IMPROVING QUALITY IN MAINE'S NURSING AND RESIDENTIAL CARE FACILITIES

Themes Emerging from the Nursing Home and Residential Care Facility Innovation and Quality Advisory Council

A Stakeholder Group Convened by the
Maine Department of Health and Human Services (DHHS)

Maine Department of Health and Human Services

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EXECUTIVE SUMMARY

The Maine Department of Health and Human Services (DHHS) convened a 26-member stakeholder group to explore quality and innovation in Maine's nursing homes and residential care homes. The Nursing Home and Residential Care Facility Advisory Council includes representatives from facilities, medical providers, advocates, and experts in aging and long-term services and supports (LTSS). The group held eight meetings in 2023 and will continue its deliberations in 2024. This status report discusses the following key themes emerging from the Council's work:

- **A Stable, Well-Trained, Well-Supported Workforce:** A stable, well-trained workforce is the foundation of a facility's ability to deliver high quality care. Most facilities struggle with both recruitment and retention of qualified direct care and support staff. Barriers to a stable workforce include low wages, high patient caseloads, hard emotional and physical work, stressed colleagues, perceived lack of respect and constant threats of burnout. Solutions will require commitments from both policy makers and facility leadership to ensure adequate training, compensation, and support that will result in work environments and cultures that promote healthy, engaged and productive staff.

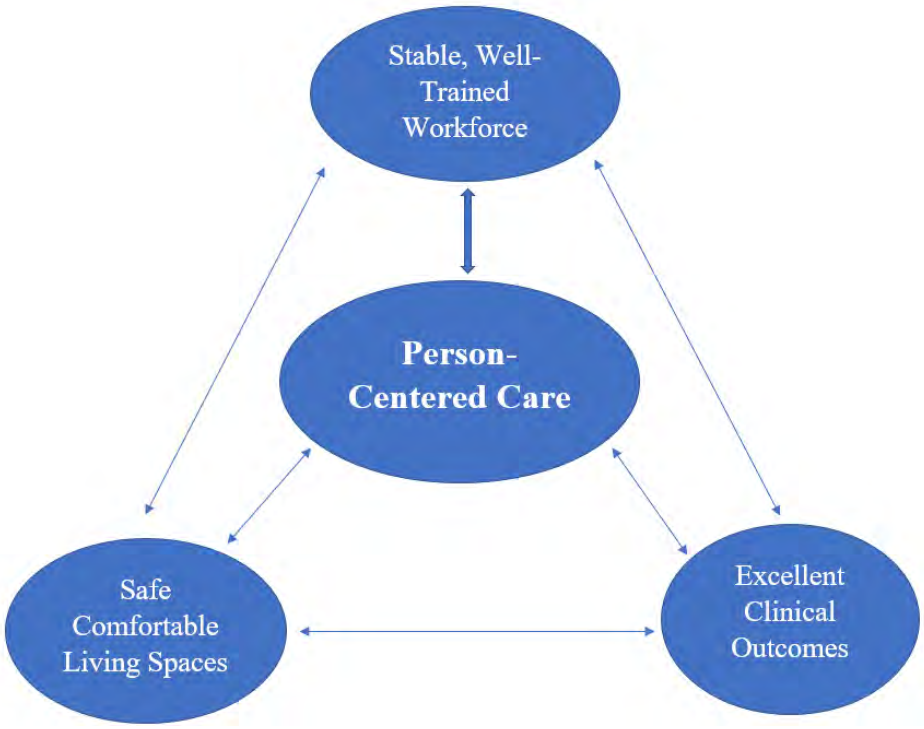
- **Autonomy and Person-Centered Care**: Person centered care requires the completion of a care plan that puts the resident first. The care plan must contain all the elements that a resident uses to define their personal quality of life. The foundation of a person-centered plan of care is the sum of the relationships between a resident and all their care staff. Facilities must ensure a process that elicits components of these care plans, so they are understood and implemented with residents by a caring and knowledgeable staff. The delivery of person-centered care is rewarding for staff and conveys value and personhood to the resident.

- **Excellence in Clinical Care**: Maine's facilities demonstrate opportunities for improvement in rates of falls, rates of urinary tract infections, antipsychotic prescribing, and emergency room utilization. A person reported outcome, bringing in the resident voice, needs to be added to publicly reported outcomes. The sum of this information will be useful when identifying measures that will best align with value-based payment methodologies being considered as part of payment reform.

- **Safe, Comfortable Living Spaces to Promote Efficient and Safe Workflows for Staff, and the Best Quality of Life for Residents**: When the nursing home environment transitions from an institutional model to one that puts residents in control of their lives, with support from an empowered and supported staff, in an environment that more closely aligns with what feels like home, both residents and staff find opportunities to develop meaningful relationships that support better clinical outcomes and improved quality of life for residents and greater satisfaction for staff.

- **Geographic Disparities in Access to High Quality Nursing and Residential Care**: Observations suggest that a health care access disparity might exist when comparing facilities in urban areas to those in more rural settings. This could lead to unnecessary emergency department visits, untreated medical conditions, and greater inconvenience for the residents in more rural facilities. It also likely leads to extra cost. Further analysis of disparities that might exist in rural versus urban facilities is needed.

- **Intersecting Themes**: High quality care is person-centered, delivered by a qualified and supported workforce, in safe and comfortable environments, capable of delivering on excellent clinical outcomes. These themes interact in synergistic ways to strengthen relationships between residents and their care staff and increase the likelihood that a resident will receive person-centered care. This may be represented as follows:



The Council was envisioned in LD 1575, *An Act to Promote Quality and Innovation in Nursing and Residential Care Facilities*, presented by the Department. The bill was carried over to the Second Session of the 131st Legislature. This status report is provided to inform further deliberation of the bill and further disseminate the priorities emerging from the Council's discussions.

DHHS also convened a provider advisory group on payment reform for nursing and residential care facilities in 2023. Promoting quality is a major objective of payment reform, and the work of the Council has been invaluable in assessing quality priorities to incentivize in payment.

BACKGROUND

In April 2023, LD 1575, *An Act to Promote Quality and Innovation in Nursing and Residential Care Facilities,* was presented by the Department to the 131st Legislature. The bill was carried over to a future Session. The bill authorizes the Department to launch initiatives in key quality areas, including person-centered care, resident safety, physical environments that support the highest resident quality of life, recruitment and retention of a well-supported workforce, the expansion and enhancement of meaningful quality measurement and continuous quality improvement, and expanded use of technology to improve the care and experiences of residents. The bill also authorizes development of quality incentives through payment reform, grants, certificate of need (CON) flexibility and technical assistance.

Also in April 2023, the Department convened the Nursing Home and Residential Care Facility Advisory Council, a 26-member stakeholder group including representatives from facilities, medical providers, advocates, and experts in aging and long-term care (Attachment A). The group held eight meetings in 2023 and will continue its deliberations in 2024. This status update summarizes key themes discussed at Council meetings to date and priorities emerging for DHHS as a result.

The purpose for creating the Council was twofold. The first was to advise DHHS in identifying appropriate quality focus areas to consider in a value-based payment methodology for nursing home and residential care facility payment reform. The second was to identify and prioritize other strategies and initiatives for promoting quality in nursing and residential care facilities in Maine, consistent with the key areas noted in LD 1575.

Related State and National Efforts

In February 2020, the Maine Health Access Foundation convened a broad-based group of older adults, advocates, aging services leaders, DHHS and MaineHousing officials, and academic centers to reimagine how residential care could be optimized for adults of all ages who require assistance with activities of daily living. The *Residential Care Think Group* began its deliberations just before the onset of the COVID-19 pandemic and continued its work remotely as the impact of the pandemic on congregate living environments became clear.

The group's report, *Re-imagining Residential Care*, articulated residential care homes with the following attributes:

- Respect for people's **autonomy,** and a **person-centered** and flexible approach to supportive services that maximizes independence and helps residents meet their individual goals;
- Virtual and actual **connections to family and community**, ensuring that life in a residential care home is not isolating or unnecessarily restrictive;
- **Inclusion** of persons from different regions, cultures, and socioeconomic classes;

- **Home-like environments with private and shared spaces**, enabling socialization but also physical separation for privacy and to minimize the spread of infectious disease;
- Implementation of **quality measure**s that include what is most meaningful to residents, quality of care and incentives for providers; and
- A healthy work environment where **staff are well-trained and well supported to promote retention and long-term relationships** with residents.

In April 2022, the National Academies of Science, Engineering & Medicine (NASEM) released its comprehensive consensus study, *The National Imperative to Improve Nursing Home Quality*. The report described nursing home care in the U.S. as "ineffective, inefficient, inequitable, fragmented, and unsustainable," resulting in poor resident outcomes, a demoralized workforce and poorly aligned government spending. The report notes that the Covid-19 pandemic "lifted the veil" on some of these deficiencies, with approximately 25 percent of all COVID-related deaths nationally occurring among nursing home residents and staff.

The NASEM report outlines seven goals and work plans to transform the status quo. Although the study group emphasizes that progress must be made on multiple fronts, it notes that delivery of **person-centered care** by **well-trained staff** provides the foundation for reform. Payment reform, transparency, and integration of technology are required drivers of change. Finally, enhanced approaches to **quality assurance and quality improvement** are critical to ensuring the delivery of the best possible care while **maximizing the quality of life** for residents living in nursing homes.

Noting the convergence of the key principles from Maine's Re-imagining Residential Care report and the NASEM report, DHHS has used the NASEM Report as a starting point for the Maine Council's discussions. The Chair of the committee that produced the NASEM report, Betty Farrell, was the Council's first guest speaker. Dr. Farrell is a nurse leader, educator, and researcher at the City of Hope, Duarte, California. Other national committee members who have assisted Maine with their insights and expertise include Dr. David Grabowski, Harvard Medical School; Dr. Marilyn Rantz, Professor Emeritus of the University of Missouri Sinclair School of Nursing; and Dr. David Stevenson, Department of Health Policy, Vanderbilt University.

THEMES EMERGING FROM THE COUNCIL'S WORK TO DATE

As of November 2023, the Council met eight times. Agendas, meeting materials and summaries can be found here. Council members are listed in Attachment A. The following themes have emerged from the presentations and deliberations of the Council to date.

A Stable, Well-Trained, Well-Supported Workforce

There is a growing body of evidence that links the delivery of high-quality care in nursing homes to adequate and consistent staffing. A January 2023 article published in The JAMA Network Open reported that maintaining constant staffing day-to-day, especially with licensed practical

nurses (LPNs) and certified nursing assistance (CNAs), is a marker of better quality in nursing homes. Unfortunately, staffing shortages are prevalent in long-term care facilities across the nation. The American Health Care Association's (AHCA) State of the Nursing Home Industry Report of June 2023 revealed that approximately 77% of nursing homes are facing moderate to high levels of staffing shortages, based on a survey they completed earlier that year.

It has been widely reported that Covid-19 devastated an already fragile workforce. By November 2021, nursing homes had lost 14% of their direct and support staff nationwide. The impact on older adults needing a nursing home bed was catastrophic, with patients languishing in hospitals, while nursing home beds remaining unoccupied. Nursing home administrators were left to piece together staffing patterns of RNs, LPNs, and CNAs the best they could. Many facilities resorted to contracting for staffing with agencies who could deliver short term nurses and CNAs, but at a price that threatened the financial survivability of many facilities. It has been reported that nursing homes used 24% more contract staff in 2020 than in 2019. Increasing competition for nursing staff resulted in increasing costs and fragmented care for residents, as well as threatening the stability of the long-term care workforce.

As health care moves beyond the impacts of Covid-19, staffing levels and the delivery of patient services are slowly moving toward pre-pandemic levels, both in Maine and nationally. But some providers are finding that path more challenging than others. While hospitals and physicians' offices have returned to pre-pandemic staffing levels, the same is not true for nursing homes and assisted living facilities. According to AHCA's Long-Term Care Jobs Report of January 2023, nursing homes staffing levels remained 13.3% lower in December 2022 than they were in February 2020. The nursing home industry is not expected to return to its pre-pandemic staffing levels until almost 2027, if all goes well. Despite providers increasing wages and offering bonuses, 95% of nursing homes are still experiencing difficulties hiring new staff.

Once a facility successfully identifies, hires, and trains a new RN, LPN or CNA, there is an ongoing concern about the longevity of that new direct care staff. Even before Covid-19, retention of staff was an ongoing frustration and expensive reality for facilities. It has been reported that from 2017-2018 the mean turnover rates for total nursing staff (RNs LPNs, and CNAs) was 129%, with the highest rates seen in facilities with for-profit status, chain ownership, high Medicaid patient census, and facilities with low Medicare.gov overall Star Ratings. Reasons given for difficulties recruiting and retention include low wages, lack of respect, high resident caseloads, all leading to high rates of burnout, and premature exits from the workplace.

Over the course of Advisory Council meetings, the importance of a well-trained and well-supported workforce emerged as a high priority for providing high quality care to nursing home residents. The Advisory Council heard directly from several direct care providers in two panel discussions. The first consisted of members of the Direct Care and Support Professional Advisory Council, a group convened in 2022 to provide support to direct care workers, while creating a strong collective voice to inform policy makers regarding workforce issues. This group had a clear message. These direct care workers have a passion for their work, are

committed to their residents, understand their role in creating relationships, and enjoy making a difference. However, they also describe physical and emotional aspects of their work that are challenging, and likely not sustainable for most. They often need to work extra hours to make ends meet. They frequently find themselves working short-staffed, caring for more residents than they can handle, with fatigued and unhappy colleagues.

The second panel consisted of members of the Maine Veterans' Home Small House Model direct care team. Jacob Anderson, Administrator of the facility, described the organization's transition from a traditional physical structure to the more homelike small house model in early 2022. More importantly, he described the changes in organizational leadership and staff function implemented in parallel to the opening of the doors of their new facility. They embraced a culture change, where the traditional roles of nursing home staff and hierarchy were purposely blurred. While RNs and LPNs still oversee the medical care needs of individual residents, there is a blending of roles and tasks, such that all staff work collaboratively to meet the needs of residents living in their homes. They now embrace the "universal worker," and describe their leadership model as a "collaborative democracy," where direct care and support staff have input and leaders share the work. They also shifted significant resources to direct care, increasing caregiver to resident staffing ratios to allow for the provision of more person-centered care. The early reviews are very positive. The Advisory Council heard directly from Maine Veterans' Home staff, who reported a greater sense of satisfaction and pride in their work. The administrator reported improvements in clinical outcomes, improvements in overall staff satisfaction and a decrease in staff turnover by 24.3% since 2021.

Strategies to recruit and retain a nursing home workforce require a multi-level approach. Consideration should be given to including staffing levels and turnover rates in value-based payment systems. Ways to invite and encourage young people to consider careers in nursing and residential care homes, such as shadowing opportunities, scholarships, and loan forgiveness. For new hires, facilities need to rethink the onboarding process, and consider including enhanced mentoring, management of physical and emotional stresses, and ways to monitor for and prevent burnout. Other promising approaches include career ladders and lattices enabling staff to progress with more advanced training, with some moving to clinical and leadership roles. Facilities need to increase educational programs, such that employees continue to learn new skills, expand their knowledge, and grow in their roles as both caregivers, and professionals

In summary, a well-trained and well-supported workforce is the foundation of a facility's ability to deliver high quality care. Most facilities struggle with both recruitment and retention of qualified direct and support staff. Barriers to a stable workforce include low wages, high patient caseloads, hard emotional and physical work, stressed colleagues, perceived lack of respect and constant threats of burnout. Solutions require commitments from both policy makers and facility leadership to ensure adequate training, compensation, and support, as well as environments and cultures that promote healthy, satisfied, and productive staff.

Autonomy and Person-Centered Care

Person-centered care is an approach to care-planning that puts the resident first. For people living in nursing homes and residential care facilities, their experience of care is synonymous with their quality of life. Person-centered care addresses a person's individual medical and functional needs, while recognizing that they are one part of an overall construct that must be addressed in the context of their environment, experiences, feelings, and wants. Despite needing assistance with activities of daily living and medical oversight, residents still like to make choices about how they spend their day. They want choice in when they wake up, what clothes they wear, what they eat for meals, what activities they participate in, and when they choose to go to bed. They want control over medical treatments they receive. They want to make choices that align with their goals for living well, both today and through the end-of-life. In nursing home practice, this information is ideally captured in a "care plan." Care plans are the vehicle which provides the care team the important information about resident goals, preferences, and priorities. This information is ideally shared and communicated to the entire staff, and the implementation of resident-specific goals should follow. Care plans are typically created by nursing staff upon a resident's admission to the facility, in collaboration with other members of the care team. Care plans are discussed at quarterly interdisciplinary team meetings and updated as resident goals and status change. While all this sounds logical and straightforward, it is actually much more complicated.

Specifically, care plans are structured documents, which may or may not contain all elements that residents use to define a resident's their goals, preferences, and priorities in achieving their best possible quality of life. It is unrealistic to think it could. A care plan's function is closely aligned with meeting certain certification and survey requirements, and might miss its mark in meeting individualized needs. Further, over time a resident's goals and preferences will change, and care plans should be updated to reflect those changes in the moment, rather than quarterly. Perhaps the most important concern about care plans is that they are not always read by all members of the direct care team, and not all staff are present when care plans are reviewed at scheduled meetings. Staff might be short-term, contracted, and less familiar with a resident under their care. While a care plan is a document that tries to capture critical information about residents' needs, it is not guaranteed to deliver person-centered care. Person-centered care requires personal engagement and interaction. It requires the creation of relationships between the resident and their care staff. These relationships must be placed at the foundation of a person-centered plan of care. For a facility to deliver person-centered care, each staff involved in a resident's care must know that resident. Staff must know their likes, their preferences, and their families. They must know who they were at different times of their lives, and what matters most to them today.

Members of the Advisory Council and invited guests presented some of the important initiatives and ideas regarding person-centered planning that are taking place here in the state of Maine. Dr. Deirdre Heersink, a geriatrician and nursing home physician at MaineGeneral Rehabilitation and Long-Term Care at Gray Birch in Augusta, described how they used resident stories and

narratives as an opportunity for staff to develop personal relationships with them. They collaborated with an organization called Memorywell.com, which scheduled, recorded, and transcribed interviews with residents, and created printed narratives, telling the story of each resident's life. These narratives are displayed in rooms and shared with all staff. This has increased satisfaction for staff, who described a new connection to residents. Residents, in turn, reported feeling valued and cared about. This project also resulted in a BBC video, as a People Fixing People feature. See this link.

The Advisory Council also heard from Angi Hunt, Chief Innovations Officer at the Cedars in Portland, as she described two ways the facility has incorporated person-centeredness into their care-planning process. They too have embraced the "resident story" as an opportunity to develop an understanding of who each resident is: Who is this person? What have they done in earlier days? Who is their family? What do they care about? The gathering of information needed to create the resident story begins at the time of referral and continues throughout the admission process. "We want to know who the resident really is by the time they arrive to their room," Angi described. As this information is shared with all direct care and support staff, residents become real people, even more deserving of personal and attentive care. In return, it creates greater personal and professional satisfaction across all levels and disciplines of staff within the facility.

Cedars has also taken steps to become an "Age Friendly Facility" following the template of Age Friendly Health Systems, an initiative of the John A Hartford Foundation and the Institute for Healthcare Improvement (IHI). Becoming an Age Friendly Health System requires providing a set of four evidence-based elements of high-quality care, known as the "4Ms," to all older adults in the system: What Matters, Medication, Mentation, and Mobility. The Cedars considers this framework for each resident and incorporates their status and goals for each "M" into their care plan. The results have been positive, including decreased antipsychotic use, decreased emergency room visits and decreased hospitalization rates among residents.

In summary, person centered care requires the completion of a care plan that puts the resident first. The care plan must contain all the elements that residents use to define their personal quality of life. The foundation of a person-centered plan of care is the sum of the relationships between a resident and all their care staff. Facilities must commit to a process that elicits components of these care plans and ensures that they are taken to the resident by a caring and knowledgeable staff. The delivery of person-centered care is rewarding for staff and conveys value and personhood to the resident.

Excellence in Clinical Care

CMS created the Five Star Quality Rating System to help consumers, families, and caregivers compare nursing homes on important outcomes in three areas: state survey results, staffing, and clinical measures. Each facility receives an overall rating between one and five stars, with one star designating a nursing home that performs much below average quality, and five stars

designating a facility that performs much above average quality. Each facility also receives a separate star rating for each area of surveys, staffing, and clinical measures. This information is gathered on every facility in the United States and is available for public viewing at Medicare.gov.

In the kickoff meeting of the Advisory Council, one of the first topics explored was the Five Star Rating System, and what it reveals about Maine's nursing homes. When reviewing trends in nursing home quality, it is important to consider that stars are awarded based on a percentile within each state. In review of Maine data, the trend is consistent with a "bell curve" distribution, as designed:

- 20% of facilities have been awarded 1 star;
- 57% have been awarded 2, 3 or 4 stars;
- 25% of the facilities have been awarded 5 stars.

However, there is more detail revealed when one explores the stars describing the 3 areas of survey, staffing and clinical measures. Individual facility measures can be viewed and compared to both Maine and national averages.

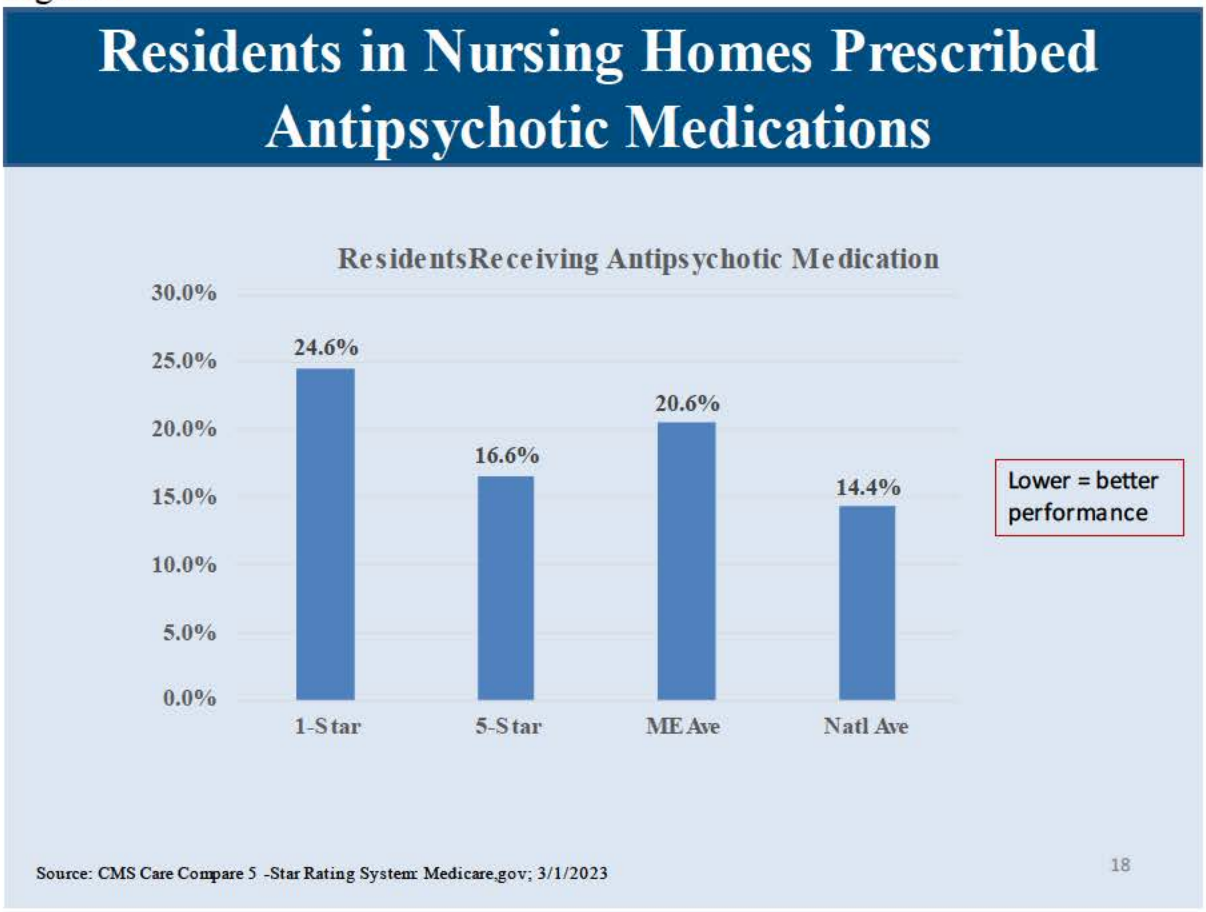
Consider the clinical measures star. Maine performs well (at average or above) in most of the 15 measures used to calculate an overall quality measures star. Below are 5 measures where the Maine average either falls below national averages, or reflects an opportunity for improvement in some of its lower performing facilities:

- Residents of Maine's nursing homes **sustain falls with injury** at a rate that is 20% higher than the national average;
- Residents of Maine's nursing homes **are diagnosed with urinary tract infections** at a rate that is 48% higher than the national average;
- Residents of Maine's nursing homes **are prescribed antipsychotic medication** at a rate that is 43% higher than the national average (20.6% versus 14.4%);
- Residents of Maine's nursing homes **utilize the emergency department** at a rate that is 18% higher than the national average (1.2 visits per 1000 resident days versus 1 visit per 1000 resident days); and
- Residents in Maine's nursing homes **develop skin ulcers and bed sores** at a rate that is 25% lower than the national average, yet residents in low performance facilities (1-star) develop skin ulcers and bed sores at rates 14% higher than national average. (It is also important to note that Maine residents in high performing facilities (5-star) develop skin ulcers and bed sores at rates 50% lower than the national average.)

As Medicare.gov allows Maine to compare their overall performance to national averages, it also allows a review of individual facility performance on clinical measures within its high performing and low performing facilities. It is important to consider measurable variations in performance on clinical measures that contribute to an overall star rating for that facility.

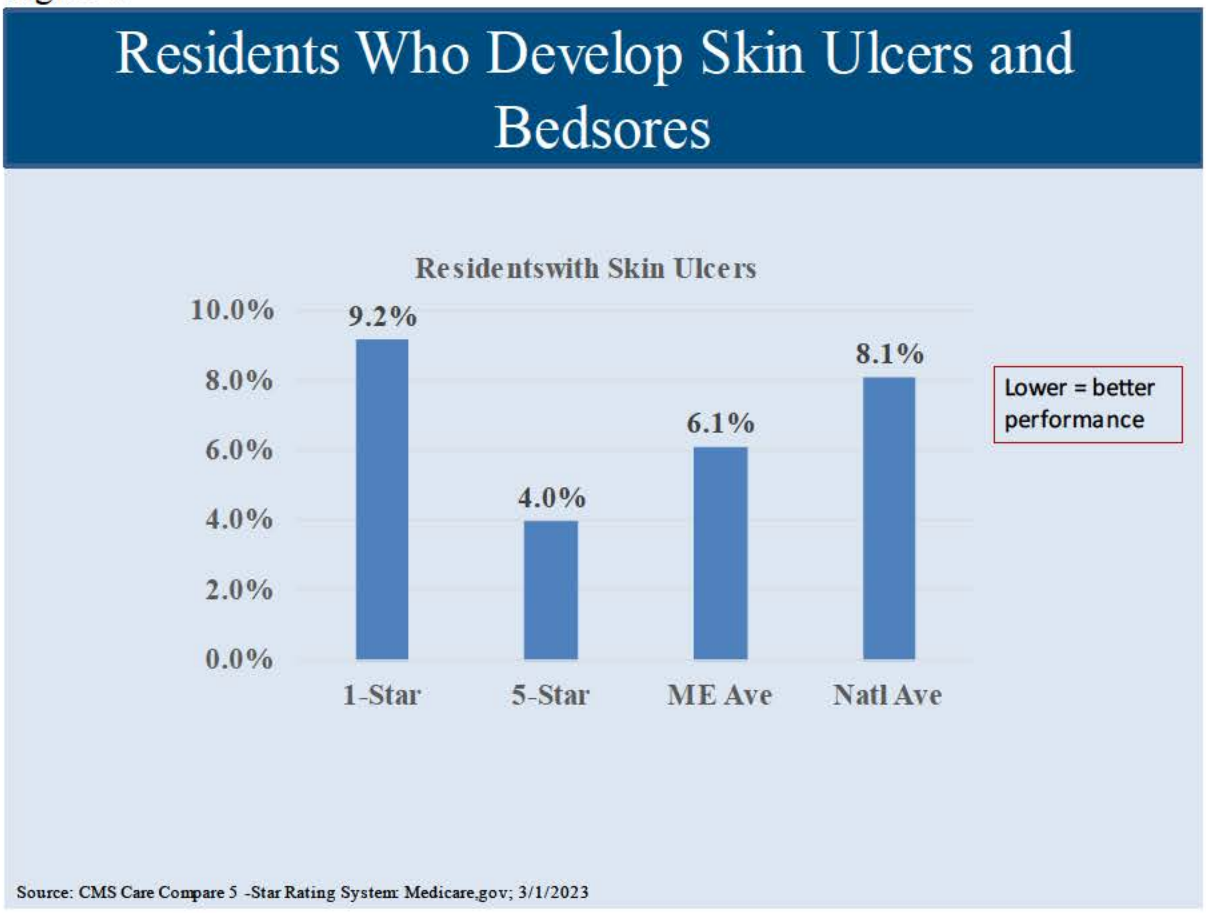
For example, while residents of Maine are prescribed antipsychotic medications at a higher rate than the national average, not all facilities deviate from national trends in equal fashion. See Figure 1. While both one-star and five-star facilities deviate from national benchmarks, antipsychotic prescribing in one-star facilities is greater that what is seen in high performing five-star facilities.

Figure 1



When Maine's average results exceed or outperform a national benchmark, opportunities for improvement may still exist. See Figure 2. Maine does well overall on rates of skin ulcers in nursing home residents, but not all facilities are performing at those high levels. Low performing one-star facilities perform worse than the national average, while Maine's five-star facilities perform much better than the national average.

Figure 2



Final conclusions about quality of care delivered cannot be made based on these observations alone. Maine's number of facilities is small (87 at the time this data was retrieved), and outliers can lead to misleading results and conclusions. Analysis did reveal significant variations in clinical measures across Maine's facilities. A "bad score" on a particular measure may or may not be reflected in a facility's overall star rating. But as CMS collects and reports on these measures, it allows facilities to focus on specific components of residents' care, where quality improvement activities can have an impact.

An important point of discussion within the Advisory Council was the lack of Person Reported Outcomes (PROs) in nursing home quality reporting. Unlike hospitals, home care agencies, and other sites of care, nursing homes have not been required to participate in a process that surveys consumers and patients. The Consumer Assessment of Healthcare Providers and Systems (CAHPS) is a set of surveys that asks patients to report on their health care experiences, on a voluntary, typically post-experience survey. It is overseen by the Agency for Healthcare Research and Quality (AHQR), a federal government agency. Although there is a CAHPS survey that has been developed for nursing home care, that survey is complex, requires in-person completion, and lacks National Quality Forum (NQF) endorsement. Alternatively, an NQF-endorsed resident and family satisfaction survey called CoreQ is a relatively simple

questionnaire. It does have some use in some Maine facilities, but to an unknown extent as this is not a required or publicly available outcome. It is known to be utilized in other states as part of Medicaid incentive programs. The Advisory Council heard from representatives from both the National Health Care Association and the Maine Health Care Association that the CoreQ survey is a tool that has logistical and practical opportunities for use in quality improvement.

In summary, Maine's facilities demonstrate opportunities for improvement in rates of falls, rates of urinary tract infections, antipsychotic prescribing, and emergency room utilization. A person reported outcome, bringing in the resident voice, needs to be added to publicly reported outcomes. The sum of this information will be useful when identifying measures that will best align with value-based payment methodologies being considered as part of payment reform.

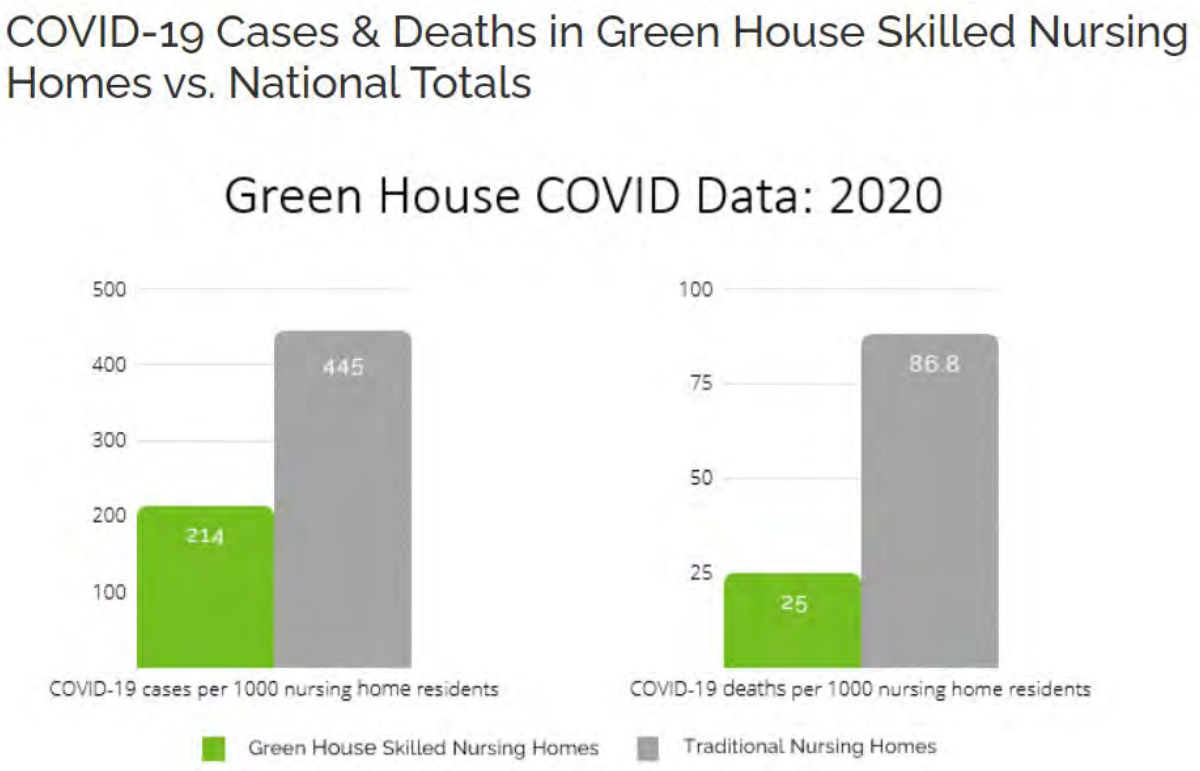
Safe, Comfortable Living Spaces to Promote Efficient and Safe Workflows for Staff, and the Best Quality of Life for Residents

It has been suggested that the term *nursing home* is a misnomer. Most U.S. nursing homes are short on nursing staff, and not typically very homelike in either their physical structure or culture. Historically, nursing homes were built as hospital extensions, with an institutional feel. Residents are typically housed in shared bedrooms, while sharing bathrooms with as many as 2 to 4 other residents. It is not surprising that Covid-19, a highly transmissible respiratory virus, had such devastating consequences in nursing homes. Although it is reported that only 0.6% of the U.S population lives in nursing homes and assisted living facilities, it has been estimated that 25% of Covid-19 deaths occurred in these settings.

In recent years, the "small house/household model" has gained traction as an alternative to traditional nursing homes. The small house/household model is a person-centered approach where residents have a significant say in their lives, their care, and their living environment. This small-scale model typically houses only 10-18 residents, each with their own private bedroom and bathroom. There are multiple common areas, including an open kitchen, where meals are prepared on-site with input from residents. A household/small house model places the older adult at the center of the organizational chart, with staff trained, empowered and organizational structure designed around maintaining the "residents first" approach. Staff recognize the critical philosophical distinction that they work in the residents' home, rather that that the residents live in the staff's workplace.

The evidence suggests that small house/household model nursing homes fared much better than traditional nursing homes against COVID-19. Figure 3 shows data from the Green House Model (the original small/house/household model) Nursing Homes in 2020, most of which occurred in the pre-vaccine Covid-19 era. The rates of new Covid-19 cases per 1000 residents in these small house models were half that seen in traditional nursing homes. Mortality rates in Green House nursing homes were less than one third of that seen in traditional facilities.

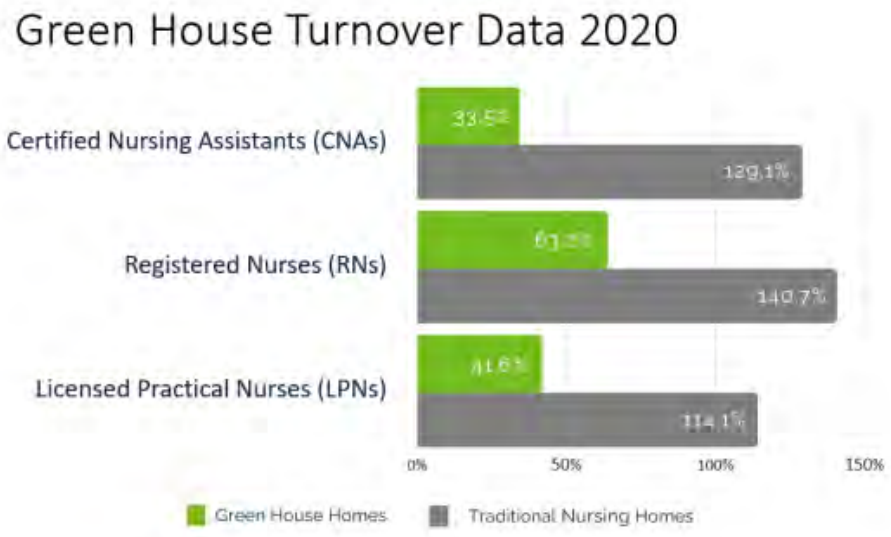
Figure 3:



Reasons given for these improved outcomes include greater private space for residents, as well as easier access to work flows that minimize infection spread from one room to the next. It has been suggested that the attendant workforce was more consistent, felt more supported, and was better able to respond to the increased stresses imposed by the pandemic.

Figure 4 shows the significantly lower mean staff turnover rates experienced by Green House facilities during this same period in year 2020, when traditional nursing homes were seeing turnover rates in the double digits.

Figure 4



Although the Green House is not the only household or small house model that exists in the US, it is the oldest, resulting in the most extensive experience and data. Evaluations of the Green House Model indicate that compared to traditional nursing homes, Green House residents have higher resident satisfaction, higher quality of life, reduced decline in late-loss activities of daily living (ADLs) and fewer hospitalizations. Green House homes also report significant lower staff turnover rates.

While the focus is often on the visible design features that distinguish them, household/small house models are primarily about a radical change in organizational culture and philosophy of care. Features of this model already discussed in the Person-Centered Care theme include a softening of traditional leadership roles, embracing the "universal caregiver" structured within a team-based model, sharing workload across multiple providers and support staff, all while developing relationships with the individual at the center of it all: the resident.

The Advisory Council again heard from Jacob Anderson, the Administrator of the Maine Veterans' Home in Augusta, whose small house model opened in early 2022. He described the inability to separate the changes to the physical environment from the commitment to organizational and staffing change. Staff, while still acting as caregivers for residents living in nursing homes, become surrogates, if not extensions of that resident's family. We heard from multiple direct care and support staff who reported tremendous increases in both personal and professional satisfaction since Maine Veterans' Homes in Augusta became a small house model home. Here are some of MVH Augusta's quality outcomes felt to be directly related to both physical and organizational changes:

- 29% reduction in falls
- Decrease in antipsychotic use from 22.3% in 2020 to 4.3% in 2023

- Stabilization of resident sleep pattern, weights, and challenging behaviors
- Decrease staff turnover rates by 24.3% since 2021

In summary, when the nursing home environment transitions from an institutional model to one that places the resident back in control of their lives, with support from an empowered and supported staff, in an environment that more closely aligns with what feels like home, both residents and staff find opportunities to develop meaningful relationships that support better clinical outcomes and improved quality of life for residents and greater satisfaction for staff.

Geographic Disparities in Access to High Quality Nursing and Residential Care

Maine has the distinction of being both the oldest and most rural state in the nation. Based on information extracted from Care Compare, CMS's Five Star Quality Rating System at Medicare.gov, 40% of Maine's nursing homes are located in urban regions, providing care to roughly 50% of all in-state nursing home residents. The remaining 60% of Maine's facilities are in designated rural and super rural regions. A full 20% of Maine's nursing home residents live in super rural regions, which are notable for both their sparse population and geographic isolation from health care centers and services.

An important question to consider is whether there is a difference in access to quality care and experiences based on geographic location. As discussed in an earlier section, analysis of the Five Star Quality data for Maine did demonstrate lower than national performance in rates of falls, rates of urinary tract infections, antipsychotic prescribing, and emergency room utilization. When Maine's super rural facilities are compared to national averages, the following is observed:

- Residents living in Maine's super rural nursing homes **fall and sustain injury** at rates 25% higher than the national average.
- Residents living in Maine's super rural nursing homes are **diagnosed with urinary tract infections** at almost twice the national average (4.4% versus 2.3%).
- Residents living in Maine's super rural nursing homes **utilize the emergency** department at rates 63% higher than the national average.

As discussed earlier, firm conclusions about quality of care delivered cannot be made based on these observations alone. The trends in these measures align with what is seen at the state level, as they relate to national averages. All we can conclude is that there are opportunities for improvements in the areas of resident falls, urinary tract infections and the use of the emergency department.

Facilities in super rural regions tend to be smaller and have fewer residents. Is there something about these facilities that makes their residents fall more or get more urinary tract infections? Although not presented here, it does not appear to be variations in staffing. Maine has a mandatory staffing requirement in place, and in comparison to national averages, Maine facilities exceed nursing time dedicated to each resident per day. The question to consider is whether these facilities located in the most rural regions of the state might struggle in their ability to manage

some of the underlying medical conditions that predispose residents to falls and urinary tract infections.

Rates of emergency department use among nursing facilities in Maine seem to be related to population density. See Figure 5. In Maine, facilities in urban regions perform better than the national average, regarding emergency department use, while performance seems to decline as population density decreases. The rates of emergency room visits appears linear, with rates twice as high in super rural compared to urban.

In the absence of any more information, a logical question is whether the trend reflects a lack of access to medical oversight, primary care, or subspecialty care in more rural areas of the state. Interestingly, residents of all of Maine's facilities are admitted to hospitals from their nursing homes at lower rates than the national average. See Figure 6. This might suggest that the high rate of emergency department visits in more rural regions might be for more low acuity visits that do not result in hospitalization. These observations merit further examination.

Figure 5

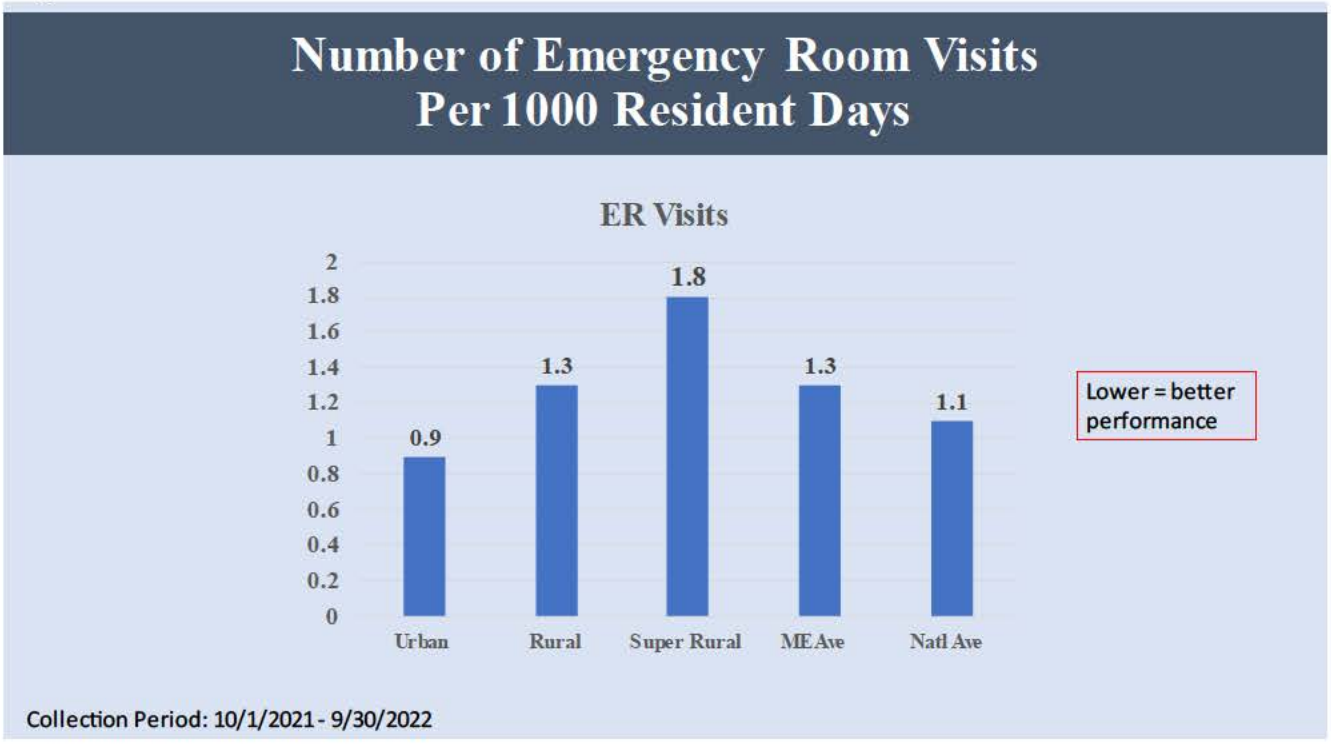
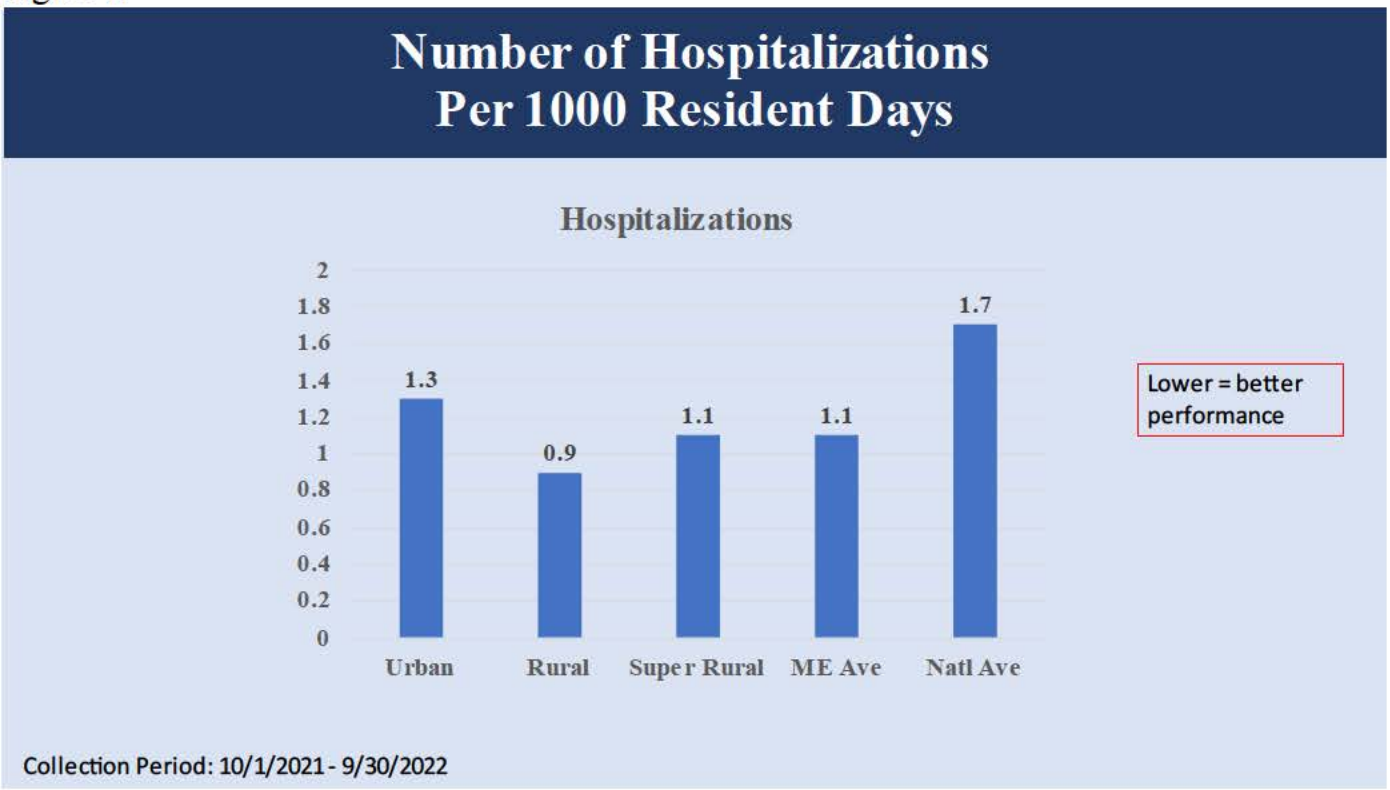


Figure 6

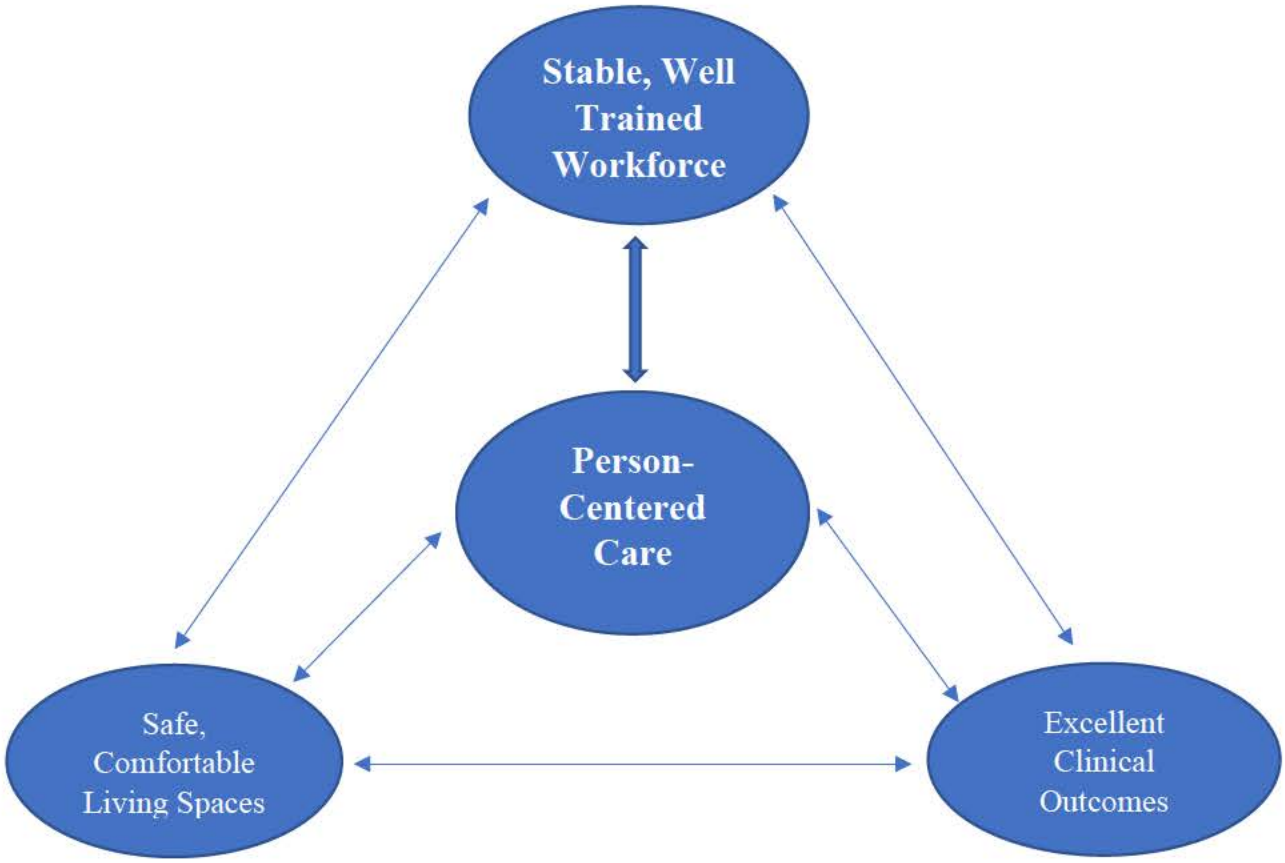


More analysis is needed, but these observations seem to suggest that a health care access disparity exists when comparing facilities in urban areas to those in more rural settings. This could lead to untreated medical conditions, increased emergency department visits, and greater inconvenience for the residents. It could also lead to extra and avoidable cost.

Intersecting Themes

As the Advisory Council discussed and considered the common themes that might contribute to improvements or deficiencies in nursing home quality, it was hard to miss the fact that certain themes intersect, or overlap, with others. For example, if the overall goal is to provide person-centered care, with the highest possible quality of life for all residents, it might be achieved through combined strategies that support a stable work force, a person-centered focus of care, safe and comfortable spaces, and the delivery of excellent clinical outcomes. Yet, as already described in previous theme discussions, these four components do not exert their individual effects on overall quality, in isolation. They impact each other in ways that are synergistic and serve to amplify the overall impact on overall quality outcomes. See Figure 7.

Figure 7



It cannot be overstated that the single most important contributor to the delivery of high-quality person-centered care in nursing homes is the availability of a stable, well-trained, well supported workforce. But what does that mean? What does it take to create that workforce?

All health care workers come to their jobs with specific training, education, certification, and licenses. Nurses and CNAs in nursing homes engage with residents and patients during the most challenging and vulnerable times of their lives. They encounter residents with many chronic and serious illnesses, physical burdens, and frailties. Many have cognitive deficits and may demonstrate challenging behaviors. The residents are limited in their ability to care for themselves, and frequently need total assistance with dressing, bathing, and toileting. Creating an effective workforce requires ongoing education and training, such that the skill set is up-to-date and consistent with the appropriate scope of practice for each worker. Employers need to create a work culture that is supportive and respectful of each worker's contribution. Staffing ratios need to support not only the best care for residents, but also reflect fair and reasonable caseloads for each worker. Staff need adequate time and space with residents, in order to assess their needs and goals, and deliver care that is individualized and person-centered. Staff need to be paid a fair wage for their work. When all this falls into place for individual staff members, and for the entire

facility workforce, nursing homes experience successes, deliver better care, and take greater pride in their accomplishments. Nursing homes can become desirable places to work.

We have heard from both national and in-state experts that small house/household models can deliver pleasant experiences for both residents and staff. Physical environments that are more "home-like" are the natural setting for person-centeredness and high quality of life for residents. But they also provide staff with creative opportunities to develop efficient and safe workflows, especially when accompanied by changes to culture, staffing norms and leadership. These environmental factors (space, culture, staff, leadership) feedback and support the experience of the worker, making the entire workforce more sustainable. Staff are allowed to see and feel new successes and experience new levels of both professional and personal satisfaction. They are less likely to leave.

In summary, previous sections of this document have made arguments that high quality care is person-centered, delivered by a qualified workforce, in safe and comfortable environments, capable of delivering on excellent clinical outcomes. Yet the overlap and intersections between these themes of quality (workforce, environments, clinical care, and person-centeredness) interact in ways that are synergistic. The result is strengthened relationships between residents and their care staff, and increasing the likelihood that a resident will receive person-centered care.

Investments in Quality May Reduce Other Costs

The Council has not yet addressed the fiscal impact of making investments in quality, such as richer staffing levels, better environments with greater privacy and infection control, and greater emphasis on monitoring clinical quality. However, it has been noted that in addition to better outcomes for residents, investments in quality may also yield savings in related costs, with reduction in staff turnover among the largest potential area of savings. Saving also may accrue to the larger health care system as costly negative outcomes are reduced, such as avoidable use of emergency department visits and hospitalizations, falls, urinary tract infections, and antipsychotic use. This area needs more attention as the Council continues its work.

Quality in Residential Care

The work of the Nursing Home and Residential Care Facility Innovation and Quality Advisory Council has resulted in major themes that will help prioritize quality initiatives. It is important to note that most of this narrative describes what is happening in and what is known about nursing homes, in part because we have more and better data on nursing homes. Because of the strong relationship between nursing homes and certain types of residential care (PNMI-C homes), the intention and goal of DHHS is to apply similar quality approaches in residential care where appropriate. DHHS has several initiatives to make residential care data more consistent with

nursing facility data, including an update to the assessment tool used in residential care, more consistency in how resident acuity is measured across settings, and an initiative to pilot the CoreQ person-reported outcome survey in Residential Care Facilities.

NEXT STEPS

The Advisory Council views this report as a preliminary roadmap for quality improvement in Maine's nursing and residential care facilities and looks forward to discussing additional quality topics in the year ahead. We spent very little time discussing technology, for example, an area that is rapidly becoming an equal partner in the delivery of high-quality care in various settings. In nursing homes, this might be achieved by supporting more efficient workflows, exploring new approaches to communication and monitoring, as well as providing residents with access to family and the world outside their facilities. The use of Maine's Health Information Exchange (HIE), HealthInfoNet, might present opportunities for better coordination across settings, as residents move from facilities to hospitals, and back again. The Advisory Council also recognizes that ageism is a broad social issue that impacts our perceptions of what a meaningful life can and should look like for individuals living in nursing and residential care facilities. These and other topics need more exploration, discussion, and consideration. But the Advisory Council firmly believes that this document represents a meaningful starting point, from which transformative change can occur.

DHHS plans to include certain quality strategies described in this report as part of its payment reform efforts. For example, DHHS has proposed that future nursing home and residential care payments include a value-based payment that considers staffing, one or more clinical measures, person-reported outcome measures and other key indicators of quality.

DHHS will resume Council meetings in 2024, following Legislative deliberations of payment reform and related legislation. Informed by those deliberations, the Department will work with stakeholders to further refine and expand efforts to promote quality in nursing and residential care homes.

Attachment A. Nursing Facility and Residential Care Innovation and Quality Advisory Council Members		
Individual	**Title**	**Organization**
Jake Anderson	Administrator	Maine Veterans' Homes
Laurie Belden	Executive Director	Home Care and Hospice Alliance of Maine
Ari Berman, MD	Medical director of Seal Rock, Gorham House & Pinnacle of Sanford	Northern Light Geriatrics
Barbara Bowers RN, PhD	Professor Emerita	University of Wisconsin-Madison, School of Nursing
Maureen Carland MA, RN-BSN, LNHA	Director of Quality and Regulatory Affairs	Maine Health Care Association
Mary Lou Ciolfi	Senior Program Manager	The University of Maine Center on Aging
Brenda Gallant	Executive Director	Maine LTC Ombudsman Program
Leo J. Delicata	Attorney	Legal Services for the Elderly
Betsy Grass, RN	Director of Programs & Services	Alpha One Service Coordination Agency
Karynlee Harrington	Executive Director	Maine Health Data Organization/Maine Quality Forum
Deirdre Heersink D.O. C.M.D.	Medical Director	MaineGeneral Rehabilitation and LTC Maine Veterans Home Augusta
LeighAnn Howard RN, DNP, CHFN	VP of Clinical Excellence and Community Partnerships	Northern Light Home Care & Hospice
Angela P. Hunt, RPT,MS	Administrator Chief Innovations Officer	The Cedars
Jena Jones	Policy & Advocacy Manager	Maine Council on Aging
Ruta Kadonoff	Vice President for Programs	Maine Health Access Foundation
Richard T. Marino, Jr MD	Nursing Home Division Director Key Clinical Faculty Clinical Assistant Professor	Maine Medical Partners Geriatrics Maine Medical Center Geriatric Fellowship Tufts University School of Medicine
Rita Owsiak	HAI Coordinator	Maine Center for Disease Control and Prevention
Gail Patry, MS, RN	Senior Vice President of Quality Programming	Healthcentric Advisors
Tarsha Rodrigue, RN BSN MHA	Administrative Director, Skilled and Long Term Care	MaineGeneral Rehabilitation and Long Term Care
Laura Tremblay	CNA	Augusta Rehab (Direct Care and Support Professional Advisory Council)
Janelle Tompkins	MaineGeneral Long Term Care Director / Administrator at the Inn at City Hall	MaineGeneral Rehabilitation & Long-Term Care
Judy Tupper, DHEd	Director, Population Health, Cutler Institute Practice Faculty, Graduate Program in Public Health	Muskie School of Public Service, University of Southern Maine
Megan Walton	CEO	Southern Maine Area Agency on Aging
Heidi Wierman, MD, FACP	Division Director Geriatrics & Medical Director Healthy Aging Associate Professor	MaineHealth Geriatrics Tufts University School of Medicine
Wanda Wilcox	Executive Director	Chase Point Assisted Living
Drew Wyman	Executive Director	The Alzheimer's Association, Maine Chapter