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Profile of Rural Residential Care Facilities: A chartbook

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May 2014

Maine Rural Health Research Center

UNIVERSITY OF SOUTHERN MAINE
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Contents

Introduction and Key Findings

Compared to urban areas, rural America has a higher proportion of older adults needing long term services and supports (LTSS), yet faces significant difficulties developing systems to address these needs.[1] The implications of caring for a growing aging population are especially apparent in rural communities where residents live longer with impairments than in urban settings[2,3] and where a more limited infrastructure for providing LTSS may affect access to services.[4-6] Studies have shown that access to home and community-based care is more limited than in urban areas reflecting, among other things, the higher costs of home care in rural areas, limited state and federal resources to support expanded elder care options, and the challenges of coordinating state and federal funding to support coordinated, home and community-based care services (HCBS).[5,7,8] The more limited availability of HCBS in rural areas may contribute to the higher rates of nursing facility use in rural versus urban areas[9] and to the fact that rural nursing facility residents tend to be less impaired upon admission than their urban counterparts.[10]

In the last several decades, federal and state policies have accelerated efforts to shift the balance of funding and services from nursing home care to community-based LTSS. The Affordable Care Act promotes further progress through a variety of programs, including increased funding for the Money Follows the Person nursing facility transition program; the Balancing Incentive Program provides financial incentives to states who implement certain structural reforms for increasing access; and increased options for home and community-based services. These initiatives are part of a broader campaign to support states' efforts to comply with the "integration mandate" under the Americans with Disabilities Act, which requires states to provide public services to persons with disabilities in the most integrated setting appropriate to the needs of the individual.[11]

The continuum of LTSS consists of formal and informal services extending from an institutional level of care provided in a skilled nursing facility to in-home services that might include nursing, therapies, and assistance with activities of daily living (ADLs) and instrumental activities of daily living (IADLs).

On the continuum of LTSS, residential care facilities (RCFs) provide non-medical housing and support services to residents who cannot live on their own but do not need nursing home level services.[12] RCFs are identified by multiple names across states, with over two-thirds of states using the licensure term "assisted living." In addition to assisted living and residential care, other less common terms include boarding homes, basic care facilities, community residences, enriched housing programs, homes for the aged, personal care homes, and shared housing establishments.[13]

While a number of federal laws have an impact on residential care, oversight and regulation primarily occur at the state level.[13] State regulations establish staffing ratios, specify training and other requirements, stipulate physical design features, and articulate a philosophical approach to residential care delivery that supports privacy, autonomy, and consumer

choice to a greater or lesser degree.[14] Residential care regulations also vary in terms of services that are required versus permitted, the types of residents that can be admitted or retained, and how and where services can be provided.[15] Policy governing the level of care that may be provided in an RCF varies greatly by state and even among providers in the same state.[16]

In addition to the level of care provided, RCFs also vary by the degree to which they can be characterized as "homelike," potentially qualifying them as a Medicaid HCBS setting. The Centers for Medicare and Medicaid Services (CMS) has recently established criteria for determining which RCFs may qualify for Medicaid reimbursement as home and community-based services.[17] For example, an RCF is presumed not to be an HCBS setting if it is part of an institutional campus or if persons living in the setting are isolated from the broader community. CMS has identified a range of additional requirements, including living space or bedroom privacy, lockable doors, control over schedules and activities, and choice of roommates, which may be modified only where the need for modification is justified and documented in the resident's person centered plan. Presumably, these new rules will increase the supply of RCFs providing more "homelike" settings that offer residents more privacy, autonomy and control over their environment.

How the role of the RCF differs across rural and urban communities is unclear. The most recent and extensive analysis comparing rural and urban assisted living facilities (ALFs) reported on data collected approximately 15 years ago.[18] Based on telephone interviews conducted with facility administrators in 1998, this study found that services were largely paid for privately and that rural areas faced a relative shortage of facilities. Rural ALFs were smaller than metropolitan ALFs and were less likely to offer private accommodations. Rural ALFs were also less likely to have licensed practical nurses on staff, and to offer a combination of both high services and high privacy. Although rural ALFs charged lower prices than urban ALFs, the average price was still unaffordable for most elderly rural residents.[18]

New data made available through the 2010 National Survey of Residential Care Facilities (NSRCF) conducted by the National Center for Health Statistics provides an opportunity to update some of these findings. The NSRCF gathered information on RCFs serving adults; having four or more beds; and providing room and board with at least two meals a day; around-the-clock on-site supervision; and assistance with personal care or health-related services; and not exclusively serving persons with severe mental illness or intellectual disability (see Methods).

The first national estimates using data from the NSRCF have recently been released.[12,19] This chartbook examines for the first time differences by rural and urban location, focusing on the facility, resident, and service characteristics of rural and urban RCFs, and their ability to meet the LTSS needs of residents.

For this analysis, rural and urban location is defined based on county-level designations of metropolitan and non-metropolitan status. Throughout the text, we refer to metropolitan and non-metropolitan as urban and rural

respectively, to promote readability. Rural counties are further divided based on their adjacency to a metropolitan area, enabling comparisons between RCFs located in urban counties, rural counties adjacent to (bordering) an urban county, and rural counties not adjacent to urban counties (neighboring only other rural counties). We frequently refer to not adjacent rural counties as remote since these counties do not border more populated areas.

Section I examines differences in rural and urban RCF characteristics. Section II explores differences in the characteristics and functional status of RCF residents. Section III profiles the services provided by rural and urban RCFs and Section IV examines rural-urban differences in admission and discharge policies and how these might reflect options for aging-in-place in rural and urban RCFs. The final section discusses policy implications for providing residential care in rural areas as part of a broader continuum of LTSS services. A methods section describes our approach and the Appendix includes the source material for this chartbook.

Key Findings

Remote rural RCFs are more likely to have private pay patients compared to urban facilities.

- Although rural RCFs are more likely than those in urban areas to be certified Medicaid providers, residents of more remote RCFs are less likely to receive Medicaid-funded services. For example, among rural, not adjacent RCFs, the average percentage of residents with some or all services paid by Medicaid is 37% compared to about 50% of residents for rural adjacent and urban RCFs.

Although residents of rural RCFs are older than their urban counterparts, they have fewer disabilities as measured by their functional assistance needs.

- Rural, not adjacent RCFs serve a larger proportion of persons age 85 and over, compared to rural adjacent and urban RCFs.
- Rural RCFs serve a smaller percentage of residents who require assistance with eating, transferring, walking, and toileting compared to urban facilities.

Remote rural RCFs are more likely to be co-located with other long-term services and supports providers.

- Compared to urban and rural adjacent RCFs, facilities in rural, not adjacent counties are more likely to be co-located with independent living housing units, nursing homes, and sub-acute/post-acute units.

Services provided differ across rural and urban RCFs.

- Compared to urban RCFs, rural RCFs are more likely to provide respite care, social services counseling, recreation outside of the facility, and transportation to educational programs, medical and dental appointments, and stores.
- Rural RCFs are more likely to serve persons with developmental needs and mental illness.

- Rural, not adjacent RCFs are less likely to provide incontinence care and more likely to provide skilled nursing services compared to rural adjacent and urban RCFs.

Compared to urban RCFs, the policies of rural RCFs appear less likely to support aging-in-place.

- Rural RCFs are more likely than urban facilities to maintain a discharge policy requiring residents to leave when their functional needs become more serious as in the case of behavior problems, incontinence, or when they require skilled nursing or end-of-life care.

- A greater proportion of rural RCF residents who move go on to nursing homes compared to urban RCF residents.

Section I

How do residential care facilities differ by rural-urban location?

The RCF's role in the continuum of LTSS is shaped by the policy environment in which it operates and by other factors (e.g., population income, availability of capital) driving the supply of and demand for RCF services. For example, access to public, Medicaid and/or state financing for RCF services will influence access and may have a greater impact in those rural areas with a greater proportion of low income residents. Access to public and/or private sources of capital investment in "bricks and mortar" of the facility may also shape access to RCF services. To better understand some of the factors that might contribute to different levels of rural and urban RCF supply and affordability, we compared ownership status, the age and characteristics of the facility, regional distribution of facilities, and source of payment.

Survey results indicate a number of rural and urban differences in the characteristics of RCFs. These differences are even more apparent when rural RCFs are divided into those located in counties that border an urban county (adjacent) and those neighboring only other rural counties (not adjacent). Compared to urban RCFs, rural, not adjacent facilities are less likely to be for-profit enterprises and are often co-located with other providers of LTSS. Rural RCFs are heavily concentrated in the Midwest, while the West claims nearly half of all urban RCFs. Despite the importance of Medicaid in providing insurance coverage in rural areas,[20] rural, not adjacent RCFs serve a lower average percentage of residents with some or all care paid by Medicaid than urban facilities. This is true despite the fact that rural RCFs are more likely to be certified Medicaid providers than their urban counterparts.

Key Facts

Rural RCFs are more likely to be not-for-profit or government owned.

- While virtually no urban RCFs are owned by state, local or county governments, 6% of rural, not adjacent RCFs have public owners. (Chart 1.1)
- A smaller percentage of RCFs in rural, not adjacent and rural adjacent counties are owned by private, for-profit companies (67% and 78%) compared to RCFs in urban counties (84%). (Chart 1.1)

The supply of RCFs and their rural-urban location varies widely by U.S. region.

- Over 40% of all rural RCFs are located in the West. (Chart 1.2)
- A greater percentage (17%) of RCFs in the Midwest are located in rural, not adjacent counties, compared to RCFs in the Northeast (4%), South (5%), and West (3%). (Chart 1.2)

Rural facilities are more likely to be built purposely as RCFs and co-located with other service providers.

- RCFs in rural, not adjacent counties are more likely to be co-located with independent living, nursing homes, and

sub-acute/post-acute units, while rural adjacent and urban RCFs are less likely to be co-located with other providers. (Chart 1.3)

- Rural RCFs, particularly those in rural adjacent counties, are more likely to be in operation for 10 or more years than urban facilities. (Chart 1.4)

The more common presence of a wait list among rural RCFs suggests some access barriers to residential care in rural areas..

- In the aggregate, we found no rural-urban differences in the average number of residents or occupancy rates. (Appendix – Table 1)

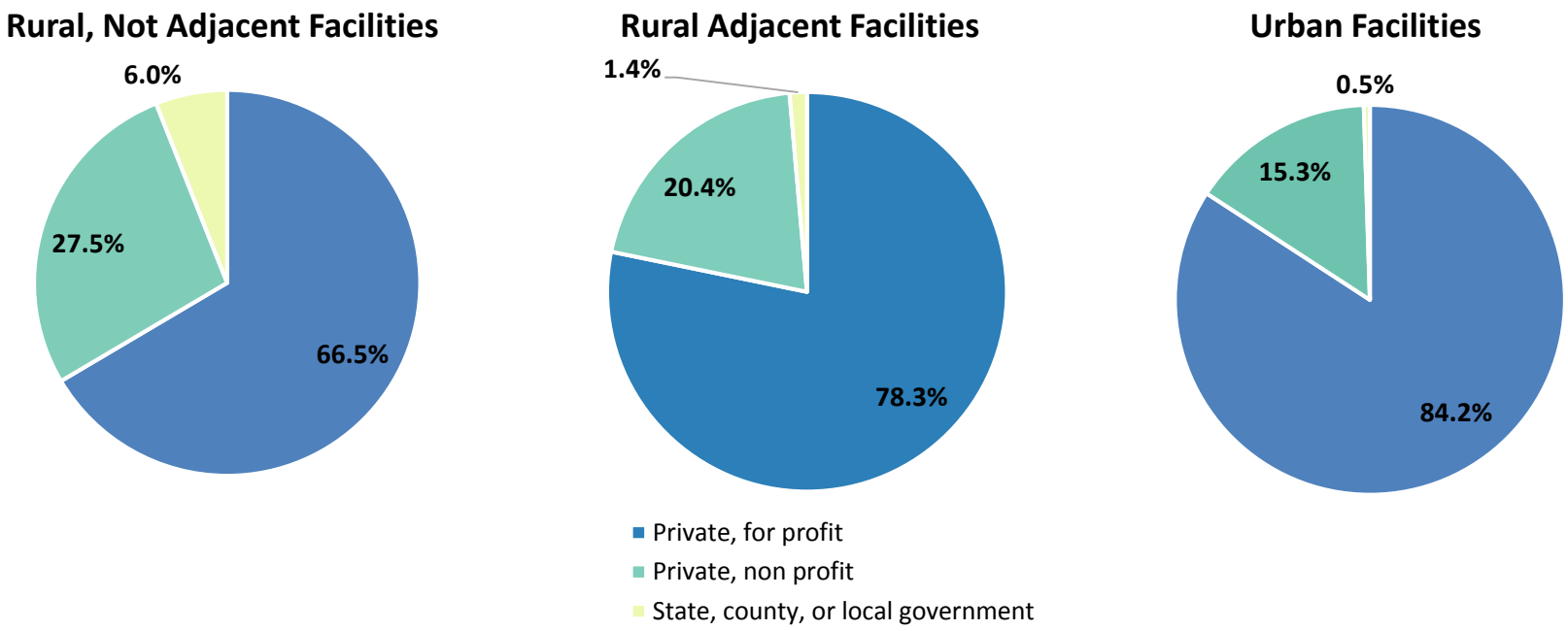
- There are no rural-urban differences among RCFs in mean number of persons on a wait list or mean number of days (Appendix – Table 1), however, rural RCFs are more likely to have a waiting list for prospective residents. (Chart 1.5)

While rural, not adjacent RCFs are more likely to be Medicaid providers, they serve a lower average proportion of residents with care paid by Medicaid.

- Nearly 70% of rural, not adjacent RCFs are certified as Medicaid providers compared to about half of urban RCFs. (Chart 1.6)

- Among RCFs certified to participate in Medicaid, , the average percentage of residents residing in rural, not adjacent RCFs with some or all LTSS services paid by Medicaid is 37% compared to about 50% of residents for rural adjacent and urban RCFs. (Chart 1.6)

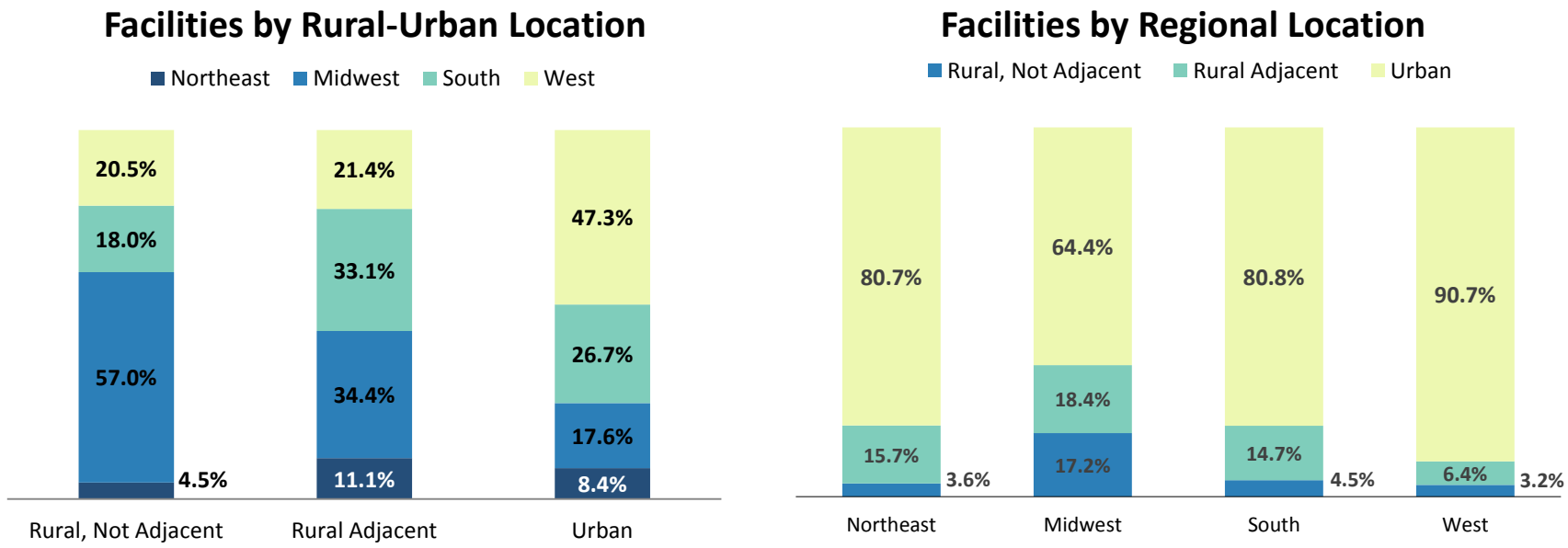
Chart 1.1 Rural RCFs are more likely to be not-for-profit or government owned.



Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.

- A smaller percentage of RCFs in rural, not adjacent and rural adjacent counties (67% and 78% respectively) are owned by private, for-profit companies compared to RCFs in urban counties (84%).

Chart 1.2 The supply of RCFs and their rural-urban location varies widely by U.S. Census Regions.

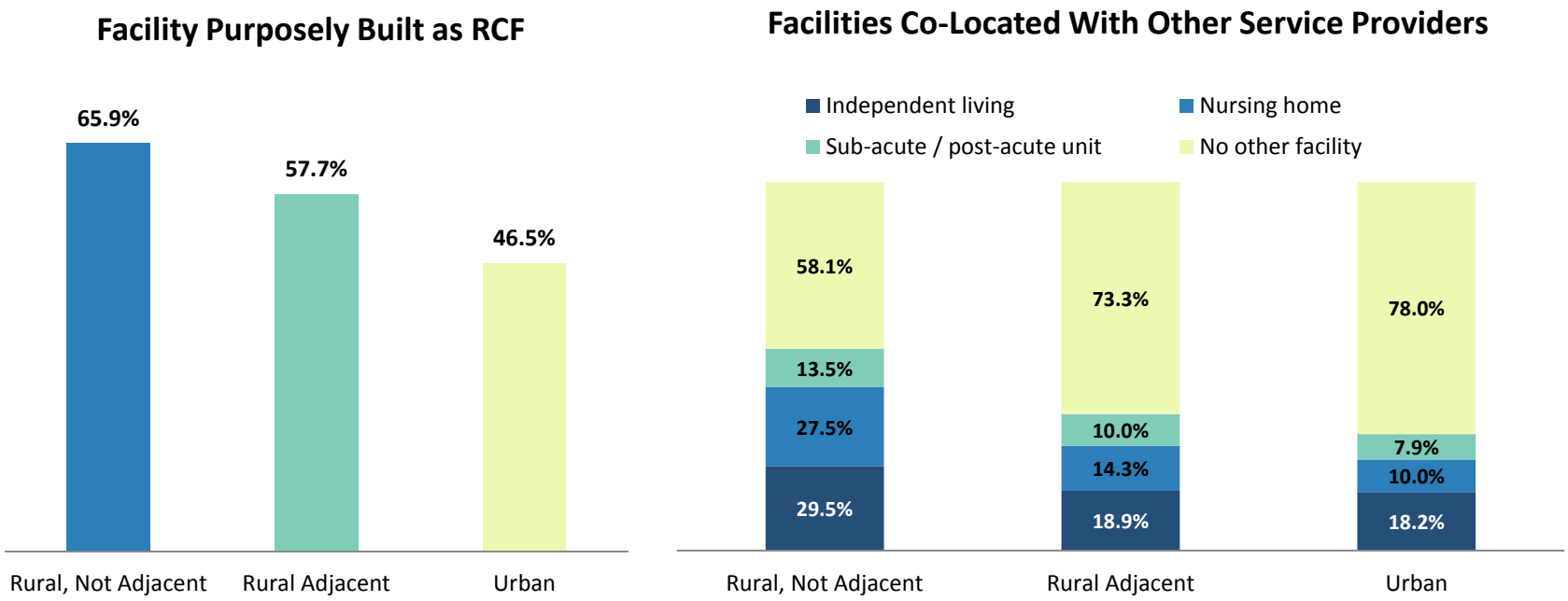


Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.

- The Western region of the United States (U.S.) contains the largest proportion of RCFs at 42% (Appendix – Table 1). Roughly 20% of rural RCFs are located in the West compared to nearly half (47%) of urban RCFs.
- Among rural, not adjacent RCFs, 57% are located in the Midwest compared to less than one-fifth (18%) of urban RCFs.
- A greater percentage (17%) of RCFs in the Midwest are located in rural, not adjacent counties, compared to RCFs in the Northeast (4%), South (5%), and West (3%).
- In the West, only 9% of RCFs are located in rural counties, while the Northeast, Midwest, and South have a larger proportion of RCFs in rural counties (19%-25%).

Chart 1.3

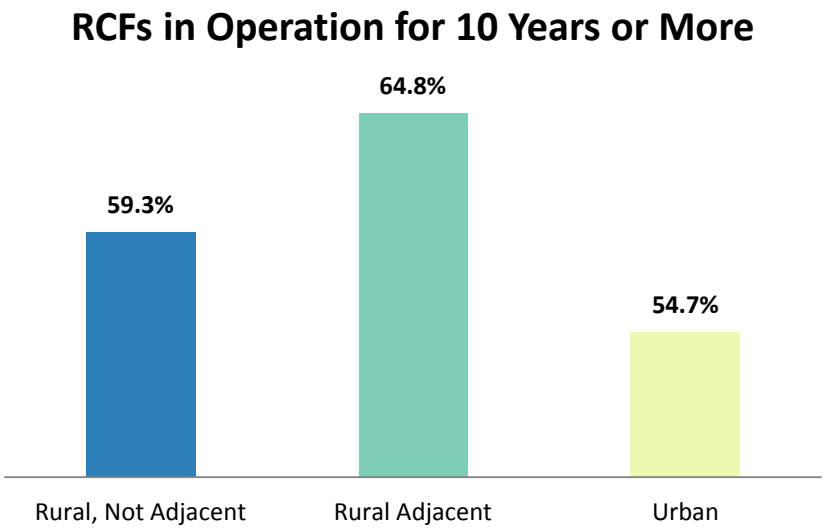
Rural facilities are more likely to be built purposely as RCFs and co-located with other service providers.



Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.

- Rural RCFs are more often built purposely as an RCF (66% of rural, not adjacent and 58% of rural adjacent) compared to urban facilities (47%).
- RCFs in rural, not adjacent counties are more likely to be on the same property or location as independent living, nursing homes, and sub-acute/post-acute units compared to those in rural adjacent and urban counties.

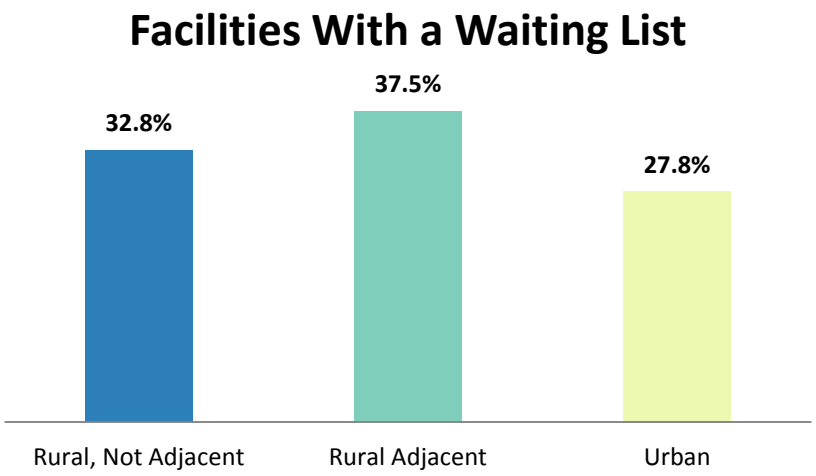
Chart 1.4 Rural RCFs tend to be older than urban RCFs.



Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.

- Rural adjacent and rural, not adjacent RCFs are more likely to be in operation for 10 years or more (65% and 59% respectively) than are urban RCFs (55%).

Chart 1.5 Rural RCFs are more likely to have a waiting list of prospective residents.

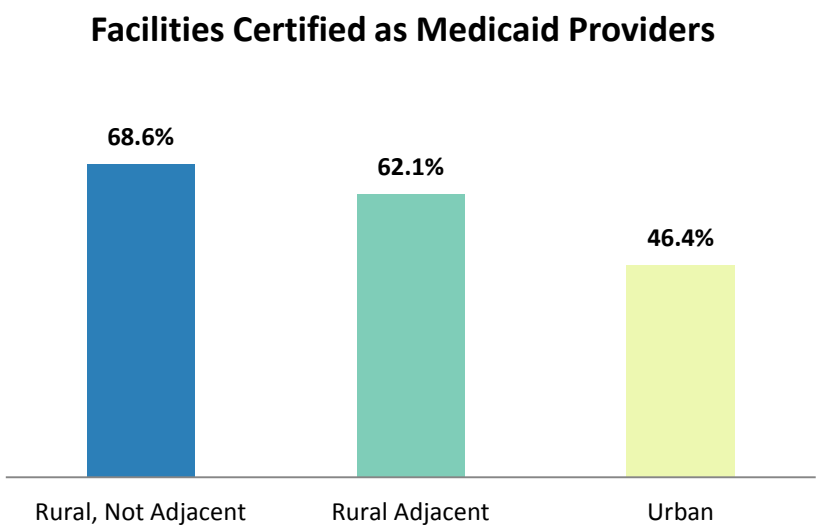


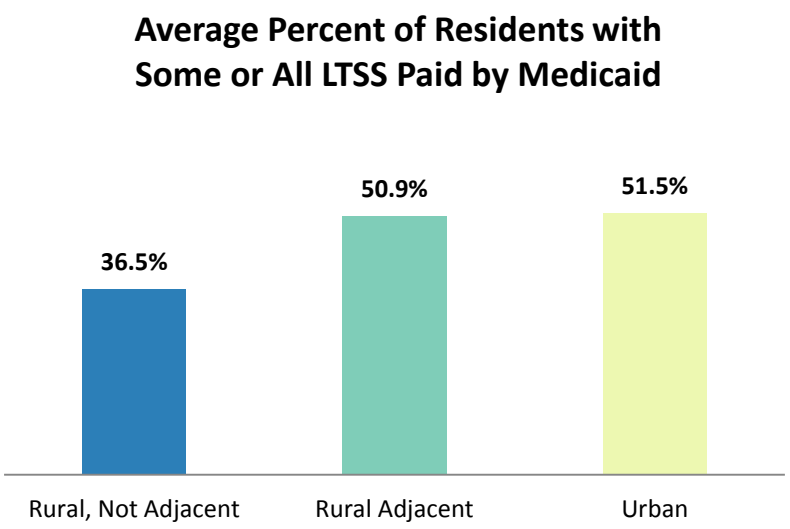
Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.

- Rural adjacent RCFs are more likely to have a waiting list of prospective residents (38%) compared to urban facilities (28%).
- Among RCFs with a waiting list, there are no rural-urban differences in number of applicants or time spent on the waiting list (data not shown).

Chart 1.6

While rural, not adjacent RCFs are more likely to be Medicaid providers, they serve a lower average proportion of residents with care paid by Medicaid.





Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.

- Nearly 70% of rural, not adjacent RCFs are certified as Medicaid providers compared to 46% of urban RCFs.
- Among rural, not adjacent RCFs, the average percentage of residents with some or all of their LTSS services paid by Medicaid is 37% compared to about 50% of residents for rural adjacent and urban RCFs.

Section II

How do residents of residential care facilities differ by rural-urban location?

We compared the characteristics of rural and urban RCF residents to better understand differences in the types of persons served by these RCFs. Generally, rural communities tend to be older and have fewer persons belonging to a racial or ethnic minority than urban communities, and the residents of rural RCFs reflect these demographics. Like residents of RCFs across the U.S. generally,[12] rural RCFs serve a majority of residents who are female and over the age of 85. RCFs serve a predominantly white population.

Significantly, however, the service needs of rural RCF residents deviate from what might be expected. Although rural residents in the general population have poorer health status and higher rates of chronic illness than urban residents,[21,22] rural RCFs serve individuals with generally higher functional status than their urban counterparts. Subsequent sections support these findings by showing that rural RCFs provide a lower level of care than their urban counterparts. These findings are also consistent with studies showing that among nursing home residents, rural residents tend to be less impaired than their urban counterparts upon admission.[10]

Key Facts

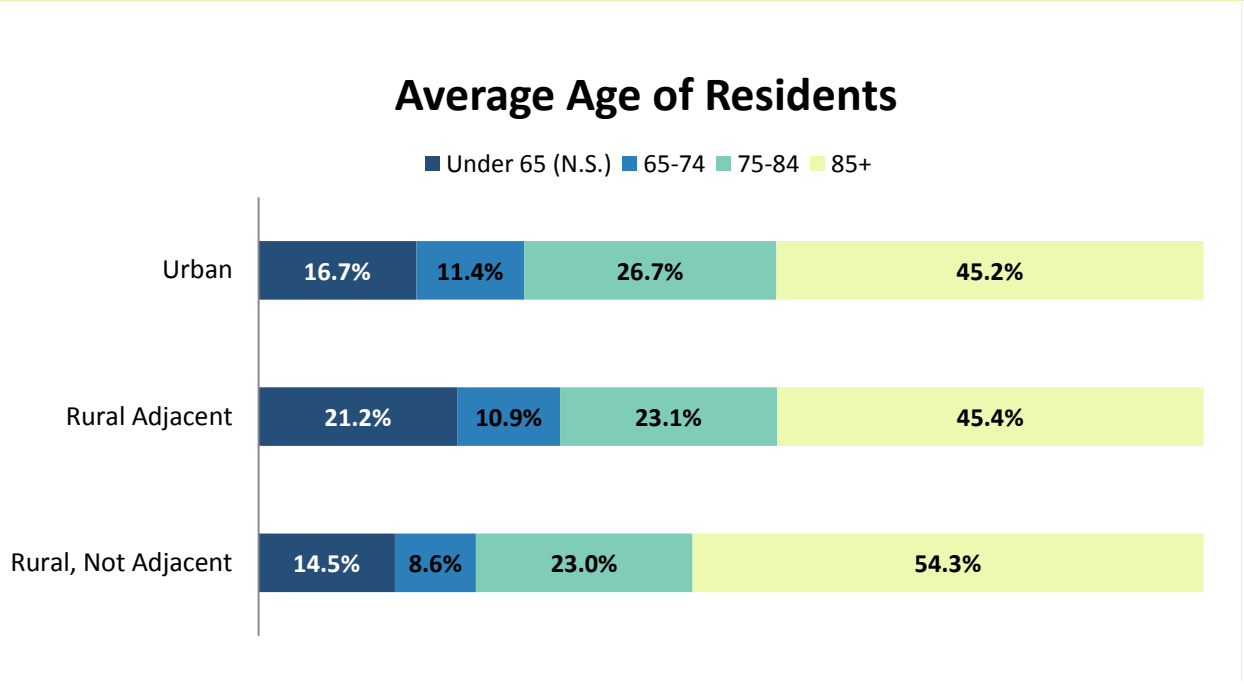
The population served by rural RCFs reflects the general demographics of rural areas.

- A larger proportion of rural, not adjacent RCF residents are age 85 and over, compared to rural adjacent and urban RCFs. (Chart 2.1)
- RCFs in both rural and urban areas serve a majority of female residents. (Chart 2.2)
- Rural RCFs serve a predominantly white population, while residents of urban facilities are more racially and ethnically diverse. (Chart 2.3)

Rural RCFs tend to serve individuals who require less assistance with functional needs but are more likely to serve persons with developmental or mental health needs.

- Residents of rural RCFs are about half as likely as their urban counterparts to require assistance with certain activities of daily living including eating, transferring, walking, and toileting. (Chart 2.4)
- Rural adjacent RCFs are more likely to serve residents with developmental disabilities or severe mental illness. (Chart 2.5)

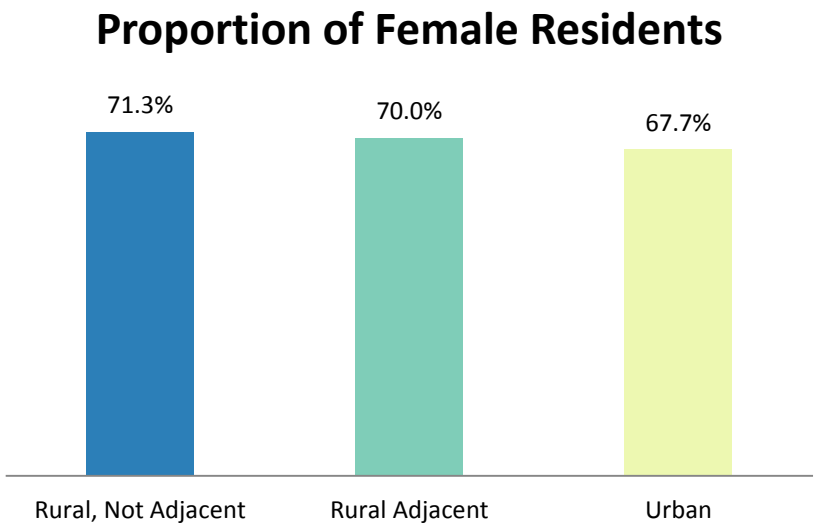
Chart 2.1 A larger proportion of residents in rural, not adjacent RCFs are 85 years of age and older.



Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.
Note: Not significant abbreviated as N.S.

- More than half (54%) of rural, not adjacent RCF residents are at least 85 years of age, compared to 45% in rural adjacent and urban RCFs.
- Across rural and urban RCFs, roughly one-quarter of residents are between 75-84 years of age and 10% are between 65-74 years of age.

Chart 2.2 Rural RCFs serve a larger proportion of female residents.

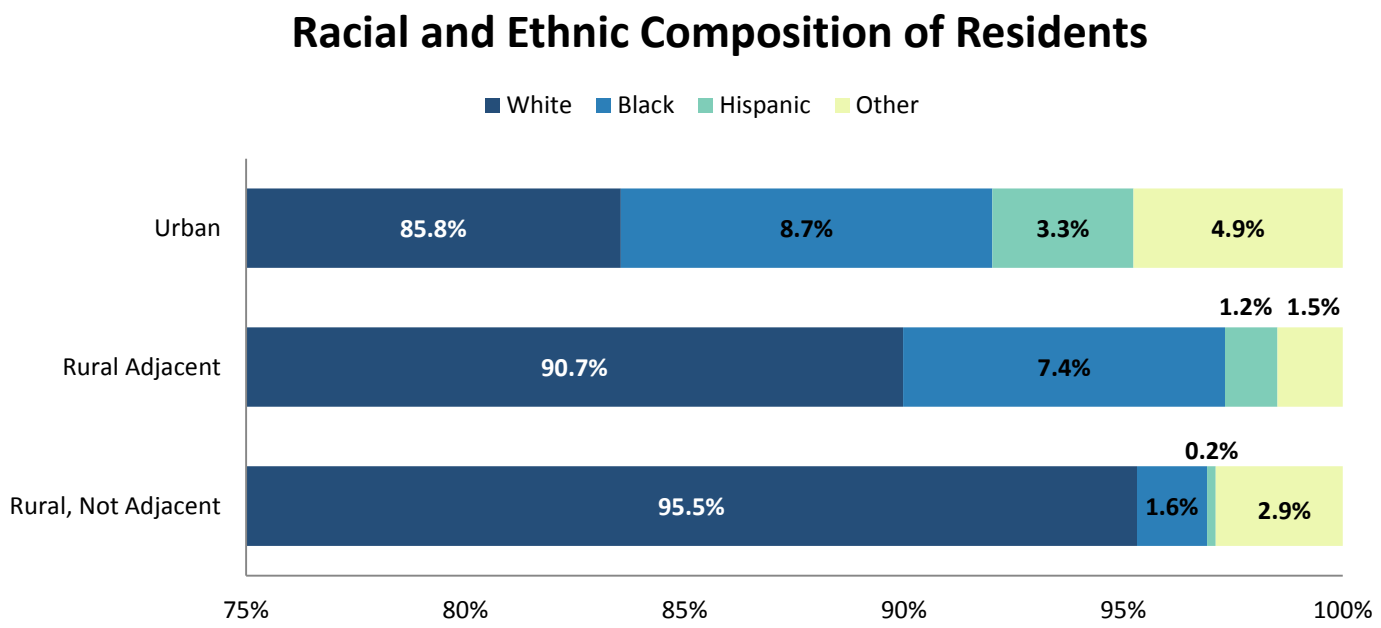


Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.

- Regardless of residence, RCFs serve a majority of female residents. On average, the population in rural RCFs is 70% female.

Chart 2.3

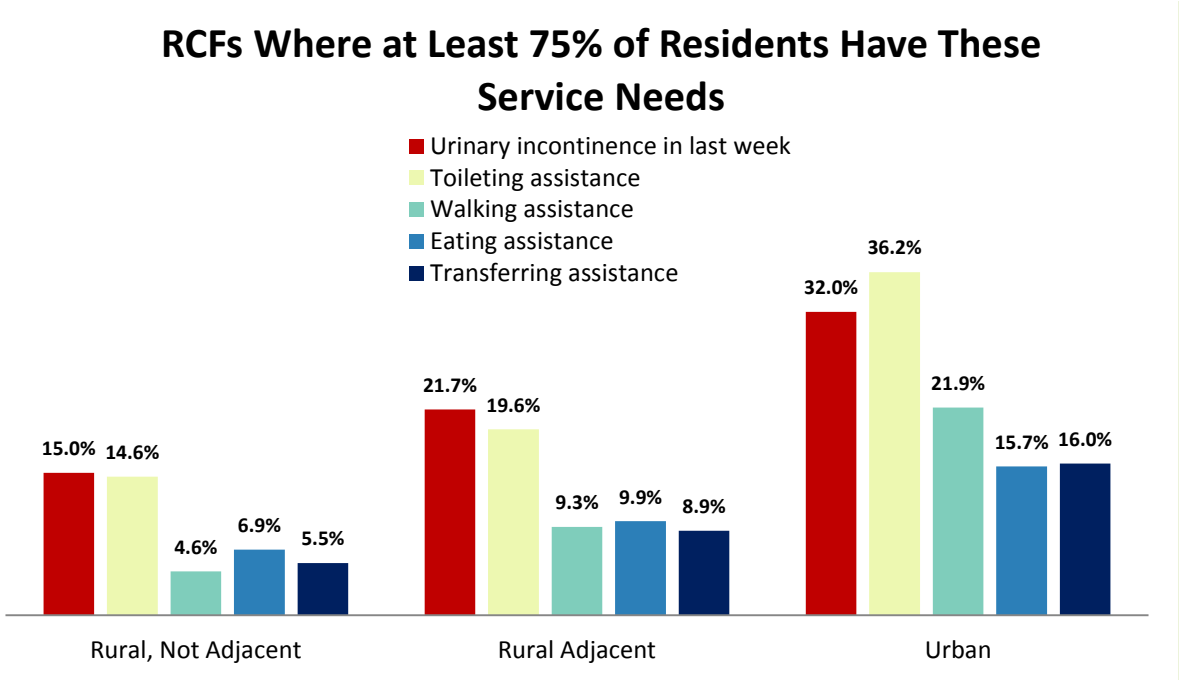
Residents of rural RCFs are more likely than their urban counterparts to be white and not Hispanic.



Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.

- On average, rural, not adjacent RCFs serve a population that is 96% white and not Hispanic, compared to 91% in rural adjacent and 86% in urban RCFs.
- In rural adjacent RCFs, black Americans are the largest racial/ethnic minority group served (7%), while not adjacent RCFs serve more individuals from other groups (e.g., Asian, Native Hawaiian and Pacific Islander, and American Indian and Alaskan Native).

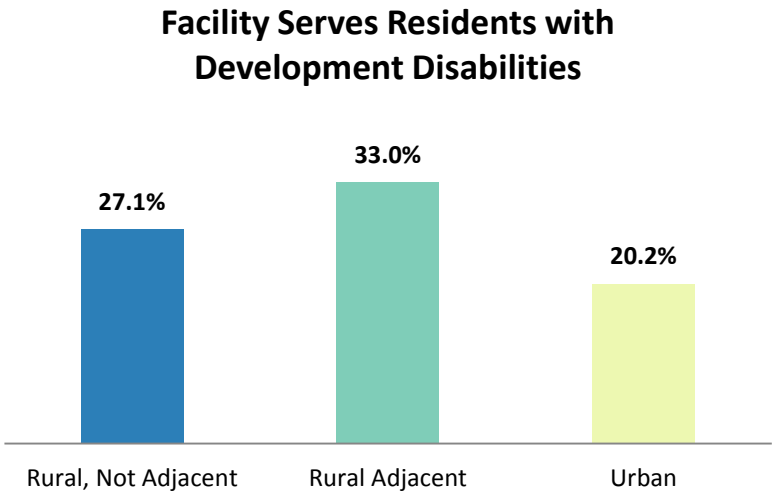
Chart 2.4 Rural RCFs tend to serve residents with fewer functional assistance needs.

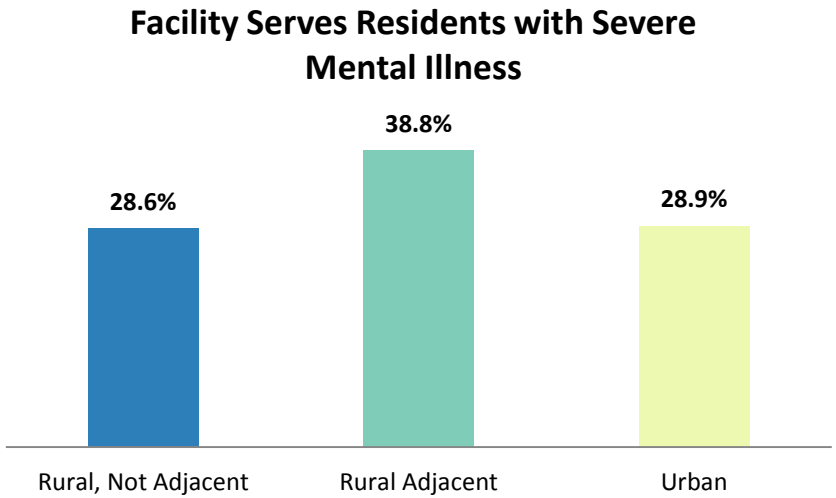


Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.

- About 15% of remote rural RCFs, compared to over 30% of urban RCFs, have at least 75% of their residents who experience urinary incontinence or require toileting assistance.
- Only 5% of rural, not adjacent RCFs have a large resident population requiring walking assistance compared to 22% of urban RCFs.

Chart 2.5 Rural adjacent RCFs are more likely to serve residents with developmental disabilities or severe mental illness.





Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.

- A greater proportion of rural RCFs (30.9%; Appendix – Table 3) serve residents with developmental disabilities.
- Rural adjacent RCFs are more likely to serve residents with severe mental illness (39%) than rural, not adjacent and urban RCFs (both at 29%).

Section III

How do services provided by residential care facilities vary by rural-urban location?

Where the RCF sits on the LTSS continuum depends on the intensity and range of services provided, relative to other LTSS options. In the case of RCFs, the types of services and level of care provided might vary depending on a number of factors including state regulatory and reimbursement policies, facility capacity, local needs and the availability of alternative services in their community. To better understand where the rural RCF fits on the LTSS service continuum, we compared the range of clinical and supportive services provided in urban and rural RCFs. Our findings suggest that rural RCFs operate at a lower level of care than their urban counterparts: they are less likely than urban RCFs to provide intensive medical services (i.e., skilled nursing, incontinence care, and physical and occupational therapy) to their residents and they are more likely to provide a wider range of supportive services.

A number of the supportive services provided involve engagement outside the facility, including social and recreation activities, and transportation to stores and education programs. These differences might reflect the higher level of functional capacity of rural RCF residents. Rural RCFs are also more likely to offer transportation to medical and dental appointments. The need for these services may reflect greater travel distances in rural versus urban areas to access medical and dental services, more limited access to primary care, specialty care,[23,24] mental health services[9] and more limited access to public transportation.

Key Facts

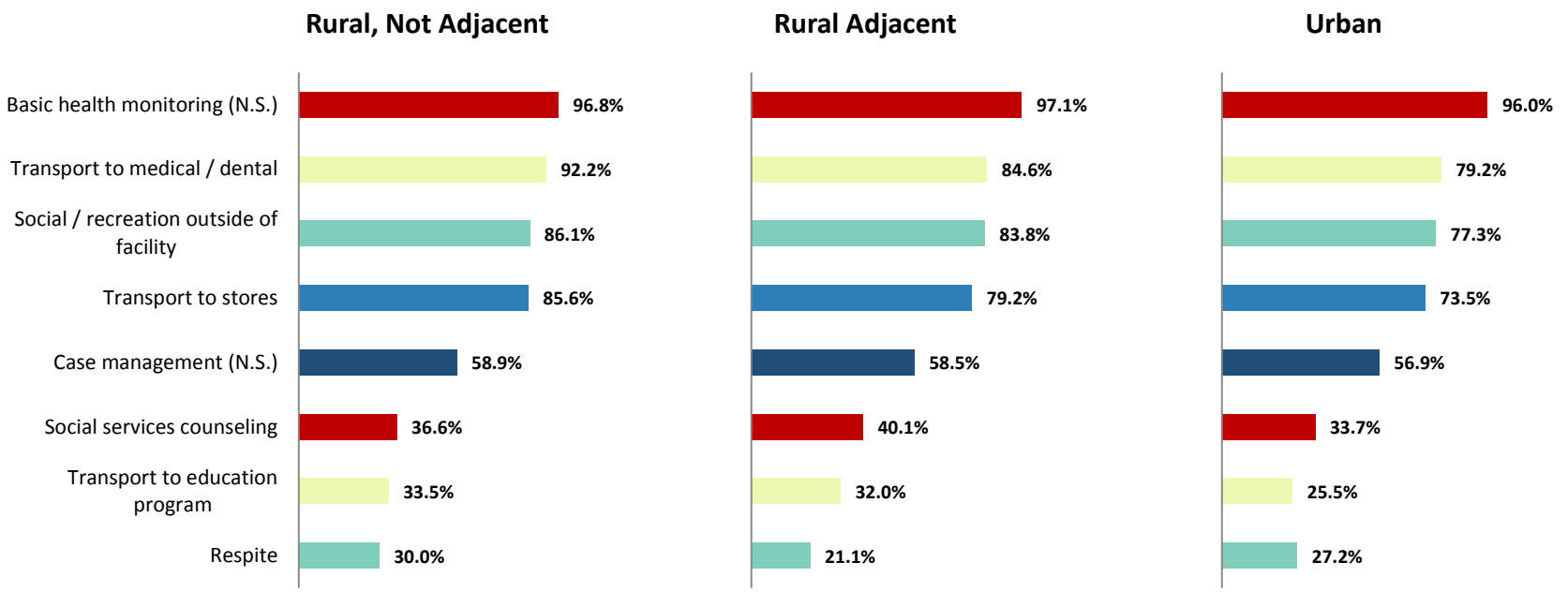
Rural RCFs are more likely to provide a range of supportive services to their residents and community.

- Rural RCFs are more likely than urban ones to provide respite care, social services counseling, recreation outside of the facility, and transportation to educational programs, medical and dental appointments, and stores. (Chart 3.1)
- A greater proportion of rural, not adjacent RCFs provide adult day health or adult day care to non-residents than rural adjacent and urban RCFs. (Chart 3.2)

Availability of services for residents with greater functional needs varies by rural and urban location.

- Rates of basic health monitoring, case management, and occupational and physical therapy do not vary by location. (Chart 3.1 and 3.3)
- Reflecting the lesser complexity of care needs among their residents, rural, not adjacent RCFs are less likely to provide incontinence care. (Chart 3.3)
- Rural, not adjacent RCFs are more likely to provide skilled nursing services compared to rural adjacent and urban RCFs. (Chart 3.3)
- Rural RCFs are less likely than urban to conduct a functional assessment of cognitive and physical abilities before or at admission. (Chart 3.4)

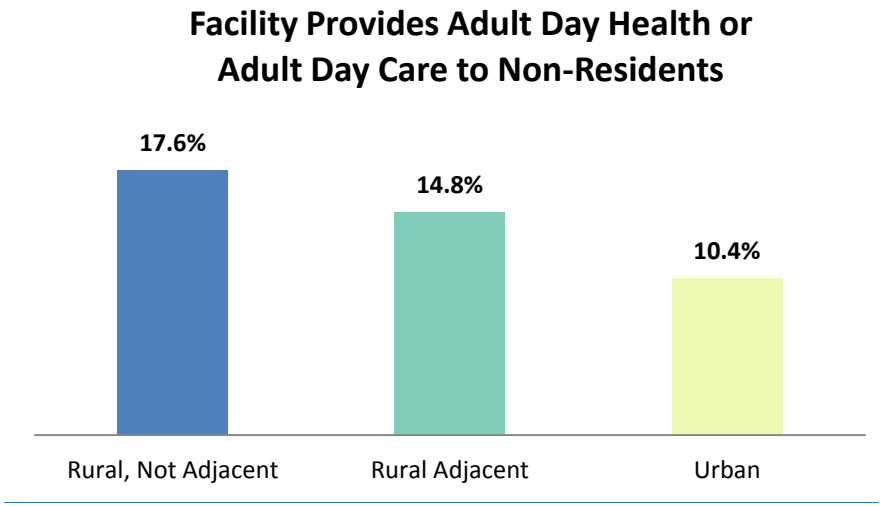
Chart 3.1 Rural RCFs are generally more likely than urban RCFs to provide support services.



Data: National Survey of Residential Care Facilities, 2010
Facility location significant at p<.05 for respite, social services counseling, social/recreation outside of facilities, and transport to education programs, medical/dental appointments and stores.
Note: Not significant abbreviated as N.S.

- Rural RCFs are more likely than urban ones to provide social services counseling and recreation outside of the facility as well as transportation to educational programs, medical and dental appointments, and stores. For example, 92% of rural, not adjacent RCFs provide transportation to medical and dental appointments compared to 79% of urban RCFs.

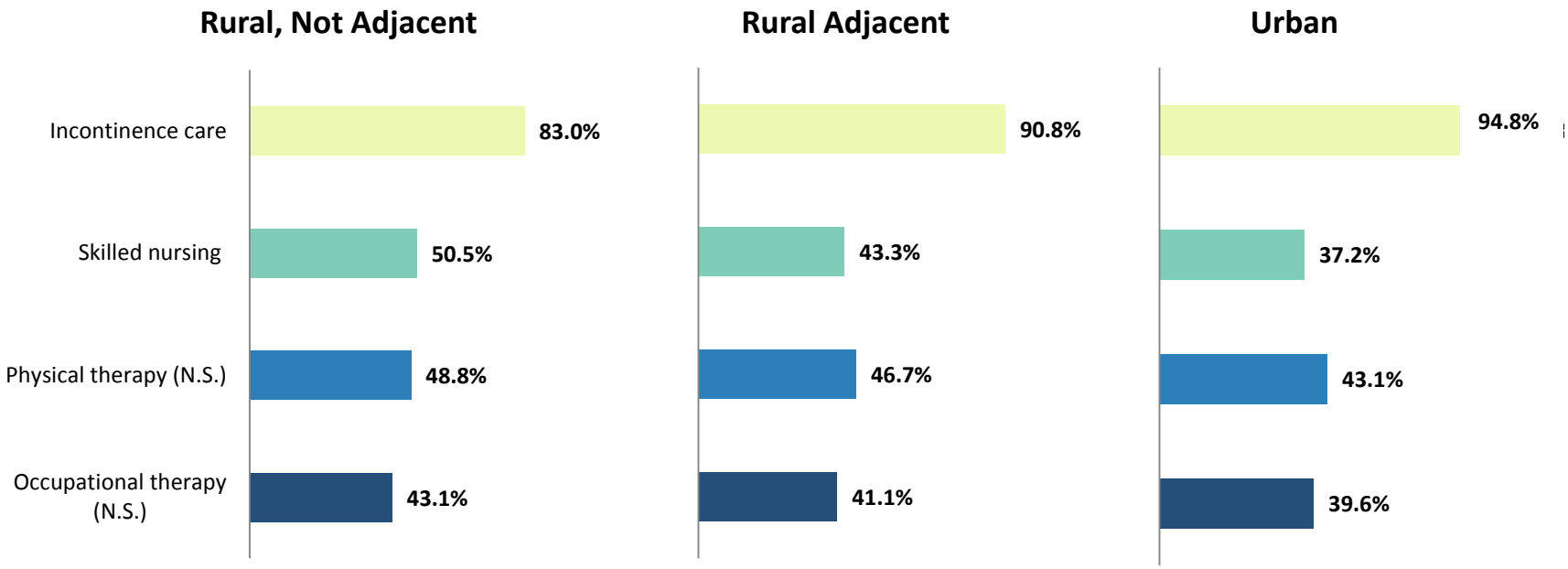
Chart 3.2 Rural RCFs are more likely than urban to provide adult day services to non-residents.



Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.

- More rural, not adjacent RCFs (18%) provide adult day health or adult day care to non-resident community members than do rural adjacent (15%) and urban RCFs (10%).

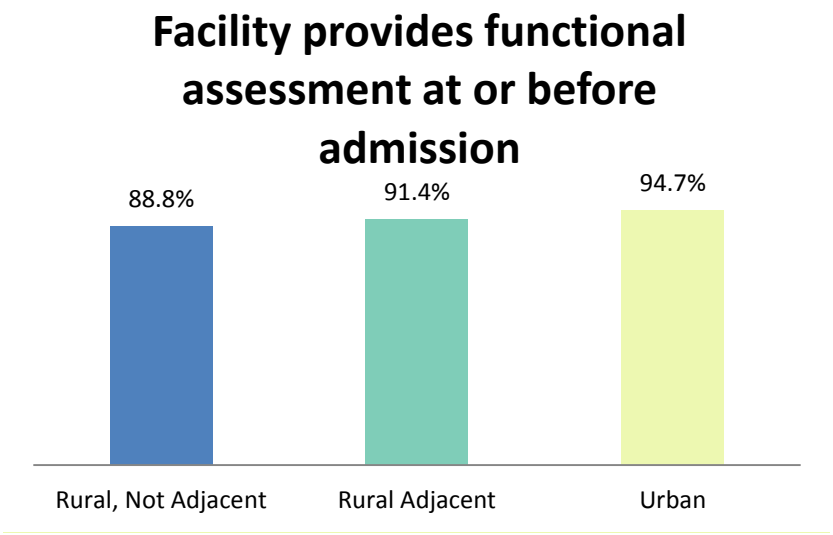
Chart 3.3 Rural RCFs are more likely to provide skilled nursing services, but less likely to provide incontinence care.



Data: National Survey of Residential Care Facilities, 2010
Facility location significant at p<.05 for incontinence care and skilled nursing services.
Note: Not significant abbreviated as N.S.

- Skilled nursing services—services that must be performed by a registered nurse or licensed practical nurse and are medical in nature—are more likely to be provided in rural, not adjacent (51%) and rural adjacent RCFs (43%) than in urban RCFs (37%).
- Rural, not adjacent RCFs are less likely to provide incontinence care (83%) compared to facilities in rural adjacent (91%) and urban counties (95%). This most likely reflects the fact that these rural, not adjacent RCFs are more likely to have admission and discharge policies that favor residents with lower care needs (see Chart 4.2)

Chart 3.4 Rural RCFs are less likely to provide a formal functional assessment at or before admission.



Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.

- A smaller proportion of rural, not adjacent RCFs (89%) provide a formal functional assessment at or before admission than do rural adjacent (91%) and urban RCFs (95%). The functional assessment is defined as a standardized tool that evaluates cognitive functioning and/or physical activities of daily living such as eating, bathing, and dressing.

Section IV

How do residential care facility policies affect options for rural aging-in-place?

Aging-in-place policies and programs offer an adaptable continuum of services to individuals as they age, or their support needs change, allowing them to remain where they live, whether in a private home or a paid residential setting. These adaptable services adjust to the individual and minimize the need for disruptive moves to a higher level of care. CMS' final rule defining appropriate settings for HCBS reinforces this concept. In order to be considered an HCBS setting for the purposes of Medicaid reimbursement, a residential setting, whether owned or controlled by the service provider, must facilitate individual choice regarding the services and supports provided to the resident as well as individual choice as to who provides the services.[25]

To explore the role RCFs may play in supporting rural aging-in-place, we analyzed rural-urban differences in facility admission, discharge and rate policies and procedures. For example, we compared whether rural and urban RCFs vary the rates they charge based on individuals' needs or whether they charge a flat rate for all residents, presuming that a varying rate would better support changing needs. We also examined rural-urban RCF differences in admission and discharge policies, to assess whether rural RCFs are more or less likely to require residents to leave an RCF if their needs become more complex.

Results indicate that rural RCFs are more likely to use a flat rate payment that may incent facilities to accept residents with lower health and functional needs and which could promote earlier discharge to a higher level of care as health and/or functional needs become greater. Consistent with findings presented in Section II, RCFs located in the most remote rural places are more likely to have admission and discharge policies that promote a resident population with fewer activity limitations and impairments. Given that most moves from a rural RCF are to a nursing home, it appears that health or functional declines are more likely to prompt a change in residence for individuals living in rural RCFs than urban RCFs.

Key Facts

Rural RCFs are less likely to adjust their rates for patient needs.

- Both rural adjacent and not adjacent RCFs are more likely than urban RCFs to charge residents a flat rate, while urban RCFs are more likely to use a rate that varies by resident disability and service need. (Chart 4.1)

Rural RCFs—especially those located in not adjacent counties—have admission and discharge policies that favor residents with lower care needs.

- Compared to urban, rural RCFs are less likely to admit applicants with greater functional needs, such as individuals with activity limitations, cognitive impairment, and behavior problems. (Chart 4.2)

- Rural RCFs are more likely than urban RCFs to have discharge policies that require residents to leave when their functional needs increase; for example, when they develop behavior problems, or incontinence, or when they require assistance into or out of bed, or need skilled nursing or end-of-life care. (Chart 4.3)

Among individuals moving from RCFs, rural residents are more likely to end up in nursing homes.

- A greater proportion of rural RCF residents who move go on to nursing homes compared to urban RCF residents. (Chart 4.4)

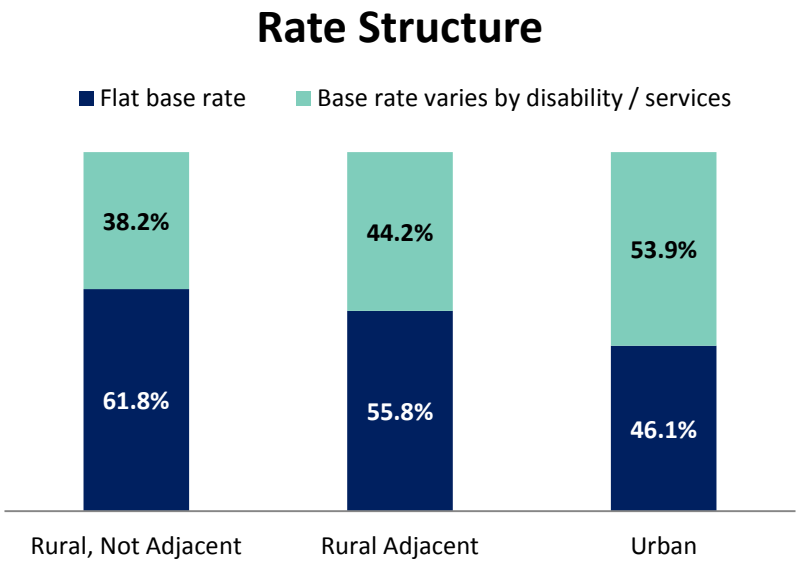
- Fewer rural moves are to other RCFs, compared to urban moves. (Chart 4.4)

- A greater percentage of rural, not adjacent moves to a nursing home occur when the RCF is co-located with a nursing home compared to urban moves. (Chart 4.5)

- Regardless of how RCFs are paid, a greater proportion of RCF moves to a nursing home occur among remote rural facilities. (Chart 4.6)

- Despite generally lower income among rural residents compared to urban,[26] a lower average percent of moves from a rural RCF is related to cost compared to urban. (Chart 4.7)

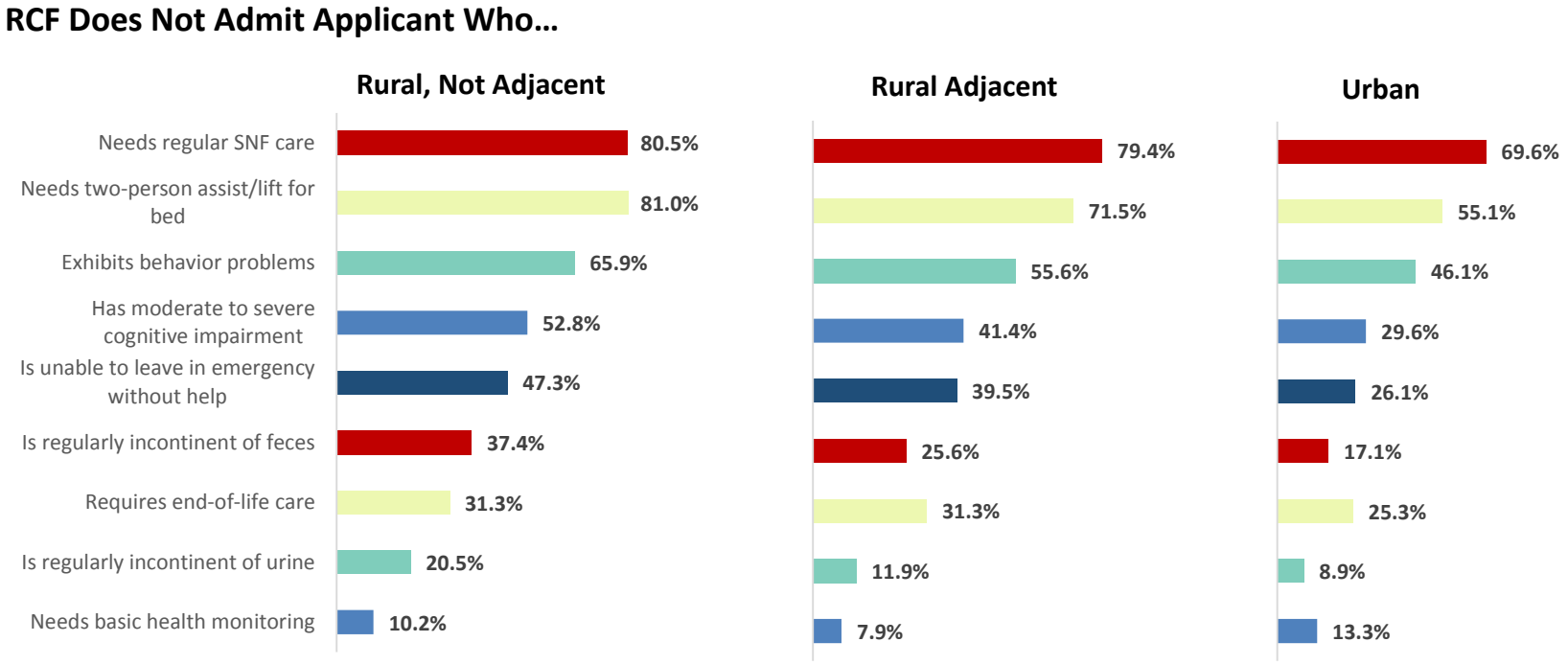
Chart 4.1 Rural RCFs are less likely to adjust their rates for patient needs.



Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.

- Both rural adjacent (56%) and not adjacent (62%) RCFs are more likely to use a flat base rate than urban facilities (46%), while urban RCFs are more likely to use a rate that varies by resident disability and service need.

Chart 4.2 Rural RCFs are less likely to admit residents with greater functional needs.

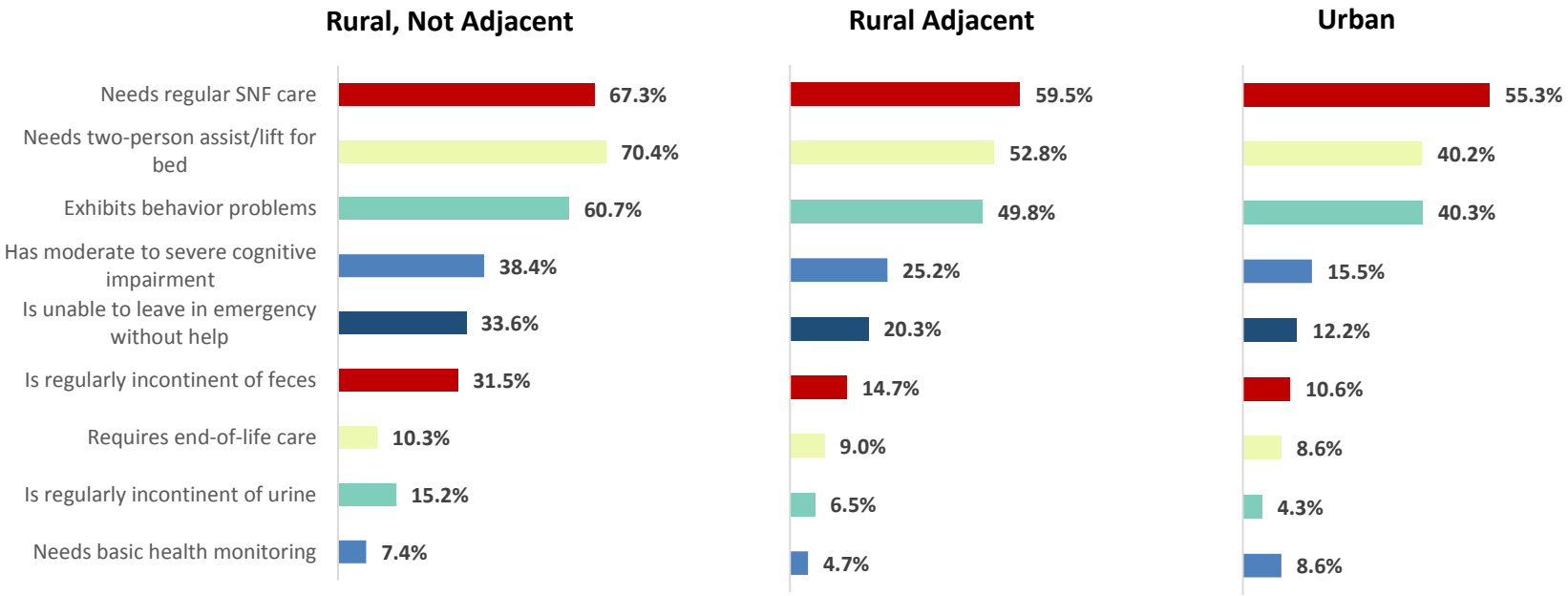


Data: National Survey of Residential Care Facilities, 2010; differences by facility location significant at p<.05.

- Rural RCFs are less likely to admit applicants with higher functional needs, including those who require regular skilled nursing care, assistance into bed, incontinence care, and end-of-life care as well as those applicants who have moderate to severe cognitive impairment and behavior problems. Rural, not adjacent RCFs tend to maintain more restrictive admission policies compared to rural adjacent RCFs.

Chart 4.3 Rural RCFs are more likely to discharge residents with greater functional needs.

RCF Discharges a Resident Who…

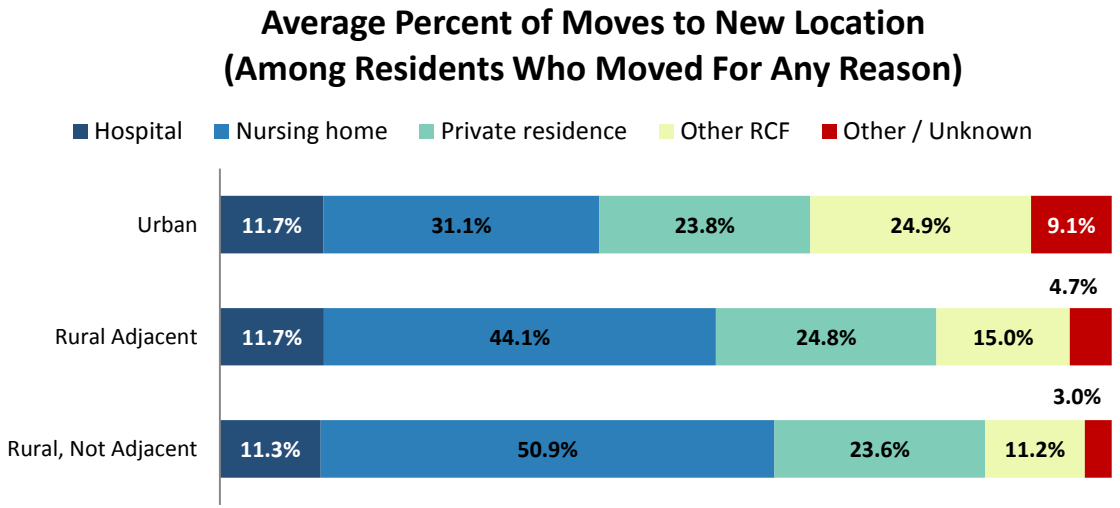


Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.

- Rural RCFs—especially those in not adjacent counties—are more likely to maintain a discharge policy that requires residents leave when their health care needs become serious. For example, 70% of rural, not adjacent RCFs discharge residents who need a two-person assist or a lift to get into bed compared to 53% of rural adjacent RCFs and 40% of urban RCFs.

Chart 4.4

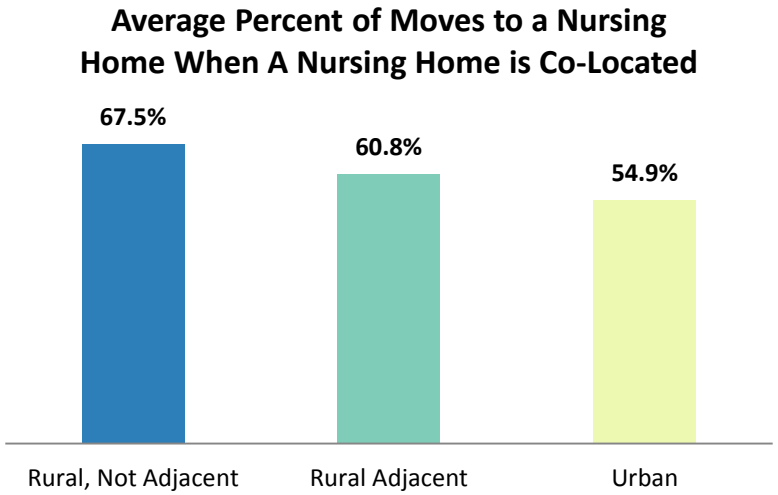
Among individuals moving from RCFs, rural residents are more likely to end up in nursing homes.



Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.

- A greater average percent of moves by residents of rural, not adjacent RCFs (51%) are to nursing homes compared to residents of urban RCFs (31%).
- A smaller percentage of rural RCFs report moves to another RCF (11%-15%), compared to urban RCFs (25%).

Chart 4.5 Proximity of provider may influence rural moves from an RCF to a nursing home.

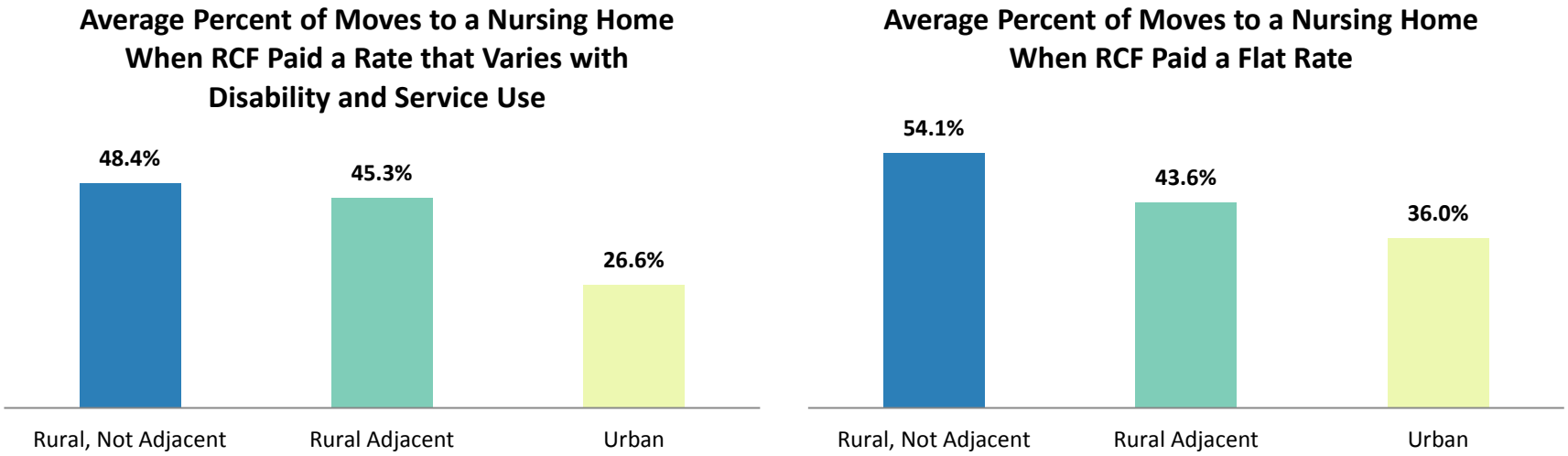


Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.

- When a RCF is co-located with a nursing home, two-thirds of moves among rural, not adjacent residents are to a nursing home compared to 55% of moves among urban residents.

Chart 4.6

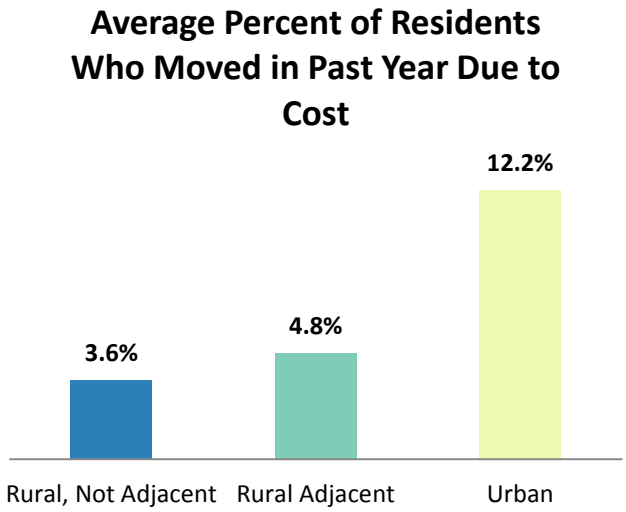
RCF payment type does not fully explain the greater proportion of resident moves to a nursing home among rural RCF facilities.



Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.

- The average percent of moves to a nursing home is higher among rural, not adjacent RCFs compared to urban RCFs when facilities are paid either a rate that varies with disability and service use or a flat rate.

Chart 4.7 Cost is less likely to be an important determinant in moves from rural RCFs.



Data: National Survey of Residential Care Facilities, 2010
Differences by facility location significant at p<.05.

- A lower average percent of moves are related to cost in rural, not adjacent (4%) and rural adjacent RCFs (5%) over urban (12%).

Section V

Policy implications

As federal and state policymakers consider their most cost-effective options for strengthening rural LTSS, more information is needed about the current system of care. This chartbook presents information on a key component of the rural LTSS continuum, the rural RCF. Survey results identify important national and regional differences between urban and rural RCFs and raise many questions about the role of RCFs in rural communities.

- **Both within and across regions, rural-urban differences in the supply and characteristics of RCFs and the populations they serve may be a function of varying state policies and differences in the organization and financing of LTSS in each state.**

RCFs represent a greater or lesser component of the LTSS continuum depending on the region of the country. Their role in the rural LTSS continuum is likely to vary as well. Over half (57%) of the rural, not adjacent RCFs are located in the Midwest while only 4.5% are located in the Northeast. These differences are explained in part by regional differences in the distribution of urban and rural populations across regions and by variation in the availability and use of RCFs across regions—the Northeast accounts for only 8% of all RCFs.

Given the regional variation in the distribution of rural RCFs, some of the differences in the characteristics of rural and urban RCFs are likely the result of differences in state policy and regulation across regions and/or regional differences in the underlying LTSS infrastructure. For example, the more pronounced role of the rural RCF in the Midwest may reflect state policies that promote the use or development of RCFs generally, or of rural RCFs in particular. Similarly, the distribution of rural RCFs may reflect regional variations in LTSS infrastructure due to differences in the capacity to provide home and community-based services or differences in nursing home supply and demand. Further analysis is needed to determine whether and how differences in policy or other factors may affect the characteristics and role of rural and urban RCFs.

- **Rural RCFs tend to operate on the lower end of the LTSS continuum and are more likely to discharge residents to a nursing facility when their service needs increase.**

On one hand, rural RCFs are more likely to offer skilled nursing services. Yet, rural RCFs are less likely to have residents with significant functional needs and are more likely to discharge them when their needs increase. There is no easy explanation for this apparent inconsistency. It may be attributable to the policy context in which these RCFs operate and/or to other factors not examined in this analysis.

Rural RCFs are more likely to be paid a flat rate. Payment rates that vary based on the type, number or severity of functional needs, and/or cognitive or behavioral impairment may incent facilities to admit and retain residents with high care needs. In contrast, a flat rate pays RCFs the same amount regardless of the services and staff assistance

required by the resident and may provide facilities with an incentive to discharge residents as their service needs exceed what can be covered under the flat rate.[11,14]

Rural RCFs are also more likely to be co-located with a nursing facility, possibly creating financial incentives that favor nursing home placement in order to maximize system reimbursement.

Taken together, rural discharge and payment policies among RCFs may not promote aging-in-place in the RCF. It is not clear whether or to what extent state policies and/or the relative availability of other alternatives including home-based care or nursing facility services may affect the lower level of care. Differences in levels of care provided in rural RCFs could also be attributable to more limited access to the expertise, staffing, or market demand.

- **Rural RCFs appear to offer a greater diversity of services and play a more diverse set of roles, possibly reflecting a need to achieve economies of scale.**

With the exception of race and ethnicity, rural RCFs tend to serve a more diverse population, including persons with developmental delay and serious mental illness and are more likely to provide adult day health services to non-residents. The more varied populations and services provided by rural RCFs may reflect community needs for these services or the facility's need to offer a mix of services in order to achieve economies of scale.

Moreover, the fact that remote rural RCFs are more likely to be co-located with other LTSS providers (i.e., independent living, nursing homes, and sub-acute or post-acute units), suggests these facilities need to share infrastructure and administrative capacity across a wider pool of services.

- **Rural RCFs serve a smaller proportion of residents with some or all care paid by Medicaid, which may result from a number of factors.**

Although a greater proportion of rural RCFs are Medicaid certified, rural RCFs serve a smaller proportion of Medicaid beneficiaries (Appendix – Table 1). One explanation for this finding may be that rural facilities tend to operate in states with more LTSS alternatives (e.g., other RCFs, home health providers, and nursing homes) with Medicaid beneficiaries dispersed across these options. Alternatively, these facilities may operate in states with restrictive Medicaid eligibility policies. In addition, given the preference for higher-paying private pay residents, rural facilities may choose to restrict admissions to higher income residents who can demonstrate an ability to pay for their own care for a specified period of time. The somewhat longer waiting lists in rural RCFs suggests as well that rural RCFs may have enough private pay demand that allows them to restrict the number of Medicaid-eligible residents. It is also worth noting that some states allow RCFs to refuse Medicaid reimbursement at their discretion, potentially resulting in residents losing their ability to transition from private pay status to Medicaid support in that facility.[27]

- **Additional research is needed to more fully understand the role of the rural RCF and the factors affecting the**

contributions of these facilities to the continuum of LTSS in rural areas.

While our findings begin to answer the question of where RCFs currently fall on the rural LTSS continuum, they do not fully describe the roles these facilities play in meeting the LTSS needs of rural residents. Some unanswered questions include:

- How well does the rural RCF meet the needs and preferences of rural community members?
- Are rural RCFs filling a gap in the LTSS continuum or displacing in-home alternatives?
- Are rural RCFs able to provide a more homelike alternative to institutional services?
- Are rural RCFs operating as nursing-facility look-alikes and reimbursed at a lower rate?
- What are the optimal regulatory and reimbursement policies to promote the right balance of LTSS in rural communities?
- Would infrastructure investments be better spent on more bricks and mortar or on the LTSS and volunteer workforce, transportation, and other adaptations to make in-home services more viable in rural communities?

These questions are central to understanding the role of rural RCFs in the continuum of LTSS available in rural America. To address them, we need information on the supply, demand, and use of other LTSS services on the continuum. In addition, knowing how past and current state and federal policies have shaped the role of the RCF would be critical to understanding how policy changes might be used to assure access to the full continuum of LTSS services in rural communities.

Methods

Data. Our data analyses were conducted through the 2010 National Survey of Residential Care Facilities (NSRCF), a new survey conducted by the National Center for Health Statistics (NCHS) that is the first to collect nationally representative data on residential care providers, their staff, services, and residents. Among the types of providers included in the NSRCF are "residential care facilities; assisted living residences; board and care homes; congregate care; enriched housing programs; homes for the aged; personal care homes; and shared housing establishments that are licensed, registered, listed, certified, or otherwise regulated by a state." To be eligible for the survey a facility must have at least four licensed beds and serve primarily adults. Facilities with a principal purpose of serving individuals with developmental disabilities or mental illness were excluded. Just over 2,300 facilities were included in the 2010 survey.

We applied to the NCHS Research Data Center for permission to have the NSRCF data linked to 2003 Rural Urban Continuum Code (RUCC) through the Area Resource File. Because the literature reveals differences in access and use of health services beyond the traditional metropolitan and non-metropolitan indicator,[20,21] the RUCC allowed us to distinguish counties based on their metropolitan and non-metropolitan status, population size, and adjacency to an urban county. Additionally, access to the RUCC allowed us to examine the full dataset by rural-urban location, a benefit over the public use file that does not identify metropolitan statistical area for 219 extra-large facilities. We recoded the RUCC from a 9-level variable to a 3-level indicator, categorizing counties as rural adjacent or not to an urban county and urban (see figure below). In our appendix, we present data tables for facilities located in rural not adjacent, rural adjacent, rural total, and urban counties.

Recoding of Rural-Urban Continuum Codes

Urban	Rural Adjacent	Rural Not Adjacent
1 - Counties in metro areas of 1 million population or more	4 - Urban population of 20,000 or more, adjacent to a metro area	5 - Urban population of 20,000 or more, not adjacent to a metro area
2 - Counties in metro areas of 250,000 to 1 million population	6 - Urban population of 2,500 to 19,999, adjacent to a metro area	7 - Urban population of 2,500 to 19,999, not adjacent to a metro area
3 - Counties in metro areas of fewer than 250,000 population	8 - Completely rural or less than 2,500 urban population, adjacent to a metro area	9 - Completely rural or less than 2,500 urban population, not adjacent to a metro area

Source: U.S. Department of Agriculture, Economic Research Service: Rural-Urban Continuum Codes Documentation. May 2013. Accessed at http://www.ers.usda.gov/data-products/rural-urban-continuum-codes/documentation.aspx#.U1-4LxDacy0.

Analysis. We conducted cross-tabulations on facility and resident characteristics, services provided, and aging-in-place policies by rural-urban residence. Frequency differences were evaluated with chi-square tests; unless stated otherwise, reported differences are statistically significant at the .05 level or less. Because the NSRCF data were collected based on a nationally representative, complex sampling design, we used the facility-level weights to adjust for known sampling bias and develop national estimates for facilities. To ensure appropriate adjustment for clustering, and reduce bias in our standard errors, we used SUDAAN to conduct all weighted analyses with the design variables.

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APPENDIX

Table 1:
PERCENT OF RURAL AND URBAN RESIDENTIAL CARE FACILITY CHARACTERISTICS

Residential Care Facility Characteristics	Residential Care Facility Location			
	Rural, Not Adjacent	Rural Adjacent	Rural Total	Urban Total
Total	6.7% (n=212)	11.9% (n=356)	18.6% (n=568)	81.3% (n=1,734)
Mean # residents	21.8	22.4	22.1	24.1
Mean # residential care beds	28.6	30.6	29.9	31.5
Mean # residential care rooms or apartments [a,d]	22.5	22.1	22.3	24.7
Mean % occupancy	77.0	78.2	77.8	78.7
Ownership type [c,f]				
Private, for profit	66.5%	78.3%	74.0%	84.2%
Private, non profit	27.5	20.4	23.0	15.3
State, county or local government	6.0	1.4	3.0	0.5
Region [c,f]				
Northeast (n=404)	4.5%	11.1%	8.7%	8.4%
Midwest (n=603)	57.0	34.4	42.5	17.6
South (n=637)	18.0	33.1	27.7	26.7
West (n=658)	20.5	21.4	21.1	47.3
Years operating as a residential care facility [b,e]				
Less than 10 years	40.7%	35.2%	37.2%	45.3%
10 or more years	59.3	64.8	62.8	54.7
Facility purposely built as RCF [c,f]	65.9%	57.7%	60.6%	46.5%
Other facilities on same property / location				
Hospital	**	**	1.1%	0.5%
Independent living [b,d]	29.5%	18.9%	22.8	18.2
Nursing home [c,f]	27.5	14.3	19.1	10.0
Sub-acute/post-acute unit [a,e]	13.5	10.0	11.2	7.9
None [c,f]	58.1	73.3	67.9	78.0
Structure of base rate [c,f]				
Flat base rate	61.8%	55.8%	58.0%	46.1%
Base rate varies by disability/services	38.2	44.2	42.0	53.9
Additional services on a FFS basis	64.3%	70.3%	68.1%	73.0%
Presence of a wait list [b,e]	32.8%	37.5%	35.8%	27.8%
Mean number of persons on wait list	7.1	6.2	6.5	7.3
Mean number of days on wait list	152.3	172.3	165.7	149.0
Percent RCFs Medicaid certified [c,f]	68.6%	62.1%	64.4%	46.4%
Mean % residents with LTSS paid by Medicaid [c,d]	36.5	50.9	45.4	51.5

** Data suppressed due to small cell sizes.

Note: Rural not adjacent, rural adjacent and urban differences significant at $p \leq .05^a$, $p \leq .01^b$, and $p \leq .001^c$. Rural total and urban differences significant at $p \leq .05^d$, $p \leq .01^e$, and $p \leq .001^f$.

Table 2:
PERCENT OF RURAL AND URBAN RESIDENTIAL CARE FACILITIES BY RESIDENT CHARACTERISTICS

Resident Characteristics	Residential Care Facility Location			
	Rural, Not Adjacent	Rural Adjacent	Rural Total	Urban Total
Total	6.7% (n=212)	11.9% (n=356)	18.6% (n=568)	81.3% (n=1,734)
Mean Age Percent				
Under 65	14.5%	21.2%	21.4%	16.7%
65-74 [a]	8.6	10.9	10.1	11.4
75-84 [b,e]	23.0	23.1	23.1	26.7
85+ [b]	54.3	45.4	48.6	45.2
Mean Percent of Female Residents [a]	71.3%	70.0%	70.5%	67.7%
Mean Race / Ethnicity Percent				
White [c,f]	95.5%	90.7%	92.4%	85.8%
Black [c,e]	1.6	7.4	5.3	8.7
Hispanic [c,f]	0.2	1.2	0.8	3.3
Other [a,f]	2.9	1.5	2.0	4.9
Had an episode of urinary incontinence in the past 7 days [c,f]				
75% or more	15.0%	21.7%	19.3%	32.0%
25-74%	40.9	39.0	39.7	36.7
24% or less	44.2	39.3	41.1	31.4
Uses wheelchair or scooter [c,f]				
75% or more	3.1%	5.3%	4.5%	10.5%
25-74%	16.2	18.9	17.9	32.1
24% or less	80.7	75.8	77.6	57.4
Receives assistance with walking [c,f]				
75% or more	4.6%	9.3%	7.6%	21.9%
25-74%	17.0	15.6	16.1	26.3
24% or less	78.4	75.1	76.3	51.9
Receives assistance with medication				
75% or more	88.7%	89.9%	89.5%	91.4%
25-74%	9.0	6.9	7.7	6.4
24% or less	2.3	3.2	2.8	2.2
Receives assistance with eating [c,f]				
75% or more	6.9%	9.9%	8.8%	15.7%
25-74%	13.9	16.7	15.7	23.3
24% or less	79.3	73.4	75.5	61.0
Receives assistance with transferring [c,f]				
75% or more	5.5%	8.9%	7.6%	16.0%
25-74%	16.1	15.5	15.7	32.1
24% or less	78.5	75.6	76.6	51.9
Receives assistance with toileting [c,f]				
75% or more	14.6%	19.6%	17.8%	36.2%
25-74%	24.8	27.3	26.4	29.0
24% or less	60.5	53.1	55.8	34.8

Note: Rural not adjacent, rural adjacent and urban differences significant at $p \leq .05^{a}$, $p \leq .01^{b}$, and $p \leq .001^{c}$. Rural total and urban differences significant at $p \leq .05^{d}$, $p \leq .01^{e}$, and $p \leq .001^{f}$.

Table 3:
PERCENT OF RURAL AND URBAN RESIDENTIAL CARE FACILITIES BY SERVICES PROVIDED

Services Provided	Residential Care Facility Location			
	Rural, Not Adjacent	Rural Adjacent	Rural Total	Urban Total
Total	6.7% (n=212)	11.9% n=356)	18.6% (n=568)	81.3% (n=1,734)
Type of service provided				
Basic health monitoring	96.8%	97.1%	97.0%	96.0%
Case management	58.9	58.5	58.7	56.9
Incontinence care [c,f]	83.0	90.8	88.0	94.7
Occupational therapy	43.1	41.1	41.8	39.6
Physical therapy	48.8	46.7	47.4	43.1
Respite [a]	30.0	21.1	24.3	27.2
Social services counseling [a]	36.6	40.1	38.8	33.7
Social/recreation outside of facility [b,f]	86.1	83.8	84.6	77.3
Skilled nursing services [b,e]	50.5	43.3	45.9	37.2
Transport to education program [a,e]	33.5	32.0	32.5	25.5
Transport to medical/dental [c,f]	92.2	84.6	87.3	79.2
Transport to stores etc [c,f]	85.6	79.2	81.5	73.5
Formal functional assessment at admission [a,e]	88.9%	91.4%	90.5%	94.7%
Type of functional assessment at admission				
Physical assessment	**	**	3.0%	1.8%
Cognitive assessment	**	**	1.2	1.2
Both	96.3%	95.6%	95.9	97.1
Provides adult day health or adult day care services to non-residents [a,e]	17.6%	14.8%	15.8%	10.4%
Serves residents with developmental disabilities [c,f]	27.1%	33.0%	30.9%	20.2%
Serves residents with severe mental illness [b,d]	28.6	38.8	35.1	28.9
Designated Alzheimer's or dementia unit in nursing home * (n=383)	35.4%	36.5%	36.0%	41.6%

* Only asked of RCFs that reported either a nursing home or a rehabilitation subacute unit within a nursing home at the same location.

Note: Rural not adjacent, rural adjacent and urban differences significant at $p \leq .05^a$, $p \leq .01^b$, and $p \leq .001^c$. Rural total and urban differences significant at $p \leq .05^d$, $p \leq .01^e$, and $p \leq .001^f$.

Table 4:
PERCENT OF RURAL AND URBAN RESIDENTIAL CARE FACILITIES BY AGING-IN-PLACE POLICIES

Policies / Characteristics	Residential Care Facility Location			
	Rural, Not Adjacent	Rural Adjacent	Rural Total	Urban Total
Total	6.7% (n=212)	11.9% n=356)	18.6% (n=568)	81.3% (n=1,734)
Admittance policy**: RCF does not admit applicant who …				
Needs SNF care regularly [c,f]	80.5%	79.4%	79.8%	69.6%
Needs basic monitoring for a health condition [a,d]	10.2	7.9	8.7	13.3
Exhibits behavior problems [c,f]	65.9	55.6	59.3	46.1
Requires end of life care [c,f]	31.3	31.3	31.3	25.3
Has moderate to severe cognitive impairment [c,f]	52.8	41.4	45.5	29.6
Is regularly incontinent of feces [c,f]	37.4	25.6	29.8	17.1
Is regularly incontinent of urine [c,f]	20.5	11.9	15.0	8.9
Needs two-person assist or lift for bed [c,f]	81.0	71.5	75.0	55.1
Is unable to leave in emergency without help [c,f]	47.3	39.5	42.3	26.1
Discharge policy***: RCF discharges a resident who...				
Needs SNF care regularly [c,f]	67.3%	59.5%	62.3%	55.3%
Needs basic monitoring for a health condition [a]	7.4	4.7	5.7	8.6
Requires end of life care [c,f]	10.3	9.0	9.4	8.6
Exhibits behavior problems [c,f]	60.7	49.8	53.7	40.3
Has moderate to severe cognitive impairment [c,f]	38.4	25.2	29.9	15.5
Is regularly incontinent of feces [c,f]	31.5	14.7	20.8	10.6
Is regularly incontinent of urine [c,f]	15.2	6.5	9.6	4.3
Needs two-person assist or lift for bed [c,f]	70.4	52.8	59.1	40.2
Is unable to leave in emergency without help [c,f]	33.6	20.3	25.1	12.2
Moves from RCF				
Mean % of residents moving out in last year	29.1%	25.6%	26.9%	25.4%
Mean % who moved as a result of cost in last year [c,f]	3.6	4.8	4.4	12.2
Mean % of moves to a nursing home				
when a NH is co-located [b,e]	67.5	60.8	64.2	54.9
when RCF paid a flat rate [c,f]	54.1	43.6	47.6	36.0
when RCF paid tiered rate varies [c,f]	48.4	45.3	46.5	26.6
Among RCFs with residents who moved, mean % of moves to:				
Hospital	11.3%	11.7%	11.6%	11.7%
Nursing home [c,f]	50.9	44.1	46.7	31.1
Private residence	23.6	24.8	24.3	23.8
Other RCF [c,f]	11.2	15.0	13.6	24.9
Other place [c,f]	2.5	3.5	3.1	6.4
Don't know [c,f]	0.5	1.2	0.9	2.7

* Only asked of RCFs that reported an independent living facility at the same location combined with the presence of either a nursing home or a rehabilitation subacute unit in a nursing home. ** Admission policy questions were asked of all responding facilities. *** Discharge policy questions were asked of those facilities that replied 'no' or 'case-specific' to the corresponding admission question. Rural not adjacent, rural adjacent and urban differences significant at $p \leq .05^{a}$, $p \leq .01^{b}$, and $p \leq .001^{c}$. Rural total and urban differences significant at $p \leq .05^{d}$, $p \leq .01^{e}$, and $p \leq .001^{f}$.

Established in 1992, the Maine Rural Health Research Center draws on the multidisciplinary faculty and research resources and capacity of the Cutler Institute for Health and Social Policy within the USM Muskie School of Public Service. Rural health is one of the primary areas of research and policy analysis focus within the Institute, and the Center builds upon the Institute's strong record of research, policy analysis, and policy development that addresses critical problems in health care.

The Maine Rural Health Research Center's mission is to inform health care policymaking and the delivery of rural health services through high quality, policy relevant research, policy analysis and technical assistance on rural health issues of regional and national significance. For over 20 years, the Maine Rural Health Research Center's research agenda has focused on some of the most intractable health access problems facing rural residents, especially those with mental health and substance abuse issues and those facing financial barriers due to lack of insurance and under-insurance.

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