Available online at www.sciencedirect.com

ScienceDirect

Nurs Outlook 68 (2020) 114–122

Nursing Outlook

www.nursingoutlook.org

Comparing residential long-term care regulations between nursing homes and assisted living facilities

Alison M. Trinkoff, ScD[a,*], *Jung Min Yoon, MSN*[a], *Carla L. Storr, ScD*[a], *Nancy B. Lerner, DNP*[a], *Bo Kyum Yang, PhD*[b], *Kihye Han, PhD*[c]

[a]*University of Maryland School of Nursing, Baltimore, MD*

[b]*Towson University, Towson, MD*

[c]*Red Cross College of Nursing, Chung-Ang University, Seoul, South Korea*

ARTICLE INFO

Article history:
Received 19 January 2019
Received in revised form
19 June 2019
Accepted 22 June 2019
Available online June 27, 2019

Keywords:
Assisted living
Regulation
Nursing home
Long-term care
Staffing
Outcomes

ABSTRACT

Background: Nursing homes (NHs) are federally regulated under uniform standards, whereas assisted living facilities (ALFs) use individual state regulations for staffing, training, and oversight of care quality and safety.

Purpose: To describe ALF staffing, training, inspection, and enforcement regulations for 50 U.S. states and the District of Columbia, and compare them to NH regulations. Publication of ALF quality and safety outcomes data also was assessed and compared to NHs.

Methods: Regulatory data were compiled from administrative and regulatory data sources, state websites, and regulatory compendia.

Findings: NHs followed a standard set of regulations, whereas ALF regulations varied widely. Overall, state ALF regulations were less stringent than NH in all categories.

Discussion: As ALF populations and acuity levels increase, staffing, training, nursing presence, and outcomes data requirements are warranted, and could be tailored from NH regulations to protect ALF quality and safety.

Cite this article: Trinkoff, A.M., Yoon, J.M., Storr, C.L., Lerner, N.B., Yang, B.K., & Han, K. (2020, January/February). Comparing residential long-term care regulations between nursing homes and assisted living facilities. Nurs Outlook, 68(1), 114–122. https://doi.org/10.1016/j.outlook.2019.06.015.

Introduction

The long-term care (LTC) sector is a major component of the U.S. health care system that continues to grow (Bureau of Labor Statistics, 2014; Congressional Budget Office, 2013). Most of this increase is due to growth in the population of oldest adults (85+), a group with limited capacity for self-care due to health conditions (Congressional Budget Office, 2013; NIA, 2015). In 2014, there were over 46 million Americans 65+ years, and 6.2 million 85+ years old (Federal Interagency Forum on Aging-Related Statistics, 2016). By 2030, there will be an estimated 74 million older adults—over 20% of the population, suggesting that demands for LTC also will increase (Federal Interagency Forum on Aging-Related Statistics, 2016).

This work was funded in part by the National Council of State Boards of Nursing under grant #R81006 (to A.M.T.).

* *Corresponding author:* Alison M. Trinkoff, University of Maryland School of Nursing, 655 W Lombard Street, Rm 625, Baltimore, MD 21201.

E-mail address: atrinkoff@umaryland.edu (A.M. Trinkoff).

https://doi.org/10.1016/j.outlook.2019.06.015

The two most common types of residential U.S. LTC facilities are nursing homes (NHs) and assisted living facilities (ALFs). While NHs are still a major provider, there has been far more rapid growth in ALFs, perhaps in response to consumer demand for a more homelike environment, as ALFs evolved from a social care, not a medical model (Stevenson & Grabowski, 2010). Between 2012 and 2014, the number of ALFs increased from 22,000 to 30,200 (1 million beds), whereas NHs in 2016 stabilized at around 15,600 NHs (1.6 million beds) (Harrington, Carillo, Garfield, Musumeci, & Squires, 2018; Harris-Kojetin et al., 2016). Thus, many who would have previously resided in NHs are now in ALFs, leading to an increase in ALF acuity as well (Dzau, McClellan, McGinnis, & Finkelman, 2017).

Both NHs and ALFs provide basic personal care, assistance with activities of daily living (ADLs), social services, recreational activities, and medication management to promote the safety and security of residents (NIA, 2017). While most NH care is funded through Medicare and Medicaid, ALF populations are largely private paying—only about 15% used Medicaid as a payer source (AARP, 2017; NCAL, 2018). To be admitted to an NH, prospective residents must require skilled nursing care and rehabilitation, whereas ALFs admit residents with care needs that vary from minimal to skilled nursing care services (American College of Nurse Practitioners, 2012; National Health Policy Forum, 2013).

ALFs were originally designed for elders with uncomplicated medical conditions; however, the proportion of the AL population with multiple chronic diseases and cognitive problems has been increasing (Gimm & Kitsantas, 2016; McNabney et al., 2014; Zimmerman, Sloane, & Reed, 2014). Both types of facilities have sizable proportions of residents with chronic diseases, e.g., 50% in NHs vs. 40% in ALFs with Alzheimer's disease or other dementias, 49% in NHs vs. 23% in ALFs with depression, and 32% in NHs vs. 17% in ALFs with diabetes (Harris-Kojetin et al., 2019; NCHS, 2018). In addition, 81% of ALFs admitted residents with daily monitoring needs or urinary incontinence, and 91% of ALFs reported that over 75% of residents required medication assistance (Han, Trinkoff, Storr, Lerner, & Yang, 2017). Although fewer ALF residents require assistance with ADLs compared to NH residents, studies have shown that substantial proportions of the ALF population require such assistance. For example, with bathing: 96.7% in NHs vs. 63.6% in ALFs; dressing: 92% in NHs vs. 48.2% in ALFs; toileting: 89.3% NH vs. 40% in ALFs) (Harris-Kojetin et al., 2019).

Despite this increase in care demands, little is known about ALF regulations that may affect the quality and safety of care in ALFs. Compared to NHs with uniform federal-level regulations, ALFs are regulated by states, using state-specific requirements. The purpose of this paper was to compile and describe ALF regulations and to compare these regulations to those for NHs, with regard to staffing, training, frequency of inspections, enforcement (e.g., fines), and collection and publication of quality and safety outcomes data (e.g., inspection reports).

Methods

Administrative and published data on facility descriptors, staffing and training regulations, and frequency of inspections and regulatory activities (e.g., enforcement) were compiled from various sources. NH staffing and training regulations were obtained from the Code of Federal Regulations (CFR, 2018b) and each state administrative code, and the inspection and enforcement regulations were accessed from CFR (2018a) and the Centers for Medicare & Medicaid Services (CMS, 2016). ALF staffing requirements and required training hours for direct care workers (DCWs) were obtained from the following primary and secondary sources: individual state registry and ALF licensing websites, a 2016 state ALF regulatory review, and the compendium of ALF residential care regulations and policy (Carder, O'Keefe, & O'Keefe, 2015; NCAL, 2016).

To ensure accuracy, the compendium was compared to regulations posted on individual state registry websites for all states. For a few states ($n = 6$), when the regulations were not specific enough, we contacted the state ALF oversight agency by telephone to obtain clarification (e.g., regulations that did not specify inspections frequency). Finally, we accessed the ALF website for each state to examine whether they publicly provided information on inspections, complaints, and other quality and safety of care violations (e.g., deficiencies of care data), to assess the availability (collection and publication) of data on ALF quality and safety outcomes.

Findings

Comparison of NH and ALF Staffing and Training Regulations

1) **Staffing regulations:** All NHs are required to have a full-time director of nursing, plus an RN on duty for eight consecutive hours, 7 days per week, plus one additional RN and licensed nurse (RN or LVN/LPN) for the two remaining shifts (CFR, 2018a; CMS, 2016). Whereas, ALF staffing requirements varied by state with regard to presence of staff on duty over a 24-hr period, overnight staff availability and required availability of licensed nursing staff (RNs and LPNs/LVNs). As shown in Table 1, 34 states required at least some staff to be on duty for 24 hrs, although not necessarily present in the facilities. The required hours for ALF staffing presence ranged from unspecified (no specific hours of coverage required) to 24-hr coverage. For

Table 1 – Assisted Living Facility 24-Hr Staffing Requirements by State, 2016

Staffing Requirements	States (Including DC)
Staffing number and on-site requirements (*N* = 51)	
Requires 24-hr staffing, but numbers, on-site, on-call unspecified (*n*= 18)	AK, AZ, CT, DC, HI, IA, KS, LA, MD, MA, MI, MN, NM, ND, NY, TN, TX, UT
Specific staffing number, some on-site required (*n* = 16)	AR (ALFs: staffing ratios vary by census, care level and shift); CO (1 on-site), DE (1 on-site); GA (1 on-site ALFs with 25+ residents); IN (1 on-site 24/7 ALFs with 50+ residents; ALFs 100+ residents need 1 extra nursing staff 24/7 on-duty); KY (1 on-site); ME (1 staff on-site ALFs >6–10 residents; 2 "available" ALFs 11+ beds); MS (1 per<16 residents on-site 7 a.m.–7 p.m.; 1 per 25 or less residents 7 p.m.–7 a.m.; MT (1 on-site), NE (1 on-site); NJ (1 on-site, 24/7; NC (1, on-site 24/7 for up to 30 residents, with increases in staffing as resident numbers increase); VT (1 on-site); WA (1 on-site); WV (1 on-site), WI (1 on-site)
Specific staffing numbers, no specific on-site requirements (*n* = 17)	AL (ALFs: 1); CA (1 per 16+ residents), FL (1 first-aid certified 24/7 ALFs with 17+ residents); ID (1); IL (1); MO (1/15 residents or major fraction of 15 day shift, 1/20 residents or major fraction evenings, 1/25 residents or major fraction nights); NH (1 awake on-site 24/7 17+ bed ALFs, 1 on-site and awake ALFs 16 or fewer residents—exceptions, e.g., ALFs with low care needs, alarm systems); NV (1, ALFs with 20+ residents); OH (1), OK (2), OR (2); PA (1, direct care staff provide 1-hr personal care/per resident/day, mobile residents; 2 hr/day residents with mobility needs, 75% during waking hours); RI (1); SC (1 staff or direct care volunteer/8 residents. 7 a.m.–7 p.m., nights: 1 staff or volunteer on-duty/30 residents); SD (1, 0.8+ hr direct care/resident/day); VA (1); WY (1)
Awake overnight staff requirements (*N* = 51)	
No mention (*n* = 17)	AL, AK, CO, CT, DE, DC, HI, LA, MA, MN, MO, NM, NY, NC, ND, UT, WA
Yes, unspecified (*n* = 18)	AR, DE, KS, KY, MT, OK, OR, PA, RI, SC, SD, TN, TX, VT, VA, WV, WI, WY
Yes, with specifics (*n* = 16)	CA (1 awake, 16–100 residents, 1 on-call and 1 awake 101–200 residents, 1 extra awake per additional 100 residents); FL (for ALFs 17+ residents); GA (for ALFs 25+ residents); ID (ALFs <16 beds 1 qualified/trained staff immediately available; ALFs 16+ beds, awake, immediately available); IL (1 awake, on duty, on-site 24/7); IN (1 awake, current CPR and first aid on-site, 24/7); IA (awake, on-duty 24/7); ME (2 awake, on-duty, available 24/7: level 4 ALFs >10 beds; MD (yes when resident care needs requires awake, overnight staff, no, when doctor or delegating nurse indicates such staff is not required; MI (1 designated resident care supervisor per shift awake 24/7; MS (awake, on-duty, fully dressed); NE (1 on site, awake 24/7); NH (1 awake 24/7); NV (yes ALFs 20+ residents); NJ (1 awake personal care assistant, 1 other staff on site 24/7); OH (on call)
Licensed staff required (RN or LPN) (*N* = 51)	
No mention (*n* = 24)	AK, CA, CO, DC, GA, ID, IA, KY, MA, MI, MN, NV, NH, NM, NY, NC, OK, OR, RI, SC, TX, VA, WA, WI
Yes, unspecified (*n* = 11)	AL, HI, IN, KS, ME, MD, TN, UT, VT, WV, WY
Yes, specified (*n* = 16)	AR (RNs available by phone/pager); CT (1 RN on-call, 24/7); DE (ALFs must have RN nursing director full-time for 25+ beds; for 20+ hr/week, 4–25 beds, <4 beds 8+ hr/week); FL (ALFs must employ or contract with a nurse for nursing care as needed); IL (licensed and certified staff sufficient to meet population care needs); LA (must employ or contract with at least 1 RN to serve as nursing director, on-site or on call and accessible 24/7); MN (must provide staff access to on-call RN 24/7); MS (licensed nurse on-site 8 hr/day); MO (licensed nurse employed 8+ hr/week, 3–30 residents; 16+ hr/week, 31–60 residents; 24 hr/week, 61–90 residents; 40 hr/week, ALFs with >90 residents); MT (must employ or contract with RN to provide or supervise nursing services); NE (RN must review medication policies and procedures, provide or oversee medication aide training); NJ (RN on staff or on-call 24/7); ND (if ALF provides medication admin, RN available to administer and/or train and supervise certified medication assistants); OH (on-site RN required if ALF provides skilled nursing care); PA (on-site or on call); SD (if medications admin need as supervising nurse)

Data sources: 2016 NCAL state regulatory review, Compendium of residential care and assisted living regulations and policy: 2015 edition (Carder et al., 2015), each state's training regulation.

Table 2 – Required Initial Training Hours: Certified Nursing Assistants (CNAs), 2016

Total Training Hours	States, Including DC (Number of Hours)
75 hr ($n = 20$)	AL, CO, IA, KY, MA, MI, MN, MS, MT, NC, ND, NE, NH, NM, NV, OH, OK. SD, TN, WY
76–100 hr ($n = 16$)	80: LA, PA, VT; 85: GA, WA; 90: AR, KS, NJ; 100: CT, HI, MD, NY, RI, SC, TX, UT
>100 hr ($n = 15$)	105: IN; 120: AZ, DC, FL, ID, IL, VA, WI, WV; 140: AK 150: CA, DE; 155: OR; 175: MO; 180: ME
Clinical training hours	
16 hr ($n = 18$)	AL, AR, CO, KY, MA, MI, MN, MS, NC, ND, NE, NH, NM, NV, OH, OK, SD, WY
17–40 hr ($n = 20$)	20: RI; 24: GA, UT; 25: MT; 30: IA, NY, VT; 32: ID, WI; 35: TN; 37.5: PA; 40: AZ, FL, IL, LA, MD, NJ, SC, TX, VA
>40 hr ($n = 13$)	45: KS; 50: CT, WA; 55: WV; 70: HI, ME; 75: DC, DE, IN, OR; 80: AK; 100: CA, MO

Data sources: CNA training requirements (Paraprofessional Healthcare Institute, 2016), nurse aide training regulations from each state administrative code.

nursing staff, 27 states required licensed nurses in some form (e.g., on-call-onsite) in their ALFs (Table 1).

2) **Training:** The majority of direct patient care in NHs is provided by CNAs, who are subject to federal regulations and are trained and certified through state nurse aide registries or boards of nursing. There is a mandatory federal curriculum for certified nursing assistant (CNA) training (CFR, 2018b). To become certified, CNAs must obtain at least 75 hr of classroom and clinical training (minimum 16 clinical hours), with many states choosing to require more than 75 hr (Table 2) (Trinkoff, Storr, Lerner, Yang, & Han, 2017). In addition, all CNAs must complete a minimum of 12 hr of continuing education annually. The CNA initial training curriculum must include the following content domains: basic nursing and personal care skills, mental health and social service needs, care of cognitively impaired residents, and basic restorative services (Table 3) (CFR, 2018b).

ALFs mostly employ unlicensed DCWs to provide personal care and daily services (NCAL, 2016; White & Cadiz, 2013). DCWs are not subject to regulation by most nurse aide registries or boards of nursing. Training hour requirements are very diverse across states, with 17 states requiring DCWs to be trained but without specific training hour requirements, whereas others mandate the number of training hours, and only Mississippi requires neither training nor hours (Table 4).

For *initial training*, 21 states have mandated DCW training hours, with 9 of those states requiring 2 to 10 hr, 5 requiring 12 to 20 hr, and 7 requiring 24 to 80 hr (Table 4). Three states (MD, IN, and TX) have varied requirements by staffing type, e.g., MD requires 2 hr initial training for all staff and 5 hr for those working with residents with dementia. Specific annual *in-service training* hours are required in 30 states, with 16 requiring 2 to 10 hr and 14 requiring 12 to 16 hr. In addition, of the 21 states with specific required initial training hours, 17 also require 2 to 16 hr of annual in-service training. To summarize initial and annual training hour requirements, 34 states require some specific training hours: 4 require initial training hours only, 13 require in-service only, and 17 require both. The remaining 17 states do not specify any training length.

For DCW training, all states except Mississippi specify required content, with common topics including first aid, fire and environmental safety, basic nursing and personal care skills, resident rights and dignity, basic restorative services, and population-specific

Table 3 – Federally Required CNA Curriculum Content Domains

Mandated Content Domains	Training Curriculum
Training prior to direct clinical contact (16 hr)	"Communication and interpersonal skills", infection control, safety/emergency procedures, residents' independence, rights
Basic nursing skills	Vital signs, height and weight, care for residents' environment, recognize and report abnormal changes, care for dying
Personal care skills	Bathing, grooming, dressing, toileting, eating, hydration, feeding techniques, skin care, transfer, and positioning
Mental health and social service needs	Responses to residents' behavior, let residents make personal choices, developmental tasks of aging, family as emotional support
Care of cognitively impaired residents	Communicate effectively, understand behavior, reduce impairment effects in cognitively impaired
Basic restorative services	Residents self-care level, assistive devices, range of motion, positioning and turning, bowel and bladder training
Residents' rights	Privacy, confidentiality, residents' rights, assist with disputes/grievances, facilitate participation in activities, secure possessions, prevent abuse, neglect, restraints

Data sources: Code of Federal Regulations (CFR, 2018b). Part 483, subpart D: requirements that must be met by states and state agencies: § 483.152 requirements for approval of a nurse aide training and competency evaluation program.

Table 4 – Required Training Hours: Direct Care Workers (DCWs), 2015

Required Training Hours, Type	States, Including DC (Specific Number of Hours)
No training hours or content specified ($n = 1$)	MS
Training content but no specified training hours ($n = 16$)	AL, AZ, CO, IA, KS, KY, ME, MI, MT, ND, NH, SC, SD, TN, UT, WY
Training hours, contents specified ($n = 34$)	
Initial/orientation training:	
≤10 hr ($n = 9$)	2: OH, WV; 4: FL, MN, NV; 5: MD; 8: OK;10: CA, CT
11–20 hr ($n = 5$)	12: RI; 16: ID, NM, TX; 18: PA
≥21 hr ($n = 7$)	24: GA; 29: MO; 40: DC, NY; 62: MA; 70: WA; 80: NC
Annual training*	
≤10 hr ($n = 16$)	2: MN; WV; 4: CA; 6: AR, CT, HI, NC, TX; 8: ID, IL, IN, NV, OH, OK;10: MA, NJ (20 hr/2 years)
≥11 hr ($n = 14$)	12: AK, DC, DE, LA, NE, NM, NY, OR, VT, WA, 15: WI; 16: GA, PA, VA

Data sources: Compendium of residential care and assisted living regulations and policy: 2015 edition (Carder et al., 2015), 2016 NCAL state regulatory review, each state training regulation.

* Annual training: includes annual in-service training, on-the job training, annual continuing education.

needs (e.g., those who are mentally ill, cognitively impaired, frail, or with chronic conditions).

3) **Inspections and enforcement requirements:** For NH oversight, states must follow the federal regulations that require regular inspections every 9 to 15 months. In addition, they must investigate all complaints and undertake enforcement actions for any deficiency of care citations (CMS, 2016). NH surveyors who conduct the inspections use federal criteria to evaluate NH compliance in the areas of nursing care, staffing, facility conditions, and care delivery procedures (CMS, 2016). Enforcement actions against noncompliant NHs can include a correction plan, in-service training, monitoring, civil monetary penalties, temporary management, transfer of residents, denial of payment for new Medicare & Medicaid admissions, and termination procedures. The selected enforcement actions depend on the nature and extent of the violation, if there was physical and/or financial harm, harm to an individual's reputation, and on any previous violations (U.S. Government Publishing Office, 2013).

State ALF surveyors also inspect and monitor facilities to determine compliance with regulations and requirements established by the state in which the ALF is located. All states have an ALF inspection procedure, with the frequency of inspections ranging from yearly to every 5 years (Table 5). All states have officials to review and investigate any reported complaint and the complaint review is to ensure compliance with state regulations for resident health and safety, residents' rights, quality of care, and safety of facility conditions (NCAL, n.d.). Every state has a system for care complaints that includes immediate inspections and some type of follow-up.

Each state also has an ALF enforcement plan with a correction plan for noncompliant ALFs, and all states can deny license renewal and revoke facility licenses under certain conditions (Table 6).

Fines vary widely with some being assessed per resident, per violation, per day, or as a fixed fee, making comparisons difficult across states. Many of the enforcement actions included in state regulations are options available to a small group of states that tend to overlap, whereas most states do not have these options stipulated under their enforcement regulations. For nonfinancial penalties, 8 states can require additional training, 14 can mandate state monitoring, and 11 can invoke closure if indicated.

Table 5 – Frequency of Required Assisted Living Facility Inspections by State, 2015

Frequency (Number of States):	States, Including DC
12 months ($n = 20$)	AL, AK, AZ, DE, DC, GA, IL, LA, MI, MO, NH, NM, NC, NV, PA, RI, SD, VA, WV, WY
15 months ($n = 7$)	IN, KS, MD, OH, OK (12–15 months), TN, WA
18 months ($n = 2$)	AR (12–18 months); NY
24 months ($n = 14$)	CT, FL, HI, IA, KY, ME, MA, MS, ND, NJ, OR, TX, VT, WI
36 months ($n = 5$)	CO, ID (first survey within 90 days; second within 15 months, else every 3 years); MN, MT (average 1–3 years); SC (average 2–3 years)
48 months ($n = 1$)	UT (average 3–4 years)
60 months ($n = 2$)	CA (20% of ALFs annually; must be inspected at least every 5 years); NE (25% ALFs annually, or every 5 years)

Data sources: Compendium of assisted living facilities regulation & policy (Carder et al., 2015), each state assisted living facility regulation website and phone call for clarifying regulatory information ($n = 6$ states).

Table 6 – Available Assisted Living Facility Enforcement Plans and Penalties,* 2017

Type of Penalty	State
Conditional/provisional probationary license ($n = 27$)	AL, AK, AZ, CO, DE, FL, ID, IL, IN, IA, KS, LA, ME, MI, MN, MO, MS, MT, NC, NJ, NM, OR, VA, WA, WI, WV, WY
Temporary administrator/management ($n = 12$)	AK, AZ, AR, DE, GA, ID, NE, NJ, OR, TX, WA, WV
Limit/suspend new admissions or service provision ($n = 27$)	AK, AR, CT, DE, DC, GA, ID, IN, MA, MD, ME, MS, NE, NH, NV, NJ, NC, OK, PA, RI, UT, VT, VA, WA, WI, WV, WY
Directed in-service training ($n = 8$)	AR, CO, DC, DE, IL, MD, MO, VA
Mandate staffing numbers and/or qualifications ($n = 2$)	MD, MA
State monitoring ($n = 14$)	AK, AR, CO, DE, DC, GA, MD, MO, NE, NH, UT, VA, WV, WY
Transfer of residents ($n = 9$)	AR, DE, GA, ID, NV, PA, TX, VT, WV
Intermediate sanction/suspension ($n = 17$)	AK, AZ, CO, DC, FL, GA, MD, ME, MN, NE, NH, NM, NY, TX, WI, WV, WY
Fines levied (for initial citations) ($n = 41$)	up to $50/day: ND; up to $100/day/violation: WA, VT (up to $10/resident or $100/day); up to $200/day/resident: CA; up to $500: MA, PA, WV (per violation), KY (per day), OK (per violation per day); up to $1,000: LA, MS (per violation), NY, WI (per day per violation); up to $2,000: CO, RI, NH; up to $2,500/violation: AR; up to $5,000: AK (per violation), NM, SC, TN, NV (per day); up to $10,000: AL, DE (per violation), FL (per violation), IL, IN, KS, MD (for each offense), ME, MO, NE, NC† (per violation ALFs ≤6 beds), UT (per violation), TX (per violation), VA (any 12-month period); up to $14,600: ID; up to $15,000, any 90-day period: OR; up to $20,000: NC (per violation ALFs ≥7 beds); up to $25,000: DC; up to $25,000 annually: GA
Closure ($n = 11$)	AK, AR, GA, MA, MI, MO, NV, NJ, TX, UT, WV

Data sources: assisted living facility regulations for each state, from state websites.

* States can have more than one type of penalty.
† NC has two fine levels by ALF size.

4) **Collection and publication of quality and safety outcomes data:** NHs must complete uniform clinical assessments of residents' health status and treatment data (NH Minimum Data Set) (CMS, 2015b). Based on these assessments, outcomes data are generated as part of the NH Quality Initiative, which contains information on quality and safety of care using the NH Quality Indicators (QIs), with QI rates based on acuity-adjusted denominators per facility. In addition, a uniform set of care deficiencies covering quality and safety, which are assessed during NH inspections, are published and are available online. These can be accessed as a database and used by researchers, consumers, and other stakeholders. There is also a 5-star NH rating system for every facility, called Nursing Home Compare, that is based on quality of care measures from resident assessments, deficiency of care citations from inspections, and average staffing hours (CMS, 2017).

For ALFs, though all states require a complaint follow-up process, 13 states do not provide any information from these processes to the public or stakeholders (AK, AR, IL, LA, KY, MA, ME, MS, NH, OH, RI, SC, and UT). For the other 38 states, some information on inspections or enforcements is provided. The type and availability of this information varies, with some states only providing complaints data, and others including regular inspection reports. The format also varies, as some states provide PDFs of formal complaints by facility that may or may not be accessible online, and others a published set of state-designated care deficiencies assessed for during ALF inspections reports, some of which can be based on NH deficiencies metrics. No state currently provides resident outcomes assessment data for ALFs, though some states provide compiled inspections data for their ALFs in a database, allowing for limited comparisons across facilities.

Discussion

This analysis highlighted the many differences between NHs and ALFs in staffing levels, training hours, and regulatory oversight. In addition this analysis examined the wide variation in ALF regulations across states in staffing levels, DCW training hours, inspections and enforcement, and complaint and inspections outcome data availability, noting that some states do not have formal regulations that cover important aspects of care safety and quality. Among NHs, federal regulation of nursing services provides funding and a mechanism to assess care quality using resident assessments. Whereas, that is not a regulated part of ALF care, leaving AL resident outcomes relatively unmonitored. Studies found that for ALFs, quality assurance was less reliable than for NHs due to lower levels of oversight and regulation (Castle & Beach, 2011). In addition, smaller ALFs

(4–25 beds) are often exempt from the ALF regulations, and these make up a substantial portion of ALFs (Caffrey, Harris-Kojetin, Rome, & Sengupta, 2014; Phillips, Guo, & Kim, 2013).

For training requirements, states have tended to increase the initial hours for CNAs, but training hours required for DCWs lagged behind in almost all states. Lack of proper staff training is a significant problem in the ALF environment, as staff qualifications may not be mandated. Many states stipulated DCW-required training content, but they may not have enough required training hours (or any specific required training hours) to cover the designated content.

Staffing requirements for ALFs varied by state, but of concern was that some states did not require licensed caregivers and that such care if required, also was permitted to be rendered remotely. Having licensed personnel in the facility to identify or prevent adverse consequences could benefit residents (e.g., by identifying residents at risk for falls).

For inspections and enforcements, ALF inspections were generally conducted less frequently than for NHs, and in many states ALF inspections and enforcements were mostly conducted in response to consumer complaints. Filing of a complaint can be a high bar for identifying quality concerns, as families can be reluctant to file if they believe doing so could adversely affect their resident's care. Furthermore, if an ALF has no formal complaints filed, one cannot necessarily assume the care is of higher quality. There is also speculation that many complaints go unaddressed after initial inquiries are conducted (Guo & McGee, 2012; Phillips et al., 2013). Enforcement tools available to ALFs also varied widely, and fines that could be assessed ranged from minimal to substantial, as leverage to support facility compliance.

ALF inspections and enforcement data can be used to assess quality to some degree, given the absence of other options. Among the states that provide inspections and/or complaint and follow-up information, most are accessed by facility name in nonsearchable formats and any metrics, if collected, are inconsistently provided. For states that only provide complaints data, there may be little or no information on many ALFs. Some complaints posted were dated (over 10 years old), and without more recent inspections data to provide context, it is unclear how to evaluate ALF quality. Though actual inspection reports can be informative, they are difficult to evaluate per ALF or to compare across facilities.

In regard to ALF resident outcomes, minimal data are available to the public because such data are generally not required by states for regulatory purposes (Phillips et al., 2013). Clinical assessments of ALF residents have been shown by others to occur sporadically or not at all (Mor, Miller, & Clark, 2010). The lack of such outcomes is also thought to be related to increased ALF care errors (Carder et al., 2015). Among NHs, standardized resident assessments, oversight, and reporting procedures allow stakeholders to learn of staffing and care issues. The rating system allows consumers to compare facilities using standardized metrics. Regular inspections and identification of deficiencies, along with publication of deficiency records and other QIs, have been shown to provide information to allow consumers to make educated care choices.

Conclusions and Recommendations

As more older adults enter ALFs, increasingly with chronic conditions and with limitations in ADLs, more stringent regulations and a mechanism to monitor quality of care are vital to promote their safety and quality care. Overall, ALF regulations should contain minimum staffing levels and worker training hours. ALF regulations that increase the presence of skilled caregivers, including licensed nurses, CNAs, and more extensively trained DCWs, could be beneficial, along with standardized monitoring of ALF care outcomes across states. For example, NH studies have found that increasing staffing levels, skill mix, and increased CNA training hours were related to improved quality (Castle, 2008; Trinkoff et al., 2017). As ALF resident acuity increases, better trained personnel will be needed to identify and care for their health problems (Dzau et al., 2017).

In addition, ALFs could benefit from a review of NH regulations that have been shown to have the greatest impact on quality care. With aging, many ALF residents can develop illnesses and impairments over time still remaining in the ALF despite requiring substantially increased nursing care. Though there is controversy about the feasibility and applicability of NH regulations for ALFs, policies and best practices can be developed for ALFs with input and expertise from geriatric care providers from nursing, medicine and other relevant disciplines (Resnick, Allen, McMahon, 2018). This can be accomplished without losing the appealing social care aspects of ALFs, with the goal of protecting resident safety and care quality.

Though the NH model of regulation and oversight is not without problems, it provides information and metrics to consumers that can be used to evaluate NH quality. In addition, though the justification for ALF outcomes data (direct evidence-based) is lacking, the NH experience with care outcomes metrics could infer benefits to ALFs that wish to emphasize quality. Requiring the collection of ALF outcomes data based on periodic resident assessment with the use of consistent metrics, could create information on quality for use by consumers and stakeholders (Murphy & Selder, 2016). A uniform system of ALF inspections and outcomes assessment could support further investigation of regulatory issues and identify best practices to meet the needs of the growing older adult U.S. population (Katz, Kronhaus, Fuller, 2018). Assessment of the quality of inspections conducted is an important topic for future research. For ALFs, consumer information about care quality also needs to be publicly available. States should provide ALF consumers with more comprehensive

quality data, beyond making complaints data available on state websites for individual facilities.

REFERENCES

AARP. (2017). Assisted living: Weighing the options. Retrieved from https://www.aarp.org/caregiving/basics/info-2017/assisted-living-options.html.

American College of Nurse Practitioners. (2012). What is the difference between a skilled nursing facility and nursing facility? Retrieved from http://www.acnpweb.org/what-difference-between-skilled-nursing-facility-and-nursing-facility.

Bureau of Labor Statistics. (2014). National industry-specific occupational employment and wage estimates; NAICS 623300—Continuing care retirement communities and assisted living facilities for the elderly. Retrieved from http://www.bls.gov/oes/current/naics4_623300.htm.

Caffrey, C., Harris-Kojetin, L., Rome, V., & Sengupta, M. (2014). *Operating characteristics of residential care communities, by community bed size: United States, 2012*. National Center for Health Statistics. NCHS Data Brief No. 170 https://www.cdc.gov/nchs/data/databriefs/db170.pdf.

Carder, P., O'Keefe, J., & O'Keefe, C. (2015). *Compendium of residential care and assisted living regulations and policy: 2015 edition*. U.S. Department of Health & Human Services, Office of the Assistant Secretary for Planning and Evaluation. Retrieved from https://aspe.hhs.gov/basic-report/compendium-residential-care-and-assisted-living-regulations-and-policy-2015-edition.

Castle, N. G. (2008). Nursing home caregiver staffing levels and quality of care: A literature review. *Journal of Applied Gerontology, 27*, 375–405.

Castle, N., & Beach, S. (2011). Elder abuse in assisted living. *Journal of Applied Gerontology, 32*(2), 248–267.

CFR. (2018a). Title 42—Public health, part 483, subpart B: Requirements for states and long term care facilities. Retrieved from http://www.ecfr.gov/cgi-bin/text-idx?SID=378c6d01cefe1fa2ff7cabcf8b6600c5&mc=true&node=sp42.5.483.b&rgn=div6.

CFR. (2018b). Title 42-public health, part 483, subpart D: Requirements that must be met by states and state agencies: Nurse aide training and competency evaluation, and paid feeding assistants. Retrieved from http://www.ecfr.gov/cgi-bin/text-idx?SID=62129fd6d9d9c07018a87948f2e0aa6a&mc=true&node=pt42.5.483&rgn=div5#sp42.5.483.d.

CMS. (2015b). Nursing home quality initiative. Retrieved from https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/index.html.

CMS. (2016). Survey and enforcement process for skilled nursing facilities and nursing facilities. *State operations manual*. Retrieved from https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Downloads/som107c07.pdf.

CMS. (2017). Survey & certification—Certification & compliance: Five-star quality rating system. Retrieved from https://www.cms.gov/medicare/provider-enrollment-and-certification/certificationandcomplianc/fsqrs.html.

Congressional Budget Office. (2013). Rising demand for long-term services and supports for elderly people. Retrieved from https://www.cbo.gov/publication/44363.

Dzau, V. J., McClellan, M., McGinnis, J. M., Finkelman, E. M. (Eds.). (2017). *Vital directions for health & health care: An initiative of the National Academy of Medicine*Washington, DC: National Academy of Medicine. Retrieved from https://nam.edu/wp-content/uploads/2018/02/Vital-Directions-for-Health-and-Health-Care-Final-Publication-022718.pdf.

Federal Interagency Forum on Aging-Related Statistics. (2016). *Older Americans 2016: Key indicators of well-being*. Washington, DC: U.S. Government Printing Office. Retrieved from https://agingstats.gov/docs/LatestReport/Older-Americans-2016-Key-Indicators-of-WellBeing.pdf.

Gimm, G. W., & Kitsantas, P. (2016). Falls, depression, and other hospitalization risk factors for adults in residential care facilities. *The International Journal of Aging and Human Development, 83*(1), 44–62.

Guo, K. L., & McGee, D. (2012). Improving quality in long-term care facilities through increased regulations and enforcement. *The Health Care Manager, 31*(2), 121–131.

Han, K., Trinkoff, A. M., Storr, C. L., Lerner, N., & Yang, B. K. (2017). Variation across U.S. assisted living facilities: Admissions, resident care needs, and staffing. *Journal of Nursing Scholarship, 49*(1), 24–32.

Harrington, C., Carrillo, H., Garfield, R., Musumeci, M., & Squires, E. (2018). *Nursing facilities, staffing, residents and facility deficiencies, 2009 through 2016*. Henry J Kaiser Family Foundation. Retrieved from http://files.kff.org/attachment/REPORT-Nursing-Facilities-Staffing-Residents-and-Facility-Deficiencies-2009-2016.

Harris-Kojetin, L, Sengupta, M, Lendon, JP, Rome, V, Valverde, R, & Caffrey, C (2019). Long-term care providers and services users in the United States, 2015–2016. National Center for Health Statistics *Vital and Health Statistics, 3*(43). https://www.cdc.gov/nchs/data/series/sr_03/sr03_43-508.pdf.

Harris-Kojetin, L, Sengupta, M, Park-Lee, E, Valverde, R, Caffrey, C, Rome, V, & Lendon, J (2016). Long-term care providers and services users in the United States: Data from the national study of long-term care providers, 2013–2014. National Center for Health Statistics. *Vital Health Statistics, 3*(38). Retrieved from https://www.cdc.gov/nchs/data/series/sr_03/sr03_038.pdf.

Katz, P. R., Kronhaus, A., & Fuller, S. (2018). The role of physicians practicing in assisted living: Time for change. *Journal of the American Medical Directors Association, 19*, 102–103.

McNabney, M. K., Onyike, C., Johnston, D., Mayer, L., Lyketsos, C., Brandt, J, & ...Samus, Q. (2014). The impact of complex chronic diseases on care utilization among assisted living residents. *Geriatric Nursing, 35*(1), 26–30.

Mor, V., Miller, E. A., & Clark, M. (2010). The taste for regulation in long-term care. *Medical Care Research and Review, 67*(4), 38S–64S.

Murphy, C. M., & Selder, C. (2016). Can quality in assisted living be measured? One county's approach. *Seniors Housing & Care Journal, 24*(1), 97–105.

National Center for Assisted Living (NCAL). (2016). Assisted living 2016 state regulatory review. Retrieved from https://www.ahcancal.org/ncal/advocacy/regs/Documents/2016_reg_review.pdf.

National Center for Health Statistics (NCHS). (2018). Variation in residential care community resident characteristics, by size of community: United States, 2016. Retrieved from https://www.cdc.gov/nchs/data/databriefs/db299.pdf.

National Health Policy Forum. (2013). *The basics of assisted living: Facilities, financing, and oversight*. Washington, DC: George Washington University. Retrieved from www.nhpf.org/library/the-basics/Basics_AssistedLiving_01-29-13.pdf.

National Institute on Aging (NIA). (2015). Why population aging matters: A global perspective. Trend 3: Rising numbers of the oldest old. Retrieved from: https://www.nia.nih.gov/publication/why-population-aging-matters-global-perspective/trend-3-rising-numbers-oldest-old.

NCAL (n.d). State licensure of assisted living enables communities to meet local needs, ensure person-centered care. Retrieved from https://www.ahcancal.org/advocacy/issue_briefs/Issue%20Briefs/AL_general_oversight_IB.pdf.

NCAL. (2018). Finance. Retrieved from https://www.ahcancal.org/ncal/facts/Pages/Finance.aspx.

NIA. (2017). Long-term care: Residential facilities, assisted living, and nursing homes. Retrieved from https://www.nia.nih.gov/health/residential-facilities-assisted-living-and-nursing-homes.

Paraprofessional Healthcare Institute. (2016). State nurse aide training requirements. Retrieved from https://phinational.org/resource/state-nurse-aide-training-requirements/.

Phillips, L. R., Guo, G., & Kim, H. (2013). Elder mistreatment in U.S. residential care facilities: The scope of the problem. *Journal of Elder Abuse & Neglect*, 25(1), 19–39.

Resnick, B., Allen, J., & McMahon, E. (2018). The role of physicians practicing in assisted living: What changes do we really need? *Journal of the American Medical Directors Association*, 19, 104–105.

Stevenson, D. G., & Grabowski, D. C. (2010). Sizing up the market for assisted living. *Health Affairs*, 29(1), 35–43.

Trinkoff, A. M., Storr, C. L., Lerner, N. B., Yang, B. K., & Han, K. (2017). CNA training requirements and resident care outcomes in nursing homes. *The Gerontologist*, 57 (3), 501–508, doi:10.1093/geront/gnw049.

U.S. Government Publishing Office. (2013). 45 CFR 160.408 factors considered in determining the amount of a civil money penalty. Retrieved from https://www.gpo.gov/fdsys/pkg/CFR-2008-title45-vol1/pdf/CFR-2008-title45-vol1-sec160-408.pdf.

White, D. L., & Cadiz, D. M. (2013). Efficacy of work-based training for direct care workers in assisted living. *Journal of Aging & Social Policy*, 25(4), 281–300, doi:10.1080/08959420.2013.816124.

Zimmerman, S., Sloane, P. D., & Reed, D. (2014). Dementia prevalence and care in assisted living. *Health Affairs*, 4, 658–666.