use in Medicaid reimbursement
- Service plan–based assessments (eg, which services are needed, especially for ADL and medication assistance)

Interactive Resident-centered AL Assessment Tools

The MDS assessment tool was developed for use in

Table 1. States Requiring Standardized Assessment Tools

State	Name of tool	Which department regulates assessments	Who completes the assessment	When is the assessment completed?
Delaware	Uniform Assessment Instrument (UAI)	Department of Health and Social Services, Division of Long Term Care Residents Protection	Registered nurse	At move-in and on ongoing basis
District of Columbia	Individualized Service Plan	Department of Health, Health Regulation Administration		
Idaho	Uniform Assessment Instrument (UAI)	Department of Health and Welfare	If resident is private pay, a trained employee from the AL facility completes the assessment. If the resident is a member of the Department of Health and Welfare, the department completes the assessment.	Within 14 days of admission, every 12 months after initial assessment; when there is a significant change in resident's medical or mental status
Kansas	Resident Assessment Instrument (RAI)	Department on Aging	Licensed nurse, social worker, or administrator	
Maine	Medical Eligibility Determination (MED)	Department of Health and Human Services, Office of Elder Services	Independent agency	Within 30 days of move-in and every 6 months thereafter
Maryland	Assisted Living Assessment and Scoring Tool	Department of Health and Mental Hygiene, Office of Health Care Quality	AL manager or designee	
New Hampshire	Resident Assessment Tool (RAT)	Department of Health and Human Services, Office of Program Support, Health Facilities		Prior to admission and every 6 months or when there is a significant change in the needs of the resident
New York	Individualized Service Plan	Department of Health, Division of Home and Community Based Care	AL operator in consultation with the resident's physician	Prior to admission and every 6 months or when there is a significant change in the needs of the resident
North Carolina	Adult Care Home Personal Care Physician Authorization and Care Plan	Department of Health and Human Services, Division of Facility Services	Multi-unit assisted housing with services (MAHS) provider to make sure that AL can meet the needs; then in-depth assessment by administrator	Within 72 hours of move-in and then at 30 days and every 12 months thereafter
Pennsylvania	Adult Residential Licensing Personal Care Preadmission screening and Personal Care Home assessment	Department of Public Welfare, Division of Personal Care Homes	Personal care home administrator, human service agency, or designated personal care home (PCH) staff member	Preadmission screening: within 30 days prior to admission Assessment: within 15 days of admission and every 12 months following or when there is a significant change in the needs of the resident

nursing homes. It is designed to be filled out by nurses using medical findings and data. A different type of assessment tool (AlphaPLAN) was developed by the author that uses staff interviews with residents and their families, a more interactive, resident-centered model.

It is difficult to compare such interactive assessment tools with MDS tools in terms of interrater reliability and validity. However, a study by the author found that, in fact, the assessment tools embedded in the AlphaPLAN software are highly correlated with MDS scores.

How Do Stakeholders Use Assessment Data?

- Overwhelmingly, regulators simply check that data are in the records.
- Physicians, nurses, and other AL staff fill out required forms and put them in the record. This may or may not influence the service planning or actual services provided.
- Little research can be done using these "data"—researchers typically reevaluate populations being studied.

State	Name of tool	Which department regulates assessments	Who completes the assessment	When is the assessment completed?
Rhode Island	Assisted Living Residential Initial Assessment	Department of Health Facilities, Regulation Division	AL administrator	Prior to admission, every 12 months after admission, and when there is a significant change in the needs of the resident
South Dakota		Department of Health, Office of Health Care Facilities Licensure and Certification		At the time of admission, 30 days after admission, and annually
Utah	Resident Assessment	Department of Health, Facility Licensing, Certification and Resident Assessment	Healthcare professional from a personal care agency	Prior to admission, annually, and when there is significant change in the needs of the resident
Vermont	Vermont Residential Care Home/Assisted Living Residence Assessment Tool (RCHRAT)	Department of Aging and Disabilities, Division of Advocacy and Independent Living	Registered nurse	14 days after receipt of the clinical certification and transitional service plan or admission
Virginia	Virginia Uniform Assessment Tool	Department of Social Services, Division of Licensing Programs	Department (those receiving care by auxiliary grants) and administrator (private pay)	Prior to admission, annually, and when there is a significant change in the needs of the resident
Washington	Dementia Specialty Placement Criteria CARE tool (for all LTC facilities)	Department of Social and Health Services, Aging and Disability Services Administration	Assessor who has either a master's or a bachelor's degree in social services and has 2 years' experience working with adults who have functional or cognitive disabilities, or a registered nurse or physical therapist with a valid Washington state license. If the resident services are being paid by the department, an authorized department case manager will handle the assessment. Both assessments are completed using a software program installed on individual laptops.	Prior to move-in and 14 days from day of admission
Wisconsin	Resident Assessment Instrument	Department of Health & Family Services, Division of Disability and Elder Services, Bureau of Quality Assurances, Assisted Living Section	Administrator	Prior to admission

NOTES: Idaho uses some of the information provided by the assessment to provided tax payers information of the characteristics of elderly clients and those with physical, developmental, and mental disabilities along the full spectrum of services.
Most of the information from the assessments is only used for inspections and surveys required by the state. The information from the assessments is kept very private to follow HIPPA.
The spaces above represent the lack of knowledge of the state departments regarding the assessment process in assisted living facilities.

What Value is MDS-like Assessment in AL?

If MDS-like assessments were adapted in the AL environment, both positive and negative impacts would be felt.

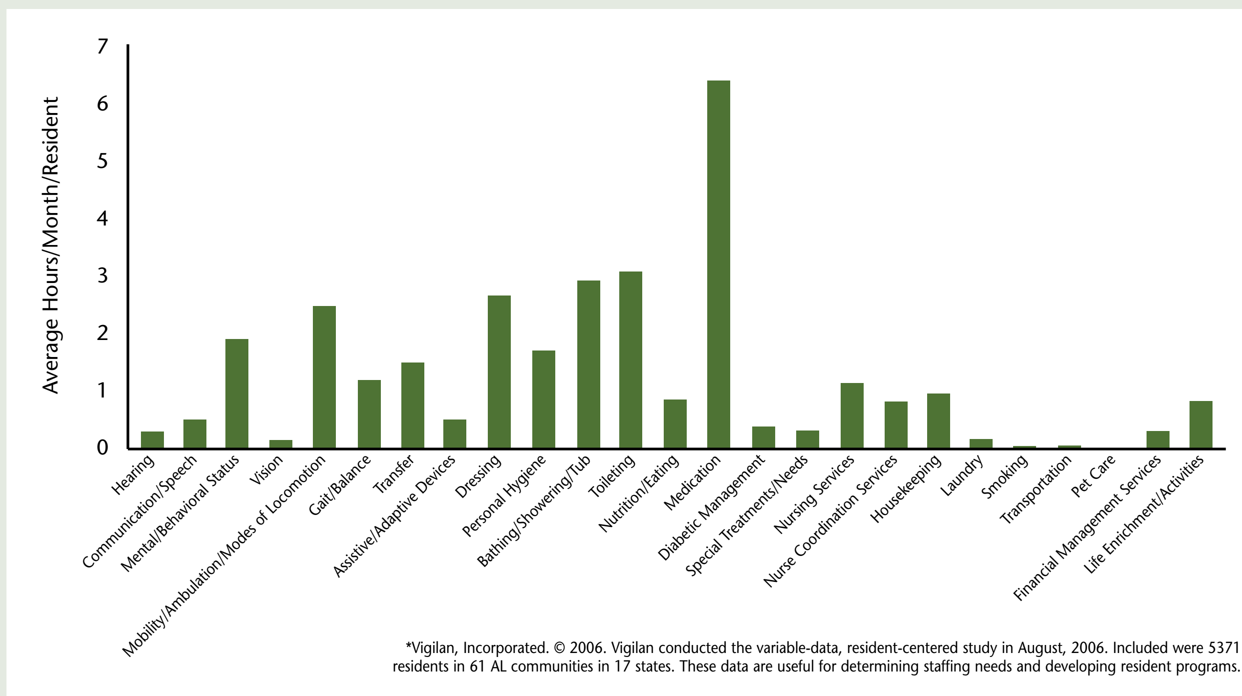
Positive Impacts

- Medicaid and other third-party payers may be more willing to pay for AL if they can measure acuity and obtain services for high-acuity residents in less costly settings.
- Consumers may find that they have more flexibility and better information for choosing the setting that is best for their needs.
- Researchers will be better able to compare outcomes across settings.

Negative Impacts

- If MDS-like assessments are used to "rate" AL quality (ie, to compare falls, hospitalizations, etc.), AL providers may attempt to select healthier residents to keep their scores high.
- The consumer-driven philosophy of AL will be diluted and AL will become "nursing home–like."
- The cost of AL will increase without adding value

Table 2. Resident-centered Data Analysis Using Vigilan® Software*



*Vigilan, Incorporated. © 2006. Vigilan conducted the variable-data, resident-centered study in August, 2006. Included were 5371 residents in 61 AL communities in 17 states. These data are useful for determining staffing needs and developing resident programs.

because staff time is used to fill out forms.

What is Value of Resident-centered and Variable Assessment in AL?

The impact of resident-centered and variant assessment in AL would be both negative and positive. For example, one use of resident-centered assessment (Table 2) is to understand the overall needs of the total resident population when planning staffing and programs.

Negative Impacts

- Difficulties in benchmarking the relationship of structure and process to outcomes will make it more difficult for regulators, researchers, providers, and consumers to determine effective practices.
- Differentiation between better and worse performers will remain difficult.

Positive Impacts

- Residents and their families will be able to determine what services are or are not of value to them based on their personal definition of "good outcomes."
- The AL philosophy will continue to infiltrate other sectors of the LTC system.

ALC

References

1. Lawton MP, Casten R, Parmelee PA, Van Haitsma K, Corn J, Kleban MH. Psychometric characteristics of the minimum data set II: validity. *J Am Geriatr Soc.* 1998;46(6):736-744.

2. Gruber-Baldini AL, Zimmerman SI, Mortimore E, Magaziner J. The validity of the minimum data set in measuring the cognitive impairment of persons admitted to nursing homes. *J Am Geriatr Soc.* 2000;48(12):1601-1606.

Brief Bibliography

Aud MA, Rantz MJ, Zwygart-Stauffacher M, Manion P. Developing a residential care facility version of the observable indicators of nursing home care quality instrument. *J Nurs Care Qual.* 2004;19(1):48-57.

Casten R, Lawton MP, Parmelee PA, Kleban MH. Psychometric characteristics of the minimum data set I: confirmatory factor analysis. *J Am Geriatr Soc.* 1998;46(6):726-735. 46.6 726-735.

Hyde J. Resident centered information system for assisted living. Presentation at the Paris Conference of the International Society for Quality in Healthcare. Paris: November, 2002. Available at: www.isqua.org.au/isquaPages/Conferences/paris/ParisAbstractsSlides/Wednesday/A08/ppt%20pdf/253Hydeppt.ppt.pdf. Accessed January 5, 2007.

National Center for Assisted Living (NCAL) Assisted Living State Regulatory Review 2006. Washington, DC: NCAL; 2006. Available at: www.ncal.org/about/2006_reg_review.pdf. Accessed January 75, 2007.

Physician House Calls: Coming Full Circle

Presenter

Gresham Bayne, MD, Chairman and Founder, The Call Doctor Medical Group, San Diego, CA; President, Board of Directors, American Academy of Home Care Physicians (AAHCP). Dr. Bayne is a Board Certified Emergency Medicine Physician. He has served as Chief of the Department of Emergency Medicine at Naval Regional Medical Center and Associate Clinical Professor at the University of California San Diego Medical School.

Responder Panelists

Josh Allen, RN, Director, Clinical Services, Senior Resources Group, LLC; Secretary, CEAL Board
Ann O'Neil, RN, MSN, President, Care Options for the Elderly and Disabled, Falls Church, VA
Daniel Haimowitz, MD, geriatrician private practice, Levittown, PA; member of the CEAL Advisory Council

Moderator

Sandy Flores, RN, Executive Director, American Assisted Living Nurses Association (AALNA), San Marcos, CA; member of the CEAL Board

The practice of physician house calls is coming full circle from our parents' generation. The pros and cons of offering physician services on site in assisted living (AL) settings were presented, and commentary on the opportunities and challenges was offered.

The Mobile Emergency Department (ED): "I've Fallen and Can't Get Up. Please Help Me!"

Dr. Bayne practices medicine in some pretty unusual places. While worshipping at church, a fellow parishioner collapsed in her pew. Rather than call 911 to rush the 96-year-old woman to the hospital, Bayne asked the ushers to take her to the church parlor. The doctor, who is something of a gadget freak, was equipped for any contingency. He carried a miniaturized version of every diagnostic tool he needed to assess her symptoms as well as a full supply of standard emergency-care drugs to treat them. "You've got to stop thinking about bricks and mortar," Bayne says. "Today, I am the ED."

Welcome to on-site, pocket-sized medicine. The revolution in microelectronics that gave us cellular phones and palmtop computers now allows doctors like Bayne to take their healing anywhere, including the AL setting. Dr. Bayne travels with fully functional ECG machines no bigger than a box of chocolates, blood-sample analyzers no larger than a princess phone, and portable ultrasound machines that fit in the trunk of a car. He even carries a handheld MRI scanner about the size and shape of a catcher's mitt.

Bayne took full advantage of the new technology that Sunday morning. Although he could not feel a pulse at this patient's wrist, he was able to determine that the heart rate had fallen from a normal 80 beats per minute to 38 by placing a digital pulse monitor the size of a lemon on the woman's finger. He then touched her chest with the portable ECG machine and analyzed her cardiac rhythms. Had there been any indication that she was suffering a heart attack, Bayne would immediately have called 911. When he determined that wasn't the case, he decided to perform a battery of blood tests.

No sooner said than done, from the woman's wrist, the doctor drew a sample, injected it into a tiny cassette, and snapped it into a handheld blood analyzer. Within 2 minutes, all readings came up normal. There was no sign of dehydration, anemia, insulin shock, or kidney failure. "In a standard ED, it would have taken me 30 minutes to an hour to get those test results," Bayne says.

Questioning his patient, Bayne finally deduced that a prescription drug she was taking had caused her heart to slow, decreasing the flow of oxygen to her brain and causing her to faint. He administered the stimulant atropine to strengthen her heartbeat. Total elapsed time from pew to recovery: 8 minutes, just about as long as it would have taken to get her to the ED in an ambulance.

It would be impractical, of course, to put a doctor in every church—or even on every street corner, and the real question is how practical it would be to place a doctor in every AL community. But Bayne suggests there may be a solution. He founded the Call Doctor Medical Group in San Diego, CA (www.1800calldoc.com) with a staff of well-equipped physicians and technicians who work through a central dispatcher to bring their high-tech tools to elderly, homebound, and disabled patients. If the symptoms do not require a 911 call, a Call Doctor physician can be

on the scene within a few hours. Average cost per call is $150, which compares quite favorably to a typical $350 charge for an ambulance and anywhere from $1000 to $3000 for a visit to the ED.

Homebound Patient Profile

The elderly homebound patients that Call Doctor sees for initial visits are a homogeneous group: 80% are women, the median age is 82 years, the number of prescriptions averages 5 medications (2 of which are controlled substances), and they haven't had a real face-to-face, interactive visit with their primary care physician in over a year.

They are scared of hospitalization, ambulances, and physicians. They fear that hospitalization or an ED visit will lead to skilled nursing facility (SNF) care. They are frightened of painful procedures, and they are mostly afraid of the cost involved. A 20% copay plus a $750 first-day charge is a lot of money for a hospital stay with a diagnosis-related group (DRG) fee of $9000. A recent study showed that patients would rather be hospitalized than receive treatment at home *only* when the outcome is assuredly going to be better. This is seldom the case in this population of patients.

These patients are also embarrassed. The generation that survived the Depression and won the War is intensely self-sufficient and never really admits that they are now dependent. Thus, they want to stay at home to a fault, not be seen leaving on a stretcher, not have ambulance sirens awaken their neighbor's cat, and, *most of all*, not be a burden to their children.

Yet, these patients also are very sick. Health Care Financing Administration (HCFA) data show that 10% of the Medicare population consumes 70% of the Medicare budget, and the vast majority of this money is spent in the last year of life. When these patients fall or reach a breaking point with a chief complaint that they can no longer tolerate, they become patients of providers like Call Doctor. New patients, and acute, established Call Doctor patients, are in crisis, whether they think so or not. The crises are hidden behind end-of-life and cultural fears of losing the last privilege of staying at home. Call Doctor was designed to restore that privilege as long as is practical.

At Call Doctor, we treat the patient as if he or she were in the ED. Call Doctor physicians provide a minimum set of ancillary testing to rule out silent myocardial infarction, severe hyponatremia, occult pneumonia, chronic hypoxemia, indolent sepsis, or other diseases that a mere history cannot rule out. We have adopted a different way of thinking about the value of tests and studies. If a test or procedure has a dispositive value—that is, it will help to keep the patient out of the hospital—it has value to the medical care of this patient population. However, our philosophy of treatment is often at odds with Medicare payment restrictions, which will pay a daily ED fee ad infinitum, but question us if we see the patient even weekly, no matter how unstable.

In short, the use of frequency of visits to establish safety doesn't work in this population. ForHealth, Corp is a medical group provider in Orange County, CA that accepts full capitated risk for a similar group of patients (loosely defined as those eligible for SNF). They make their profit by limiting the delivery of care at every level. They have also found that they can reduce the healthcare costs of these patients only by having a nurse practitioner or physician visit an average of *9 times monthly*. And yet, they have still asked us to work with them so they can access our technology-based delivery system to provide comprehensive and acute care in the home.

Point-of-Service Diagnosis

The house call is the unit of our healthcare delivery system, and it provides a point-of-service diagnosis and treatment capability unique to us. Instead of giving antibiotics to a patient with possible pneumonia and returning later to see if they get better, we prove the clinical status with a chest X-ray and oximetry that we can use for comparison at the next visit. Simply put, if we cannot demonstrate objective improvement on the next visit, the patient may be dying and needs either to be counseled or admitted to the hospital. This philosophy seems simple, but it is vastly different than that of an office-based practice. The difference in our care is based on the patients' lack of cognitive function, lack of transport options, reluctance to seek further care, and high mortality rates. We simply cannot use the standard principles of internal medicine or family practice to deliver what is, essentially, emergency geriatric care.

An AL resident who visits an ED after a fall faces the frightening and disorienting experience of emergency transport, exposure to infection and disease in the ED, a long wait, and significant expense. The experience is upsetting to other residents and increases their exposure to infection when the resident has been released from the ED and returns to the AL site. On-site or on-call physician care provided in the AL home can provide a less traumatic, less risky, and certainly less expensive experience for the resident. There is no risk of unnecessary exposure to infection, and the care is provided in a familiar environment by a physician with some knowledge of the patient and support that will be provided to the patient after the visit.

A scheduled home visit by a physician providing routine care or on-call care that might otherwise be

deemed "emergency" can improve the quality of care for AL residents and the AL community while providing a cost-effective alternative to traditional physician office or ED visits.

Note: The American Academy of Home Care Physicians Web site offers a home care physician locator. To find a physician near you visit: www.aahcp.org.

Responder Ann E. O'Neil, RN, MSN, CS

Assisted living (AL) residents, just like people living in the community, require a system of primary and preventive care. If AL is to be embraced as a home in which to age in place, it follows that AL residents want to be treated in those residences. And, as people age in place, there will be increased illnesses leading to increased demand for health services.

Elders in AL can be divided into two groups—those who are chronically ill and those with compound illnesses who frequently suffer severe episodes, requiring short-term medical treatments. For both these groups, there are currently too many ED visits, which have a traumatic effect on both the resident patient and other residents.

Health care, as part of the continuum of care, must be included in the list of assistive services provided in AL and these services must meet a broad spectrum of needs. Providing such richness of care requires an interdisciplinary approach, and geriatrics is inherently an interdisciplinary specialty.

It behooves us to explore new methods of delivering healthcare services in AL. Our experience demonstrates that the complex health problems of AL residents require extensive coordination from medical, nursing, rehabilitation, nutrition, and mental health practitioners. No individual practitioner possesses all the skills and knowledge needed to manage the care of the frail older person. We must view care of AL residents just as we do care of home-bound older persons or those with long-term care (LTC) needs. Consultations by nurse practitioners, geriatric care managers, mental health specialists, licensed clinical social workers, nurse clinical specialists, physicians, nutritionists, and rehabilitation specialists address various components of the complex needs of residents.

If we are to address the increasing numbers of people who now require or will require services, we cannot be confined by traditional roles of existing health care. A creative partnership between the disciplines and the staff can be developed to manage common and chronic illnesses and the increasing diversity and acuity of AL residents.

Collaborative, transitional plans of care and expansion of traditional services into the AL environment are needed to ensure that patients leaving acute-care settings are discharged with appropriate plans for re-admission to the AL setting. Unfortunately, the speed at which patients currently move through inpatient stays allows little time for adequate discharge planning. Our current healthcare system often leaves the older person in an abyss.

The challenges we face are the complexity of referrals, payments for services (Table 1), finding funding sources, and accessibility to the skilled healthcare practitioner to meet the increasing diversity and acuity of the AL resident. A start can be made by acknowledging the need and building a system of consultants who can address specific problems. We look forward to creating partnerships to meet the needs of the home-bound AL resident.

Responder Dan Haimowitz, MD

Dr. Bayne used an example of a patient who collapsed in a church pew. In that particular instance, he was present and was equipped to handle the situation, which is fabulous. But in that same situation, I would have called 911. I don't think all of us are equipped, literally and figuratively, to handle emergency situations in the way he described. Most facilities do not have on-site physicians, and those that do, certainly do not maintain 24-hour service. One important aspect of the scenario that Dr. Bayne described is the ability to determine what is or is not an "emergency" situation.

In the AL setting, risk and liability are the issues. We have to provide good care and guard against liability. We have to have the skills to determine exactly what constitutes an emergency. Is every fall an emergency? We market the AL residence as the resident's "home." Yet when an elder resides in his or her own home or the home of a child or other relative, every fall does not result in an ED visit. But some facilities require that every fall be followed by a call to an emergency medical technician (EMT) team and an ED visit.

Dr. Bayne spoke about the benefits of not sending an AL resident to the ED. There is no doubt that going to the hospital is bad—the transitions are difficult, communication is potentially bad, and ED staff typically don't know or care about the difference between a SNF and an AL facility. That difference is not their concern or focus.

I don't see how in the present model a physician can be available for emergency care in AL. There are

Table 1. Comparison of 2006 and 2007 Fee Schedules for House Calls to Home and Domiciliary Care*

New Patient Home	New Patient Domiciliary Care (AL Home)	History/ Physical†	Physical problem†	Medical Decision Making†	Face-to-Face Time‡	Medicare Allowable $		
						2006 Home and Domiciliary Care	2007 Home	2007 Domiciliary Care (AL Home)
99341	99324	Problem focused	Low	Straightforward	20	58.16	54.14	54.52
99342	99325	Expanded problem focused	Moderate	Low	30	85.73	79.49	79.49
99343	99326	Detailed	Mod-High	Moderate	50	125.02	115.30	114.54
99344	99327	Comprehensive	High	Moderate	60	163.92	150.69	150.31
99345	99328	Comprehensive	High	Moderate	90	202.82	186.12	186.12
Established Patient	**Established Patient**							
99347	99334	Problem focused	Self-limited	Straightforward	15	45.32	42.21	42.21
99348	99335	Expanded problem focused	Low	Low	30	71.76	66.46	66.46
99349	99336	Detailed	Moderate to high	Moderate	40	111.04	102.23	101.85
99350	99337	Comprehensive	Moderate to high	Moderate to high	72.5	163.92	150.69	149.55

*Includes assisted living (AL)
†For new patients, all three components of the service (examination, history, and decision making) are required and must be documented in the note. For established patients, 2 of the 3 components are required.
‡When more than 50% of face-to-face time during a visit is spent in health-related counseling activities, the visit level associated with the total face-to-face time for the visit (rather than the other components) should be used to determine the code. If excess time is spent on the face-to-face visit (at least 30 minutes more than typical), "prolonged" codes can also be billed. These are 99354 for an additional 30 to 74 minutes and 99355 for 75 to 104 minutes.

Note: In November, 2006, The Centers for Medicare and Medicaid (CMS) announced reimbursement reductions for home care physicians for 2007. The reductions range from 7.2% to 8.5% (without geographic modifiers). In December, 2006, Congress passed legislation to prevent an additional 5% cut to physician reimbursement for 2007.

simply not enough house-call physicians available, and those who are cannot be expected to be available around the clock.

What about physicians in the nonemergency situation in AL? Is a physician presence in AL valuable? It very clearly is, on many different levels:

- The resident does not have to be transported.
- Care is consistent.
- Care costs less.
- Seeing the physician on site is easier for patients, families, and facilities.

Having a physician on staff can be a wonderful marketing tool for AL. Physicians with on-site presence gain more residents as patients. Residents benefit from a physician who is a geriatrician.

Four or 5 years ago, the mindset was that physicians were not needed in AL (social model of AL). Now that mindset is fading. On-site physician care (medical model) allows more frequent visits and more preventive care to treat conditions that are very common in the AL environment such as osteoporosis, hypertension, incontinence, and hypercholesterolemia.

Both Center for Excellence in Assisted Living (CEAL) Quality Summits have had medical quality and disease-state medical panels. I would personally like to see more physicians attend these summits. It is my understanding that facilities are having difficulty hiring Medical Directors. We are hopeful that reimbursement will drive more physicians to make AL visits. ALC