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# 2023 Community Based Care: Resident and Community Characteristics Report on Assisted Living, Residential Care, and Memory Care Communities

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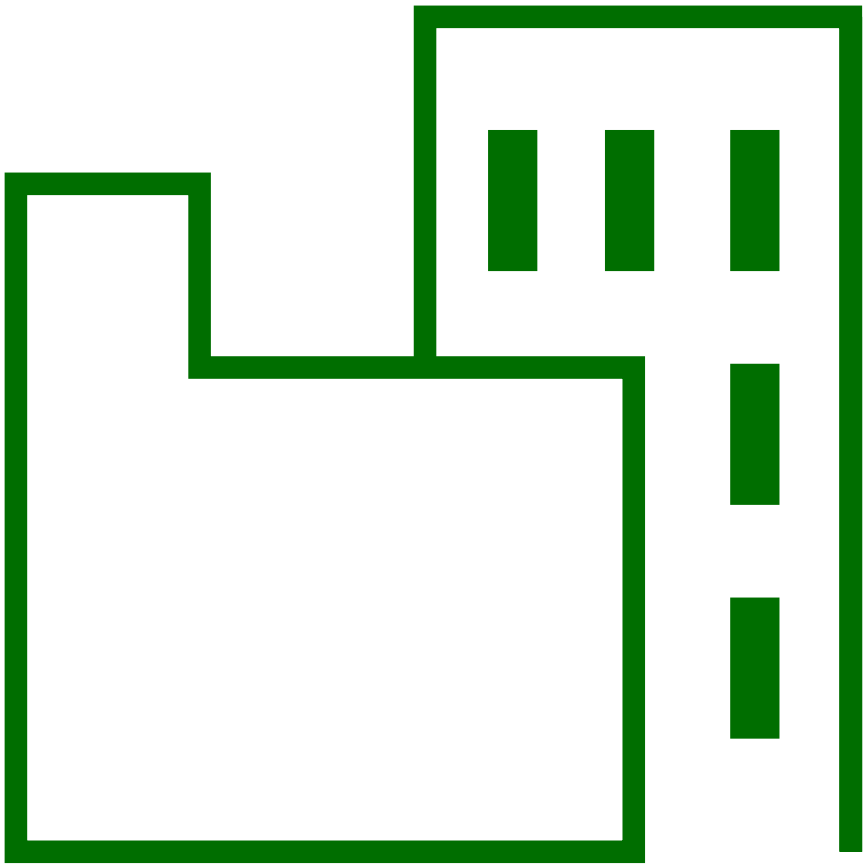
# Community Based Care

## Resident and Community Characteristics Report
## on Assisted Living, Residential Care, and Memory Care Communities



**A study completed by the Institute on Aging at Portland State University in partnership with Oregon Department of Human Services**

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Portland State
Institute on Aging

Oregon Department of Human Services
AGING & PEOPLE WITH DISABILITIES

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A study completed by the Institute on Aging at Portland State University in partnership with Oregon Department of Human Services

### About the Institute on Aging at Portland State University

IOA/PSU strives to enhance understanding of aging and facilitates opportunities for elders, families, and communities to thrive.

### About Oregon Department of Human Services

ODHS is Oregon's principal agency for helping Oregonians achieve wellbeing and independence through opportunities that protect, empower, respect choice and preserve dignity, especially for those who are least able to help themselves.


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# CONTENTS


**INTRODUCTION** **1**

Definitions and Licensing Requirements 2

Study Methods 3

Policy Considerations and Notable Findings 4

**FINDINGS** **5**

**COMMUNITY CHARACTERISTICS** **9**

AL/RC/MC Supply Across Oregon 9

Occupancy Rates 13

Units and Room Sharing 15

Medicaid Acceptance, Payer Sources, and Medicaid Reimbursement 16

Private Pay Charges 19

Estimated Industry Charges 20

Involuntary Move-Out Notices 21

**FACILITY STAFF** **23**

Care-Related Staff Employed Full-Time and Part-Time 24

Staff to Resident Ratios 27

Acuity-Based Staffing Tool and Staffing Levels 29

Hiring New Staff 33

**RESIDENTS** **36**

Resident Demographics 36

Move-out Location and Length of Stay 39

Advance Care Planning & Legal Documentation 41

Assistance with Personal Care 45

Additional Services and Transportation Use Among Residents 51

Health Conditions 53

Significant Change in Condition 53

Falls & Fall-Related Injuries 55

Health Service Use 55
Medication Use 56
**IMPACT OF COVID-19 PANDEMIC 60**
Community Experiences during the COVID-19 Pandemic 60
**CONCLUSION 62**
**APPENDIX A: METHODS 65**
Study Population 65
Data Collection Instruments 65
Response Rates 67
Weights 67
Item Non-Response 68
Data Analysis 69
Staffing Ratio and Level Calculation 70
Profession Charges 70
**APPENDIX B: ADDITIONAL TABLES 73**
**APPENDIX C: REFERENCES 81**
**APPENDIX D: FACILITY QUESTIONNAIRE 90**
**APPENDIX E: RESIDENT QUESTIONNAIRE 94**

# COMMON ACRONYMS

**ADLs** - Activities of Daily Living

**ADRD** - Alzheimer's Disease and Related Dementias

**APD** - Division of Aging and People with Disabilities

**AL** - Assisted Living (non-Memory Care)

**CBC** - Community-Based Care

**CI** - Confidence Interval

**CMA** - Certified Medication Assistant

**CMS** - Centers for Medicare & Medicaid Services

**CNA** - Certified Nursing Assistant

**COVID-19** - SARS-CoV-2

**HCBS** - Home and Community Based Services

**HPRD** - Hours Per Resident Per Day

**IOA** - Institute on Aging

**LPN** - Licensed Practical Nurse

**LTSS** - Long-Term Services and Supports

**MC** - Memory Care Community (AL or RC)

**NCHS** - National Center for Health Statistics

**NIA** - National Institute on Aging

**NIC** - National Investment Center

**NPALS** - National Post-Acute Long-Term Care Study

**OAR** - Oregon Administrative Rules

**ODHS** - Oregon's Department of Human Services

**OHA** - Oregon Health Authority

**PACE** - Program of All-Inclusive Care for the Elderly

**PPE** - Personal Protective Equipment

**PRN** - As needed (referring to pro re nata medication administration)

**PSU** - Portland State University

**RC** - Residential Care (non-Memory Care)

**RN** - Registered Nurse

# INTRODUCTION

The Institute on Aging at Portland State University (IOA/PSU) presents findings from the ninth annual study of Oregon community-based care: assisted living and residential care facilities (AL/RC) with and without memory care endorsement (MC). In 2022, the AL/RC/MC settings continued to face many pressing issues such as ongoing outbreaks and staffing challenges. As of January 13, 2023, there were 169 active COVID-19 outbreaks in congregate care settings in Oregon, and over 50,000 COVID-19 cases and over 2,500 deaths had been recorded as associated with active and resolved outbreaks in these settings (Oregon Health Authority, 2023).

Staffing challenges in the AL/RC/MC settings also received significant attention during 2022 and included burnout among staff, staff shortages, hiring difficulties, and an inadequate supply of trained, willing workers (Carder et al., 2023). The processes and practices adopted for infection prevention and controls continued to create significant challenges for residents as well as staff (Carder et al., 2023). Early 2023, COVID-19 pandemic requirements (e.g., testing, masking) and restrictions (e.g., visitation) began to lift. Against this background, data collection for this report took place during February-March 2023.

Following our past practice, we use the terms *facility* to refer to AL/RC and *community* to refer to MC throughout this report, following the language used in Oregon Administrative Rules (OAR). We use the term *setting* to interchangeably refer to AL/RC or MC or both. The following acronyms are used to organize findings associated with the three licensed setting types:

- **AL/RC/MC** includes findings from assisted living and residential care facilities, including those with a memory care endorsement,
- **AL/RC** includes findings from assisted living and residential care facilities without a memory care endorsement, and
- **MC** includes findings from memory care communities only.

This study includes rotating questions that focus on emerging areas of interest in the AL/RC/MC settings based on feedback from ODHS and interested parties alongside a core set of questions that are asked every year or every other year to allow comparisons over time.

In this year's study, we included information about various resident, community, and staff characteristics, including:

- Residents: sociodemographic characteristics (e.g., age, sex, race, ethnicity), length of stay, personal assistance, health conditions, status, service use, medications, and advanced care planning/legal documentation.
- Communities: capacity, occupancy rates, resident move-in and move-out locations, private pay charges, Medicaid reimbursement to facilities, staffing, resident transportation use, COVID-19 impacts.
- Staff: type (e.g., RN, LPN, CNA, CMA, non-licensed or certified personal care staff), contract or agency staff, number of staff employed, benefits offered, ability to hire new staff, challenges to hiring new staff.

Prior years' reports, which may include other topics of interest that were not included this year, can be found on the following websites:

- https://www.pdx.edu/ioa/oregon-community-based-care-project
- http://www.oregon.gov/DHS/SENIORS-DISABILITIES/Pages/publications.aspx
- https://pdxscholar.library.pdx.edu/aging_pub/

## Definitions and Licensing Requirements

AL/RC facilities are licensed residential settings, authorized by Oregon Administrative Rules (OAR 411-054), that may additionally apply for and receive approval from ODHS to operate as an MC community (OAR 411-057). AL/RC/MC provide individualized personal care, social services, and social/recreational activities for older adults and persons with disabilities. AL must provide private apartments that have a living and sleeping space, kitchen area, bathroom, and storage. While RC are not required by Oregon rules to provide private bathrooms, living quarters, or kitchenettes, they may choose to do so. Older RC might have shared bathrooms, while newer constructions of RC may have a combination of these building designs. Since AL and RC are similar in all other aspects, including the Oregon Administrative Rules they must follow, we report findings for these two settings in aggregate (AL/RC) in this report.

ODHS may approve a licensed AL, RC, or a nursing home (NH) to operate as MC through an "endorsement" (OAR 411-057-0110) indicating that the setting is designated for adults with a diagnosis of Alzheimer's disease or a related dementia (ADRD). This report includes only MC units with an AL or RC license (and not NH). All MC must meet requirements such as training staff in

dementia care practices, building design standards such as controlled exits, and programming for people with health and behavioral symptoms associated with ADRD. MC residents differ from AL/RC residents in many aspects of care provision, such as prevalence of receiving assistance for ADLs, health services use, and cost of care. These and other differences and similarities are described in more detail throughout the report.

According to OAR, licensed AL/RC/MC communities must:

- Be staffed 24-hours daily to meet current residents' care and service needs.
- Provide access to a licensed nurse(s) who is (are) regularly scheduled for onsite duties and available to assess resident needs and provide phone consultation.
- Provide daily meals and snacks and access to food at any time.
- Provide housekeeping and laundry services.
- Offer social and recreational activities.
- Provide medication and treatment administration.
- Coordinate transportation.
- Coordinate, monitor, and provide interventions from on-site and off-site health service providers to residents.

As of fall 2022, there were 570 AL/RC/MC settings licensed in Oregon and 229 of these 570 were endorsed MC communities. The total licensed capacity for all AL/RC/MC was 29,571. Of these, 8,106 were specifically endorsed for MC.

## Study Methods

IOA/PSU uses two separate questionnaires to collect information about AL/RC/MC settings and a sample of three residents selected randomly from each responding community's roster. The facility questionnaire asks questions about payment sources, use of acuity-based staffing tools, management, policies, employees and benefits, contract/agency staff use, and COVID-19 pandemic impacts. The resident questionnaire asks questions about demographics (e.g., sex/gender, race/ethnicity), length of stay, diagnosed health conditions, personal care assistance with activities of daily living and behaviors, health services and medications, diagnosed health conditions, documentation of advanced care planning and legal relationships (e.g., guardianship), and payer type, private pay charges, and Medicaid reimbursement.

We sent out one facility-level and three resident-level questionnaires to each of the 570 licensed AL/RC/MC settings licensed in Oregon as of fall 2022. Of these, 229 had a memory care endorsement (40 percent). IOA/PSU received both the facility-level and one or more resident-level questionnaires from 319 settings, only the facility-level questionnaire from four settings, and at least one resident-level questionnaire from eight settings for a total of 331 responding AL/RC/MC and a response rate of 58 percent.

Among AL/RC/MCs that returned at least one resident-level questionnaire (n=327), 318 facilities returned the requested information about three residents; six facilities returned two questionnaires and three facilities returned one questionnaire only. Overall, this resulted in a data set of 969 resident-level cases. Unless otherwise noted, any resident information discussed in this report comes from data collected through the resident-level questionnaire.

Appendix A provides details about the questionnaire development and study design. Additional details related to data collection, data analysis, and copies of the questionnaires can also be found in the appendices of this report.

## Policy Considerations and Notable Findings

- Occupancy rates improved significantly though they remain lower than pre-pandemic levels.
- The number of AL/RC/MC and total number of beds licensed by ODHS did not change significantly since last year.
- Medicaid reimbursement continues to constitute a large source of revenue for Oregon's AL/RC/MC.
- Residents living in AL/RC and MC settings have significant care needs.
- While improved compared to recent years, significant staffing challenges remain.

IOA/PSU and ODHS recognize that the AL/RC/MC communities, administrators, and staff continue to serve their residents during the ongoing challenges related to the COVID-19 pandemic. We extend our thanks and appreciation to those who took the time to participate in this study. Finally, we thank all AL/RC/MC administrators and staff for all they do on behalf of Oregon's older adults and people living with disabilities.

# FINDINGS

### AL/RC/MC Capacity and Private Apartment Occupancy

- There were 570 AL/RC/MC licensed settings as of November 2022.
- 331 licensed settings returned facility-level and/or resident-level questionnaires.
- The total licensed capacity for all AL/RC/MC settings in Oregon was 29,571 residents.
  - The total licensed capacity for the 331 AL/RC/MC settings that responded was 969 residents.
- 82% of residents lived in a private apartment, 12% shared their unit with an unrelated roommate, and 6% lived with a relative or spouse.

### AL/RC/MC Ownership

- 86% operated for profit.
- 80% were chain-affiliated.

### Move-Out Notices

- In the last 90 days, 18% of communities gave at least 30-day move-out notices to at least one resident.
  - 6% for unpaid charges owed to the community.
  - 3% for resident care needs exceeding the level of services provided by the community.

### Memory Care

- 229 of all AL/RC in Oregon had an MC endorsement.
- 34% of all residents living in the responding facilities lived in MC.

### AL/RC/MC Medicaid Use and Expenditure

- 41% of residents were Medicaid beneficiaries.
- In 2022, ODHS was billed a total of $511,626,486 on behalf of Medicaid-eligible residents in all AL/RC/MC facilities.
  - Median total monthly reimbursement amount paid by ODHS was $3,249 and $5,384 for AL/RC and MC residents, respectively.

## AL/RC/MC Private Payers and Rates

- 59% of residents were private pay (e.g., personal sources, long-term care insurance, social security).
- $6,661 was the average total monthly charge paid by current AL/RC/MC residents.
- $79,932 is the amount that a single resident would pay for 12 months based on the average total monthly charge.

## AL/RC/MC Staffing

- 8,640 staff were employed by 313 responding facilities that reported staffing data.
  - 82% of employees' job responsibilities included resident care.
  - 87% of care-related employees worked full-time.
- The top three challenges to hiring new staff:
  - 81% lack candidates interested in working in this setting.
  - 65% lack qualified candidates.
  - 64% experience competition with jobs in other sectors or industries.
- 74% of AL/RC/MC settings reported adopting the Acuity-Based Staffing Tool (ABST) provided by ODHS to determine appropriate staffing levels.
  - The remaining 26% were using a different ABST.

## AL/RC/MC Resident Demographics

- 68% female.
- 81% ages 75 and older.
- 49% ages 85 and older.
- 82% non-Hispanic White.
- Approximately 1% each were Asian, Black or African American, American Indian/Native American or Alaska Native, or Native Hawaiian or other Pacific Islander.
- 2% were Hispanic/Latino of any race.

**Length of Stay among AL/RC/MC Residents from Move In Date and Most Common Location Residents Moved In From**

- 34% less than 1 year.
- 47% 1 year to 4 years.
- 18% for 4 or more years.
- 56% moved in from home (alone, with spouse or partner, child, or relative).

**AL/RC/MC Residents Who Regularly Received Assistance with Personal Care and Other Services**

- 16% eating.
- 57% dressing.
- 76% bathing and grooming.
- 48% using the bathroom.
- 35% mobility/walking.
- 7% vision impairment.
- 45% staff assistance during the night.
- 24% assistance from two staff.

**AL/RC/MC Residents Who Regularly Received Assistance with Behavioral Symptoms**

- 58% received staff assistance with at least one of the following three behavioral symptoms.
  - 38% due to lack of awareness or ability to orient to surroundings.
  - 15% due to wandering.
  - 5% danger to self or others.

**Top Five Most Commonly Reported AL/RC/MC Resident Health Conditions**

- 61% of residents had high blood pressure/hypertension.
- 50% had Alzheimer's disease or related dementias (ADRD).
- 40% had depression.
- 37% had heart disease.
- 26% had anxiety disorder.

**Fall-Related Injuries Among Current AL/RC/MC Residents, Prior 90 Days**

- 18% experienced at least one fall that resulted in an injury.

**Health Service Use Among Current AL/RC/MC Residents, Prior 90 Days**

- 22% treated in a hospital emergency department.
- 11% hospitalized overnight.

**Top Three Most Commonly Used Additional Services and Transportation**

- 60% transportation services for medical or dental appointments.
- 54% transportation services for social and recreational activities or shopping.
- 31% escorts to medical or dental appointments.

**Medication Use Among Current AL/RC/MC Residents**

- 54% took nine or more medications on a regular basis.
- 28% took antipsychotic medications in the last week.
- 19% took opioid medications in the last week.
- 21% took a dementia-specific medication in the last week.

**AL/RC/MC Residents Who Have Advance Care Planning, Guardianship, or Conservatorship in Place**

- 37% Advance directive or living will.
- 56% Durable medical power of attorney.
- 16% Health care proxy, surrogate, or agent.
- 71% Physician Orders for Life-Sustaining Treatment (POLST).
- 53% Do Not Resuscitate (DNR) Order.

# COMMUNITY CHARACTERISTICS

AL/RC/MC settings across Oregon vary in their size and location, ownership and chain affiliation, payer mix and Medicaid acceptance, and move-out policies. To explore this variation, this section provides information about:

- AL/RC/MC supply across Oregon,
- Ownership and chain affiliation,
- Occupancy rates,
- Units and room sharing,
- Payer sources, Medicaid reimbursement, and private pay charges,
- Estimated industry charges, and,
- Involuntary move-out notices.

## AL/RC/MC Supply Across Oregon

As discussed in the Introduction section above, ODHS licenses assisted living (AL) and residential care (RC) facilities. In addition, both AL and RC may receive an "endorsement" from ODHS to operate as a memory care (MC) community with distinct rules around additional staff training in dementia care alongside specific building requirements.

Each AL/RC and MC is licensed to accommodate a specific number of residents, referred to as licensed capacity. Table 1 shows the total number of licensed settings and their licensed capacity based on information provided by ODHS as of fall 2021 and 2022. There were 570 AL/RC/MC settings in both years and there was a negligible change in the number of licensed bed capacity; however, the number of MC communities increased from 224 in 2021 to 229 in 2022 accompanied with a commensurate increase in the number of MC endorsed beds (from 7,926 to 8,106).

**Table 1. Number of all licensed settings and licensed capacity as of November 2021-2022**

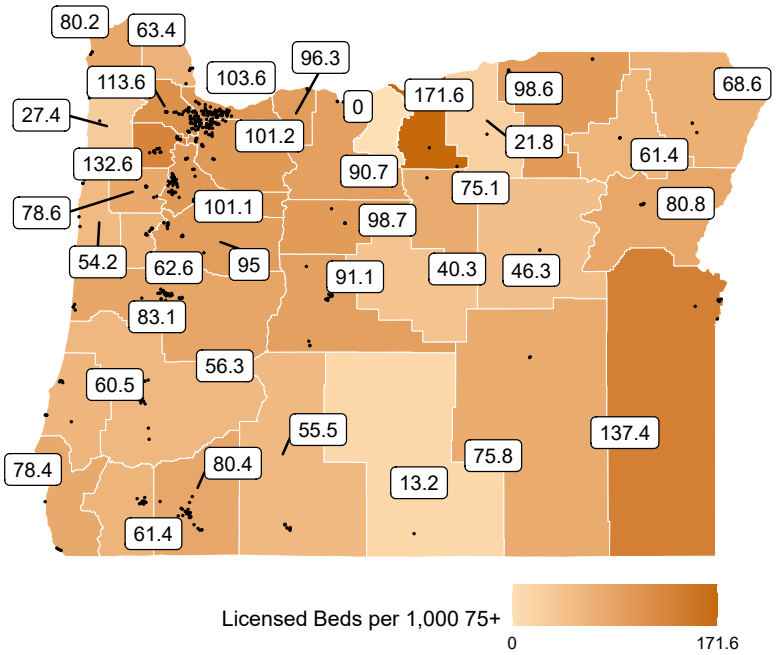
| | Number of Settings | | Licensed Capacity | |
|---|---|---|---|---|
| | 2021 | 2022 | 2021 | 2022 |
| All Facilities (AL/RC/MC)[1] | 570 | 570 | 29,563 | 29,571 |
| MC Endorsed Only | 224 | 229 | 7,926 | 8,106 |

[1]*This figure includes all AL or RC facilities, including those that have a MC endorsement.*

The availability of AL/RC and MC did not show significant change from last year and continue to vary across Oregon. Similar to last year, all 36 counties except Sherman had at least one AL/RC/MC and 30 counties (except Harney, Lake, Morrow, Sherman, Tillamook, and Wheeler) had at least one MC. The three counties with the largest number of AL/RC/MC beds were Multnomah, Washington, and Clackamas, which collectively accounted for 42 percent of Oregon's overall licensed capacity.

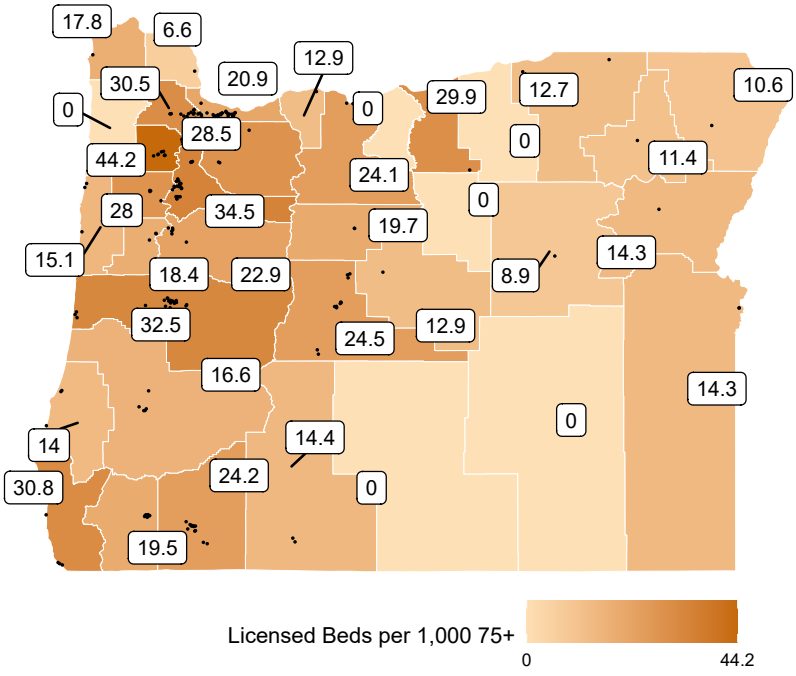
The number of potential residents who may need AL/RC/MC differ across Oregon. To account for this, we created a measure of supply that takes into account differences in population across counties by dividing licensed capacity and memory care units by 1,000 persons aged 75 and over (Figure 1 and Figure 2, respectively).

## Figure 1. AL/RC/MC supply by county




Across Oregon, AL/RC/MC supply was not extremely concentrated, though counties exhibited varying levels of supply (Figure 1 above). AL/RC/MC supply was greatest in Gilliam and Malheur Counties, followed by Yamhill and the three counties located in the Portland Metro Area (Multnomah, Washington, and Clackamas). In terms of MC supply, Yamhill, Marion, and Lane Counties had the highest supply according to this measure (Figure 2 below) while counties located in the Eastern Oregon region had the lowest MC supply.

## Figure 2. MC supply by county



## Ownership and Chain Affiliation

Ownership structure in the AL/RC/MC sector can have significant implications in terms of the facility's mission, operations, and finances. For profit entities may include corporations, real estate investment trusts (REITs), or private equity firms. Nonprofit AL/RC/MC can include those owned and operated by faith-based organizations or charitable foundations. Finally, some government agencies may own and operate AL/RC/MC, typically to serve specific populations such as low-income individuals.

Most AL/RC/MC settings in the US operate as for profit entities (Sengupta et al., 2022). In Oregon, 14 percent of responding AL/RC/MC were non-profit entities (including government-owned) and the remaining 86 percent were for profit, either privately owned or publicly traded or as limited liability companies (Table 2). MC were slightly more likely to be for profit compared to AL/RC (90 percent and 79 percent, respectively).

**Table 2. Type of ownership, 2023**

| | AL/RC | MC | AL/RC+MC |
|---|---|---|---|
| | % | % | % |
| **Non-profit (incl. Gov't-owned)** | 17 | 10 | 14 |
| **For profit** | 79 | 90 | 86 |

*Note: non-profit include private non-profit and government (federal, state, county, or local) owned. For profit include private for profit organizations and publicly traded or limited liability companies. AL/RC+MC refers to all settings that responded to this question.*

Similar to last year, we asked settings whether their community was owned by a person, group, or organization that owns or manages two or more AL, RC, or MC, including a corporate chain.

Table 3 below shows that 80 percent of responding AL/RC/MC reported being affiliated with a chain, which was slightly higher among MC compared to AL/RC (87 percent and 76 percent, respectively).

**Table 3. Chain affiliation, 2023**

| | AL/RC | MC | AL/RC+MC |
|---|---|---|---|
| | % | % | % |
| **Chain-affiliated** | 76 | 87 | 80 |
| **Not chain-affiliated** | 24 | 13 | 20 |

*Note: AL/RC+MC refers to all settings that responded to this question.*

## Occupancy Rates

Higher occupancy rates play an important role in the success and sustainability of AL/RC/MC, by ensuring increased revenues, by providing greater resources for services and amenities, and by lowering the impact of sizable fixed costs typical in this sector (such as mortgages or lease payments or property maintenance). In addition, by increasing the number of residents, higher occupancy rates can translate into a more vibrant community, improving opportunities for socialization and meaningful relationships among residents.

We calculated occupancy rates by taking the average of the number of current residents divided by the licensed capacity. Note that the approach used here, which is based on total occupants (e.g., number of residents) instead of occupied units (e.g., apartments), differs from methods utilized by some senior housing professionals and may provide slightly different results (although our past reports found the two calculations were highly correlated).

Table 4 shows occupancy rates between 2020 and 2023. At 74 percent, the average occupancy rate for AL/RC almost recovered to the level right before the COVID-19 pandemic started. While the average occupancy rate for MC recovered from pandemic lows (75 percent in 2022), it has room to grow at 80 percent back to pre-pandemic levels, which was 85 percent in early 2020. These occupancy rates in Oregon AL/RC/MC are comparable to broader AL and RC occupancy trends observed nationally (National Investment Center, 2023).

**Table 4. Average occupancy rates, 2020-2023**

| | 2020 % | 2021 % | 2022 % | 2023 % |
|---|---|---|---|---|
| AL/RC | 77 | 70 | 70 | 74 |
| MC | 85 | 76 | 75 | 80 |
| AL/RC+MC | 79 | 71 | 71 | 76 |

*Note: For the current year, calculation is based on 316 cases with non-missing information. The figures for 2020, 2021, and 2022 were retrieved from past years' reports. Occupancy rates for 2020 and 2021 were calculated by dividing total number of residents by total number of licensed beds among responding facilities in the state. AL/RC+MC refers to all settings that responded to this question.*

Table 5 shows the distribution of occupancy rates among responding AL/RC/MC. For both AL/RC and MC, there were few settings at which occupancy rates were below 50 percent with the bottom 10th percentile being 51 percent. The top 10th percentile was 94 percent for AL/RC and 100 percent for MC. These results suggest a wide range of occupancy rates across AL/RC/MC settings in Oregon.

**Table 5. Distribution of occupancy rates of responding facilities, 2023**

| Percentile | Bottom 10th | Bottom 25th | Middle | Top 25th | Top 10th |
|---|---|---|---|---|---|
| AL/RC | 51 | 65 | 76 | 85 | 94 |
| MC | 51 | 71 | 84 | 93 | 100 |
| AL/RC+MC | 51 | 67 | 79 | 88 | 97 |

*Note: Based on 316 cases with non-missing information. AL/RC+MC refers to all settings that responded to this question.*

## Units and Room Sharing

According to OAR, AL and RC units may be designated for up to two residents. If two people are to share a unit in an AL, they must know each other (e.g., married couples, relatives, or friends). RC may have private units or units shared by roommates who did not previously know each other (OAR 411-054-0200). When sharing a unit, each resident has the right to choose a roommate (OAR 411-054-0027).

Most AL/RC/MC residents (82 percent) live in private rooms or apartments (Table 6). MC residents were much more likely to share their rooms or apartments with an unrelated roommate compared to AL/RC residents (38 percent vs. 1 percent). AL/RC residents were more likely to live with a partner, spouse or other relative compared to MC residents (8 percent vs. 1 percent).

**Table 6. Unit and room sharing among sampled residents by setting, 2023**

| | AL/RC | MC | AL/RC+MC |
|---|---|---|---|
| **Does not share a room/apartment** | 91 | 61 | 82 |
| **Shares a room or apartment with a partner, spouse or other relative** | 8 | 1 | 6 |
| **Shares a room or apartment with an unrelated roommate** | 1 | 38 | 12 |

*Note: Percentages may not add up to 100 due to rounding. AL/RC+MC refers to all settings that responded to this question.*

## Medicaid Acceptance, Payer Sources, and Medicaid Reimbursement

AL/RC/MC can accept Medicaid as a form of payment by entering into a contract with ODHS that can pay for residential LTSS received by eligible residents who meet certain financial and medical criteria (OAR 411-27-0025). Of the 570 AL/RC/MC licensed in Oregon, 78 percent had a Medicaid contract and a slightly higher share of responding AL/RC/MC (83 percent) had a Medicaid contract. Although having a Medicaid contract does not necessarily indicate that the setting currently has one or more Medicaid beneficiaries, over 95 percent of AL/RC/MC with a Medicaid contract did have at least one resident who paid primarily using Medicaid funds (not shown in table).

The primary payer sources among residents of responding AL/RC/MC settings were residents' personal funds (59 percent) and Medicaid (41 percent) (Table 7). MC residents were more likely to use Medicaid (45 percent) compared to AL/RC residents (39 percent). A 1915(c) waiver from the Centers for Medicare and Medicaid Services (CMS) allows ODHS to use Medicaid funds designated for individuals who require nursing facility level of care to instead receive those services in their homes or in a community-based care setting, including AL/RC/MC. As such, Medicaid use among Oregon AL/RC/MC residents continues to be higher compared to the national average (18 percent) (Caffrey et al., 2022).

**Table 7. Distribution of payer sources among sampled residents by setting, 2023**

| | AL/RC | MC | AL/RC+MC |
|---|---|---|---|
| | % | % | % |
| **Medicaid** | 39 | 45 | 41 |
| **Private Sources** | 61 | 55 | 59 |
| **Other** | <1 | 0 | <1 |

*Note: Other payer sources (<1%) included Providence ElderPlace, a Program of All-Inclusive Care for the Elderly (PACE), some of whose recipients may be eligible for or actively using Medicaid, even though Medicaid was not reported as their primary source of payment for services. AL/RC+MC refers to all settings that responded to this question.*

Table 8 shows reimbursement rates applied to Medicaid services funded by APD/ODHS effective as of January 2023. The lowest monthly rates that ODHS pays on behalf of eligible AL, RC, and MC residents were $1,663, $2,071, and $5,433, respectively. The resident who is eligible for Medicaid services pays room and board at a rate of $711 unless the resident's income is under that amount and qualifies for assistance with this cost. ODHS pays an additional $402 and $398 for each eligible add-on among RC and AL residents, respectively, up to three add-ons, the assessment of which is made individually based on needs documented in the Client Assessment and Planning System (CA/PS) and as described in OAR 411-027-0025. Note that under the Enhanced Wage Add-on program, approved by the Oregon Legislature, AL/RC/MC can receive a 10 percent enhanced rate if they pay wages at or above a specific threshold set by rules. A more detailed description of Oregon's LTC Medicaid program, including a discussion of criteria for eligibility and change in reimbursement rates since 2020, can be found in a report recently published by IOA/PSU (Tunalilar et al., 2023).

**Table 8. Medicaid reimbursement rates by setting, January 2023**

| | AL | RC | MC |
|---|---|---|---|
| **Base (Lowest) Rate** | $1,663 | $2,071 | $5,433 |
| **Room & Board** | $711 | $711 | $711 |
| **Total (Base Rate + Room & Board)** | $2,374 | $2,782 | $6,144 |

*Note: Lowest rate refers to base rate for RC, Base rate refers to Level 1 care for AL facilities, and a flat rate for MC. Room and Board is the same across settings.*

Examining the reimbursement rates for base level care only might be misleading since these reimbursement rates do not correspond to the full amount paid to AL/RC/MC by ODHS for three reasons: first, some Medicaid residents have much higher care needs and qualify at reimbursement rates higher than base levels. Second, the published rates do not include additional payments that ODHS may pay on behalf of residents in the form of "exceptions." Third, about 30 AL/RC/MC have various specific needs contracts with ODHS to serve individuals with much higher needs, such as TBI, hospice, and behavioral health. These specific needs contract rates can go up to over $20,000 for each individual Medicaid client.

In consideration of this potential difference between published Medicaid reimbursement rates and actual payments for Medicaid residents, this year for the first time we asked communities the total monthly reimbursement amount paid by ODHS for selected residents if they used Medicaid as the primary payment method. As Table 9 on the next page shows, median total monthly reimbursement paid by ODHS for AL/RC residents was $3,249 - an amount higher than the base rate for either AL or RC. On the other hand, median total monthly reimbursement paid by ODHS for MC residents was $5,384 and approximately equal to the flat rate listed in the reimbursement schedule.

**Table 9. Total monthly reimbursement amount paid by ODHS for Medicaid residents, 2023**

| | AL/RC | MC | AL/RC+MC |
|---|---|---|---|
| **Median** | $3,249 | $5,384 | $3,748 |
| **Average** | $4,653 | $4,805 | $4,701 |

*Note: AL/RC+MC refers to all settings that responded to this question.*

## Private Pay Charges

We asked providers about each sampled resident's base and total monthly charges for the prior month if they are paying primarily using private funds instead of Medicaid (Table 10). Facilities have different ways of assessing a base rate, which might include rent and basic services. The total monthly charge for a resident can be higher than the base rate because it includes the base rate in addition to charges for any additional services received by the resident.

Among private pay residents, the average base monthly charge for AL/RC was $4,792 and the average total monthly charge including services received by the resident was $6,082, indicating additional service charges of approximately $1,290 per month (Table 10). As expected, the average base monthly charge for MC was higher at $6,579 and the average total monthly charge was $7,738 with a difference of $1,159 for additional services.

**Table 10. Average monthly private-pay charges among sampled residents by setting, 2023**

| | AL/RC | | MC | | AL/RC+MC | |
|---|---|---|---|---|---|---|
| **Monthly Charge** | **Base** | **Total** | **Base** | **Total** | **Base** | **Total** |
| **Median** | $4,735 | $5,900 | $6,300 | $7,650 | $5,325 | $6,400 |
| **Average** | $4,792 | $6,082 | $6,579 | $7,738 | $5,417 | $6,661 |

*Note: AL/RC+MC refers to all settings that responded to this question.*

Based on the average total monthly charge, a year-long stay for a single AL/RC resident would amount to $72,984, a 23 percent increase over the total annual charge reported in 2021 ($59,184) (Table 11). Similarly, based on the average total monthly charge, a year-long stay for a single MC resident would amount to $92,856, a 12 percent increase over the total annual charge reported in 2021 ($82,404). Some of the potential drivers of these year-on-year increases in private pay charges during the pandemic include broader inflationary pressures, tight labor market conditions and resulting increase in staff wages, and other additional expenses because of pandemic-related precautions (e.g., PPE and COVID-19 testing).

**Table 11. Estimated change in average annual total private-pay charges among sampled residents by setting, 2021-2023**

| | AL/RC | | | MC | | |
|---|---|---|---|---|---|---|
| | 2021 | 2022 | 2023 | 2021 | 2022 | 2023 |
| Estimated Average Annual Total Charges | $59,184 | $65,976 | $72,984 | $82,404 | $85,704 | $92,856 |

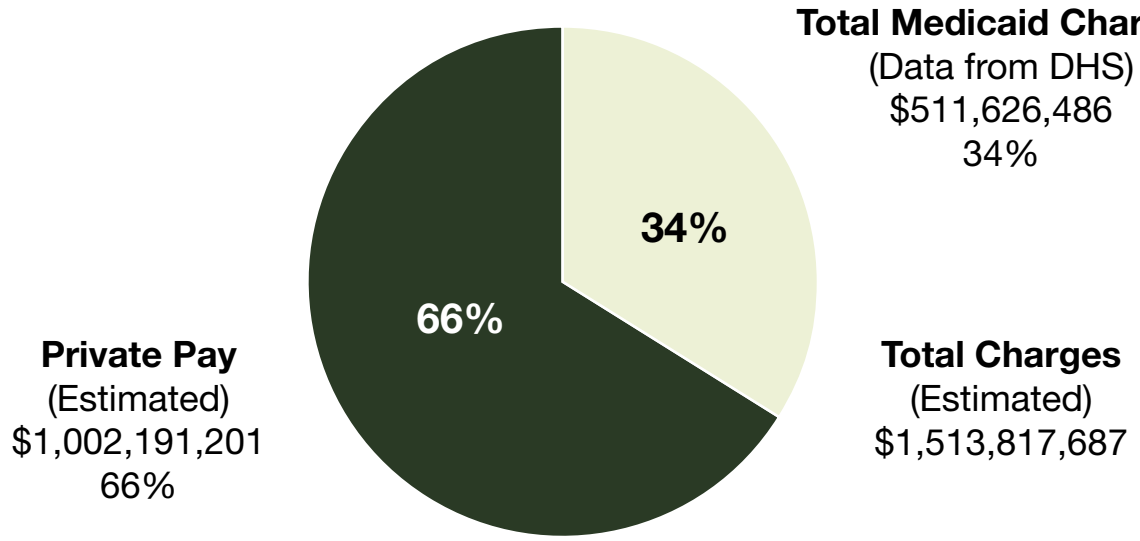
*Note: Data for 2021 and 2022 were retrieved from past reports.*

## Estimated Industry Charges

Every year since 2017, we estimate total annual industry charges for all AL/RC/MC settings using the same methodology based on the amount billed to ODHS for Medicaid services by providers and the average total monthly charge for private pay residents (see Table 1, Appendix A for a description of this year's calculations). The total estimated industry charges in 2022 were over 1.5 billion dollars, at $1,513,817,687—an increase of 20 percent from last year's estimates (Figure 3).

The total estimated industry charges were distributed between private sources (66 percent) and Medicaid funds billed to ODHS on behalf of Medicaid-eligible residents (34 percent). The distribution between private and Medicaid funding was the same as last year.

**Figure 3. Estimated total annual industry charges for AL/RC/MC in Oregon, 2023**




*Note: See Appendix A for details about how total annual industry charges were estimated.*

## Involuntary Move-Out Notices

A good fit between resident needs and preferences and a facility's services, amenities and policies can ensure that each resident is able to live in their unit for as long as they want (Mitty, 2010; Siegel et al., 2021). However, a resident's changing cognitive and functional status might not fit well with the facility's staffing level or the building's design (Fields, 2016). While Oregon rules encourage AL/RC/MC "to support residents' choice to remain in his or her living environment," they also recognize that remaining in the setting may "no longer be appropriate… due to safety and medical limitations" (OAR 411-054-0080). Consequently, providers may ask a current resident to move out due to one of the reasons specified in the rule.

This year, we asked whether AL/RC/MC gave a 30-day move-out notice to any residents due to one of the reasons specified in the rule and Table 12 below. Overall, a small share of responding AL/RC/MC reported giving a 30-day move-out notice. The most likely reason was due to unpaid charges owed to the community for both AL/RC (8 percent) and MC (2 percent). Overall, AL/RC were slightly more likely to give a 30-day move-out notice to any resident compared to MC across all reasons. Considering the resident profile of MC communities, these differences are not surprising.

**Table 12. Move-out notices by setting, 2023**

| | AL/RC | MC | AL/RC + MC |
|---|---|---|---|
| | % | % | % |
| Resident care needs exceeded the level of services provided by this community. | 5 | 1 | 3 |
| Resident engaged in behavior or actions that have repeatedly and substantially interfered with the rights, health or safety of residents or others. | 4 | 1 | 3 |
| Resident had a medical condition that was complex, unstable, or unpredictable and exceeded the level of health services provided by this community. | 3 | 0 | 2 |
| Our community was unable to accomplish resident evacuation in accordance with Fire and Life Safety regulations. | 1 | 0 | <1 |
| Resident exhibited behavior that posed a danger to self or others. | 4 | 1 | 3 |
| Resident engaged in illegal drug use or committed a criminal act that caused potential harm to themselves or others. | 1 | 0 | 1 |
| Resident had unpaid charges owed to this community. | 8 | 2 | 6 |

*Note: AL/RC+MC refers to all settings that responded to this question.*

# FACILITY STAFF

The following section describes information about facility staff including:

- The care-related staff employed full-time and part-time,
- The staff-to-resident ratios,
- Acuity-based staffing tool and staffing levels,
- Employee benefits, and
- Hiring new staff.

AL/RC/MC settings in Oregon are required to have qualified awake direct care staff and sufficient numbers of staff to meet the 24-hour scheduled and unscheduled needs of residents (OAR 411-054-0070). ODHS requires minimum staffing standards depending on resident acuity, the total number of residents, the facility's structure, and fire and life safety evacuation plans. Direct care staff in AL/RC/MC settings assist with activities of daily living, medication administration, resident-focused activities, supervision, and support for residents in facilities.

This section consists of the number of current staff, either full- or part-time, including both all staff and care-related staff. And then, we describe the "staffing ratios," which are calculated by the ratio of staff to the number of current residents. The acuity-based staffing tool (ABST) provides information to evaluate the residents' needs and the results (number of care hours/minutes) that must be used to develop and update the facility staffing plan, not a staffing tool that provides the final staffing plan for a facility (ODHS, 2022). We also calculate staffing levels with the method from the National Study of Long-Term Care Providers (Harris-Kojetin et al., 2019). Although staffing ratios and staffing levels are two common ways to calculate the number of staff relative to the number of residents, they constitute averages that cannot reflect the actual time that staff spend with residents or the differential care needs of residents in long-term care facilities. Thus, staffing ratios and levels are intended to compare and contrast by setting type to examine changes over time. This year, our team also asked for employee benefits for full-time employees and staffing challenges to understand working environments and employment conditions faced by AL/RC/MC settings.

## Care-Related Staff Employed Full-Time and Part-Time

We asked facilities for the total number of all employees they employed with separate numbers of care-related staff, including registered nurses (RNs), licensed professional nurses (LPNs), certified nursing assistants (CNAs), certified medication assistants (CMAs), personal care staff who are not licensed or certified, social workers, and activities directors or staff. Oregon requires AL/RC/MC facilities to provide personal care staff and regularly scheduled RNs for onsite duties at the facility and be available for a phone consultation (OAR 411-054-0045).

Of the 323 responding AL/RC/MC, 10 facilities did not provide information about staffing. The remaining 313 AL/RC/MC employed a total of 8,640 care-related staff. Table 13 on the next page shows the percentage of care-related staff employed by employee categories. Most care-related employees were personal care staff who were not licensed or certified (e.g., resident assistant, direct care worker, personal care aide, resident services, caregivers) in AL/RC/MC (82 percent). Although personal care staff are not required to be licensed or certified, they need to complete some required training, including pre-service training, infectious disease training, annual training, and dementia care training (OAR 411-054-0070). Personal care staff provides services for residents to assist with activities of daily living, give personal care, lead social and recreational activities, administer medications, serve meals, and do laundry and housekeeping. Following care-related employees were activity directors or staff (seven percent), RNs (four percent), CNAs (three percent), and LPNs and CMAs (two percent each).

Table 14 below shows the percentage of staff employed full- and part-time within the seven care-related staff categories. Most care-related staff in each employee category are more likely to be employed full-time rather than part-time at AL/RC/MC. Among care-related staff, over one-third of RNs were employed part-time, while other care-related staff were employed part-time less than 30 percent. While MC (86 percent) had a higher percentage of full-time for all care-related staff than AL/RC (85 percent), AL/RC settings were more likely to employ full-time care-related staff in some care-related categories compared to MC, including RNs (67 percent versus 63 percent), CMAs (88 percent versus 86 percent), and social workers (78 percent versus 75 percent).

**Table 13. Distribution of care-related staff employed, by employee categories, 2023**

| | AL/RC | | | MC | | | AL/RC+MC | | |
|---|---|---|---|---|---|---|---|---|---|
| | FT | PT | All | FT | PT | All | FT | PT | All |
| | % | % | % | % | % | % | % | % | % |
| RNs | 3 | 9 | 4 | 2 | 8 | 3 | 3 | 9 | 4 |
| LPNs | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| CNAs | 2 | 5 | 3 | 2 | 4 | 3 | 2 | 5 | 3 |
| CMAs | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 |
| Personal Care Staff | 83 | 73 | 82 | 84 | 75 | 83 | 84 | 74 | 82 |
| Social Workers | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Activity directors or staff | 7 | 8 | 7 | 6 | 8 | 7 | 7 | 8 | 7 |
| All Care-Related Staff | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

*Note. Abbreviations: "RNs"= registered nurses; "LPNs"= licensed professional nurses; "CMAs"= certified medication assistants; "CNAs"= certified nursing assistants." AL/RC+MC refers to all settings that responded to this question. Percentages may not equal exactly 100% due to rounding.*
**Personal Care Staff = Personal care staff who are not licensed or certified, such as resident assistant, direct care worker, personal care aide, resident services, caregiver, etc.*

**Table 14. Percentage of care-related staff employed full- and part-time, within employee categories and by setting, 2023**

| | AL/RC | | MC | | AL/RC + MC | |
|---|---|---|---|---|---|---|
| | FT | PT | FT | PT | FT | PT |
| | % | % | % | % | % | % |
| RNs | 67 | 33 | 63 | 37 | 66 | 34 |
| LPNs | 82 | 18 | 88 | 12 | 85 | 15 |
| CNAs | 71 | 29 | 78 | 22 | 74 | 26 |
| CMAs | 88 | 12 | 86 | 14 | 87 | 13 |
| Personal Care Staff | 86 | 14 | 87 | 13 | 87 | 13 |
| Social Workers | 78 | 22 | 75 | 25 | 77 | 23 |
| Activity directors or staff | 82 | 18 | 82 | 18 | 82 | 18 |
| All Care-Related Staff | 85 | 15 | 86 | 14 | 85 | 15 |

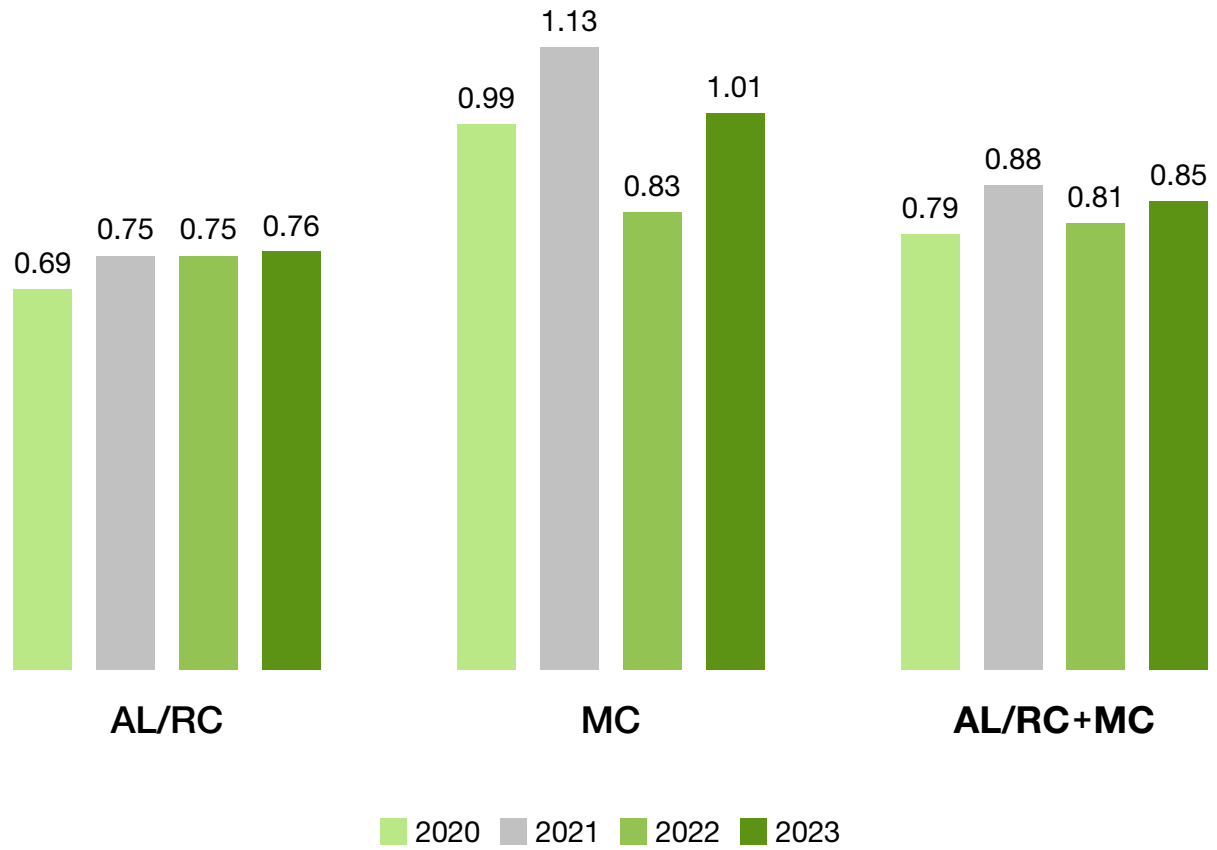
*Note: Percentages within each staff category and setting type add up to 100%.*

## Staff to Resident Ratios

Despite no specific regulations for staffing ratios in AL/RC/MC, each facility is required to provide sufficient and qualified staff to meet residents' 24-hour scheduled and unscheduled needs. This section calculated staffing ratios to residents and compared changes over time. The staffing ratio was calculated by dividing the number of staff to current residents by the response of facilities.

Of the 323 facilities, 313 facilities provided valid information for calculating the staffing ratio. The average ratio of care-related staff in AL/RC/MC is 0.85 (Figure 4). Similar to the previous outcomes, this year's response also shows that the staffing ratio in MC was higher than AL/RC (1.01 and .76, respectively). Compared to previous year's studies, this year's staffing ratios were higher than those in 2020 and 2022 and lower than those in 2021.

**Figure 4. Staff to resident ratios by setting and staff type, 2020-2023**




*Note: Based on cases with no missing data on staffing items and valid staffing data for AL/RC/MC (n=317 in 2020, n=314 in 2021, n=280 in 2022, and n=313 in 2023).*

Table 15 indicates the percentile distribution of staff ratios by facilities. Regardless of percentile, MC has a higher care-related staffing ratio than AL/RC. The top 25th percentile of AL/RC had a 1.00 care-related staffing ratio, meaning they employed one care-related staff for every resident.

The top 10th percentile for all AL/RC/MC was over four times higher than those in the bottom 10th percentile. Potential reasons for these variations might include different resident-level characteristics, such as care needs and preferences, and setting-level characteristics, such as staffing policies.

**Table 15. Percentile distribution of staff ratios by setting, 2023**

| Percentile | Bottom 10th | Bottom 25th | Median | Top 25th | Top 10th |
|---|---|---|---|---|---|
| **Care Staff in AL/RC** | 0.33 | 0.42 | 0.61 | 1.00 | 1.33 |
| **Care Staff in MC** | 0.52 | 0.68 | 0.93 | 1.15 | 1.67 |
| **Care Staff in AL/RC+MC** | 0.36 | 0.48 | 0.73 | 1.08 | 1.48 |

*Note: Percentages are based on unweighted staffing data from the 313 AL/RC/MC with non-missing, valid staffing data. AL/RC+MC refers to all settings that responded to this question.*

## Acuity-Based Staffing Tool and Staffing Levels

The Oregon Legislature passed HB 3359 in 2017 and SB 714 in 2021, which require licensed AL/RC to use an acuity-based staffing tool (ABST) to make staffing decisions by the beginning of 2022 (ODHS, 2022). An ABST is intended to help facilities determine the amount of staff time required to care for current residents based on actual resident care needs. Facilities may use the tool developed by ODHS in response to HB 3359 or another tool that incorporates the elements outlined in OAR 411-054-0037, such as assistance with ADLs, incontinence care, transferring into or out of bed or a chair, support while eating, non-drug treatments for pain management, redirection, nonpharmacological behaviors, monitoring conditions, responding to call lights, safety checks, and resident-specific housekeeping or laundry services. ODHS piloted the use of the newly developed ABST as required by SB 714 in eleven facilities and found that the tool was easy to use, had clear instructions, and provided a graphical summary of data entered into the tool (ODHS, 2021a; ODHS, 2021b).

This year we asked which ABST each community currently uses to determine appropriate staffing levels (Table 16). Of the 305 settings that responded, 74 percent used ABST provided by ODHS, while 26 percent used another ABST. For settings that use ABST provided by ODHS, AL/RC and MC were similarly likely to use ABST provided by ODHS (76 percent and 73 percent, respectively).

**Table 16. Acuity-based staffing tool (ABST) adoption by setting, 2023**

| | AL/RC | MC | AL/RC+MC |
|---|---|---|---|
| | % | % | % |
| **ABST provided by ODHS** | 76 | 73 | 74 |
| **Another ABST** | 24 | 27 | 26 |

*Note: Percentages are based on 305 AL/RC/MC with non-missing. AL/RC+MC refers to all settings that responded to this question.*

The method proposed by the National Center for Health Statistics (NCHS) helps to understand staff availability in licensed care settings (Harris-Kojetin et al., 2016). Staffing levels are calculated as the total number of hours worked by care-related employees per day (RNs, CNAs, CMAs, personal care staff, social workers, and activities staff) divided by the total number of residents. It represents the average staffing hours per resident per day (HPRD), meaning an estimate of staff time spent with residents, not an actual accounting of staffing time. Staffing levels are commonly used to indicate long-term care facility quality (Rome et al., 2019).

Staffing levels in any given facility are widely distributed (Table 17).

The average staffing hours per resident per day in AL/RC/MC are 3 hours 52 minutes; specifically, MC has higher staffing levels than AL/RC (4 hours 38 minutes and 3 hours 25 minutes, respectively). AL/RC/MC in the top 10th percentile has 3.79 times staffing hours per resident per day compared to the bottom 10th and 1.92 times as many as the median facilities. Although staff in MC has higher average hours per resident per day than staff in AL/RC, the differences between the top 10th and bottom 10th percentile within the same type of facilities are larger in AL/RC than in MC. AL/RC in the top 10th percentile has 3.84 times as many hours per resident per day compared to the bottom 10th, while MC in the top 10th percentile has 3.23 times as in the bottom 10th.

**Table 17. Percentile distribution of care hours per resident per day by setting, 2023**

| Percentile | Bottom 10th | Bottom 25th | Middle | Top 25th | Top 10th |
|---|---|---|---|---|---|
| AL/RC | 1:30 | 1:59 | 2:45 | 4:23 | 5:55 |
| MC | 2:25 | 3:11 | 4:17 | 5:16 | 7:49 |
| AL/RC+MC | 1:40 | 2:16 | 3:17 | 5:00 | 6:19 |

*Note: Based on unweighted staffing data from the 313 AL/RC/MC with non-missing, valid staffing data. The numbers reflect Hours:Minutes. AL/RC+MC refers to all settings that responded to this question.*

Table B8 (Appendix B) shows changes in the distribution of care hours per resident per day by setting between 2020 (latest data collected prior to the pandemic) and 2023. Among AL/RC, median care hours increased by 24 minutes per resident per day, from 2 hours and 21 minutes in 2020 to 2 hours and 45 minutes in 2023. During the same period, median care hours among MC increased by 17 minutes, from 3 hours and 57 minutes to 4 hours and 14 minutes. These changes can be attributed to various organizational and staffing changes that occurred, such as declines in occupancy rates, increased use of agency or contract staff, and greater staff retention.

## Employee Benefits

The growing older population has increased the demand for staff and job quality interventions that improve workers' lives and the residents they support in AL/RC/MC. Offering employer-sponsored benefits such as health insurance and paid time off can help to meet these demands (National Governors Association, 2022). Currently, workers in AL/RC/MC settings face below-average coverage rates for employer-provided retirement and health insurance benefits when compared to other workers, and are less likely than other workers to have access to employer-sponsored retirement plans (approximately 25 percent versus 35 percent) or health insurance (approximately 45 percent versus 35 percent) (Hickey et al., 2022). This year, we asked whether facilities offered five benefits (listed in Table 18 below) to each of the following full-time staff types: Administrators, RNs, CNA/CMAs, and personal care staff. More AL/RC/MC administrators were offered health insurance with family coverage, retirement (pension, 401k, or 403b) or life insurance benefits than other full-time workers (Table 18). Personal care staff were offered approximately the same coverage options as administrators, and slightly fewer RNs than administrators were offered these benefits. Fewer CNA/CMA were offered any type of benefit than any type of staff.

More MC than AL/RC administrators were offered either type of health insurance, while more AL/RC administrators were offered a retirement benefit. A slightly greater number of RNs in MC were offered healthcare and time off, and a few more in AL/RC than MC were offered a retirement benefit. More AL/RC than MC CNA/CMA staff were offered any benefit with the exception of health insurance with family coverage. More MC personal care staff were offered either type of healthcare insurance and any type of time off, and more AL/RC than MC personal care staff were offered a retirement or life insurance benefit (Table 18).

## Table 18. Employee benefits to full-time employees by employee categories, 2023

| | | Health insurance that includes family coverage | Health insurance for the employee only | Paid personal time off, vacation time, or sick leave | A pension, a 401(k), or a 403(b) | Life insurance |
|---|---|---|---|---|---|---|
| AL/RC | Administrator | 85 | 74 | 98 | 82 | 76 |
| | RN | 80 | 71 | 92 | 79 | 73 |
| | CNA/CMA | 57 | 57 | 70 | 58 | 54 |
| | Personal Care Staff | 81 | 75 | 96 | 78 | 73 |
| MC | Administrator | 90 | 78 | 100 | 77 | 76 |
| | RN | 83 | 72 | 93 | 72 | 69 |
| | CNA/CMA | 57 | 52 | 67 | 51 | 49 |
| | Personal Care Staff | 89 | 77 | 100 | 74 | 74 |
| AL/RC + MC | Administrator | 87 | 75 | 98 | 80 | 76 |
| | RN | 81 | 72 | 92 | 76 | 72 |
| | CNA/CMA | 57 | 55 | 68 | 55 | 52 |
| | Personal Care Staff | 84 | 76 | 97 | 76 | 74 |

*Note: "RNs"= registered nurses; "CNAs"= certified nursing assistants; "CMAs"= certified medication assistants. AL/RC+MC refers to all settings that responded to this question.*
**Personal Care Staff = Personal care staff who are not licensed or certified, such as resident assistant, direct care worker, personal care aide, resident services, caregiver, etc.*

## Hiring New Staff

Hiring and retaining staff remains a major challenge in AL/RC/MC (Carder et al., 2023), due to many reasons including the COVID-19 pandemic (Fana et al., 2020). We asked facilities how they dealt with staffing shortages in the last 30 days (Table 19). Among the 312 responded facilities, 26 percent of AL/RC/MC hired temporary agency staff to cover staff shortages. As another way to respond to staffing shortages, 13 percent of AL/RC/MC limited new resident admissions. While the percentage of MC that hired temporary staff agency staff is more than those of AL/RC (26 percent and 27 percent, respectively), the percentage of facilities that limited new resident admissions is higher in AL/RC (15 percent) than in MC (11 percent).

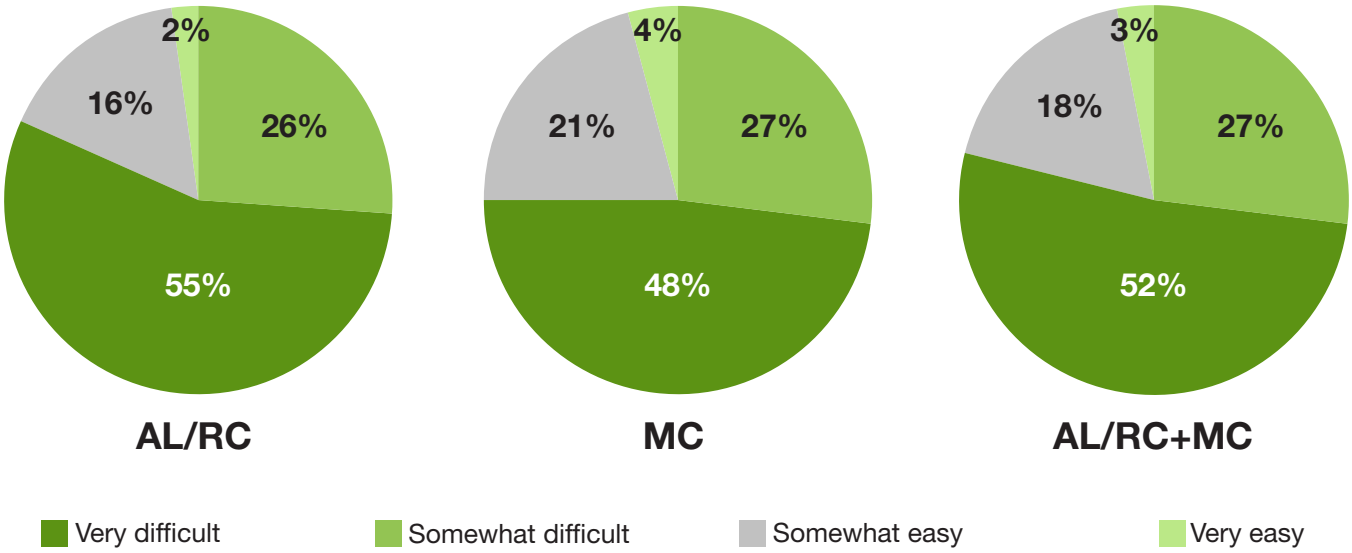
**Table 19. Percentage of facilities that hired temporary agency staff or limited new resident admissions to cover staff shortages, 2023**

| | AL/RC | MC | AL/RC+MC |
|---|---|---|---|
| | % | % | % |
| **Hired temporary agency staff** | 26 | 27 | 26 |
| **Limited new resident admissions** | 15 | 11 | 13 |

*Note: AL/RC+MC refers to all settings that responded to this question.*

This year, we also asked facilities how they rated their ability to hire new staff. Of the 316 respondents, most AL/RC/MC said it was difficult, 27 percent for very difficult, and 52 percent for somewhat difficult, and only 21 percent responded that hiring new staff was somewhat or very easy (Figure 5). While the percentage of AL/RC rated it very easy or somewhat easy to hire new staff was 18 percent, that of MC was 25 percent, indicating that MC is more likely to feel it is easier to hire new staff than AL/RC, although hiring new staff is still challenging.

**Figure 5. Difficulty hiring new staff, 2023**




To understand the barriers to operating facilities due to staff shortages, we asked about the biggest three challenges to hiring new staff in AL/RC/MC. Out of 323 respondents, 32 facilities did not respond to this question, and 38 selected that they did not have any challenges in hiring new staff. Of the remaining 253 respondents, the lack of candidates interested in working at AL/RC/MC is the biggest challenge in hiring new staff (81 percent) and followed by the lack of qualified candidates (65 percent) and competition with jobs in other sectors or industries (64 percent) (Table 20).

Challenges related to the COVID-19 pandemic were not rated as highly, such as vaccination requirements by employer or state (28 percent) and fear of contracting Covid or other infectious diseases (one percent). Since we asked about the biggest three challenges, the percentage of fear of contracting Covid or other infectious diseases is only one percent, even though the anxiety of infectious diseases impacts hiring new staff (Table 20).

**Table 20. Percentage of the biggest 3 challenges to hiring new staff, 2023**

| | AL/RC | MC | AL/RC + MC |
|---|---|---|---|
| | % | % | % |
| Lack of candidates interested in working in this setting | 80 | 82 | 81 |
| Lack of qualified candidates | 68 | 60 | 65 |
| Competition with jobs in other sectors or industries | 64 | 62 | 64 |
| Unable to offer competitive wages | 46 | 46 | 46 |
| Vaccination requirements (by employer or state) | 27 | 31 | 28 |
| Delays in background checks | 8 | 11 | 9 |
| Fear of contracting Covid or other infectious diseases | 1 | 2 | 1 |

*Note: Percentages are based on unweighted staffing data from the 253 AL/RC/MC with non-missing, valid staffing data. AL/RC+MC refers to all settings that responded to this question.*

# RESIDENTS

Major factors in the demographic shift toward a higher proportion of older adults ages 65 and older in the United States include the aging and increased longevity of the baby boom generation (those born from 1946 through 1964), and lower birth rates (Kim et al., 2022). In Oregon, an estimated one in five people will be aged 65 and over by 2030 (Oregon Office of Economic Analysis, 2019) and the demand for CBC is correspondingly expected to increase with the aging population.

The following section describes information about residents including:

- Demographics by setting type,
- Move-in and move-out locations and length of stay,
- Advance care planning,
- Personal care needs and types of staff assistance received,
- Health conditions and health service use,
- Falls, and
- Medication use.

## Resident Demographics

Table 21 describes residents' sex/gender and age ranges by setting type. As in previous years, the largest share of residents across all setting types were female and ages 85 and older. A slightly larger share of residents ages 65 to 74 resided in AL/RC, more residents ages 75 to 84 lived in MC, and a greater number of those ages 85 and older resided in AL/RC communities. As in the previous CBC year's study, the mean age of residents across both setting types was 84 years. The median age of AL/RC residents was slightly higher than MC residents (85 versus 83 years), and slightly higher than in the previous year (approximately 82 years in each setting type).

**Table 21. Sex/gender and age distribution among sampled residents by setting, 2023**

| | AL/RC | MC | AL/RC + MC |
|---|---|---|---|
| | % | % | % |
| **Sex/Gender** | | | |
| **Male** | 35 | 25 | 32 |
| **Female** | 64 | 75 | 68 |
| **Transgender** | <1 | 0 | <1 |
| **Age categories** | | | |
| **18-49** | <1 | <1 | <1 |
| **50-64** | 4 | 3 | 3 |
| **65-74** | 17 | 13 | 16 |
| **75-84** | 29 | 40 | 32 |
| **85 and over** | 50 | 45 | 49 |

*Note: AL/RC+MC refers to all settings that responded to this question.*

Oregon is becoming more diverse in terms of race and ethnicity and approximately 25 percent of Oregonians belong to a minority race or ethnic group. Overall, Hispanics or Latinos comprise the largest minority group in Oregon (13 percent) and has outpaced growth in all other racial groups, nearly doubling in size since 2000. The largest percentage of non-Hispanic minority racial groups was Asian and Pacific Islanders (five percent) (Oregon Office of Economic Analysis, 2019).

Trends in residents' race/ethnicity remain consistent with previous CBC study years. The largest share of residents in all setting types were identified as non-Hispanic White. The remaining 18 percent were identified as Hispanic/Latino or another Non-Hispanic race/ethnicity and most of those were categorized as other or unknown.

**Table 22. Race/ethnicity among sampled residents by setting, 2023**

| | AL/RC | MC | AL/RC + MC |
|---|---|---|---|
| | % | % | % |
| **Hispanic/Latino of any race** | 2 | 2 | 2 |
| **Non-Hispanic** | | | |
| **American Indian/Native American or Alaska Native** | <1 | 1 | <1 |
| **Asian** | 2 | 1 | 1 |
| **Black/African American** | 1 | 1 | 1 |
| **Native Hawaiian/Other Pacific Islander** | <1 | <1 | <1 |
| **White** | 81 | 86 | 82 |
| **Two or more races** | 1 | 1 | 1 |
| **Other or unknown** | 13 | 7 | 12 |

*Note: Percentages may not add up to 100% due to rounding. AL/RC+MC refers to all settings that responded to this question.*

## Move-out Location and Length of Stay

This section presents residents' move-out locations who moved out or died in their current locations in the prior 90 days, and the length of time at the AL/RC/MC. Aging in place refers to an individuals' decision to remain safely in their preferred residence and community while addressing increasing functional limitations and healthcare needs. Research has shown that more than 70 percent of older adults ages 65 and older prefer to age in place and find ways to manage personal care and household chores (called activities of daily living and instrumental activities of daily living), and finances. However, many found their current living situation could not accommodate future needs (Brim et al., 2021). For those whose circumstances require a greater level of care, transition to a CBC setting presents challenges including loss of autonomy, stress, and uncertainty (Sun et al., 2021). Assisting individuals with decision-making and preparations for the transition, and care plans that include residents, family, and facility staff can facilitate a smooth transition (Sun et al., 2021).

Table 23 shows move-in locations of sampled residents. A large share of AL/RC/MC residents moved in from home (46 percent), followed by another AL/RC (11 percent), independent living apartment in senior housing (10 percent), or the home of a child or other relative (10 percent). There was a notable difference between AL/RC and MC. More AL/RC than MC residents moved from home (50 percent and 35 percent respectively) while more MC (21 percent) than AL/RC (7 percent) residents moved from another AL/RC facility. Overall, 10 percent of residents moved from independent living or the home of a child or other relative, with slightly more AL/RC than MC residents moving from either location. Fewer residents (between <1 percent and three percent) moved in from another location type.

Residents' length of stay in a CBC setting is influenced by several personal and environmental factors including medical diagnosis, level of care needs, and person-environment fit (Fields, 2016). One study found that physical functioning is associated with shorter stays than for cognitive functioning (Moore et al., 2019). Understanding reasons for residents' shorter and longer lengths of stay is important for estimating costs and fostering smooth transitions.

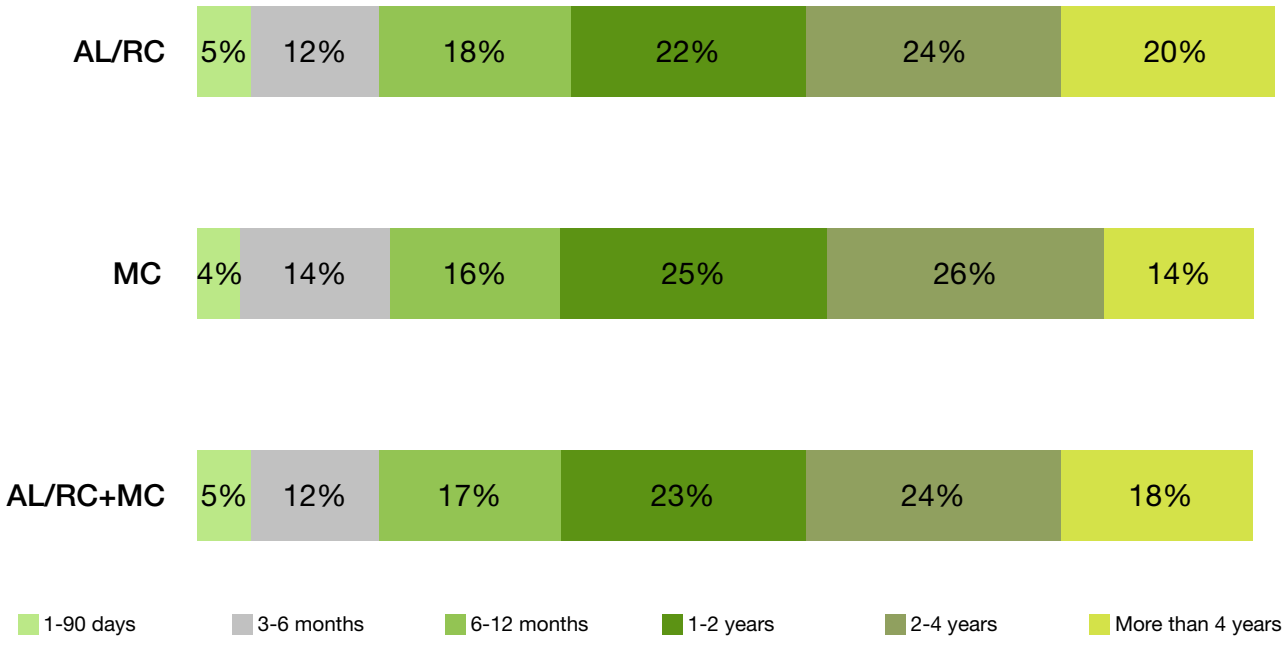
The facility questionnaire asked providers when their current residents moved in and calculated length of stay among current residents as of March 2023. Figure 6 below breaks lengths of stay into six time periods and can be grouped into shorter or longer stay periods. As in prior years, most residents who moved had lived in their AL/RC/MC for two or more years. Just over half of MC residents stayed for this duration, while slightly fewer AL/RC residents did so (51 percent versus 46 percent). Fewer (34 percent) resided in an AL/RC/MC for one year or less.

**Table 23. Move-in locations among sampled residents by setting, 2023**

| | AL/RC | MC | AL/RC + MC |
|---|---|---|---|
| | % | % | % |
| **Home (alone or with spouse/partner)** | 50 | 35 | 46 |
| **(Another) Assisted living/residential care** | 7 | 21 | 11 |
| **Nursing or Skilled Nursing Facility** | 5 | 4 | 5 |
| **Independent living apartment in senior housing** | 11 | 6 | 10 |
| **Home of child or other relative** | 11 | 8 | 10 |
| **(Another) Memory care community** | <1 | 5 | 2 |
| **Adult foster care** | 2 | 2 | 2 |
| **Hospital** | 3 | 6 | 3 |
| **Psychiatric hospital** | <1 | <1 | <1 |
| **Houseless/homeless** | 1 | 1 | 1 |
| **Criminal justice system (e.g., prison)** | <1 | <1 | <1 |
| **Don't know** | 8 | 10 | 9 |
| **Other** | 1 | 1 | 1 |

*Note: AL/RC+MC refers to all settings that responded to this question.*

**Figure 6. Length of stay among residents who moved out by setting, 2023**




## Advance Care Planning & Legal Documentation

The COVID-19 pandemic highlighted existing gaps in and public awareness of advance care planning, particularly a lack of cohesion between acute care, hospital palliative care, and long-term care settings (Hirakawa et al., 2021). For the first time, we asked providers whether residents had certain medical, financial, or legal relationships on file in their resident records. Oregon Administrative Rules state that each resident record must include documentation of financial and legal relationships if they exist, including advance directives, guardianship, conservatorship, and power of attorney (OAR 411-054-0034).

In addition to these relationships, we also asked about medical/legal documentation that could be related to advance care planning, such as Do-Not-Resuscitate (DNR) orders, health care proxy, and Physician or Portable Orders for Life-Sustaining Treatment (POLST). We describe these documents from most to least prevalent (Table 24). Compared to AL/RC residents, a larger share of MC residents had these types of documentation on record overall.

**Physician Orders for Life-Sustaining Treatment (POLST).** POLST forms utilize a hierarchical set of orders that either suppress or apply CPR if an individual is without a pulse and provides orders for medical treatments, antibiotics, and hydration support if someone does have respiration or pulse (Mirarchi et al., 2015). The POLST form intends to share a person's wishes for their end-of-life treatments concerning CPR, hospitalization, and intensive care in the event of any medical emergency (Oregon Health Authority [OHA], 2020). In Oregon, when first responders arrive at a person's home to respond to a medical crisis, responders can utilize the Oregon POLST Registry database to locate a patient's POLST orders to determine the appropriate steps to follow (OHA, n.d.).

Though intended for severely ill individuals, POLST forms are more universally accepted across various healthcare settings (Mirarchi et al., 2015). POLST forms were the most prevalent type of documentation on file in residents' records (71 percent).

**Table 24. Presence of advanced care planning and legal documentation among sampled residents by setting, 2023**

| | AL/RC | MC | AL/RC + MC |
|---|---|---|---|
| | % | % | % |
| **Physician Orders for Life Sustaining Treatment (POLST)** | 68 | 77 | 71 |
| **Durable medical power of attorney** | 51 | 69 | 56 |
| **Do Not Resuscitate (DNR) Order** | 50 | 59 | 53 |
| **Advance directive or living will** | 36 | 41 | 37 |
| **Health care proxy, surrogate, or agent** | 14 | 17 | 15 |
| **Guardianship** | 10 | 29 | 15 |
| **Conservatorship** | 4 | 9 | 5 |

*Note: AL/RC+MC refers to all settings that responded to this question.*

**Durable Medical Power of Attorney.** There are different relationships under the umbrella of "power of attorney." A durable medical power of attorney is similar to a health care proxy or surrogate (see below for additional details) but is inclusive of financial authority for a person who is incapacitated (Williamson, 2019). While 56 percent of residents had a durable medical power of attorney on record, there was a larger share of MC residents (69 percent) compared to AL/RC residents (51 percent).

**Do Not Resuscitate (DNR) Order.** Over half of AL/RC/MC residents have a DNR order on record. A DNR is a written medical order from a doctor that provides instruction to not perform cardiopulmonary resuscitation (CPR) should an individual's heart stop beating, or their breathing stops (Dugdale III & Zieve, 2022). Healthcare providers must make all necessary attempts to resuscitate a patient unless a person specifies with an advance directive, POLST, or DNR that they decline specific life-saving treatments (Oregon State Hospital, 2019).

One study reported that DNRs have been fraught with misinterpretation by first responders in prehospital settings, which has called for greater acceptance of POLST forms in prehospital settings (Mirarchi et al., 2015). Additionally, a guardian or healthcare representative can agree to a DNR on a patient's behalf (Dugdale III & Zieve, 2022).

**Advance directive & health care proxy.** Advance directives are written documents that provide an individual's explicit wishes concerning treatments under specific circumstances, usually in the context of life-sustaining medical treatments after losing capacity to make informed decisions on their own behalf (Frierson & Jacoby, 2008). In Oregon, advance directives serve the additional purpose of appointing a healthcare representative who has the authority to act on behalf of the incapacitated person. A healthcare representative (or "proxy") can serve as an agent when the patient's medical provider determines a patient is incapacitated (OHA, 2020).

Oregon Revised Statute 127.529 provides the current advance directive for Oregon residents. Under the Oregon advance directive, there are three situations in which people state their desired wishes for their end-of-life care. According to ORS 127.529, Oregon defines them as follows: terminal condition, advanced progressive illness, and permanently unconscious. Furthermore, individuals can express their life's most revered values, what they value for their death, and spiritual beliefs to aid their healthcare representative (ORS

127.529). The individual signs this form in the presence of two witnesses or a notary public, and their nominated healthcare representative accepts the appointment by signing the advance directive.

While 37 percent of residents had an advance directive on file, only 16 percent of residents had a designated health care proxy (15 percent in AL/RC compared to 20 percent in MC). However, over half of residents have durable medical power of attorney in place, suggesting that the majority of this population has some type of healthcare decision making contingency in place.

**Guardianship & Conservatorship.** Guardianship is a legal process used when a person cannot make sound and safe decisions on their own behalf and therefore is subject to undue influence (Oregon Department of Human Services [ODHS], 2014). Guardians generally manage the healthcare and housing of the Protected Person (ODHS, 2014; National Guardianship Association, 2022). Similarly, a Conservatorship is a legal process used to appoint a Conservator to manage the financial affairs of an incapacitated person (Cornell Law School, 2021). The court orders a Conservator to make decisions about the financially incapable person's assets and conserve resources on behalf of the Protected Person.

In Oregon, a person is declared legally incapacitated by the court if they cannot make decisions on their own behalf regarding shelter, food, healthcare, and other sustaining measures to support their long-term maintenance to prevent serious injury or illness and, therefore, necessitating care and supervision from others (Disability Rights Oregon, 2009; ODHS, 2014). In Oregon, only the court (i.e., a judge) can appoint a Guardian or Conservator, and both guardianship and conservatorship are court-ordered relationships (Disability Rights Oregon, 2009; ODHS, 2014). A Guardian and Conservator can be the same person or entity.

Though the least prevalent among the types of documentation we asked about in this study, AL/RC/MC residents do have legal relationships in the form of guardianship and conservatorship (15 percent and five percent respectively). Three times as many MC residents have a legal guardian compared to AL/RC residents and twice as many have a conservatorship in place.

## Assistance with Personal Care

Residents of AL/RC/MC settings often need assistance with personal care (Table 25 on the next page). This need is often a deciding factor to move into a community-based care setting where support with personal care can be received (Edemekong et al., 2022). OAR 411-054 ensures that individuals in need of assistance with activities of daily living and other areas of health and safety, such as vision and cognitive impairment and behavioral symptoms, can receive the support necessary in ways that support the individual's dignity, privacy, choice, individuality, and preferences. These core values are essential to residents feeling respected, which can enhance their self-worth and determination (Clancey et al., 2021).

**Night-Time Care.** Oregon Administrative Rules (OAR 411-054-0070 and OAR 411-057-0150) require qualified staff in AL/RC and MC settings to be available to care for residents' needs at all hours of the day and night. Providers were asked how many residents regularly received assistance from night shift staff during the night. Nearly three quarters of MC residents (73 percent) and 33 percent of AL/RC residents received staff assistance during nighttime hours. This is comparable to findings in 2022, with MC residents requiring substantially more nighttime care than AL/RC residents.

**Mobility Aids and Staff Assistance with Using Mobility Aids.** A mobility aid is a device used to assist walking or improve mobility, such as a cane, walker, or wheelchair. Seventy three percent of residents used a mobility aid to get around, with AL/RC residents (78 percent) reporting greater use of an aid than MC residents (60 percent). However, more MC residents (72 percent) than AL/RC residents (33 percent) regularly received staff assistance to use their mobility aid.

**Two-Person Staff Assistance.** As per ODHS policy (OAR 411-054-0070), "a minimum of two direct care staff must be scheduled and available at all times whenever a resident requires the assistance of two direct care staff for scheduled and unscheduled needs." Overall, 24 percent of residents received assistance from two staff for physical and/or cognitive health needs, a slight increase by two percentage points from 2022. Among MC residents, 39 percent received assistance from two staff, an increase by 7 percent from 2022, compared to 18 percent among AL/RC residents.

**Table 25. Residents who receive staff assistance by setting, 2023**

| | AL/RC | MC | AL/RC + MC |
|---|---|---|---|
| | % | % | % |
| **Night-time care** | 33 | 73 | 45 |
| **Using mobility aids to get around** | 78 | 60 | 73 |
| **Staff assistance for mobility aids** | 33 | 72 | 42 |
| **Two staff care for physical and/or cognitive health needs** | 18 | 39 | 24 |
| **Staff assistance due to a vision impairment or difficulty seeing** | 5 | 14 | 7 |

*Note: AL/RC+MC refers to all settings that responded to this question.*

**Assistance with Behavioral Symptoms.** The Oregon Department of Human Services mandates that facilities providing care for residents with dementia must ensure that their staff receives training in the person-centered care approach. Prior to providing care and services, all staff members are required to undergo training that encompasses the understanding, identification, and assessment of common behavioral symptoms associated with dementia to implement recommended interventions (OAR 411-057-0150 and OAR 411-054-0070).

As depicted in Table 26 on the next page, there are three types of behavioral symptoms for which residents receive staff assistance: (1) Lack of awareness of safety, judgment, and decision making, or ability to orient to surroundings; (2) wandering; and (3) danger to self or others. Among these symptoms, majority of the needed assistance was for the lack of awareness regarding safety, judgment, decision-making, and orientation to surroundings (38 percent of all residents), followed by wandering assistance (15 percent), whereas only a small proportion of residents (5 percent) needed staff assistance due to being a danger to themselves or others.

Comparing the two resident categories, those in MC needed assistance with all three symptoms more frequently than those in AL/RC. For instance, 76 percent of MC residents required assistance due to lack of awareness, compared to 23 percent of AL/RC residents.

In the case of wandering, 38 percent of MC residents needed assistance, while only 6 percent of AL/RC residents did. Furthermore, 11 percent of MC residents needed assistance due to being a danger to themselves or others, compared to 3 percent for AL/RC residents.

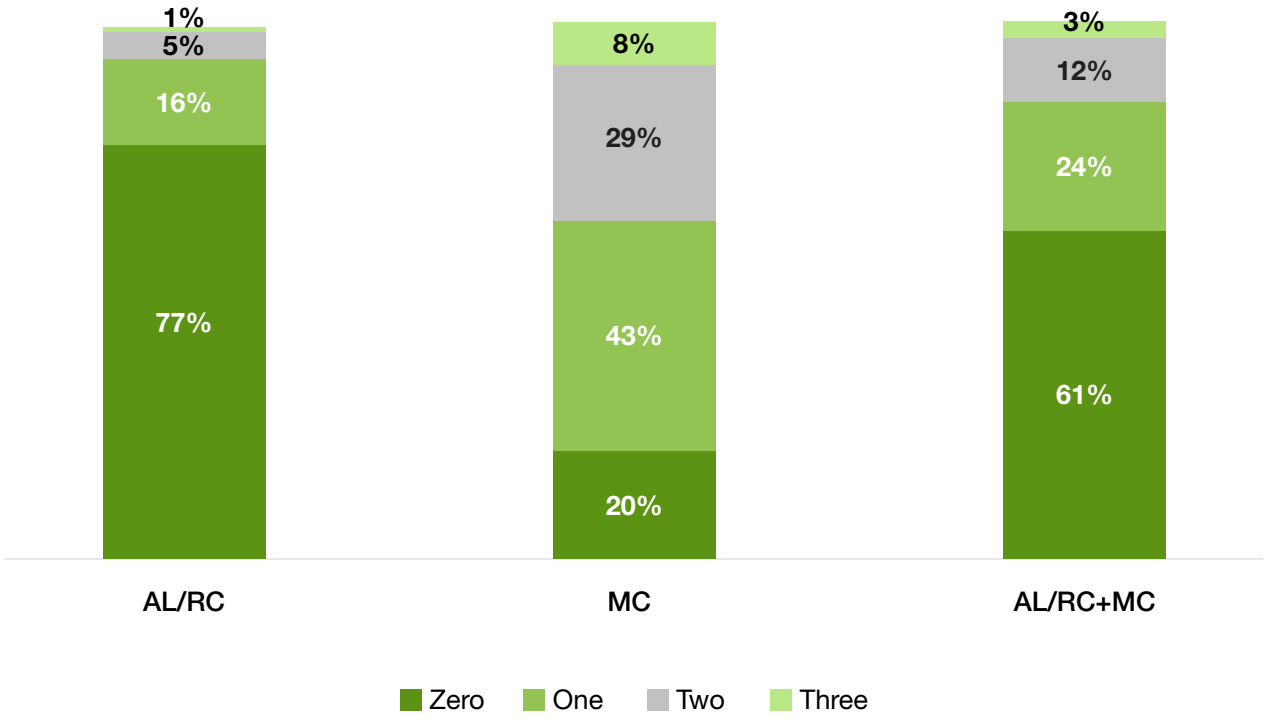
**Table 26. Residents who receive staff assistance for behavioral symptoms by setting, 2023**

| | AL/RC | MC | AL/RC + MC |
|---|---|---|---|
| | % | % | % |
| **Lack of awareness of safety, judgment, and decision making, or ability to orient to surroundings.** | 23 | 76 | 38 |
| **Wandering** | 6 | 38 | 15 |
| **Danger to self or others** | 3 | 11 | 5 |

*Note: AL/RC+MC refers to all settings that responded to this question.*

Figure 7 describes the share of residents who exhibited one or more of the behavioral symptoms described above. Among all AL/RC/MC residents, 61 percent did not require staff assistance with any of these three behavioral symptoms. Twenty-four percent required assistance with only one, 12 percent with two, and three percent with all three behavioral symptoms. As expected, the number of behavioral symptoms among residents varied widely by setting type. A much higher share of AL/RC (77 percent) compared to MC (20 percent) residents did not require staff assistance with any of these three behavioral symptoms.

**Figure 7. Distribution of number of behavioral symptoms among residents by setting, 2023**




**Assistance due to Vision Impairment.** The risk of vision impairment tends to increase with age, significantly impacting independence and quality of life (Shang et al., 2021). Recent data from 2021 shows that more than 1 in 4 adults aged 71 years and older in the United States had vision impairment, which is higher than previous estimates (Killeen et al., 2023). For the first time, we asked providers how many of their residents received assistance due to vision impairment. Among all residents, 7 percent required assistance due to vision impairment or difficulty seeing. Of those, a higher percentage of residents in Memory Care (MC), at 14 percent, needed assistance compared to those in Assisted Living/ Residential Care (AL/RC) at 5 percent. This variation in assistance due to vision impairment between MC and AL/RC aligns with previous studies indicating a connection between vision impairment and accelerated cognitive decline (Yamada et al., 2016; Maharani et al., 2018; Zheng et al., 2018). Additionally, conditions like age-related macular degeneration and glaucoma, which contribute to vision impairment, have also been associated with Alzheimer's disease (Yamada et al., 2016; Maharani et al., 2018; Zheng et al., 2018).

**Assistance with Activities of Daily Living (ADLs).** ADLs encompass fundamental tasks necessary for maintaining one's health and well-being, such as eating, dressing, bathing/grooming, using the bathroom and walking or mobility. Various factors, including the normal aging process, chronic health conditions, cognitive decline, and medication effects, can amplify the need for personal care assistance among older adults (Edemekong et al., 2022). The level of dependence on ADLs has a significant impact on the mortality risk of older adults (He et al., 2015). For instance, hospitalized patients who require assistance with one to three ADLs have a 40% higher likelihood of death within a year, while those reliant on all five ADLs are four times more likely to die within the same period compared to individuals without ADL disabilities (He et al., 2015). Figure 8 below illustrates the proportion of residents in AL/RC/MC facilities who regularly receive staff assistance with the five ADLs. Overall, the majority of residents (76 percent) received assistance with bathing and grooming, followed by dressing (57 percent), using the bathroom (48 percent), mobility/walking (35 percent) and eating (16 percent). Notably, among all the five ADLs, the percentage of MC residents required assistance was greater than AL/RC residents.

**Figure 8. Residents who receive staff assistance with personal care, 2023**

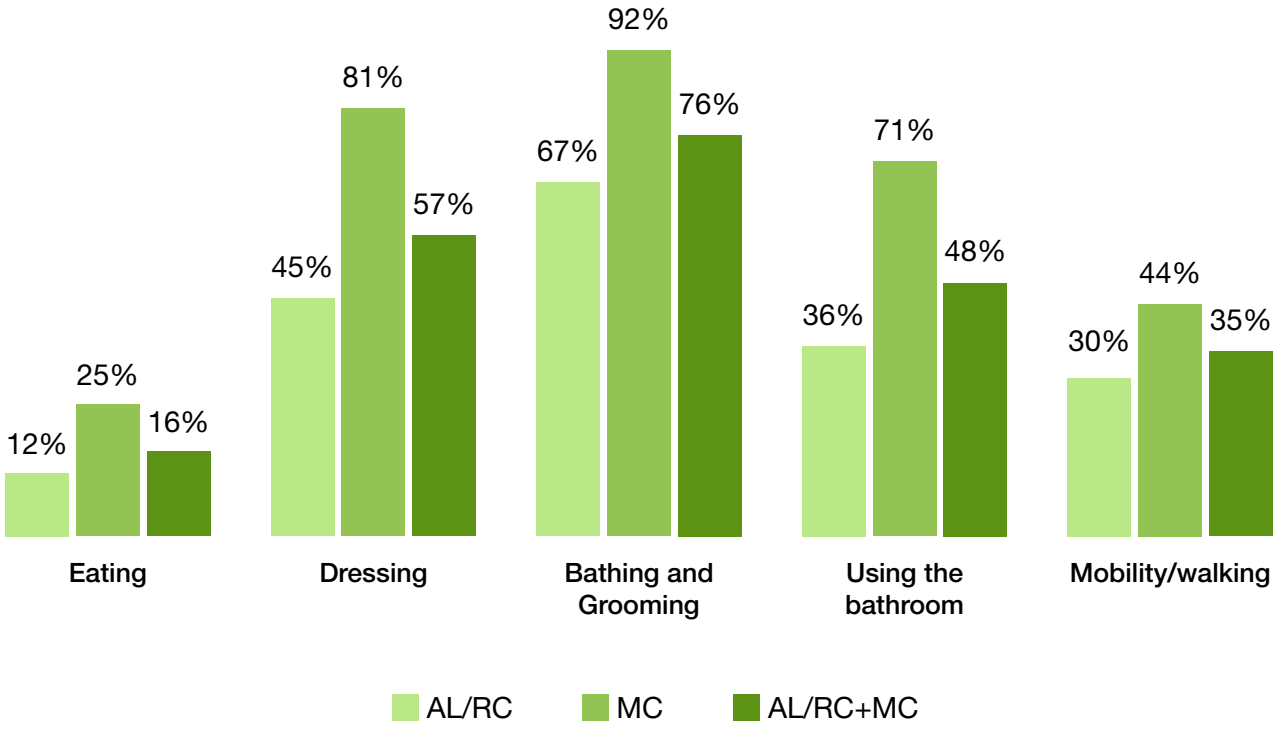
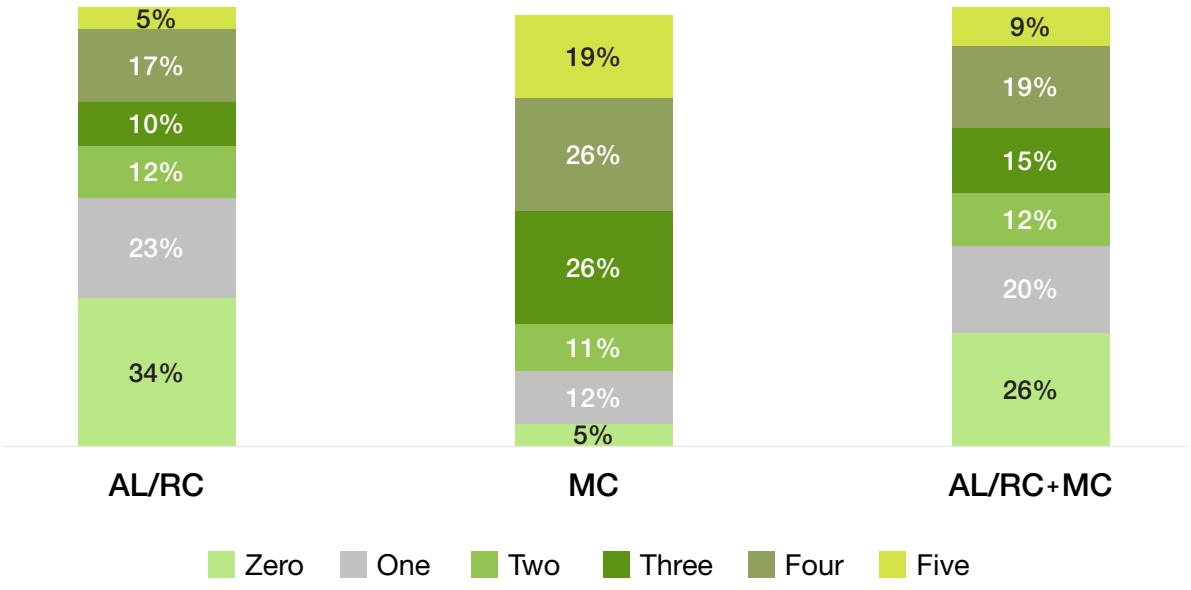



Figure 9 below illustrates the distribution of residents based on the number of ADLs they require assistance with, ranging from zero to five. A higher proportion of MC residents (19 percent) receive assistance with all five ADLs, compared to AL/RC residents (5 percent). Regarding residents who did not receive any assistance with the five ADLs, approximately one-third (34 percent) of AL/RC residents received no assistance, compared to MC residents (5 percent).

**Figure 9. Residents by number of ADLs for which they receive staff assistance, 2023**



## Additional Services and Transportation Use Among Residents

We asked AL/RC/MC if they provide the following services to their residents: private home care or personal support, physical therapy, hospice services, escorts to medical or dental appointments, transportation services for medical, dental, or other health-related appointments, transportation services for social and recreational activities or shopping, and behavioral or mental health services. As shown in Table 27 below, the three most frequently used services among all residents were transportation services for medical, dental, or other health-related appointments (60 percent), followed by transportation services for social and recreational activities or shopping (54 percent), and escorts to medical or dental appointments (31 percent).

Service use varies by facility type. In total, AL/RC residents had higher usage across all services except for hospice services and escorts to medical or dental appointments, where more MC residents utilized these services compared to AL/RC. Regarding the most utilized services mentioned earlier, a larger proportion of AL/RC residents (65 percent) used transportation services for medical, dental, or other health-related appointments, whereas among MC residents, this figure stood at 47 percent. Similarly, for transportation services for social and recreational activities or shopping, more AL/RC residents (61 percent) utilized the service compared to 37 percent among MC residents. However, a higher percentage of MC residents (42 percent) used escort services to medical or dental appointments compared to 27 percent of AL/RC residents.

**Table 27. Services usage of resident in AL/RC/MC, 2023**

| | AL/RC | MC | AL/RC + MC |
|---|---|---|---|
| | % | % | % |
| Private home care or personal support | 6 | 4 | 6 |
| Physical therapy | 15 | 5 | 12 |
| Hospice services | 6 | 16 | 9 |
| Escorts to medical or dental appointments | 27 | 42 | 31 |
| Transportation services for medical, dental, or other health-related appointments | 65 | 47 | 60 |
| Transportation services for social and recreational activities or shopping | 61 | 37 | 54 |
| Behavioral or mental health services | 11 | 5 | 10 |

*Note: AL/RC+MC refers to all settings that responded to this question.*

## Health Conditions

The presence of chronic health conditions is often associated with older age. As individuals age, their susceptibility to chronic diseases such as ADRD, heart disease, type 2 diabetes, arthritis, and cancer increases (Centers for Disease Control and Prevention [CDC], 2022). Many of these conditions can lead to physical and cognitive impairments, requiring ongoing treatments such as medications and therapies. Moreover, they are significant contributors to illness, disability, mortality, and healthcare costs in the nation (CDC, 2022). Research indicates that a majority of older adults aged 65 and above in the United States have more than one chronic condition (Jaul & Barron, 2017; Ward & Schiller, 2013). This prevalence of multiple chronic conditions is on the rise due to the aging population (Hayek et al., 2017; Gerteis et al., 2014). Table 26 below displays the percentage of AL/RC/MC residents who have been diagnosed with common chronic health conditions. The five most prevalent conditions among them are hypertension (61 percent), Alzheimer's disease and related dementias (ADRD) (50 percent), depression (40 percent), heart disease (37 percent), and anxiety disorder (26 percent).

## Significant Change in Condition

According to the ODHS/OAR, a significant change of condition refers to a substantial deviation from the most recent evaluation, which has the potential to impact various aspects of the resident's functioning or health. This deviation is not expected to be short-term and poses a significant risk to the resident (OAR 411-054-0040). In the event of such a significant change, the facility is required to assess the resident, consult the facility nurse, record the change, and adjust the service plan accordingly. Overall, 11 percent of residents in AL/RC/MC experienced a significant change in their health condition. Moreover, a greater proportion of MC residents (14 percent) experienced a change in health condition compared to AL/RC residents (10 percent).

**Table 28. Resident health conditions by setting, 2023**

| | AL/RC | MC | AL/RC + MC |
|---|---|---|---|
| | % | % | % |
| High blood pressure/hypertension | 62 | 59 | 61 |
| Alzheimer's disease and other dementias (ADRD) | 30 | 99 | 50 |
| Depression | 37 | 48 | 40 |
| Heart disease | 39 | 30 | 37 |
| Anxiety disorder | 25 | 30 | 26 |
| Arthritis | 28 | 17 | 25 |
| Diabetes | 26 | 20 | 24 |
| Osteoporosis | 18 | 19 | 18 |
| COPD and allied conditions | 12 | 7 | 10 |
| Stroke | 11 | 10 | 11 |
| Cancer | 12 | 8 | 11 |
| Serious mental illness | 11 | 12 | 12 |
| Drug and/or alcohol abuse | 7 | 7 | 7 |
| Traumatic brain injury | 3 | 2 | 3 |
| Pressure wound or injury | 4 | 2 | 4 |
| Obesity | 12 | 5 | 10 |
| Substance use disorder | 3 | 1 | 2 |

*Note: AL/RC+MC refers to all settings that responded to this question.*

## Falls & Fall-Related Injuries

Falls are a common reason for hospitalization among AL residents (Gimm & Kitsantas, 2016), and those with an ADRD diagnosis are eight times more likely to fall than residents without dementia (Allan et al., 2009).

Providers were asked how many falls with injury residents had during the last 90 days. It was reported that 16 percent of AL/RC residents and 22 percent of MC residents, with a total average of 18 percent across all settings, had one or more falls resulting in some kind of injury (Table 29).

**Table 29. Fall-related injuries, 2023**

| | AL/RC | MC | AL/RC + MC |
|---|---|---|---|
| | % | % | % |
| **Any fall resulting in some kind of injury** | 16 | 22 | 18 |
| **1 fall** | 9 | 13 | 10 |
| **2 or more falls** | 7 | 9 | 8 |

*Note: AL/RC+MC refers to all settings that responded to this question.*

## Health Service Use

Health service use consists of treatment in a hospital emergency room (ER) and overnight hospitalization. In the 90 days prior to completing the questionnaire, AL/RC and MC respondents reported 22 percent and 20 percent of residents were treated in a hospital emergency room (ER), respectively, with a total average of 22 percent across all settings (Table 30). This is the highest rate of ER visits reported across all settings since the beginning of this study in 2015, with the exception of 23 percent of MC residents being treated in the ER in 2022.

Similar to ER visits, this year reported the highest rate of hospitalizations across all settings since 2015. Twelve percent of AL/RC residents and 8 percent of MC were hospitalized overnight, with the total average of hospitalizations in the last 90 days at 11 percent for all settings (Table 30).

**Table 30. Health service use among residents in the last 90 days, 2023**

| | AL/RC | MC | AL/RC + MC |
|---|---|---|---|
| | % | % | % |
| **Treated in the hospital ED** | 22 | 20 | 22 |
| **Hospitalized overnight** | 12 | 8 | 11 |

*Note: AL/RC+MC refers to all settings that responded to this question.*

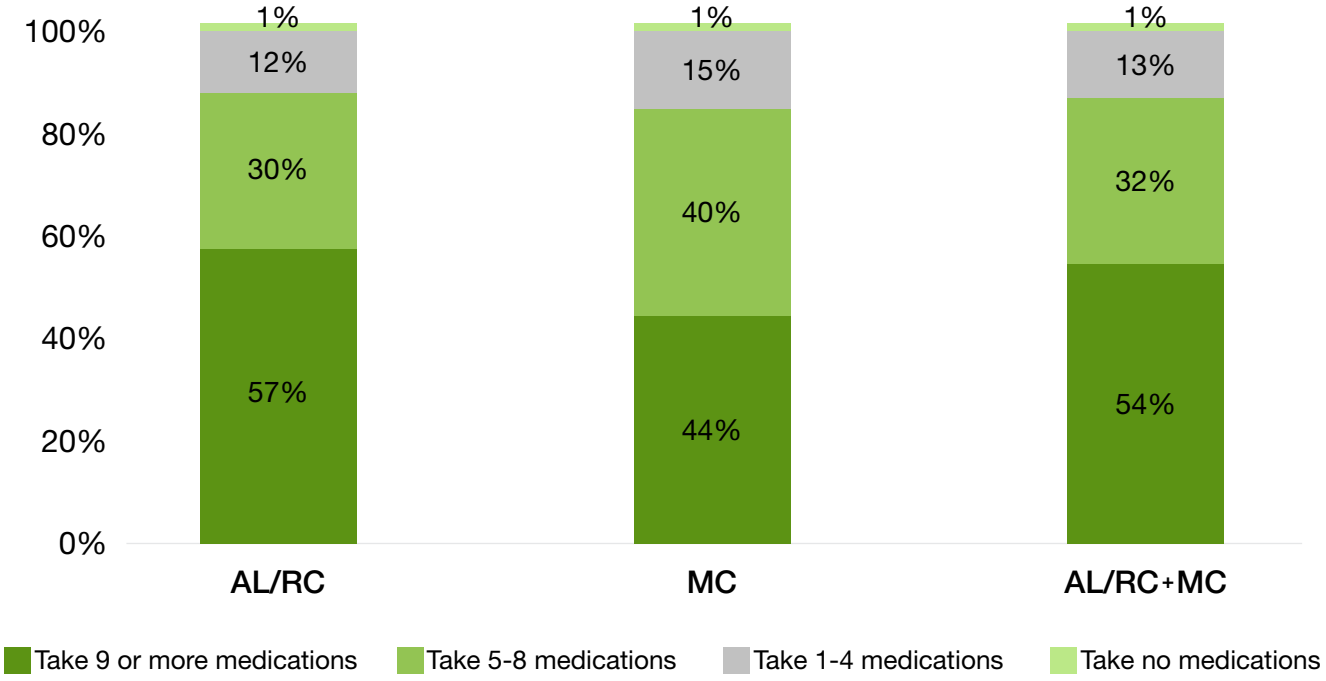
## Medication Use

Assistance with medication management is a common service provided to AL/RC/MC residents. The number of medications a person takes can increase with age with one-third of adults over age 60 using five or more medications, which can result in complex medication management (Hales et al., 2019; U.S. Department of Health and Human Services, 2021). Using multiple types of medications at the same time may be inappropriate and result in adverse events, such as drug-drug interactions, falls, or emergency department visits (Wastesson et al., 2018). This section describes polypharmacy, and the percent of residents who take psychotropic (e.g., antipsychotic, antidepressant, antianxiety, anxiolytic/sedative-hypnotic), opioid, or dementia-specific (i.e., cognition-enhancing) medications on an as-needed or scheduled basis.

**Polypharmacy.** Polypharmacy, or the concurrent use of multiple medications, has many definitions that can depend on the number and clinical significance of the types of medications (Pazan & Wehling, 2022). For each randomly selected resident, AL/RC/MC staff provided the number of prescription medications, including routine (scheduled) or PRN (as-needed) medications that were prescribed or ordered by a physician or health care provider.

The World Health Organization (2019) defines polypharmacy as the concurrent use of five or more medications, including prescription, over-the-counter, and supplemental medications. However, there is significant variation ranging from two to 11 medications (Masnoon et al., 2017). Most AL/RC/MC residents had five or more prescription medications, regardless of setting type (86 percent). Over half of residents had nine or more prescription medications, with a larger share of AL/RC residents (57 percent) than MC residents (44 percent) (Figure 10).

**Figure 10. Number of prescription medications taken by residents by setting, 2023**




**Dementia-Specific Medications.** Cholinesterase inhibitors and glutamate regulators are two drug classes that include five types of medications used to manage cognitive symptoms of dementia. We refer to cholinesterase inhibitors (donepezil, rivastigmine, and galantamine), glutamate regulators (memantine), and a combination (memantine and donepezil) as dementia-specific medications because their clinical indication is to manage cognitive symptoms, including memory loss, misplacing things and losing ability to retrace steps, confusion with time or place, new problems with speaking or writing, decreased or poor judgment, and changes in mood, personality of behavior (Alzheimer's Association, 2023).

About one in five residents received a dementia-specific medication in the prior seven days. As expected, a larger share of MC residents received these medications compared to those living in AL/RC (40 percent versus 13 percent). Recently, the U.S. Food and Drug Administration approved two new anti-amyloid treatments designed to slow disease progression in people living with early Alzheimer's disease or mild cognitive impairment, aducanumab (Cavazzoni, 2021) and lecanemab (U.S. Food and Drug Administration, 2023). These medications were not included in this study.

**Table 31. Medication received as scheduled/routine or as needed/PRN in the last week among residents by setting, 2023**

| | AL/RC | MC | AL/RC + MC |
|---|---|---|---|
| | % | % | % |
| **Dementia-specific** | 13 | 40 | 21 |
| **Antipsychotic** | 20 | 49 | 28 |
| **Anti-depressant** | 36 | 52 | 41 |
| **Anxiolytic/sedative-hypnotic** | 9 | 15 | 11 |
| **Opioid** | 20 | 17 | 19 |

*Note: AL/RC+MC refers to all settings that responded to this question. Dementia-specific medication use calculated only for residents diagnosed with Alzheimer's disease or other dementias.*

**Antipsychotic Medications.** Antipsychotic medications are clinically indicated to treat serious mental illness, such as bipolar disorder or schizophrenia. These medications may be used "off-label" (e.g., nonstandard) to manage behaviors or psychosis that may occur in individuals living with Alzheimer's disease and other dementias, in addition to nonpharmaceutical interventions. Antipsychotic medications may be used to respond to individuals with behaviors, and are more likely to be prescribed to individuals with dementia or have a psychiatric diagnosis (Carder et al., 2022). The Oregon Quality Metrics council considers the frequency of antipsychotic use for nonstandard purposes as a quality indicator and will report estimates for the first time in 2023 (Berger, 2023).

Over one quarter of AL/RC/MC residents received an antipsychotic medication in the prior seven days. Nearly half of MC residents took an antipsychotic medication on as-needed or scheduled basis (49 percent) compared to 20 percent of AL/RC residents, similar to last year's estimates. The U.S. Department of Health and Human Services reported that the number of antipsychotic prescriptions dispensed across the country increased during the COVID-19 pandemic in both nursing homes and in assisted living (U.S. Department of Health and Human Services, 2022). A recent study showed that the federal efforts to reduce antipsychotic prescribing in nursing home residents with dementia did not impact the decline of prescribing among assisted living residents with dementia (Coe et al., 2022).

**Anti-depressant Medications.** As discussed in the Health Conditions subsection above, depression is the third most prevalent diagnosed condition among AL/RC/MC residents, and even more so among MC residents. Depression is a common mental health condition among individuals of all ages (Haigh et al., 2018), though late-life onset of depressive symptoms are associated with cognitive impairment and dementia (Leyhe et al., 2017).

Anti-depressant medications are the most commonly prescribed psychotropic medications among assisted living and nursing home residents (Coe et al., 2022). Over half of MC residents (52 percent) received an anti-depressant medication in the prior week compared to 36 percent of AL/RC residents.

**Anxiolytic/Sedative-hypnotic Medications.** Anxiolytic, or anti-anxiety, and sedative-hypnotic medications are a type of psychotropic medication used to treat anxiety symptoms and disorders. A recent study reported that 14 percent of older adults living with dementia had prescriptions filled for multiple psychotropic medications, among the most popular combinations are antidepressants, benzodiazepines, and antipsychotics (Maust et al., 2021). Though research has shown a slight decrease in anxiolytic/sedative-hypnotic prescribing, and consistent benzodiazepine prescribing pre-pandemic (Coe et al., 2022).

Similar to last year, 11 percent of residents received an anxiolytic/sedative-hypnotic medication in the last week. A larger share of MC residents (15 percent) received these medications compared to AL/RC residents (9 percent).

**Opioid Medications.** Prescription opioid medications can be used as effective short-term treatments for moderate-to-severe pain (Centers for Disease Control, 2017). For some individuals, initiating opioids to treat acute pain (e.g., after surgery, development of back pain) can transition into long-term chronic use and eventually develop into a use disorder (Musich et al., 2019). A recent study reported that during the COVID-19 pandemic, there were no observed changes in overall use of opioids and other medications, however, among newly admitted assisted living and nursing home residents initiation of short-acting opioid medications increased (Stevenson et al., 2022). In our sample, almost one in five residents received an opioid medication in the prior seven days. A slightly smaller share of MC residents received opioid medication (17 percent).

# IMPACT OF COVID-19 PANDEMIC

## Community Experiences during the COVID-19 Pandemic

The COVID-19 pandemic introduced new challenges and exacerbated existing ones for AL/RC/MC residents, staff, and administrators. In response to these challenges, communities and government agencies pivoted to utilizing and providing new resources or increased use of existing ones, increased communication channels, and changes to rules, regulations, policies, and processes. To better track and understand the community experiences with the COVID-19 pandemic, we have been asking the same set of nine statements since 2021 (two items that were previously included were dropped this year). Table 32 below shows the share of AL/RC/MC that agreed or strongly agreed with each of these nine statements in 2021, 2022, and 2023.

Overall, we observe an emerging picture of improvement in several areas as well as ongoing challenges in others. In terms of improvements, communities report high success in accessing personal protective equipment (PPE), and addressing concerns of their residents, families of their residents, and their staff. Communities' reported difficulties with finding new residents have also subsided significantly, from 67 percent back in 2021 down to 26 percent this year. This finding is consistent with the improving occupancy rates that we observed this year and bodes well for the financial wellbeing of the AL/RC/MC sector in Oregon. Finally, the share of AL/RC/MC reporting difficulties with staffing declined from last year, although a sizable share (73 percent) continues to report challenges with staffing.

Most AL/RC/MC reported their residents having used virtual social visits (73 percent) and telemedicine or telehealth (79 percent), with continuing declines from the past two years. It is possible that these declining prevalence in telemedicine or telehealth use may be related to the upcoming or ongoing changes to Medicare rules related to telehealth (U.S. Department of Health and Human Services, 2023).

**Table 32. Provider agreement with statements regarding the coronavirus (COVID-19) pandemic, 2021-2023**

| In the past 12 months... | 2021 | 2022 | 2023 |
|---|---|---|---|
| | % | % | % |
| a. We have been given enough support from county/state agencies to deal with issues/problems due to the pandemic. | 65 | 63 | 64 |
| b. We have been satisfied with the communication about rules and regulations from the county/state agencies. | 67 | 65 | 65 |
| c. We have been able to access personal protective equipment (PPE) (such as eye protection, gloves, N95 respirator masks). | 83 | 88 | 89 |
| d. We have been able to address concerns of my residents' families related to the pandemic. | 89 | 85 | 87 |
| e. We have been able to address concerns of my staff related to the pandemic. | 86 | 83 | 86 |
| f. We have had a harder time finding new residents. | 67 | 43 | 26 |
| g. We have had a harder time with staffing (such as hiring, retaining, and scheduling. | 77 | 90 | 73 |
| h. Our residents have used virtual visits (e.g., iPad, computer, smart phone) with their family members and friends. | 94 | 86 | 73 |
| i. Our residents have used telemedicine or telehealth for purposes of assessments, monitoring, diagnosis, or treatment. | 94 | 85 | 79 |

*Note: Percentages refer to the share of respondents that agreed or strongly agreed with each statement, out of the six possible options ranging from strongly disagree to strongly agree, including "not applicable" responses. In 2021, the look-back period was defined as "As of March 2020, since the COVID-19 pandemic started…" instead of "In the past 12 months…"*

# CONCLUSION

In this report, we describe the state of AL/RC/MC settings using data collected directly from communities in February-March 2023. As in the last two years, the COVID-19 pandemic and its reverberating impacts in the lives of older adults and people with disabilities as well as the broader US society are considerable and should be kept in mind to contextualize the findings included here. Here, we summarize and highlight a few of the findings that might inform policy decisions and practices that may impact AL/RC/MC settings:

## Occupancy rates improved significantly though they remain lower than pre-pandemic levels.

Occupancy rates are an important indicator of financial wellbeing for AL/RC/MC. They dropped significantly during the first two years of the pandemic, potentially threatening the sustainable supply of AL/RC/MC in Oregon. Our findings show that occupancy rates recovered somewhat this year, although they continue to be below their pre-pandemic levels for both AL/RC and MC settings. These trends mirror the national picture in the AL/RC/MC market.

## The number of AL/RC/MC and total number of beds licensed by ODHS/APD did not change significantly.

Considering the lower occupancy rates sustained in the last two years, an important consideration has been how well the AL/RC/MC supply would hold up. To that end, between fall of 2021 and 2022, the number of AL/RC/MC has remained at 570 although the share of MC communities in this total increased slightly from 224 to 229. The corresponding change in the licensed capacity was also muted with an increase of only 8 beds in total (more of which are MC beds). These changes continue the trends we observed in previous reports as the share of MC beds increasing in the AL/RC/MC sector in Oregon.

## Medicaid reimbursement continues to constitute a large source of revenue for Oregon's AL/RC/MC.

Similar to previous years, Medicaid was the primary payer for a significant share of AL/RC and MC residents (39 percent and 45 percent, respectively). There were significant increases in Medicaid reimbursement rates during the pandemic in response to new costs associated with the pandemic, including PPE and increased staffing costs. Overall, the total estimated industry charges were approximately 20 percent higher year-on-year and Medicaid reimbursement corresponded to about one-third of these charges - unchanged from the year before.

## Residents living in AL/RC and MC settings have significant care needs.

In general, our findings point to a resident profile with a high prevalence of many chronic health conditions and notable functional limitations (such as difficulties with bathing, dressing, mobility, medication management, and other activities of daily living or instrumental activities of daily living) that require significant staff assistance - much more so in MC compared to AL/RC. For instance, most AL/RC/MC residents received assistance with two or more ADLs. Almost a third of AL/RC residents (and practically all MC residents) had a diagnosis of ADRD. One in five residents had recently been treated in the hospital emergency department and one in ten residents had recently been hospitalized overnight. Overall, these findings underscore a commensurate need for sufficient staffing with appropriate training for providing care in this setting.

## While improved compared to recent years, significant staffing challenges remain.

While there was improvement in staffing, we also observed several signs of continuing difficulties and adverse effects. On the one hand, the share of AL/RC/MC that reported a harder time with staffing is back at 73 percent, lowest since the pandemic started, from last year when it peaked at 90 percent. On the other hand, 27 percent found it very difficult to hire new staff, one in four communities hired temporary agency staff and one in ten limited new resident missions in response to staff shortages.

Creating better jobs by improving employee benefits constitutes an important pathway to successful recruitment and lowering turnover. About a quarter of communities reported not offering health insurance, retirement plan, and life insurance for full-time personal care staff such as direct care workers and even a larger share did not do so for full-time CNAs and CMAs. These results suggest room for improvement in this area. Future research should also address the benefits offered to part-time staff and characteristics of these benefits at communities that do offer them (e.g., financing or who pays for how much).

*****

We would like to end this report by extending our greatest appreciation for communities and staff who provide valuable care for older adults and people with disabilities, and interested parties and policymakers who advocate and work on their behalf.

# APPENDIX A: METHODS

## Study Population

Every licensed AL and RC facility is eligible to participate in the Community-Based Care study. As of fall 2022, there were 570 AL/RC/MC settings licensed by ODHS. Of these 570, 229 were endorsed to provide memory care services. In prior years, for settings with only a portion of their licensed beds endorsed for MC, we asked providers to complete two separate questionnaires for their AL or RC units and for their MC units. This year, to reduce provider burden, we treated the license as the unit of analysis. If a setting had a license with partial units endorsed for MC, providers only filled out one set of questionnaires for their entire population.

## Data Collection Instruments

IOA/PSU mailed one facility questionnaire, three resident questionnaires, and a resident sampling instruction sheet to each of the 570 AL/RC/MC settings licensed as of fall 2022. The sampling instruction sheet was designed and piloted in 2018 by IOA/PSU and provides a mechanism for respondents to randomly select three current residents based on the number of people who live in the setting.

**Facility questionnaire.** The 2023 facility-level questionnaire included questions about:

- Resident payer mix
- Acuity-based staffing tool use
- Ownership type
- Chain ownership
- Reasons for 30-day move out notices
- Employees, staffing, and benefits
- Contract or agency staffing use
- COVID-19 pandemic impacts

New questions this year included fringe benefits offerings to full time employees, perceived difficulty of hiring new staffing, biggest challenges associated with hiring new staff, and community responses to staffing shortages.

**Resident questionnaire.** The 2023 resident-level questionnaire included questions about:

- Resident demographic characteristics (i.e., sex/gender, race/ethnicity, age)
- Room/apartment sharing
- Move-in date and where the resident lived before moving in
- Health services use
- Information about falls with injury
- Staff assistance with activities of daily living and behavioral expressions
- Advance care planning and legal documentation (e.g., guardianship) on record
- Diagnosed health conditions
- Medication use
- Payer type and charges for private residents
- Monthly reimbursement paid to facility by ODHS for individual residents on Medicaid

Alongside questions asked every year, PSU/IOA included specific questions related to assistance with vision impairment, presence of different types of advance care planning and legal documents in the resident's record, and the total amount reimbursed to the facility for an individual resident who used Medicaid to pay for their services.

## Response Rates

Of the 570 licensed AL/RC/MC, 319 returned a facility-level (F-ARM) questionnaire and one or more resident-level (ARM-R) questionnaires, four returned a F-ARM questionnaire only, and eight returned at least one ARM-R questionnaire only, for a total of 331 responding facilities (319+4+8=331), for a response rate of 58 percent.

Among facilities that returned at least one ARM-R questionnaire (n=327), 318 facilities returned the requested information about three residents; six facilities returned two questionnaires and three facilities returned one questionnaire only.

Overall, this resulted in a data set of 969 resident-level cases.

Facilities differed in their likelihood of responding by geographic region, Medicaid contract, rural status, and profit status. AL/RC/MC outside of the Portland Metro area, rural facilities, facilities with a Medicaid contract, and non-profit facilities had a disproportionately high rate of responding (not shown). Due to these differences, we constructed sampling weights to account for observed response rates and improve representativeness of the sample.

## Weights

Previous years of the CBC study required the design and use of weights to account for differences in response and the likelihood of residents being selected into the study based on facility size. The number of randomly selected residents for each eligible license could be one, two, or three depending on how many questionnaires respondents returned to IOA/PSU. The average probability that each resident was selected into our study sample was calculated by dividing the number of randomly selected residents by the number of residents on the census as reported by the facility.

$$Average\ probability\ of\ selection = \frac{\#\ randomly\ selected\ residents}{total\ number\ residents\ on\ census}$$

To account for residents who have different probabilities of being chosen at random due to differences in facility size, IOA/PSU takes the inverse of the average probability (1/average probability of selection) as a design weight when calculating estimates.

When examining response patterns, IOA/PSU conducted additional analyses to look at the associated between facility-level characteristics and responses to both facility and resident questionnaires. These facility characteristics include license type, region, size, Medicaid contract, and profit status. Results of this analysis (not shown) suggested that facilities differed by some of these characteristics (see Response Rates). IOA/PSU constructed non-response weights for facility and resident data to account for these differences.

IOA/PSU estimated a logistic regression model that included the facility characteristics mentioned above to estimate the predicted probability of responding for each facility. We then used the inverse of the predicted probabilities as the non-response weights, which were applied during analysis of facility-level data. For resident-level data, these non-response weights were multiplied by the design weights used to account for differential likelihood of individual residents being selected into the study as well as the differences observed in responding versus non-responding facilities.

## Item Non-Response

For all questions, respondents are encouraged to provide their best estimates. Various questionnaires contained unanswered questions. In prior years, the IOA/PSU team made attempts to collect missing information from responding facilities through phone calls for facility-level data only. This year, to reduce the burden on respondents, IOA/PSU made the decision not to follow up on missing information.

Depending on the question, the share of missing information ranged from less than one to 20 percent for facility questionnaires and from less than one to 11 percent for resident questionnaires. The questions most often left unanswered were diagnosed medical conditions and guardianship or conservatorship documentation (resident questionnaire) and staffing (facility questionnaire).

## Data Analysis

**Data cleaning.** IOA/PSU performed similar data cleaning procedures as previous years of the study. All data received were entered into Stata, a statistical software package. Data cleaning involved three phases. In phase one, members of the research team checked through the data to confirm that respondents correctly followed skip logic patterns. Skip logic occurs when respondents are directed to answer a follow-up question only if they have relevant characteristics determined by an additional question (please see questions 12 and 13 of the resident-level questionnaire for an example). The second phase of data cleaning involved checks to ensure that all of the answers provided were within valid ranges for each facility. For example, if a resident reported there were 50 current residents, they should not report more than 50 residents in any question.

The IOA/PSU team checked against original copies of the submitted questionnaires to correct any errors in data entry. In the final phase of data cleaning, we cross-checked any items that involved summing to a total value with our own calculation of the sum of multiple categories that add up to an independent total value. For example, in question 1 of the facility questionnaire, respondents are asked to allocate the number of residents by payer type (i.e., Medicaid, Private sources, or Other) and provide the total number of residents. The sum of the values for these three individual categories should equal the total number of residents provided.

**Quantitative analysis.** We used descriptive statistics, such as counts, averages, percentiles, and percentages for all responding facilities and separately by memory care endorsement (AL/RC or MC). Each variable had different levels of missing data (see the Item Non-Response subsection of Appendix A). Any cases with missing information were excluded from final estimates on a variable-by-variable basis. All estimates have been weighted using the design and non-response weights described in the Weights subsection of Appendix A.

## Staffing Ratio and Level Calculation

**Staff-to-resident ratios.** Staffing ratios were calculated by dividing the number of all employees reported by facilities to all current residents.

**Staffing levels.** IOA/PSU reports staffing levels in estimated hours per resident per day. We first estimated the number of full-time and part-time hours by multiplying the number of full-time employees for each type of staff by 35 hours, and then multiplying the number of part-time employees for each type of staff by 17.5. Second, we summed these numbers and divided the resulting total staff hours by the total number of residents. This value was further divided by seven to provide average staff hours per resident per day. No contract or agency staff were included in these estimates. The resulting equation for staffing levels is:

$$\frac{((\text{Number FT staff} \times 35 \text{ hours}) + (\text{Number PT staff} \times 17.5 \text{ hours}))}{\text{Total number of residents}}$$

## Profession Charges

IOA/PSU calculated estimated industry charges and the share of total industry charges paid by Medicaid and private sources following the same formula as previous years (Table A1 on the next page). First, we calculated the number of private pay residents among responding settings. We then multiplied that value by average total monthly charges calculated using resident-level data. Based on estimates calculated from responding settings, we imputed values about non-respondent settings. To estimate the number of residents in non-respondent settings, we used licensed capacity and occupancy rates among responding settings. Then, we used Medicaid rates among responding settings and prevalence of having a Medicaid contract among nonresponding settings to calculate the percentage of Medicaid and private residents living in facilities that did not respond. Lastly, we calculated total monthly charges by multiplying the estimated total number of private pay residents with average total monthly charges calculated using data from the resident-level study. Since all three estimates (occupancy rates, Medicaid rates, and average total monthly charges) for nonrespondent settings assume that the responding and non-respondent settings are similar to each other in terms of these characteristics (an assumption that cannot be tested using available data), the results should be interpreted with caution.

**Table A1. Estimated annual profession charges for AL/RC and MC communities in Oregon, 2023**

| | | AL/RC | MC | AL/RC+MC |
|---|---|---|---|---|
| **Responding Communities (Facility Data, Unweighted)** | | | | |
| **Private Pay** | | | | |
| | **Total current residents** | 8,066 | 4,108 | 12,174 |
| - | **Total current Medicaid benificiaries** | 3,561 | 1,784 | 5,345 |
| = | **Total current private pay residents** | 4,505 | 2,324 | 6,829 |
| x | **Average total monthly charge incl. services (Resident Data)** | $6,082 | $7,738 | |
| = | **Total private pay charges** | $27,399,410 | $17,983,112 | $45,382,522 |
| **Non-Respondent Communities** | | | | |
| **Private Pay** | | | | |
| | **Licensed capacity** | 8,664 | 4,670 | |
| x | **Occupancy rate*** | 74% | 80% | |
| = | **Estimated total current residents** | 6,411 | 3,736 | 10,147 |
| | | | | |
| x | **Estimated % of Medicaid residents*** | 44% | 43% | |
| = | **Estimated total Medicaid beneficiaries** | 2,831 | 1,622 | 4,453 |

*Note: AL/RC+MC refers to all settings that responded to this question.*

**Table A1. (continued) Estimated annual profession charges for AL/RC and MC communities in Oregon, 2023**

| | | AL/RC | MC | AL/RC+MC |
|---|---|---|---|---|
| | | | | |
| | Estimated total current residents | 6,411 | 3,736 | 10,147 |
| - | Estimated total Medicaid beneficiaries* | 2,831 | 1,622 | 4,453 |
| = | Estimated total private pay residents | 3,581 | 2,114 | 5,694 |
| x | Average total monthly charge incl. services (Resident Data) | $6,082 | $7,738 | |
| = | Total est. charges for private pay residents | $21,778,760 | $16,354,651 | $38,133,411 |
| | | | | |
| | Estimates Total Annual Private Pay Charges*** | | | $1,002,191,201 |
| | Total Annual Medicaid Charges Billed (Data from ODHS) | | | $511,626,486 |
| | Total Annual Profession Charges | | | $1,513,817,687 |

*Note: AL/RC = Assisted living and residential care; MC = memory care community*
*AL/RC+MC refers to all settings that responded to this question.*
** Estimates based on respondents to the community-level study applied to residents of communities that did not respond.*
*** Estimates based on respondents to the resident-level study applied to residents of communities that did not respond.*
**** Total est. monthly charges for private pay residents of responding and non-respondent communities multiplied by 12 months for annual estimates.*

# APPENDIX B: ADDITIONAL TABLES

**Table B1. Average monthly private-pay charges among sampled residents, excluding bottom and top 1 percentile, 2023**

| | AL/RC | | MC | | AL/RC+MC | |
|---|---|---|---|---|---|---|
| **Monthly Charge** | **Base** | **Total** | **Base** | **Total** | **Base** | **Total** |
| **Minimum** | $2,756 | $3,824 | $3,766 | $3,825 | $2,756 | $3,824 |
| **Median** | $4,800 | $5,930 | $6,182 | $7,500 | $5,340 | $6,400 |
| **Maximum** | $8,550 | $10,160 | $8,605 | $10,162 | $8,605 | $10,162 |
| **Average** | $4,896 | $6,068 | $6,339 | $7,529 | $5,407 | $6,596 |

*Note: AL/RC+MC refers to all settings that responded to this question.*

**Table B2. Monthly private-pay charges among sampled residents by region, 2023**

| | Portland Metro | Willamette Valley | Southern Oregon | East of Cascades |
|---|---|---|---|---|
| **Base monthly charge** | | | | |
| **Average** | $5,956 | $5,190 | $5,466 | $4,653 |
| **Minimum** | $711 | $1,000 | $927 | $504 |
| **Median** | $5,627 | $4,870 | $5,495 | $4,735 |
| **Maximum** | $12,648 | $11,935 | $9,451 | $9,042 |
| **Total monthly charge** | | | | |
| **Average** | $7,049 | $6,385 | $6,636 | $5,790 |
| **Minimum** | $711 | $1,000 | $1,665 | $875 |
| **Median** | $7,049 | $6,165 | $6,500 | $5,700 |
| **Maximum** | $21,787 | $12,087 | $12,245 | $13,645 |

**Table B3. Monthly private-pay charges among sampled residents by region, excluding bottom and top 1 percentile, 2023**

| | Portland Metro | Willamette Valley | Southern Oregon | East of Cascades |
|---|---|---|---|---|
| **Base monthly charge** | | | | |
| **Average** | $5,784 | $5,104 | $5,413 | $5,127 |
| **Minimum** | $3,100 | $2,827 | $2,756 | $2,867 |
| **Median** | $5,600 | $4,870 | $5,438 | $5,138 |
| **Maximum** | $8,559 | $8,500 | $8,550 | $8,605 |
| **Total monthly charge** | | | | |
| **Average** | $7,002 | $6,332 | $6,753 | $6,087 |
| **Minimum** | $4,053 | $3,825 | $3,824 | $3,950 |
| **Median** | $6,911 | $6,165 | $6,548 | $5,857 |
| **Maximum** | $10,125 | $10,160 | $10,050 | $10,162 |

**Table B4. Comparison of communities that employed at least one full- or part-time care-related staff by employee categories, 2020-2023**

| | 2020 | | | 2021 | | | 2022 | | | 2023 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | FT | PT | Any | FT | PT | Any | FT | PT | Any | FT | PT | Any |
| | % | % | % | % | % | % | % | % | % | % | % | % |
| RNs | 66 | 34 | 94 | 69 | 28 | 91 | 55 | 37 | 87 | 60 | 31 | 84 |
| LPNs | 28 | 7 | 33 | 31 | 7 | 36 | 32 | 6 | 37 | 34 | 6 | 38 |
| CNAs | 22 | 8 | 25 | 26 | 10 | 29 | 19 | 8 | 23 | 20 | 8 | 23 |
| CMAs | 10 | 3 | 10 | 10 | 2 | 10 | 10 | 3 | 10 | 11 | 3 | 13 |
| Personal care staff | 94 | 63 | 98 | 92 | 57 | 97 | 91 | 54 | 98 | 93 | 52 | +8 |
| Social workers | 4 | 1 | 5 | 4 | 2 | 6 | 3 | 2 | 4 | 3 | 1 | 5 |
| Activity directors or staff | 76 | 29 | 87 | 72 | 23 | 81 | 76 | 24 | 86 | 86 | 25 | 91 |

*Note: Abbreviations: "FT"= full time; "PT"= part time; "RNs"= registered nurses; "LPNs"= licensed professional nurse; "CMAs"= certified medication assistants; "CNAs"= certified nursing assistants."*

**Table B5. Sex/gender and age distribution of residents by setting, 2020-2023**

| | AL/RC | | | | MC | | | | AL/RC+MC | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % | | | | % | | | | % | | | |
| | 2020 | 2021 | 2022 | 2023 | 2020 | 2021 | 2022 | 2023 | 2020 | 2021 | 2022 | 2023 |
| **Gender** | | | | | | | | | | | | |
| **Male** | 30 | 33 | 32 | 35 | 29 | 28 | 28 | 25 | 30 | 32 | 31 | 32 |
| **Female** | 70 | 67 | 68 | 64 | 71 | 72 | 72 | 75 | 70 | 68 | 69 | 68 |
| **Trans-gender** | <1 | 0 | 0 | <1 | 0 | 0 | 0 | 0 | <1 | 0 | 0 | <1 |
| **Age Categories** | | | | | | | | | | | | |
| **18-49** | <1 | 1 | 1 | <1 | 0 | 0 | 0 | <1 | <1 | 1 | 1 | <1 |
| **50-64** | 6 | 6 | 6 | 4 | 3 | 2 | 4 | 3 | 5 | 5 | 5 | 3 |
| **65-74** | 15 | 17 | 18 | 17 | 13 | 15 | 20 | 13 | 15 | 16 | 18 | 16 |
| **75-84** | 29 | 26 | 24 | 29 | 30 | 31 | 37 | 40 | 29 | 27 | 28 | 32 |
| **85+** | 49 | 50 | 51 | 50 | 54 | 52 | 40 | 45 | 51 | 51 | 48 | 49 |

*Note: AL/RC+MC refers to all settings that responded to this question.*

## Table B6. Resident race/ethnicity by setting, 2020-2023

| | AL/RC | | | | MC | | | | AL/RC+MC | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % | | | | % | | | | % | | | |
| | 2020 | 2021 | 2022 | 2023 | 2020 | 2021 | 2022 | 2023 | 2020 | 2021 | 2022 | 2023 |
| Hispanic/ Latino of any race | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 |
| Non-Hispanic | 99 | 99 | 98 | 98 | 99 | 99 | 98 | 98 | 99 | 99 | 98 | 98 |
| American Indian/Native American or Alaska Native | 1 | <1 | <1 | <1 | 0 | 1 | <1 | 1 | 1 | <1 | <1 | <1 |
| Asian | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Black/African American | 1 | 1 | 1 | 1 | 1 | <1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Native Hawaiian/ Other Pacific Islander | 0 | 0 | <1 | <1 | 0 | 0 | 1 | <1 | <1 | 0 | <1 | <1 |
| White | 91 | 88 | 89 | 81 | 90 | 89 | 90 | 86 | 91 | 88 | 89 | 82 |
| Two or more races | 0 | 1 | <1 | 1 | 0 | <1 | 0 | 1 | <1 | 1 | <1 | 1 |
| Other or unknown | 5 | 9 | 6 | 13 | 7 | 7 | 5 | 7 | 5 | 8 | 6 | 12 |

*Note: Percentages may not add up to 100% due to rounding. AL/RC+MC refers to all settings that responded to this question.*

**Table B7. Move-In locations among sampled residents by setting, 2020-2023**

| | 2020 | 2021 | 2022 | | | 2023 | | |
|---|---|---|---|---|---|---|---|---|
| | AL/RC + MC | AL/RC + MC | AL/RC | MC | AL/RC + MC | AL/RC | MC | AL/RC + MC |
| | % | % | % | % | % | % | % | % |
| Home (alone or with spouse/partner) | 41 | 42 | 48 | 27 | 43 | 50 | 35 | 46 |
| Another assisted living/residential care | 15 | 12 | 11 | 23 | 14 | 7 | 21 | 11 |
| Nursing or Skilled Nursing Facility | 9 | 9 | 7 | 7 | 7 | 5 | 4 | 5 |
| Independent living apartment in senior housing | 11 | 11 | 13 | 2 | 10 | 11 | 6 | 10 |
| Home of child or other relative | 7 | 8 | 7 | 17 | 9 | 11 | 8 | 10 |
| Another memory care community | 2 | 2 | 1 | 6 | 2 | <1 | 5 | 2 |
| Adult foster care | 3 | 2 | 2 | 4 | 3 | 2 | 2 | 2 |
| Hospital | X | 3 | 3 | 5 | 3 | 3 | 6 | 3 |
| Psychiatric hospital | X | 1 | <1 | 1 | <1 | <1 | <1 | <1 |
| Houseless/ homeless | X | 1 | <1 | <1 | 1 | 1 | 1 | 1 |
| Criminal justice system (e.g., prison) | X | <1 | <1 | 0 | <1 | <1 | <1 | <1 |
| Don't know | 8 | 9 | 5 | 8 | 6 | 8 | 10 | 9 |
| Other | 3 | 1 | 1 | <1 | 1 | 1 | 1 | 1 |

*Note: X indicates that the response category was not available in that year. AL/RC+MC refers to all settings that responded to this question.*

**Table B8. Percentile distribution of care hours per resident per day by setting, 2020-2023**

| | Percentile | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|
| AL/RC | Bottom 10th | 1:26 | 1:32 | 1:32 | 1:30 |
| | Bottom 25th | 1:48 | 1:55 | 1:49 | 1:59 |
| | Middle | 2:21 | 2:42 | 2:30 | 2:45 |
| | Top 25th | 3:49 | 3:55 | 3:42 | 4:23 |
| | Top 10th | 5:15 | 6:34 | 6:15 | 5:55 |
| MC | Bottom 10th | 3:00 | 2:21 | 2:15 | 2:25 |
| | Bottom 25th | 3:19 | 3:28 | 3:16 | 3:11 |
| | Middle | 3:57 | 4:12 | 4:01 | 4:17 |
| | Top 25th | 4:54 | 5:33 | 4:49 | 5:16 |
| | Top 10th | 6:15 | 8:56 | 6:38 | 7:49 |
| AL/RC+MC | Bottom 10th | 1:32 | 1:38 | 1:36 | 1:40 |
| | Bottom 25th | 2:05 | 2:16 | 2:01 | 2:16 |
| | Middle | 3:04 | 3:16 | 3:07 | 3:17 |
| | Top 25th | 4:14 | 4:28 | 4:22 | 5:00 |
| | Top 10th | 5:44 | 7:16 | 6:21 | 6:19 |

*Note: Based on unweighted staffing data from the 313 AL/RC/MC with non-missing, valid staffing data. Data for the years 2020-2022 are from past years' reports. The numbers reflect Hours:Minutes. AL/RC+MC refers to all settings that responded to this question.*

# APPENDIX C: REFERENCES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# APPENDIX D: FACILITY QUESTIONNAIRE

*CCMU/Provider Number:* ***«CCMU Number» («FacType»)***

## Section A. Payer Mix

**1.** **Last month**, how many of **your current residents** primarily paid using the following payment types? *Please count each resident only once and write 0 for any categories with no residents.*

☐ **Medicaid**

☐ **Private sources** - May include resident and/or family personal accounts, Veteran's Aid & Attendance, long-term care insurance, pension, Social Security

☐ **Other:** _____

☐ **TOTAL # OF CURRENT RESIDENTS**

## Section B. Community Characteristics & Policies

**2.** Communities may choose to adopt an acuity-based staffing tool (ABST) provided by the Oregon Department of Human Services (ODHS) or a different one. Which ABST does this community currently use to determine appropriate staffing levels? *Please CIRCLE one choice.*

1. ABST provided by ODHS
2. Another ABST

**3.** What is the type of ownership of this community? *Please CIRCLE one choice.*

1. Private - Nonprofit
2. Private - For profit
3. Publicly traded company or limited liability company (LLC)
4. Government (federal, state, county, or local)

**4.** Is this community owned by a person, group, or organization that owns or manages two or more assisted living, residential care, or memory care communities? This may include a corporate chain. *Please CIRCLE one choice.*

1. Yes
2. No

**5.** In the last 90 days, did this community give a 30-day move-out notice to any residents due to following reasons? *Please mark yes or no for each reason.*

| | Yes | No |
|---|---|---|
| Resident care needs exceeded the level of services provided by this community. | ○ | ○ |
| Resident engaged in behavior or actions that have repeatedly and substantially interfered with the rights, health or safety of residents or others. | ○ | ○ |
| Resident had a medical condition that is complex, unstable, or unpredictable and exceeded the level of health services provided by this community. | ○ | ○ |
| Our community was unable to accomplish resident evacuation in accordance with Fire and Life Safety regulations. | ○ | ○ |
| Resident exhibited behavior that posed a danger to self or others. | ○ | ○ |
| Resident engaged in illegal drug use or committed a criminal act that caused potential harm to themselves or others. | ○ | ○ |
| Resident had unpaid charges owed to this community. | ○ | ○ |

Please go to next page.

## Section C. Employees and Staffing

**6. How many employees does your community currently have?** *An individual is considered an employee if your community is required to issue a Form W-2 federal tax form on their behalf. Please include all current employees, such as direct care, dietary, housekeeping, janitorial, administration, etc.*

☐ **TOTAL NUMBER OF ALL EMPLOYEES**

**7.** For each staff type below, **write the number of full-time or part-time employees** currently employed by your community. ***Write "0" for any categories with no employees****. If any of these employees work in more than one building or campus, please consider only the hours those employees currently work in the building/community listed on the first page.*

| Care-related employees | Number of Full-Time Employees | Number of Part-Time Employees |
|---|---|---|
| Registered nurses (RN) | | |
| Licensed practical nurses (LPN) | | |
| Certified nursing assistants (CNA) | | |
| Certified medication aides (CMA) | | |
| Personal care staff who are not licensed or certified* | | |
| Social workers | | |
| Activities directors or staff (e.g., social engagement) | | |

* Such as resident assistant, direct care worker, personal care aide, resident services, caregiver, etc.

**8. Does your community currently have any contract or agency staff?** *Contract or agency staff refers to individuals or organization staff under contract with and working at this community but are not directly employed by the community. Please CIRCLE one choice.*

1. Yes (go to question 9 below) 2. No (skip to question 10 on next page)

**9.** For each employee/staff type below, **write the number of full-time or part-time contract or agency staff** your community currently has. ***Write "0" for any categories with no contract or agency staff****. If any of these contract or agency staff work in more than one building or campus, please consider only the hours those staff currently work in the building/community listed on the first page.*

| Care-related contract or agency staff | Number of Full-Time Contract or Agency Staff | Number of Part-Time Contract or Agency Staff |
|---|---|---|
| Registered nurses (RN) | | |
| Licensed practical nurses (LPN) | | |
| Certified nursing assistants (CNA) | | |
| Certified medication aides (CMA) | | |
| Personal care staff who are not licensed or certified* | | |
| Social workers | | |
| Activities directors or staff (e.g., social engagement) | | |

* Such as resident assistant, direct care worker, personal care aide, resident services, caregiver, etc.

**10.** Does this community currently offer the following benefits to full-time employees?
*Please mark yes or no for each benefit and staff category.*

| Type of Benefit | Administrator | | RN | | CNA/CMA | | Personal Care Staff Who Are Not Licensed or Certified* | |
|---|---|---|---|---|---|---|---|---|
| | Yes | No | Yes | No | Yes | No | Yes | No |
| Health insurance that includes family coverage | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Health insurance for the employee only | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Paid personal time off, vacation time, or sick leave | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| A pension, a 401(k), or a 403(b) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Life insurance | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

* Such as resident assistant, direct care worker, personal care aide, resident services, caregiver, etc.

**11.** How would you rate your ability to hire new staff right now? *Please CIRCLE one choice.*

1. Very difficult
2. Somewhat difficult
3. Somewhat easy
4. Very easy

**12.** In the last 30 days, did this community do any of the following due to staffing shortages?
*Please mark yes or no for each row.*

| | Yes | No |
|---|---|---|
| Hired temporary agency staff | ○ | ○ |
| Limited new resident admissions | ○ | ○ |

**13.** In your experience, which of the following are the biggest 3 challenges to hiring new staff? If you did not have any challenges, please select the top row. If you had staffing challenges, please write 1, 2, or 3 for the top 3 concerns at your community.

| | |
|---|---|
| We did not have any challenges to hiring new staff | ○ |

| Write 1, 2 or 3 next to your top 3 staffing concerns below. | |
|---|---|
| Unable to offer competitive wages | |
| Lack of candidates interested in working in this setting | |
| Lack of qualified candidates | |
| Fear of contracting Covid or other infectious diseases | |
| Vaccination requirements (by employer or state) | |
| Competition with jobs in other sectors or industries | |
| Delays in background checks | |

**14.** How much do you agree or disagree with the following statements regarding your community's experience with the coronavirus (COVID-19) pandemic in the past 12 months? **Please put an "X" in the column that best describes your experiences.**

| **In the past 12 months…** | **Strongly Disagree 1** | **Disagree 2** | **Neither Agree nor Disagree 3** | **Agree 4** | **Strongly Agree 5** | **Not Applicable to Our Community** |
|---|---|---|---|---|---|---|
| a. We have been given enough support from county/state agencies to deal with issues/problems due to the pandemic. | ① | ② | ③ | ④ | ⑤ | |
| b. We have been satisfied with the communication about rules and regulations from the county/state agencies. | ① | ② | ③ | ④ | ⑤ | |
| c. We have been able to access personal protective equipment (PPE) (such as eye protection, gloves, N95 respirator masks). | ① | ② | ③ | ④ | ⑤ | |
| d. We have been able to address concerns of our residents' families related to the pandemic. | ① | ② | ③ | ④ | ⑤ | |
| e. We have been able to address concerns of our staff related to the pandemic. | ① | ② | ③ | ④ | ⑤ | |
| f. We have had a harder time finding new residents. | ① | ② | ③ | ④ | ⑤ | |
| g. We have had a harder time with staffing (such as hiring, retaining, and scheduling). | ① | ② | ③ | ④ | ⑤ | |
| h. Our residents have used virtual visits (e.g., iPad, computer, smart phone) with their family members and friends. | ① | ② | ③ | ④ | ⑤ | |
| i. Our residents have used telemedicine or telehealth for purposes of assessments, monitoring, diagnosis, or treatment. | ① | ② | ③ | ④ | ⑤ | |

# APPENDIX E: RESIDENT QUESTIONNAIRE

**1.** Who is completing this questionnaire? **Mark all that apply.**

- ☐ Administrator
- ☐ Nurse
- ☐ Resident Care Coordinator
- ☐ Direct Care Staff
- ☐ Office staff/Receptionist
- ☐ Other: _____

## COMMUNITY CENSUS

**2.** How many residents live in this community today? This should be equal to the highest number on your resident list (refer to the blue sheet).

☐ Number of residents

## RESIDENT INFORMATION

**3.** Does this resident live in an endorsed Memory Care Unit? **Mark only one answer.**

- ☐ Yes
- ☐ No

**4.** What is this resident's gender? **Mark only one answer.**

- ☐ Male
- ☐ Female
- ☐ Transgender

**5.** What is this resident's age? **Write the age in years.**

☐ Age of resident

**6.** Which one (or more) of the following would you say is this resident's race? **Mark all that apply.**

- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Black/African American
- ☐ Native Hawaiian or Other Pacific Island
- ☐ White
- ☐ Other

**7.** Is this resident of Hispanic, Latino, or Spanish origin or descent? **Mark only one answer.**

- ☐ Yes
- ☐ No
- ☐ Don't know

**8.** When did this resident first move into your community (e.g., January 2017, 11/2005)?

☐ Month and Year

**9.** Does this resident currently share their room/apartment with another person? **Mark only one answer.**

- ☐ No
- ☐ Yes, with a partner, spouse or other relative
- ☐ Yes, with an unrelated roommate

**10.** Where did this resident live immediately before moving into your community? **Mark only one answer.**

- ☐ Home (alone or with spouse or partner)
- ☐ Home of a child or relative
- ☐ Independent living apartment in senior housing
- ☐ Assisted living or residential care community
- ☐ Memory care community
- ☐ Adult foster/care home
- ☐ Nursing facility or Skilled nursing facility
- ☐ Hospital
- ☐ Psychiatric hospital
- ☐ Houseless/homeless
- ☐ Criminal justice system (e.g., prison)
- ☐ Other _____
- ☐ Don't know

## RESIDENT HEALTH, ACUITY, AND HEALTH SERVICES USE

**11.** In the last 90 days, was this resident treated in a hospital emergency room? **Mark only one answer.**

- ☐ Yes
- ☐ No
- ☐ Don't know

**12.** In the last 90 days, was this resident hospitalized overnight? Please exclude trips to the emergency room that did not result in an overnight hospital stay. **Mark only one answer.**

- ☐ Yes
- ☐ No
- ☐ Don't know

**13.** As best you know, during the last 90 days, how many falls with injury has this resident had? By falls with injury, we mean an unintended descent to the floor or other object (e.g., sink, table, surrounding furniture) that results in an injury. This includes falls witnessed by staff or reported by a resident.

**An "injury" may include any of the following:**

- Bruise, abrasion or wound requiring simple intervention such as dressing, ice, limb elevation, topical medications, oral pain medications, etc.
- Dislocation, fracture, intracranial injury, laceration requiring sutures/stitches, skin tear/avulsion or significant bruising.

☐ Number of falls with injury

**This next section is about this resident's mobility and supports provided by staff to this resident.**

**14.** Does this resident use a mobility aid to get around? By mobility aid, we mean a device designed to assist walking or otherwise improve the mobility of people with a mobility impairment, such as a cane, walker, or wheelchair. **Mark only one answer.**

- ☐ Yes (go to question 15)
- ☐ No (skip to question 16)
- ☐ Don't know (skip to question 16)

**15.** Does this resident regularly receive staff assistance to use a mobility aid? **Mark only one answer.**

- ☐ Yes
- ☐ No
- ☐ Don't know

**16.** Does this resident regularly receive assistance from NOC or night shift staff during the night? **Mark only one answer.**

- ☐ Yes
- ☐ No
- ☐ Don't know

**17.** Does this resident regularly receive assistance for physical and/or cognitive health needs from two staff? **Mark only one answer.**

- ☐ Yes
- ☐ No
- ☐ Don't know

**18.** Does this resident regularly receive staff assistance due to a vision impairment or difficulty seeing? **Mark only one answer.**

- ☐ Yes
- ☐ No
- ☐ Don't know

**19.** Does this resident regularly receive staff assistance because they… **Mark Yes or No for each activity.**

| | Yes | No |
|---|---|---|
| Lack awareness to safety, judgment, and decision-making, or ability to orient to their surroundings | ☐ | ☐ |
| Wander | ☐ | ☐ |
| Are a danger to themselves or others | ☐ | ☐ |

**20.** Does this resident need regular and ongoing staff assistance with any of the following? **Mark Yes or No for each activity.**

| | Yes | No |
|---|---|---|
| Eating | ☐ | ☐ |
| Dressing | ☐ | ☐ |
| Bathing and grooming | ☐ | ☐ |
| Using the bathroom | ☐ | ☐ |
| Mobility/Walking | ☐ | ☐ |

**Next, we would like to ask about this resident's health-related needs.**

**21.** **In the last 90 days,** has this resident experienced a significant change in condition (i.e., a major deviation from this resident's most recent evaluation that may affect multiple areas of functioning or health that is not expected to be short-term, and imposes significant risk)? **Mark only one answer.**

- ☐ Yes
- ☐ No
- ☐ Don't know

**22.** For which of the following does your community have documentation in this resident's file? **Mark Yes or No for each document type.**

| | Yes | No |
|---|---|---|
| Guardianship | ☐ | ☐ |
| Conservatorship | ☐ | ☐ |
| Advance directive or living will | ☐ | ☐ |
| Durable medical power of attorney | ☐ | ☐ |
| Health care proxy, surrogate, or agent | ☐ | ☐ |
| Physician Orders for Life-Sustaining Treatment (POLST) | ☐ | ☐ |
| Do Not Resuscitate (DNR) Order | ☐ | ☐ |

## MEDICATION USE AND DIAGNOSED CONDITIONS

The next section asks about prescription medications that this resident takes. Prescription medications include standing (routine) or PRN (as-needed) medications, as prescribed or ordered by a physician or other health care provider.

**23.** About how many prescription medications does this resident currently take on a typical day? **Mark only one answer.**

- ☐ Resident does not take any medications
- ☐ 1-4 medications
- ☐ 5-8 medications
- ☐ 9 or more medications

Questions 24 to 28 ask about types of medications that this resident uses. We provide examples of common medication names; the lists do not include all possible medications for each medication type.

**24.** **In the last 7 days**, did this resident receive any antipsychotic medications? Examples include aripiprazole (Abilify), haloperidol (Haldol), olanzapine (Zyprexa), quetiapine (Seroquel), risperidone (Risperdal). **Mark only one answer.**

- ☐ Yes, as scheduled/routine or as needed (PRN)
- ☐ No
- ☐ Don't know

**25.** **In the last 7 days**, did this resident receive any dementia-specific medications? Examples include donepezil (Aricept), rivastigmine (Exelon), galantamine (Razadyne), memantine (Namenda or Namzaric). **Mark only one answer.**

- ☐ Yes, as scheduled/routine or as needed (PRN)
- ☐ No
- ☐ Don't know

**26.** **In the last 7 days**, did this resident receive any opioid medications? Examples include hydrocodone (Vicodin/Norco/Lortab), oxycodone (Percocet/Endocet), fentanyl, codeine, morphine, hydromorphone, methadone, tramadol. **Mark only one answer.**

- ☐ Yes, as scheduled/routine or as needed (PRN)
- ☐ No
- ☐ Don't know

**27.** **In the last 7 days**, did this resident receive any anti-depressant medications? Examples include sertraline (Zoloft), duloxetine (Cymbalta), venlafaxine (Effexor), bupropion (Wellbutrin), trazodone, citalopram (Celexa), escitalopram (Lexapro), mirtazapine (Remeron), fluvoxamine (Luvox), paroxetine (Paxil). **Mark only one answer.**

- ☐ Yes, as scheduled/routine or as needed (PRN)
- ☐ No
- ☐ Don't know

**28.** **In the last 7 days**, did this resident receive any anxiolytic/sedative-hypnotic medications? Examples include lorazepam (Ativan), alprazolam (Xanax), clonazepam (Klonopin), diazepam (Valium), zoldipem (Ambien). **Mark only one answer.**

- ☐ Yes, as scheduled/routine or as needed (PRN)
- ☐ No
- ☐ Don't know

**29.** Has this resident been diagnosed with any of the following conditions? **Mark Yes or No for each condition.**

| | Yes | No |
|---|---|---|
| Heart disease (e.g., congestive heart failure, coronary or ischemic heart disease, heart attack) | ☐ | ☐ |
| Stroke | ☐ | ☐ |
| Alzheimer's or other dementias (including Lewy body, Huntington's disease, and vascular dementia) | ☐ | ☐ |
| High blood pressure or hypertension | ☐ | ☐ |
| Depression | ☐ | ☐ |
| Anxiety disorder | ☐ | ☐ |
| Serious mental illness (such as bipolar disorder, schizophrenia). Excludes anxiety disorder and depression. | ☐ | ☐ |
| Diabetes | ☐ | ☐ |
| Cancer | ☐ | ☐ |
| Osteoporosis | ☐ | ☐ |
| Chronic obstructive pulmonary disease (COPD) and allied conditions | ☐ | ☐ |
| Drug or alcohol abuse | ☐ | ☐ |
| Arthritis | ☐ | ☐ |
| Traumatic brain injury (TBI) | ☐ | ☐ |
| Pressure wound or injury | ☐ | ☐ |
| Obesity | ☐ | ☐ |
| Substance use disorder | ☐ | ☐ |

## COMMUNITY RATES, FEES, AND SERVICE USE

**30.** During the last month, what was the *primary* method of payment used by this resident? Private sources include resident and/or family personal accounts, Veteran's Aid & Attendance, long-term care insurance, pension, and Social Security. **Mark only one answer.**

- ☐ Medicaid (skip to question 33)
- ☐ Private sources (go to question 31)
- ☐ Other: _____

*If resident uses **private sources** as primary payment method:*

**31.** During the last month, what was *the base monthly charge* for this resident to live in this community? Please include the base charge only for this resident.

☐ Write dollar amount

**32.** During the last month, what was *the total monthly charge* for this resident to live in this community? Please include basic monthly charge *and* charges for any additional services for this resident. *This value should be more than or equal to question 31 above.*

☐ Write dollar amount

*If resident uses **Medicaid** as primary payment method:*

**33.** During the last month, what was *the total monthly reimbursement amount paid to your community by ODHS* for this resident to live in this community?

☐ Write dollar amount

**34.** Which of the following services does this resident currently use? These services may be offered by your community's staff or provided at the community by non-community personnel. **Mark Yes or No for each service.**

| | Yes | No |
|---|---|---|
| Hospice | ☐ | ☐ |
| Private home care or personal support | ☐ | ☐ |
| Physical therapy | ☐ | ☐ |
| Escorts to medical or dental appointments | ☐ | ☐ |
| Transportation services for medical or dental appointments | ☐ | ☐ |
| Transportation services for social and recreational activities or shopping | ☐ | ☐ |
| Behavioral or mental health services | ☐ | ☐ |

**Thank you for completing the questionnaire!**