



OCT 2017

TEXAS

**HOME CARE
MARKET ASSESSMENT**



Contents

KEY TAKEAWAYS	1
About this Report:	1
NATIONAL OVERVIEW.....	2
INTRODUCTION.....	3
MARKET OVERVIEW	5
Customers.....	5
Providers.....	6
Rural vs. Urban Conditions	8
Existing Home Care Cooperatives.....	9
Payers	9
Key Stakeholders	10
REGULATORY & PUBLIC POLICY OVERVIEW	11
Medicaid Overview.....	11
Texas Medicaid Overview	13
Home and Community Based Services (HCBS)	13
Non-Medicaid State Programs.....	14
General Licensing Requirements	14
Medicaid Licensing Requirements.....	14
Regulatory & Political Barriers	15
Training Requirements	15
LABOR OVERVIEW.....	16
Current Labor Conditions.....	16
Future Labor Trends	17
COOPERATIVE OPPORTUNITY	20
Cooperative Law	20
Cooperative Strategy	20
Appendix.....	23
Appendix A: Home Care 1915 Medicaid Waiver Descriptions.....	23
Appendix B: State Opportunity Matrix	24
Appendix C: State Opportunity Matrix Methodology.....	25

KEY TAKEAWAYS

- **Public Program:** Medicaid reimbursement rates in Texas are exceptionally low, preventing many providers, and particularly small agencies, from entering the larger public pay market. A moratorium is in place in the state limiting licensing for home health focused home care agencies, however, these limitations should not have a strong impact on home care cooperatives looking to launch or expand in the state.
- **Consumer Demand:** Texas' elderly population is expected to more than double by 2040, significantly increasing demand for home care services. Between 2017 and 2024, over 240,000 new home care customers are expected to enter the market. The home care market is estimated to serve 1,476,718 individuals, with a private pay market in the state estimated at no more than 248,000.
- **Labor Supply:** Texas' current caregiver to client ratio is 1 to 5.29, better than the national average of 1 to 8. Texas will need to recruit an estimated 1,434,671 new caregivers to the workforce by 2024 given current high turnover rates, exceeding 70% in the region, and soaring demand. Texas has the lowest wage rate for home care workers of all 50 states, paying 8% less on average than comparable retail and food service jobs.
- **Home Care Agency Market:** With nearly 4,000 agencies, Texas has the largest number of home care providers of any state; however, almost half of all home care agencies in the state earn less than \$250,000 per year in sales revenue.
- **Existing Home Care Cooperatives:** Texas is home to one existing home care cooperative, eQuality Home Care, a 20-caregiver (11 member) worker cooperative established in 2014, offering non-medical home care services, with 100% private pay clients.
- **Cooperative Opportunity:** With a growing client pool, a larger than average supply of working caregivers, and a history of cooperative development in the state, Texas presents many positive attributes for prospective or current home care cooperatives.

About this Report:

This report is part of the Cooperative Development Foundation's Socially Disadvantaged Group Grant. The ICA Group wrote this report to assist CDF in its efforts to bring home care worker cooperatives to scale across the country and to support the scale and sustainability efforts of the numerous home care cooperatives already operating. This state specific report is an in-depth market analysis for existing home care coops operating in Texas or community groups working to start new firms in the state. For more information visit: www.cdf.coop or www.ica-group.org.

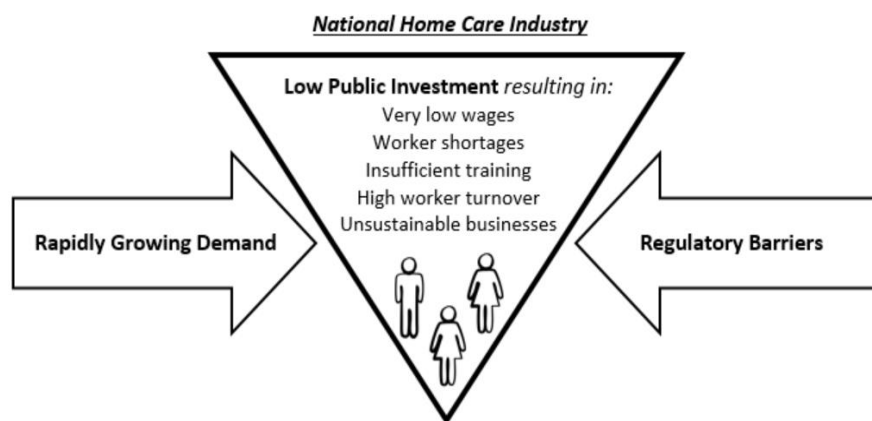
NATIONAL OVERVIEW

Unprecedented growth in the nation's elderly population, paired with a cultural shift towards aging in place, is driving historical growth in the home care sector. In the United States, the population of citizens age 65 and over will almost double by 2050. Nine in ten seniors want to “age in place” in their current home and community, and an estimated 70 percent will need help with basic daily living activities to do so. Accordingly, millions of new home care workers will need to be hired and trained over the next few decades to meet this growing demand. Today, more than two million workers are employed by the home care industry in the U.S., a workforce that has already more than doubled in the last decade.

Despite unprecedented job growth, the work is low paid, benefits are limited, hours are inconsistent, training is insufficient, career advancement is nearly non-existent, and the job is emotionally and physically taxing. Eighteen percent of home care workers are uninsured, and of those insured 40% rely on public health care coverage (primarily Medicaid). Consequently, turnover rates within the home care sector are at an all-time high of 60% nationally, and the nation struggles with a growing caregiver shortage. Nationally there are eight clients who need home care for every one caregiver in the workforce. Many states experience significantly higher shortages. The industry wide cost of caregiver turnover is over \$6.5 billion per year, a number equivalent to 10 percent of the \$61.8 billion in Medicaid dollars spent on home care in 2016.

Nationally, home care is a \$5B+ quickly expanding, national market, expected to grow at a rate of nearly 7% year-over-year for the next five years.¹ Yet, as a direct result of underinvestment and complex state regulations, the home care industry remains highly fragmented and dominated primarily by small, independent providers. The three largest companies in the industry have a market share of only 8.7%. Industry consolidation through merger and acquisition activity has, however, accelerated in recent years as a response to low reimbursement rates driving down profits. While local, independent providers can arguably be more responsive to consumer needs, small agencies lack the profit margins necessary to increase salaries or invest in internal growth generally.

Public reimbursement rates for home care services are low, driving down wages across the industry. Unlike many other sectors in healthcare, the homecare industry does not have strong political representation and thus has been an easy target for federal cuts. Across the U.S., the hourly median wage for workers in the direct care workforce is \$10.49 per hour, only 25 cents more than the median wage for retail and food service workers. Even though homecare is increasingly promoted by

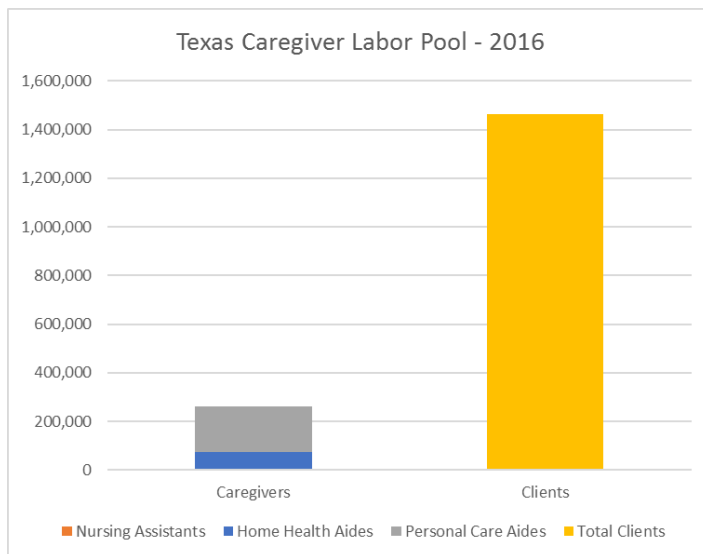


¹ IBISWorld Industry Reports: 62161 Home Care Providers in the US

healthcare professionals and offers a superior value for clients, this recognition has not yet resulted in increased payments for services. With deep public underinvestment in home care, small and large home care cooperatives alike struggle to remain financially sustainable, let alone carve out the financial resources necessary to invest in the worker-focused benefits that differentiate a home care cooperative job from a standard home care job. Worker cooperatives have the potential to raise wages and job quality for caregivers and provide better outcomes for patients, but the business model must be first strengthened, scaled, and unified in order to sufficiently influence and transform the industry today.

INTRODUCTION

Texas has long been supportive of home-based care for the states' elderly and disabled. As a result, Texas boasts the largest number of home care agencies nationally and ranks in the top ten states for Medicaid spending on home and community based care programs. Brownsville, Texas in the Rio Grande Valley is home to the greatest concentration of home health aides in the entire country². Today, nearly 500,000 individuals receive home health and personal assistance services through state-licensed agencies in Texas. As the states' elderly population booms—with an expected increase of over 50% by 2040—demand for home care, particularly Medicaid funded care, will increase dramatically.



While the conditions for home care development appear positive on the surface, the Texas home care market faces several significant challenges in meeting home care demand, chief among them, the recruitment and retention of quality caregivers to provide care. Texas is one of only eight states in the nation that pays its direct caregivers less than retail and food service workers, and ranks last among all states nationally. Unsurprisingly, Texas has one of the highest rates of caregiver turnover in the country. The low wages are driven in large part by unusually low

Medicaid reimbursement rates for home care services as compared to other states.

In Texas, as is true in all states across the nation, Medicaid is the largest payer for home care services. Low Medicaid reimbursement rates prevent agencies reliant on public pay from paying workers adequate wages to remain in the job, and negatively affect private pay agencies by setting a low rate standard. While few, if any, small agencies can remain financially viable operating in the public pay market, Medicaid offers the greatest opportunity for growth and scale. Importantly, to reduce “fraud waste, and abuse” the Centers for Medicaid and Medicare Services issued a state moratorium in July 2016 on new licenses for home health agencies in the state. The moratorium prevents the issuance of

² Health Care Issues for the Elderly Draw Attention in Texas, DePillas, L., Feb. 2017. Retrieved from www.washingtontimes.com.

new licenses for certified Medicare and Medicaid fee-for-service (FFS) home health providers until the moratorium is lifted. The moratorium does *not*, however, include personal assistance service, hospice, private pay home health, or managed care home health providers.

This report will analyze the home care market across a few key dimensions including market size, labor supply, the regulatory environment, and other state specific findings. We will then use this analysis to drive conclusions on the state of home care in Texas, how this effects current and start-up home care cooperatives in the state, and explore potential strategies for nurturing and growing home care cooperatives in Texas.

MARKET OVERVIEW

To understand the market for home care services in Texas, we use three separate lenses of analysis: customers, competition, and payers. This section provides a view into the number of potential home care customers in the Texas market, how home care clients pay for home care in the state, and who is competing for these customers. Finally, we explore key stakeholders in the state focused on the home care and cooperative industries.

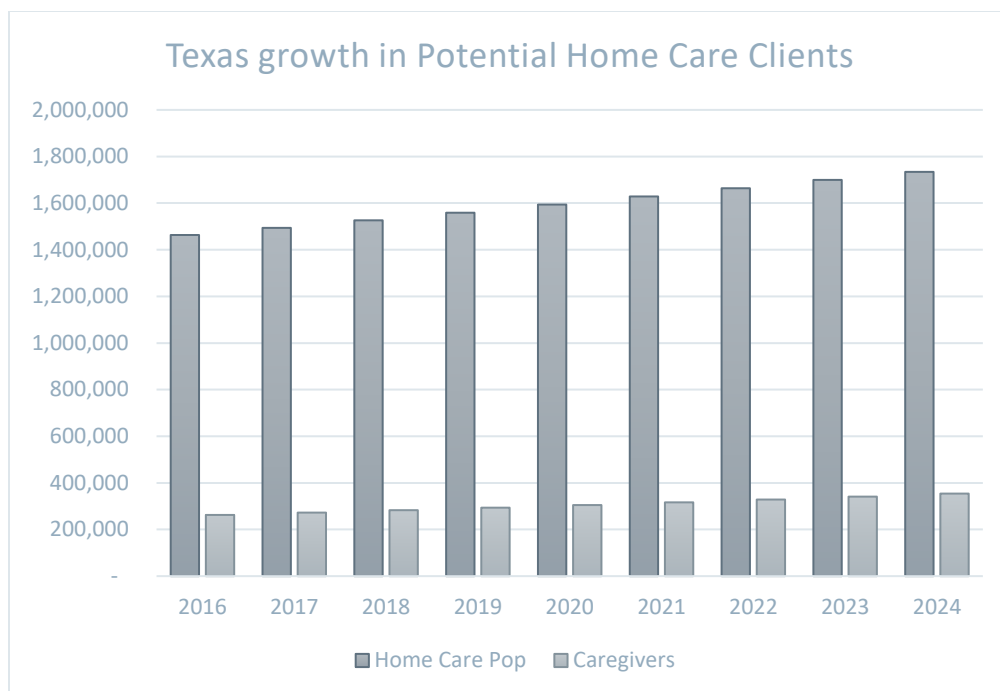
Customers

The home care client demographics in Texas are favorable towards the development of home care businesses. Among the 50 states, Texas has the third-largest population of adults aged 60 and older. Further, Texas' aging population is growing faster than the national average at 13.0% compared to 9.7% nationally. Between 2017 and 2040, the population of people age 65 and older in the state is predicted to more than double from 3.5 million to 7.6 million, bringing the percentage of the population that is 65+ to 17% of the total state population³. Texas' self-care (SC) and independent living (IL) disabled population is 7.6% or nearly 1.7 million people (2015 data).⁴ Despite large populations of both elderly and SC and IL disabled individuals, the total number of individuals in these groups potentially requiring home care services, defined as the "home care subset", is slightly lower than the national average at 5.3% (vs. 6.19%). As of 2016, 1,476,718 Texas residents were categorized as "frail elderly", "self-care disabled", or "independent living disabled" and likely needing home care services⁵. The primary source of growth in home care demand is Texas' "frail elderly," although the state's population of individuals with disabilities requiring home care will outnumber the states "frail elderly" until 2024. Long-term trends point towards a growing customer base, but high costs may reduce the potential size of the private pay market.

³ Medicaid CHIP Perspective 11th Edition Chapter 7. Retrieved from <http://hhs.texas.gov>.

⁴ 2015 Disability Status Report: Texas. Ithaca, NY: Cornell University Yang Tan Institute on Employment and Disability(YTI), Erickson, W., Lee, C., & Von Schrader, S. Retrieved from www.disabilitystatistics.org.

⁵ U.S. Census Bureau (2016). *Monthly Population Estimates for the United States: April 1, 2010 to December 1, 2017* 2016 Population Estimates. Retrieved from www.census.gov.



Providers

Texas boasts the largest number of home care agencies of any state with an estimated 3,917 licensed home health and non-medical home care agencies. The directory for home and community support services agencies supplied by Texas Health and Human Services Commission (HHS or HHSC) lists 2,569 agencies as providing “Personal Assistance Services” and 2,634 agencies as offering “Licensed and Certified Home Health Services,” with many agencies offering both services⁶. While Texas has an unusually large number of providers, the five largest home care firms in Texas control only 36.2% of the market, meaning Texas is still a relatively competitive market.⁷ Industries in which the top five firms control 60% or more of the market are generally considered non-competitive. The top-five largest agencies are:⁸

1. **AccentCare, Inc.**, also doing business as Texas Home Health and Texas Home Health Group, a national post-acute home healthcare services company with operations in 11 states, is the largest home care provider in the state with over 33 locations serving 127 of Texas’ 254 counties. AccentCare offers skilled home healthcare, personal care, hospice care, and case management services. AccentCare, Inc. controls 10.3% of the total Texas home care market.
2. **Epic Health Services, Inc.**
3. **Advanced Homecare Management** doing business as Encompass Home Health & Hospice⁹
4. **Caprock Home Health Services**

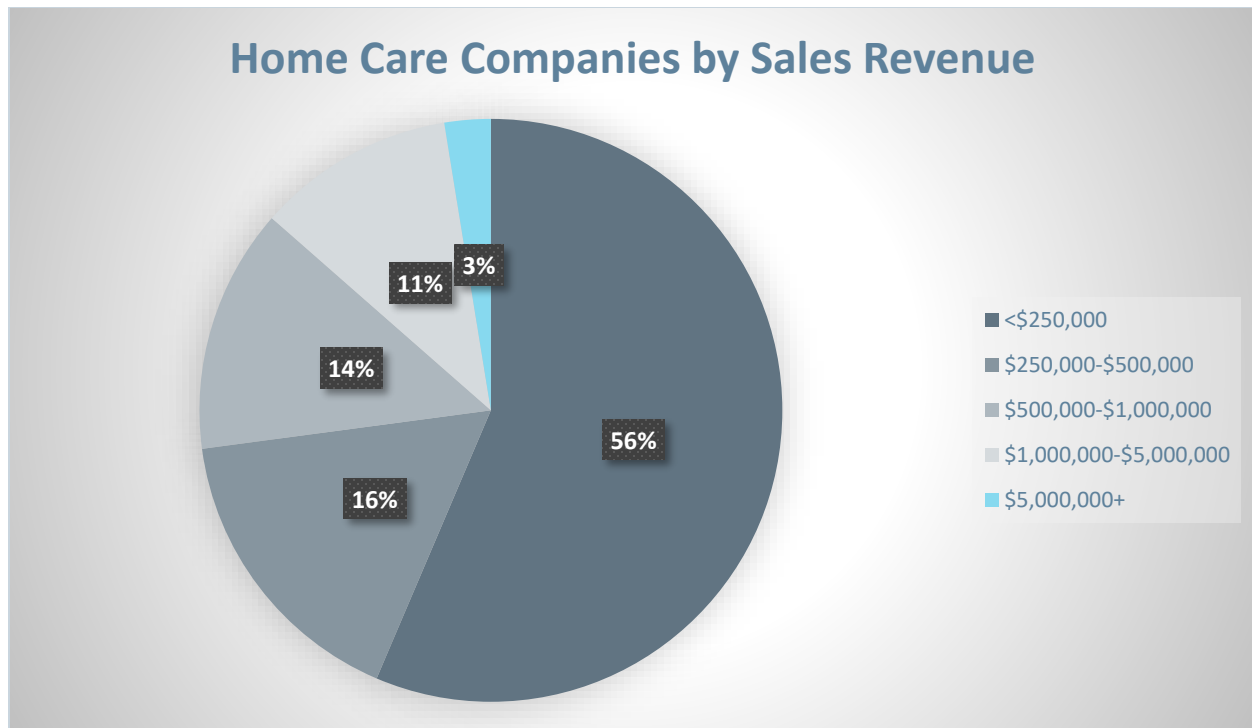
⁶ Agency Directory for Home and Community Support Services Agencies, Texas Health and Human Services Commission. Retrieved from <https://hhs.texas.gov>.

⁷ Industries in which the top five firms control 60 % or more of the market are generally considered non-competitive.

⁸ Mergent Intellect Dun and Bradstreet. (n.d.). Loblaws Inc. Retrieved from www.mergent.com.

⁹ Does not provide non-medical home care.

5. Valley View Primary Home Care

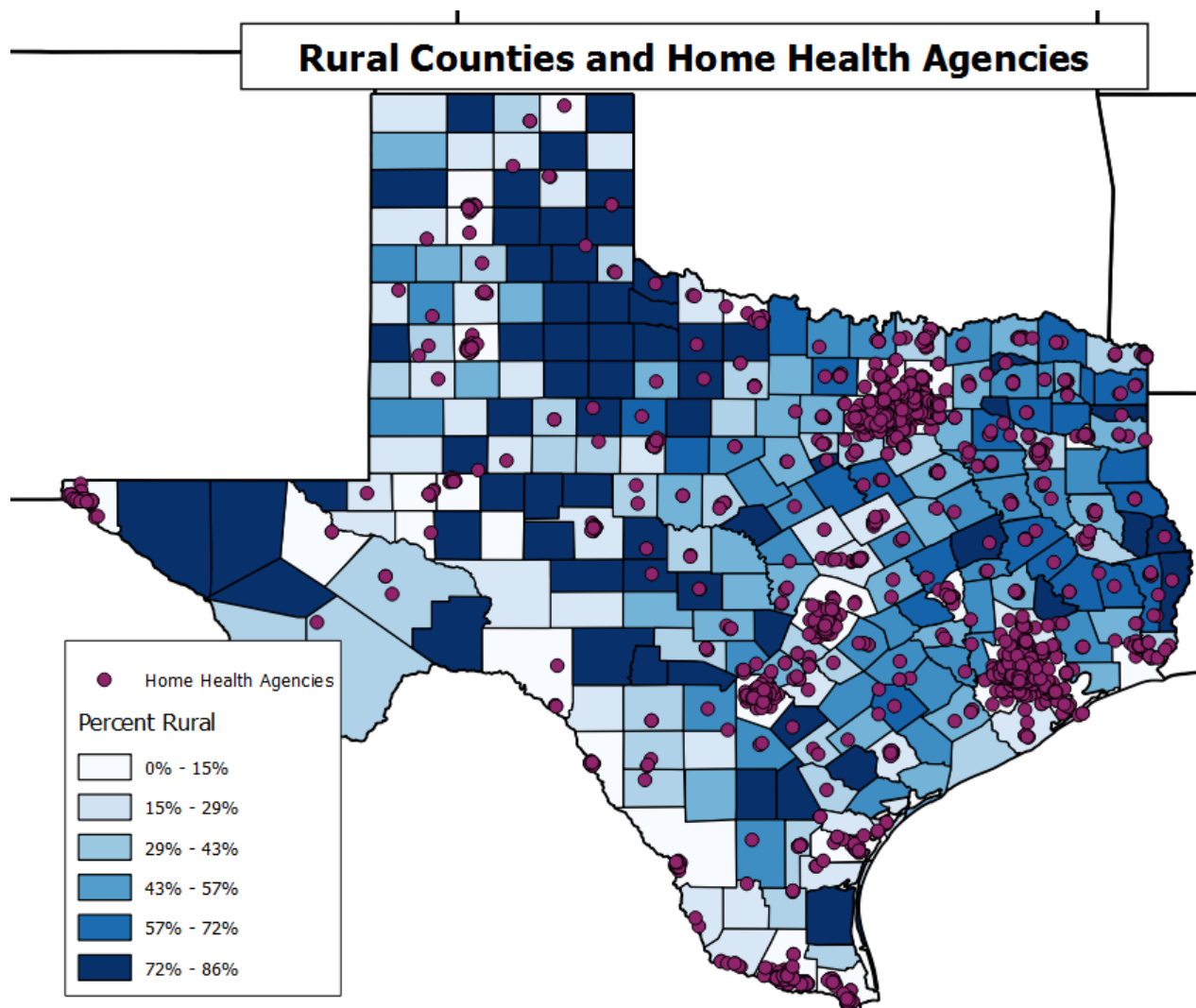


Like the national home care market, home care in Texas has relatively few large companies and primarily consists of small local operators. The median sales revenue for Texas home care companies is \$196,509 only slightly below the national median of \$216,243. While the median sales revenue is \$196,509 the *average* revenue is \$1,114,347, suggesting that the larger home care companies are an order of magnitude larger than small operators. Indeed, AccentCare, Inc. holds over ten percent of the entire state market. Of the 3,917 home care operators in the state (home health and non-medical), 46% have revenue of less than \$250,000 per year¹⁰. While low barriers to entry allow many small firms to enter the market, scaling to a sustainable size is much more difficult, especially because of the low Medicaid rates that depress margins and require even greater scale economies and operational efficiencies to cover costs.

¹⁰ Mergent Intellect Dun and Bradstreet. (n.d.). Loblaws Inc. Retrieved from www.mergent.com.

Rural vs. Urban Conditions

While Texas is one of the largest states by land area and population, overall population density is low in urban, suburban and rural areas, as compared to the national average. Average annual revenues of home care companies in both rural and urban Texas are only marginally different than national



averages, with rural average sales being slightly lower and urban average sales being slightly higher. These findings, paired with the sheer number of small agencies operating in the state, indicate that given the right conditions, small home care companies can successfully compete in both rural and urban Texas, but scaling is likely difficult due to low Medicaid reimbursement rates and typical rural recruitment challenges.

Unsurprisingly, the largest density of provider agencies is clustered in Texas' major urban areas, with the strongest presence in Dallas, Houston, Austin, and San Antonio. Smaller cities along Texas' southern border in the Rio Grande Valley, including McAllen, Brownsville and Laredo, also have a significant

density of home care agencies, driven in large part by a large Medicaid population and a lack of brick-and-mortar healthcare institutions to meet population needs.

Existing Home Care Cooperatives

Texas is home to one home care cooperative. Established in 2014, by the Home Care Foundation, eQuality Home Care, based in New Braunfels, in Central Texas, employs twenty caregivers, eleven of which are worker-owners. eQuality Home Care is 100% private pay, and offers only non-medical home care. eQuality charges clients \$19 per hour on average, but offers a sliding scale charging 24/7 clients slightly less and limited needs clients slightly more. eQuality secures the majority of clients through partnership and direct client referrals. The agency has also tested creative service days (mending workshops) at local nursing homes as a strategy to build potential client pipelines. With support from the Texas Rural Cooperative Center, eQuality is working to strengthen the business' back office and build cooperative systems to position the company for greater stability and growth. Like most other agencies in Texas, eQuality struggles with retention of workers, and hopes that strengthening the cooperative aspects of the business will help attract and retain more workers. eQuality also attempts, where possible, to leverage caregivers in administrative tasks to provide more steady employment for dedicated workers, increasing retention.

Payers

The primary public payer for home care nationally and in Texas is Medicaid. In Texas, 17.88% of the state's residents (or over 4 million beneficiaries¹¹) receive Medicaid benefits – on par with the national average of 18%. The percentage of “aged” Medicaid enrollees is 9%, while the percentage of “disabled” enrollees is 14%¹². Given the state's size and population, Texas ranks third nationally for total Medicaid spending at over \$40 billion dollars annually¹³. Texas is one of nineteen states that did not expand Medicaid under the Affordable Care Act, however, Texas has the highest Medicaid/CHIP enrollment among non-expansion states¹⁴.

In 2015, Texas allocated 31% of Medicaid funding to Long Term Services and Supports (LTSS) programs, marginally less than the national average of 32%, but up in the state from 28% in 2014. Texas allocates a slightly higher proportion of LTSS spending on Home and Community Based Services (HCBS) programs (57%) than the national average (53%), spending over \$4.9 billion on home-based supportive services¹⁵. As a result, Texas ranks 7th nationally in regards to percentage of Medicaid spending allocated to HCBS. Despite being an important payer for home care services, Texas has the lowest home care reimbursement rates in the country. Medicaid reimbursement rates for non-medical home care are set at \$11 per hour, far below the amount needed to pay caregivers a fair wage and manage overhead

¹¹ Texas Health and Human Services Health Care Statistics. Retrieved from <https://hhs.texas.gov>.

¹² Medicaid Enrollees by Enrollment Group, The Henry J. Kaiser Family Foundation. Retrieved from www.kff.org.

¹³ Total Medicaid Spending, The Henry J. Kaiser Family Foundation. Retrieved from www.kff.org.

¹⁴ The State of Texas, Legislature Budget Board, Medicaid Overview, April 2016. Retrieved from www.lbb.state.tx.us.

¹⁵ Medicaid Expenditures for Section 1915 (c) Waiver Programs in FY2014, Eiken, S., Burwell, B, Sredl, K., Saucier, P. Retrieved from www.medicaid.gov.

costs. Thus, many agencies, particularly small, single-location agencies, focus exclusively on the private pay market.

While there is a significant amount of data available on the size of the public pay market, it is much more difficult to estimate the size of the private pay market. Our own analysis of available data indicates a potential private pay potential pool of approximately 248,000 clients¹⁶. It is not yet known, though, how many of these individuals can afford to pay for home care out-of-pocket, or with the support of private insurance, and for how long they will be able to remain outside of the public pay market.

Today full-time home care for an individual in need costs a staggering 82% of the median household income in Texas. For individuals 64+, costs exceed 112% of median household income, jeopardizing the long-term sustainability of the private market. The average private pay client cannot afford full-time care out-of-pocket without draining savings or having access to supplementary income streams. While home care costs are lower in Texas than many other states in the country, potentially signaling a more stable private pay market, the pool of private pay clients that can afford care is limited, and reliance on this market will present a barrier to growth and scale for many agencies.

Key Stakeholders

As mandated by the Older American's Act of 1965, Texas operates 28 area agencies on aging (AAA), which provide a suite of services to promote independence for persons 60+ with a primary focus on frail, rural and low-income minority individuals. The AAA's contract with other agencies to provide services, including homemaker and personal care services. Texas also operates nine Aging and Disability Resource Centers (ADRCs), where Texas residents can access information and one-on-one counseling on long-term services and supports available in Texas. Both the AAA's and ADRC's are important referral sources for home care companies. In Texas, religious institutions serve as important community supports as well, and can be important referral partners.

For provider agencies, the Texas Association for Home Care & Hospice represents licensed home and community supports services agencies. For existing or prospective cooperatives interested in operating in the state, the Texas Rural Cooperative Center (TRCC), located at the University of Texas, Rio Grande Valley, provides training and technical assistance to cooperative businesses across the state. The Austin Cooperative Business Association (ACBA), a chapter of the National Cooperative Business Association, advocates for the expansion of the cooperative economy in Central Texas.

¹⁶ To estimate the size of the private pay market in Texas, we used our estimate of the combined frail elderly, independent disabled, and self-care disabled population in Texas is 1,476,700. This number is then multiplied by the private pay market's (out-of-pocket and private insurance) percent of the national home care industry, estimated to be 16.8% by IBIS World. Using this method, we estimate the size of the Texas private pay home care potential client pool to be 248,000.

REGULATORY & PUBLIC POLICY OVERVIEW

Whether private pay or public pay, agencies wishing to operate in Texas must have a basic understanding of the regulatory and policy environment in the state. This section provides an overview of Medicaid generally as well as Texas specifically, discusses Texas' commitment to home and community based services for long term service and support needs, provides an overview of specific programs, and discusses both licensing and worker training requirements that need to be met by private pay and public pay agencies that wish to operate in the state, and finally, discusses any regulatory or political barriers to operating a home care agency in the state.

Medicaid Overview

Dually funded by the federal government and individual states, Medicaid provides financial support for health care services for low-income individuals, including elderly and disabled individuals requiring long term care (accounting for over 60% of Medicaid spending). Under Medicaid, the federal government provides a base match of 50% for approved Medicaid provided services, with low income states eligible for higher reimbursement rates. To be eligible for Medicaid benefits, individuals must meet federally mandated financial and asset criteria.

Beginning in 2014, the Affordable Care Act allowed states the option to expand Medicaid eligibility to all non-elderly adults with income below 138% of the federal poverty line. Under "Medicaid Expansion", the federal government absorbs a larger share of Medicaid costs for new enrollees, covering 100% of costs from 2014 to 2017, and gradually reducing that percentage to 90% from 2017 to 2020. To date 32 states and the District of Columbia have expanded Medicaid¹⁷.

Medicaid requires that states provide specific services at a minimum, to participate in the program. Required programs include inpatient and outpatient hospital services, physician and laboratory services, nursing home care and more recently, home health care. Above the minimum required programs, states may elect to cover additional services and/or expand services to individuals outside of the standard eligibility limits set by the Center for Medicaid and Medicare Services (CMS), the federal governing body. Typically, these additional services are provided under approved "waivers"¹⁸. The number and type of waivers in each state varies widely, however common waivers include 1915 waivers, Aged and Disabled Waivers (ADW), and Intellectual Disability Waivers (ID). Home care relevant 1915 waivers include:

- 1915(c) Home and Community-Based Waivers (offered in 47 states and DC)
- 1915(i) State Plan Home and Community Based Waivers
- 1915(j) Self-Directed Personal Assistance Services Under State Plan Waivers
- 1915(k) Community First Choice Waivers¹⁹

See Appendix A for waiver details.

¹⁷ A 50 State look at Medicaid Expansion, April 2017. Retrieved from www.familiesusa.org.

¹⁸ Congressional Budget Office, Overview of Medicaid. Retrieved from www.cbo.gov/publication/44588.

¹⁹ Medicaid, Authorities. Retrieved from www.medicaid.gov.

1915 (c) HCBS waivers were first introduced in 1983 as a way for states to transition beneficiaries out of costly institutional care settings, and in 2005, became formal Medicaid State plan options.²⁰ States can offer as many 1915(c) Home and Community-Based Waivers as they elect, provided they meet the requirements set forth by CMS, and can elect what services to cover under the waivers. Home health aide, personal care aide, and homemaker services, however, are almost always covered under these programs.²¹ Understanding where states fall on the spectrum of HCBS spending for their long-term services and supports (LTSS) programs is an important metric for states overall preference for institutional versus home based care.

From Medicaid's founding in 1965 until the early 1990's, Medicaid operated under a system of "fee-for-service", where providers were directly reimbursed for services provided, based on rates set by individual states. In the early 1990's however, Medicaid began a transition towards a system known as "managed care" to better manage costs, utilization, and quality. Under Medicaid managed care, state Medicaid agencies contract with independent for profit or non-profit Managed Care Organizations (MCOs) that accept per member per month payments for health care services, known as "capitated payments". Because payments are "capitated" MCO's are driven to balance the needs of high-need/high-cost beneficiaries with low-need/low-cost beneficiaries and provide care in the most cost effective manner possible to avoid cost overruns. Early on, managed care was implemented under 1115 Waivers, but in 1997 the Balanced Budget Act gave states more authority to implement managed care programs without waivers²². As of March 2017, only 12 states did not have Managed Care programs in place²³. States that have begun transitions to managed care programs are in varying states of transition. Several states including Tennessee, Hawaii, New Hampshire, New Jersey, Rhode Island, Kentucky, Iowa, Delaware, Florida and Arizona operate almost exclusively under managed care programs (over 90% transitioned)²⁴, including home and community based services, while others are just beginning this transition. Understanding where specific states fall on this transition is important, as it is directly correlated to how service rates are set, how money flows, and the importance of strategic partnerships, scale and other factors to home care agency success in a state.

In addition to the transition to managed care, states are increasingly transitioning Medicaid to "value-based" care models by implementing Accountable Care Organizations (ACO's). To date, ten states (MA, VT, NY, OR, UT, CO, MN, NJ, and RI) have implemented ACO programs²⁵. The goal of ACO's is to "(1) enhance the patient experience of care; (2) improve the health of the population; and (3) reduce the per capita cost of health care". What differentiates an ACO from an MCO is innovative values-based payment structures and carefully defined and tracked data and quality metrics to assess and confirm established value outcomes. The transition to value based care via the ACO model is an important one

²⁰ Medicaid, Authorities. Retrieved from www.medicaid.gov.

²¹ Medicaid, Authorities. Retrieved from www.medicaid.gov.

²² Kaiser Family Foundation, Five Key Questions and Answers about Section 1115 Medicaid Demonstration Waivers, 2011. Retrieved from www.kaiserfamilyfoundation.com.

²³ Kaiser Family Foundation, Total MCO's, March 2017. Retrieved from www.kff.org.

²⁴ Kaiser Family Foundation, Share of Medicaid Population Covered Under Different Delivery Models, July 2016. Retrieved from www.kff.org.

²⁵ Center for Health Care Strategy, Inc. Medicaid ACO's: Status Update, June 2017. Retrieved from www.chcs.org.

for cooperative home care agencies and developers to watch, as higher quality care is a hallmark of cooperative homecare agencies, and could be an important market differentiator.²⁶

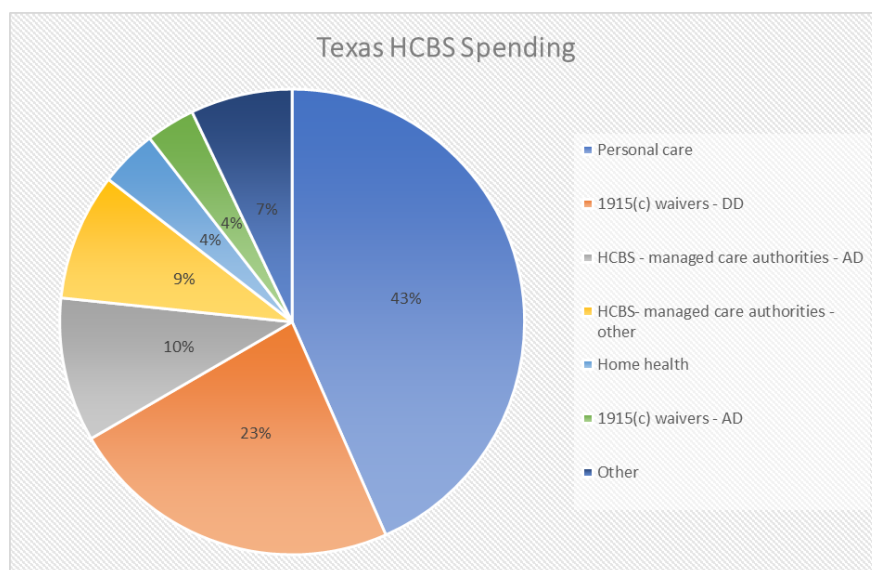
Texas Medicaid Overview

Texas Medicaid provides health care services through two service delivery models: fee-for-service (FFS) (traditional Medicaid) and managed care. The majority of Medicaid clients receive care through managed care health plans and the state is continuing an effort to transition Medicaid clients to managed care to more efficiently deliver care and manage costs. Texas began transitioning from fee-for-service Medicaid in 1993, under the State of Texas Access Reform (STAR) program. While there are several STAR programs, the most important for home care is STAR+PLUS, which covers people who have disabilities or are aged 65+. People in STAR+PLUS receive Medicaid long-term services through a state Medicaid health plan. There are 19 Medicaid managed care organizations (MCOs) that coordinate care under Texas' Medicaid program. MCO's contract directly with home care agencies, utilizing risk-based capitated payment models.²⁷

As of September, 2016, Texas Health and Human Services Commission (HHS or HHSC) is the single state agency responsible for Texas's Medicaid program, including long term services and support programs (LTSS). LTSS includes home and community based services, which formerly fell under the Department of Aging and Disability Services (DADS). Interviews with home care stakeholders on the ground revealed significant challenges working with DADS from both the agency and care recipient side. It will be important to watch the transition to HHS for improvements.

Home and Community Based Services (HCBS)

Home and community based service programs allow Medicaid recipients who are age 65+ and those living with physical disabilities to receive support with activities of daily living (ADL's) and instrumental activities of daily living (IADL's) at home or in their community, rather than in institutional settings. In total, HCBS programs serve approximately 800,000 aged and disabled Medicaid beneficiaries in Texas annually. Texas' HCBS state plan services include: Personal Assistant Services (PAS), Community Attendant Services (CAS), Personal Care



²⁶ Center for Health Care Strategy, Inc. Medicaid Accountable Care Organization Programs: State Profiles. Brief: October 2015. Retrieved from www.chcs.org.

²⁷ Medicaid Managed Care in Texas: A Review of Access to Services, Quality of Care and Cost Effectiveness, Sellers Dorsey, Milliman, Feb. 2015. Retrieved from www.tahp.org.

Services (PCS), Community First Choice (CFC) and Day Activity and Health Services (DAHS). Additionally, Texas participates in several 1915(c) Medicaid Waiver programs to support home and community based services. These waiver programs are the Home and Community Services Waiver (HCS), Community Living Assistance and Support Services (CLASS), Texas Home Living (TxHmL), and the Deaf Blind with Multiple Disabilities (DBMD) program. As of 2014, 1915(c) waivers for Aged and Disabled and Intellectual/developmental disabilities accounted for 23.3% of Texas' state HCBS spending, personal care accounted for 43.4% of spending, and the remaining programs totaled 32.6%.

Texas offers three service delivery options for individuals who require long term care supports: a traditional Agency Option, a Consumer Directed Services Option (CDS), and a unique Service Responsibility Option (SRO), a hybrid of the agency and CDS options in which the care recipient, MCO and provider agency all work together to select and train caregivers²⁸. Consumer direct services are generally associated with higher quality of care for clients and higher pay for caregivers. Participation in CDS and SRO in Texas are low as compared to other states.

Non-Medicaid State Programs

In addition to the Medicaid home and community based services programs listed above, Texas offers several non-Medicaid based support programs for individuals who need personal care to remain at home and meet financial and medical eligibility requirements. These include the Texas Community Care for the Aged/Disabled (CCAD) program, Community Attendance Services (CAS) program, and Texas' In-Home and Family Support Program (also referred to as the Community Services IHFS Grant). Eligibility for all programs is determined by the Department of Health and Human Services.

General Licensing Requirements

Whether private pay or public pay, home care agencies that provide community support services in Texas must be licensed by the Department of Health and Human Services (HHS). Licensing fees are \$1,750 for each parent or branch, and \$1,000 for each alternate delivery site. Licensing typically takes 45 days. Specific requirements and processes are detailed in Part 1, Chapter 97 Licensing Standards for Home and Community Support Services Agencies²⁹.

Medicaid Licensing Requirements

Agencies wishing to serve Medicaid clients, must also apply for certification with the Centers for Medicaid Services (CMS), and must report this request to the Texas HHS. Given the ongoing moratorium in Texas, agencies wishing to provide Medicaid funded service can elect to offer personal assistance services, hospice services, or managed care home health. Providers wishing to participate in managed care home health need to enroll in Medicaid FFS through the Texas Medicaid and Healthcare Partnership in order to be eligible to contract with state managed care organizations.

²⁸ Medicaid CHIP Perspective 11th Edition Chapter 7. Retrieved from <http://hhs.texas.gov>.

²⁹ Office of the Secretary of State, Texas Administrative Code. Retrieved from www.texreg.sos.state.tx.us.

Regulatory & Political Barriers

On January 30, 2014, the Centers for Medicare and Medicaid Services (CMS) implemented a moratorium to prevent enrollment of new home health agencies (HHAs) in Houston and Dallas. On July 29, 2016, the moratorium was expanded to cover the entire state. The moratorium has been extended in six-month intervals and remains in place at the time of this writing³⁰. The moratorium applies only to initial licensed and certified home health agencies that serve Medicare clients and Medicaid fee-for-service (FFS) home health providers, but does not affect the home and community support service agency categories of licensed home health (private pay), personal assistance services (PAS), or hospice. Again, while the current moratorium does not apply to managed care providers, given enrollment in Medicaid FFS is a prerequisite for participation in managed care, providers will continue to be allowed enrollment in Medicaid FFS through the Texas Medicaid and Healthcare Partnership.

For agencies wishing to serve Medicare clients, acquisition of an existing Medicare certified agency is a potential strategy to overcome the licensure barrier. Per a September 2016 communication issued by the Texas Department of Aging and Disability Services, the moratorium “does not affect a change of ownership unless CMS determines that the new owner of the HHA must apply for initial Medicare certification as required by Title 42 of the Code of Federal Regulations, §424.550. If a Medicare-certified HHA undergoes a change of ownership, the HHA must ask CMS and its applicable Regional Home Health Intermediary to determine if the provider agreement will transfer to the new owner³¹.”

Training Requirements

State training requirements for *Home Health Aides* are in-line with federal requirements. *Nursing Aides* must complete 25 more training hours and 24 more clinical hours than federal standards. *Personal Care Aides* must only be ‘deemed competent’ by their employer agency, with the exception of personal care aides that are employed to provide care under the Medicaid HCBS waiver. Under this program, “the provider agency must outline a plan for initial and ongoing training of personal care aides and administer a written competency-based assessment of the applicant’s ability³².” Each of these programs also offer a participant-directed option, where the participant is responsible for facilitating the training of their PCA.

The majority of home care workers in Texas, and across the U.S., are trained and certified, as applicable, by their initial employing agency. In cases of participant-directed services, the individual receiving care can often conduct the training themselves. In cases where more advanced training is required, the participant can also engage a training service.³³

³⁰ Centers for Medicare and Medicaid Services, Provider Enrollment Moratorium. Retrieved from <https://www.cms.gov/Medicare>. September 2017.

³¹ Texas Department of Aging and Disability Services, Provider Letter No. 16-35 FAQ relating to Licensing and the CMS Moratorium on HHA Enrollment in Texas, Henderson T., Sept. 2016. Retrieved from www.dads.state.tx.us.

³² Paraprofessionals Healthcare Institute, Personal Care Aide Training Requirements, Summary of State Findings, Marquand, A., March 2013. Retrieved from www.phinational.org.

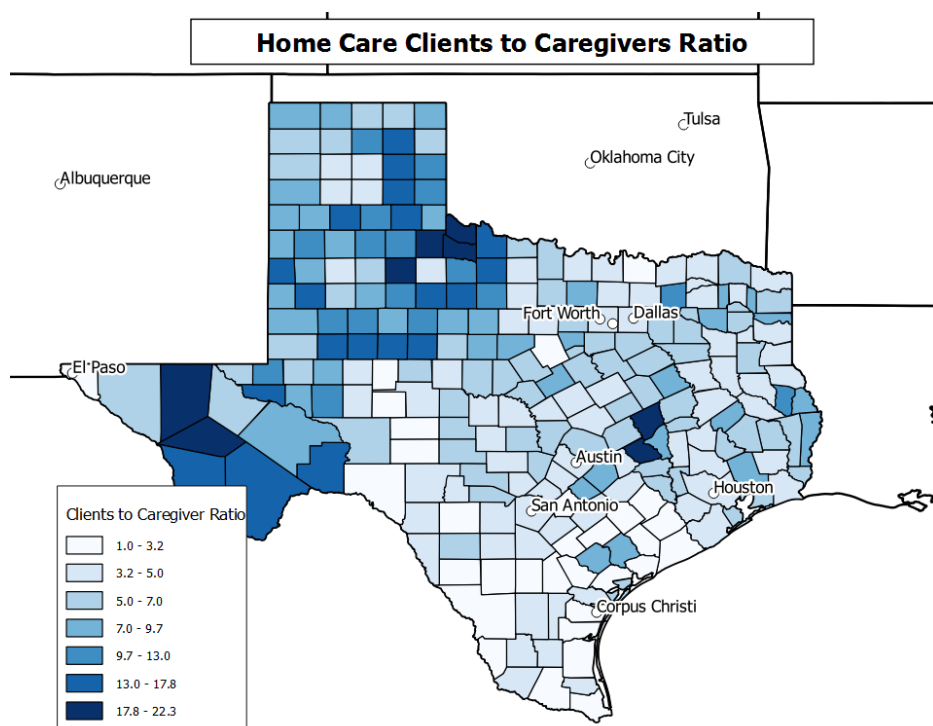
³³ For example, the Personal Care Assistant Certification Program offered by the University of Texas at Austin, Center for Professional Development. This online, self-paced course prepares individuals for a career in the personal care field, including home health, covering basic topics as well as advanced topics such as care for individuals with memory challenges, immunosuppressive disorders, mental health issues, substance abuse disorders, and more. The course costs \$2,495. Individuals

LABOR OVERVIEW

As a human centered business, recruitment and retention of enough quality home care workers is the biggest factor in the sustainability and success of any home care agency. Home care cooperatives and agencies across the country are having trouble recruiting and retaining enough caregivers to meet their business needs. This section provides an overview of the current labor pool of caregivers in the state, as well as the current labor conditions for home care workers, and a view into the future market for caregivers as demand for home care work increases.

Current Labor Conditions

As is true nationally, Texas agencies struggle to recruit and retain enough caregivers to meet demand. Inter-agency competition for caregivers is especially fierce given the sheer number of home care agencies in the state. For every one caregiver in Texas, there are currently 5.29 people categorized as frail elderly, independent-living disabled, or self-care disabled. While Texas's dependency ratio is improved over the national caregiver dependency ratio of 8 to 1, the projected 12.6% annual growth in Texas' elderly population is significantly higher than the national average (9.7%). Further, the turnover of caregiving workers in Texas is significantly higher than other regions of the country at 73%. Combined, we expect the state's caregiver ratio to decline over the coming years as these conditions force consequences.



In the United States the average caregiver is paid over 10% more than the average food service or retail worker. In Texas, caregivers are paid over 8% less than food service and retail workers, at an average

who makes this investment and complete the course may be especially good candidates for cooperatively owned home care agencies seeking high quality care workers or company management talent.

hourly rate of only \$8.91 per hour. The median hourly pay rates for personal care aides, home health aides and nursing assistants in 2015 were \$8.61, \$8.85 and \$11.25, respectively³⁴. For comparison, state minimum wage is \$7.25 per hour and the hourly wage of a starting cashier at Walmart in Texas is \$8.68. Median wages for personal care aides below entry-level retail jobs, like Wal-Mart, are especially troubling given the industry’s recruitment and retention goals. And, given the added challenges facing home care workers, including irregular and insufficient hours, limited benefits, and the emotional and physical demands of the work, there is often little incentive for workers to enter or stay in the industry.

Caregiver and Retail/Food Service Wage Comparison			
	Direct Care	Retail/Food	Difference
National Average	\$ 10.70	\$ 10.24	\$ 0.46
Texas	\$ 8.91	\$ 9.73	\$ (0.82)

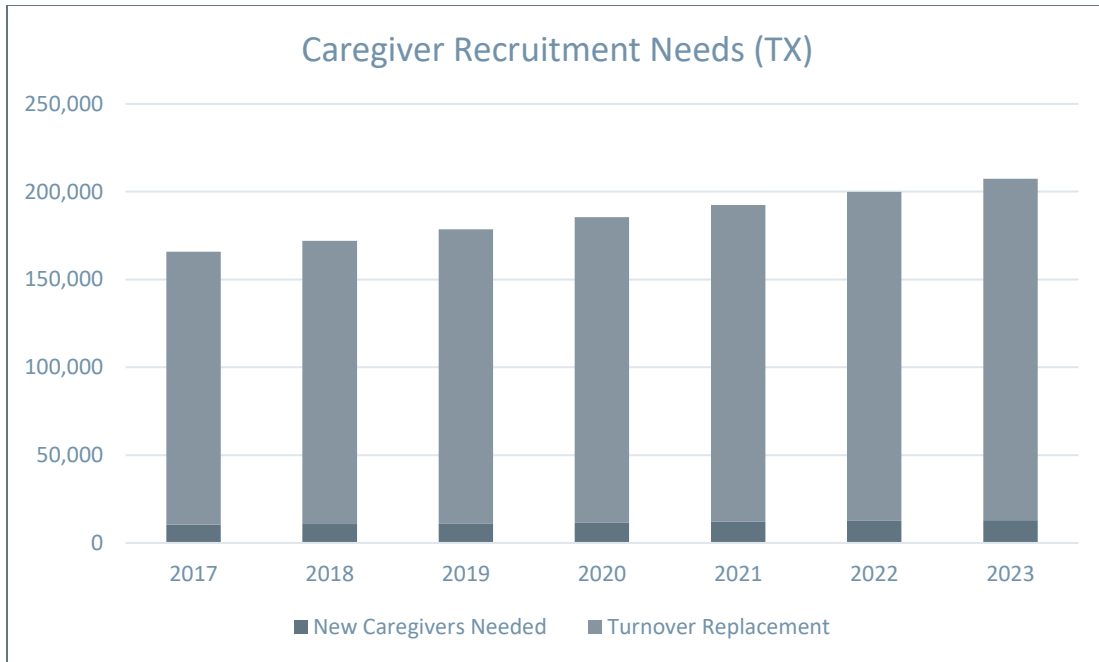
Future Labor Trends

According to the Texas Workforce Commission, personal care aides and home health aides are the first and third fastest growing occupations in Texas, respectively, followed closely at #4 by nurse practitioners³⁵. By 2024, Texas is expected to *employ* over 354,000 caregivers—90,605 Home Health Aides, 254,620 Personal Care Aides, and 8,882 Nursing Assistants—over 90,000 more than currently work in the state³⁶. Combining the growth in the workforce with the industry’s high turnover rate, we estimate that the state of Texas will need to recruit and train 1,434,671 new workers to meet this demand.

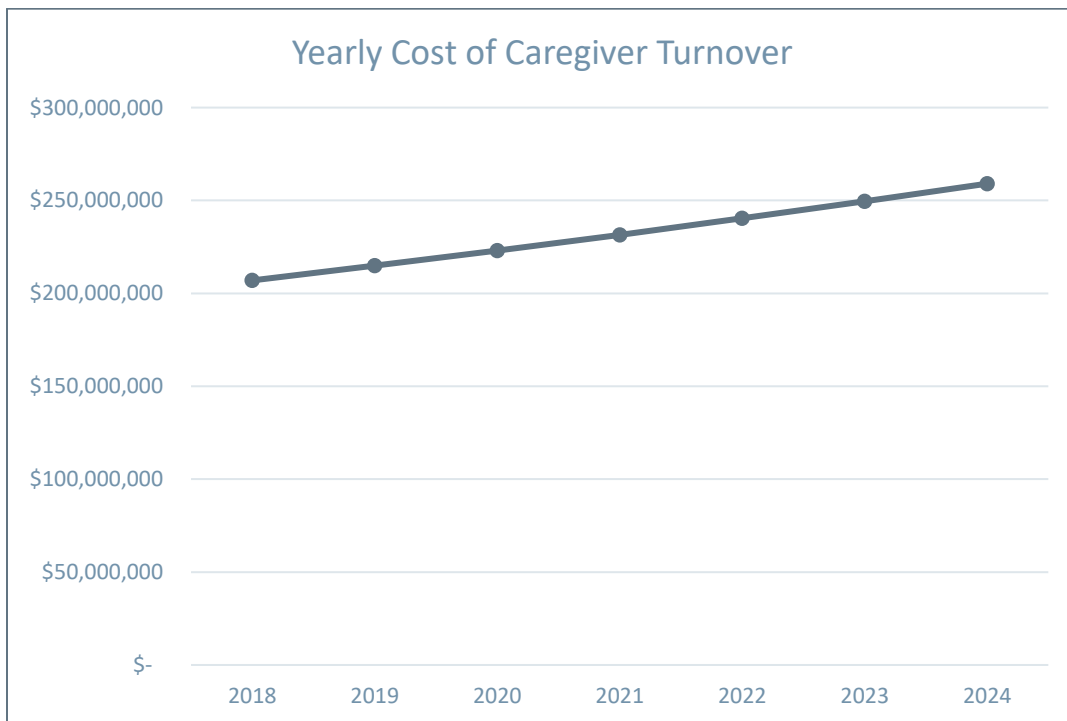
³⁴ Paraprofessionals Healthcare Institute, 2015. Retrieved from <https://phinational.org>.

³⁵ Texas Workforce Commission, Employment Projections. Retrieved from www.tracer2.com.

³⁶ Projections Central, Long Term Occupational Projections. Retrieved from www.projectionscentral.com.

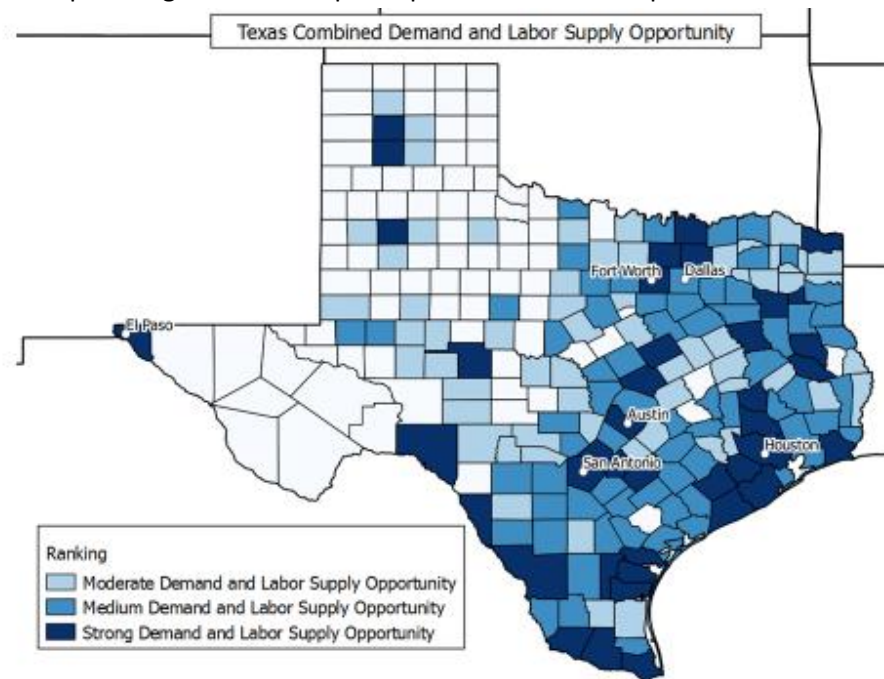


In fact, we estimate Texas's extreme 73% turnover rate to result in annual costs exceeding \$200M and rising for the state if current conditions are unaddressed.



Even if the turnover rate were halved over the same period, over 717,335 new caregivers would have to be hired and trained should current turnover trends continue. Strategies will need to be employed to support the retention of workers in the home care field and attract others into the field.

The macro employment environment in Texas is average with unemployment comparable to national unemployment. The prime-age labor force participation rate is seven percent below the national



average, indicating the potential to identify a small pool of untapped labor to recruit into the caregiver workforce. The right mix of outreach, training opportunities, wages and benefits could entice unemployed or underemployed Texans to join the home care sector. As is true nationally, a greater diversity of caregivers will still need to be recruited into the state's home care workforce, including notably, more men and both younger and older workers.

Home care cooperatives should be particularly well positioned to leverage the benefits of worker ownership to help retain more workers, but financial stability and success, as well as the translation of this success into higher wages and benefits, will be necessary to truly reap the benefits of the cooperative advantage. Note the darker-colored counties on the map above indicating areas where both demand *and* potential labor supply opportunity is the greatest, and revealing potentially strong areas for home care cooperative development.

COOPERATIVE OPPORTUNITY

Cooperative Law

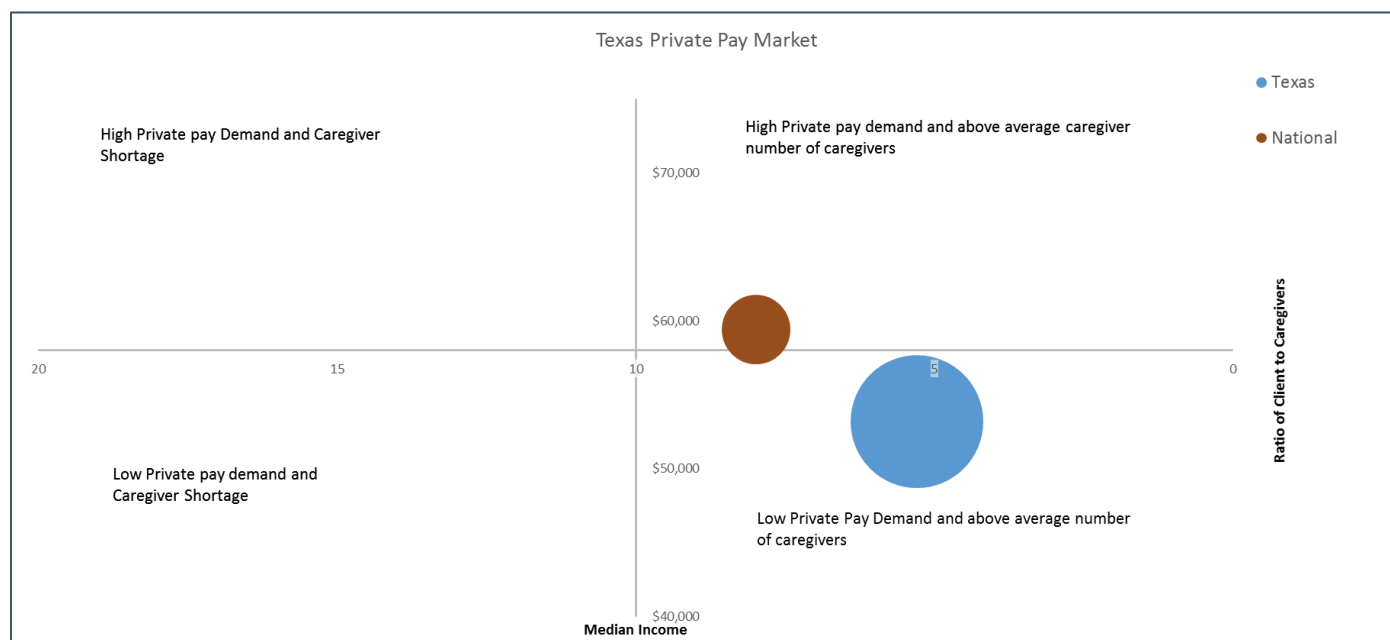
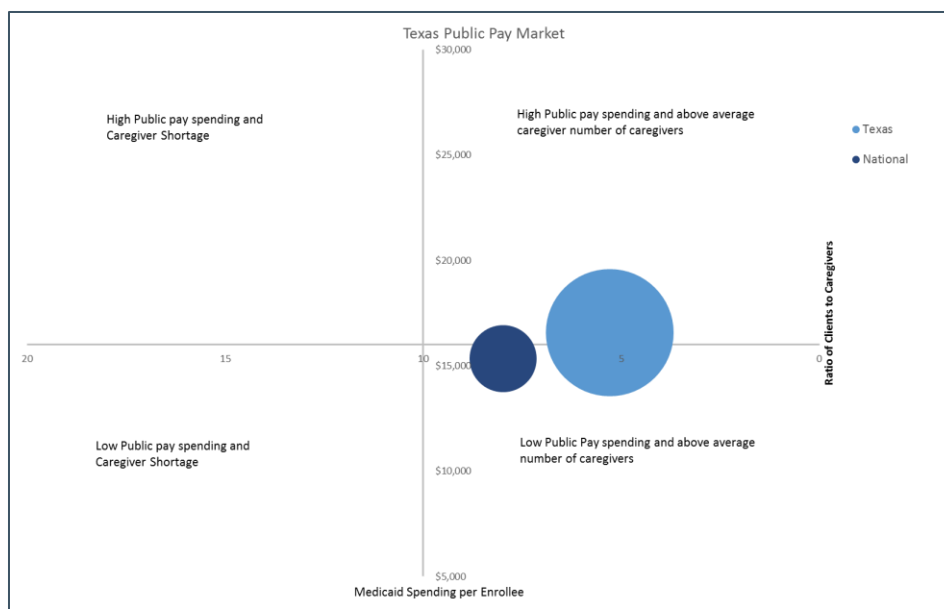
In Texas, cooperative companies can elect to organize under the Texas Cooperative Association Act, Chapter 251 of the Texas Business Organizations Code, or as a “member managed” Texas Limited Liability Company (LLC). The Texas Cooperative Association Act exempts organizations from paying Texas franchise taxes and provides specific rules and regulations around organization and governance.³⁷

Cooperative Strategy

Cooperative developers and others interested in supporting home care cooperatives in Texas have an exciting opportunity to improve the quality of jobs, the quality of care, and access to care in the state. However, while the potential for impact is high, the road is difficult. Nationwide, independent home care agencies are struggling to survive because of the small private pay market, low margins on Medicaid clients, difficulty in recruitment and retention, and high training costs. While the Texas market presents several challenges to launching or scaling a home care agency, home care client demographics in the state are favorable towards the development of home care businesses. At a high level, Texas spends about the same per Medicaid enrollee as the national average, but median household income is lower than average for the private pay market. Texas, however, has a less severe caregiver shortage than in other areas of the country, placing the state in a more promising category of markets for home care in the country (see public and private-pay graphics below).³⁸

³⁷ Texas Cooperative Law, Co-Op Law. Retrieved from <http://www.co-oplaw.org/statebystate/texas/>.

³⁸ The two graphics below analyze both the private pay market and the public pay market by integrating the labor supply, the number of clients needing home care services, and the pool of money available for those services. In both charts the size of the bubble indicates the total number of potential home care clients in the state. Along the x-axis, we have the ratio of home care clients to caregivers in the state. For example, nationally, there are about eight home care clients for every one working caregiver. States to the right of the national bubble have a relatively strong supply of caregivers in the state in comparison to the national average. Finally, on the y-axis we have two different data points depending on whether we are assessing the private pay market or the public pay market. In the private pay assessment, we use the state’s median income to determine the potential pool of private money available to pay for home care. In the public pay assessment, we use the state’s per enrollee Medicaid spending on aged and disabled beneficiaries.



Long-term trends point towards a growing customer base with the greater opportunity in public pay, rather than private pay. Despite the large number of home care agencies in Texas, the market for home care in Texas is sufficiently large to support multiple home care cooperatives in the state. Cooperative home care agencies that can differentiate both their employment practices and the quality of care they provide should be well positioned to gain competitive advantage through increased recruitment and retention of both home care workers and clients. Marketing and partnership development will be critical, as will strategic placement for either launch or expansion. Pursuing partnerships with influential community organizations including County Agencies on Aging, assisted living and senior living communities, and religious institutions presents a strong opportunity for client pipeline growth.

Given the challenges of launching a home care company and a cooperative company generally, strategic partnerships with both local and national organizations supportive of cooperative development, like the Texas Rural Cooperative Center can play an important role in ensuring early and long term success. While Texas only has one home care cooperative at current, Texas does have a long and fruitful history of cooperatives in other industries including agriculture and energy, and home care cooperatives that can leverage historical knowledge among clients may enjoy greater support.

Furthermore, national home care cooperative development strategies can support the successful start-up and growth of local cooperatives. One potential strategy for operatives and partners to assist local home care cooperatives is through the development of a secondary (purchasing style) cooperative. It can be difficult for smaller scale organizations to manage back office operations, training, and regulatory paperwork while also managing a home care business and generating new sales. A membership organization for cooperatives that provides more efficient payroll and scheduling solutions and access to high quality training can create the benefits of scale while also allowing for local control of the cooperative. An organization that can provide a pool of well-trained caregivers can significantly reduce recruitment costs and increase quality of care for cooperative members and a membership organization is one strategy that may provide that advantage.

In Texas and nationwide, effecting the potential impact of cooperatives in the home care industry will require sufficient capital investment, collaboration, ingenuity, and a willingness to take risks and learn from failure. If done right, home care cooperatives can be a powerful, market-based approach creating access to dignified employment for low-wage workers in a difficult industry that has suffered from systemic underinvestment – an approach that is working for, but not waiting for, the policy solutions that are needed for larger-scale change.

Appendix

Appendix A: Home Care 1915 Medicaid Waiver Descriptions

1915(c) Home and Community-Based Waiversⁱ

This waiver enables States to tailor services to meet the needs of a particular target group. Within these target groups, States are also permitted to establish additional criteria to further target the population to be served on a HCBS waiver (e.g. target by age or diagnosis such as autism, epilepsy, cerebral palsy, traumatic brain injury, HIV/AIDS; etc.). Eligible individuals must demonstrate the need for a Level of Care that would meet the State's eligibility requirements for services in an institutional setting. States choose the maximum number of people that will be served under a HCBS Waiver program. States can offer a variety of unlimited services under an HCBS Waiver program. Programs can provide a combination of standard medical services and non-medical services. Standard services include but are not limited to: case management (i.e. supports and service coordination), homemaker, home health aide, personal care, adult day health services, habilitation (both day and residential), and respite care. States can also propose "other" types of services that may assist in diverting and/or transitioning individuals from institutional settings into their homes and community.

1915(i) State Plan Home and Community Based Waiversⁱⁱ

States can offer a variety of services under a State Plan Home and Community-Based Services (HCBS) benefit. People must meet state-defined criteria based on need and typically get a combination of acute-care medical services (like dental services, skilled nursing services) and long-term services (like respite, case management, supported employment and environmental modifications) in home and community-based settings.

1915(j) Self-Directed Personal Assistance Services Under State Plan Waiversⁱⁱⁱ

Self-directed personal assistance services (PAS) are personal care and related services provided under the Medicaid State plan and/or section 1915(c) waivers the State already has in place.

- Participation in self-directed PAS is voluntary. Participants set their own provider qualifications and train their PAS providers. Participants determine how much they pay for a service, support or item.

The plan must include an assessment of contingencies that pose a risk of harm to participants and an "individualized backup plan" to address those contingencies, as well as a "risk management plan" that outlines risks participants are willing to assume.

1915(k) Community First Choice Waivers^{iv}

The "Community First Choice Option" allows States to provide home and community-based attendant services and supports to eligible Medicaid enrollees under their State Plan. This State plan option was established under the Affordable Care Act of 2010.

Appendix B: State Opportunity Matrix

Key Metrics - Labor Supply:	<u>US Average</u>	<u>Texas</u>
<i>Assesses ease or difficulty of recruitment and retention for direct-care workforce.</i>		
Prime-Age Labor Force Participation Rate (25-55 Years of Age)	81.70%	73%
Other Entry-Level Pay Comparison (Retail and Food Service)	10.83%	-8.40%
Caregiver Dependency Ratio (direct care workforce over home care subset-frail elderly/dependent)	7.98	5.29
Unemployment Rate	4.40%	5.00%
Key Metrics - Firm Barriers to Entry:	<u>US Average</u>	<u>Texas</u>
<i>Assesses ease or difficulty of entering the home care market as a new provider</i>		
Scale Barriers	\$216,243	\$136,909
Average Sales of Home Care Companies Rural	Rural: \$431,300	Rural: \$345,000
Average Sales of Home Care Companies Urban	Urban: \$373,800	Urban: \$402,500
Scale of Service Area (as Population Density)	91.39	106.66
Rural Population Density	Rural: 19.17	Rural: 10.1
Suburban Population Density	Suburban: 57.83	Suburban: 30.8
Urban Population Density	Urban: 1015.17	Urban: 317.07
Key Metrics - Market Competitiveness	<u>US Average</u>	<u>Texas</u>
<i>Assesses the state of market consolidation/fragmentation, and dominance of any major firms.</i>		
Total % Market Share of Top 5 Firms	8.7%(Top Three)	36.20%
Largest Provider Operating in State (Annual Sales)	Kindred	Accentcare Inc.
Key Metrics - Client/Customer Demographics	<u>US Average</u>	<u>Texas</u>
<i>Describes composition of population in state likely needing home care services.</i>		
Total % in Home Care Subset (Frail Elderly & Ind'l with Disabilities, IL & SC)	6.19%	5.30%
Growth in Aging Population	9.70%	12.60%
Total % Population Age 65+	14.10%	11.20%
Total % Population Individuals with Disabilities	6.81%	11.60%
Total % Population on Medicaid	18.00%	17.88%
Home Care Costs as % of Median Income of 65+ Population	119%	112%
Key Metrics - Payer Composition	<u>US Average</u>	<u>Texas</u>
<i>Describes key customers/payers in the state, how money flows, ability of providers to negotiate for better rates, etc.</i>		
Percentage Total State Medicaid Spending on LTSS	32%	28%
Share Medicaid LTSS Spending for Devoted to HCBS	53%	57%
Self-Directed Care Program	N/A	Yes
Rate Flexibility	N/A	Managed Care
Per Capita HCBS	\$18,870	\$10,657

Appendix C: State Opportunity Matrix Methodology

To better understand the opportunities and challenges of creating or expanding a home care cooperative we assessed the state on five dimensions: labor supply, barriers to entry, market competitiveness, customer demographics, and payer composition. We used multiple data points and measures to assess each category, and the sources and calculation methods for each data point is outlined in Appendix X.

Labor Supply: To evaluate the state's labor supply, we wanted to understand how difficult it is to recruit, attract, and retain homecare workers. The caregiver dependency ratio is the ratio of the number of direct care workers to the number of potential homecare customers which paints a picture of how much demand there is for homecare workers in the state. We also compare wages for homecare workers to wages for other service sector jobs to determine how easy it is to recruit homecare workers away from other entry-level work. Finally, the state labor force participation rate and unemployment rate are used to determine whether there is an available pool of workers to recruit from.

Barriers to Entry: Barriers to entering the homecare market were assessed using the National Establishment Time Series (NETS) database and the Mergent Intellect online database. These two databases were used to calculate the average size of homecare companies for rural counties, urban counties, and for the entire state. This data is useful in understanding how large a homecare company must be to successfully operate in a state. Additionally, we calculated the population density of rural, urban, and suburban counties to understand how travel time and costs may affect homecare companies operating in those counties.

Competitiveness: The market competitiveness category is an evaluation of the business environment for the home care industry in the state. We assessed the competitiveness of the homecare industry by calculating what percentage of the industry's sales revenue was captured by the five largest firms in the state. Since many of the larger homecare companies simultaneously operate personal care, home health, and nursing facility lines of business in multiple states, this measure does not have a high level of precision but does give an accurate assessment of the general level of homecare industry competitiveness in the state.

Client Demographics: This category is an assessment of the current and future demand for homecare services in a state based upon the size and growth of the customer base. Primarily using US census data, we determined the size of the state's elderly population, the growth rate of the elderly population, the size of the adult disabled population, and the size of the homecare subset (frail elderly plus individuals with disability). Additionally, we determined the client base's ability to pay for homecare services by comparing the current per capita homecare costs to the states per capita median wage. Finally, the potential size of the public pay market is estimated using the total percentage of the state's population currently on Medicaid.

Payer Composition: The payer composition category uses both qualitative and quantitative data to assess the regulatory environment, the amount of public money allocated towards homecare, and the funding streams for homecare in the state. The total amount of money available for homecare is measured using the percent of Medicaid spending dedicated to Long-term Support and Services (LTSS) and Home and

Community Based Care (HCBS). Per capita spending on HCBS is used to determine how much public money is dedicated to each homecare customer.

Labor Supply		
Data Point	Source	Calculation/Notes
Prime-Age Labor Force Participation Rate (25-55 Years of Age)	BLS	Direct from source
Other Entry-Level Pay Comparison (Retail and Food Service)	OES wage data	Average of retail and food service wages divided by average of personal care and home health aide wages
Caregiver Dependency Ratio	OES wage data and US Census (2015 American Community Survey 5-year Estimates)	Sum of nursing assistants in home care (7.9% of all nursing assistants nationally), personal care aides, and home health aides divided by sum of adults with disabilities and seniors designated as frail or dependent
Unemployment	BLS	Direct from source
Firms Barriers to Entry		
Data Point	Source	Calculation/Notes
Scale Barriers	Mergent Intellect	Median revenue of homecare companies in D&B database
Average Sales Revenue Rural Home Care Companies	NETS Data	Rural designation based county in which the company's headquarters is located
Average Sales Revenue Urban Home Care Companies	NETS Data	Urban designation based county in which the company's headquarters is located
Scale of Service Area	US Census	Direct from source
Rural Population Density	US Census	Direct from source
Suburban Population Density	US Census	Direct from source
Urban Population Density	US Census	Direct from source
Market Competitiveness		
Data Point	Source	Calculation/Notes
Total % Market Share of Top 5 Firms	Mergent Intellect cross checked with state list	Revenue of five largest homecare firms in state divided by total state homecare market revenue
Largest Provider is state by sales revenue	Mergent Intellect cross checked with state list	Direct from Source
Client Demographics		
Data Point	Source	Calculation/Notes
Total Percent in Home Care subset	US Census (2015 American Community Survey 5-year Estimates)	Sum of adults with disabilities and frail elderly population
Growth in Aging Population	US Census (2015 American Community Survey 5-year Estimates)	
Total Percent Population 65+	US Census (2015 American Community Survey 5-year Estimates)	

Total Percent Population Individuals with Disabilities	US Census (2015 American Community Survey 5-year Estimates)	
Total Percent Population on Medicaid	Kaiser State Health Facts	
Home Care Costs as Percent of Median Income of 65+ Population	US Census (2015 American Community Survey 5-year Estimates) and...	
Payer Composition		
Data Point	Source	Calculation/Notes
Percent Total Medicaid Spending on LTSS	CMS and Truven Health Analytics report	Direct from Source
Share Medicaid LTSS Spending dedicated to HCBS	CMS and Truven Health Analytics report	Direct from Source
Per Capita HCBS	Kaiser Health Foundation from 2013 based off KCMU and UCSF analysis	Total number of state Medicaid HCBS spending divides by number of participants.

Data Sources:

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Employment Statistics*, July, 2017 Retrieved from www.bls.gov/oes/

Mergent Intellect Dun and Bradstreet. (n.d.). Loblaws Inc. Retrieved from Mergent Intellect database.

National Establishment Time Series (NETS). *NETS is a proprietary database developed by Walls & Associates that converts Dun and Bradstreet (D&B) archival establishment data into a time-series database of establishment information.*

State Health Facts. The Henry J. Kaiser Family Foundation, 2017. Retrieved from <http://www.kff.org/statedata>.

U.S. Census Bureau. *S0103 Population 65 Years and Over in the United States 2011-2015 American Community Survey 5-Year Estimates*, 2015. Retrieved from www.factfinder.census.gov.

U.S. Census Bureau. *S1902 Mean Income in the past 12 Months (2015 Inflation-Adjusted Dollars) 2011-2015 American Community Survey 5-Year Estimates*, 2015. Retrieved from www.factfinder.census.gov.

U.S. Census Bureau. *S1810 Disability Characteristics 2011-2015 American Community Survey 5-Year Estimates*, 2015. Retrieved from www.factfinder.census.gov.

U.S. Census Bureau. *Monthly Population Estimates for the United States: April 1, 2010 to December 1, 2017 2016 Population Estimates*, 2016. Retrieved from www.factfinder.census.gov.

Improving the Balance, The Evolution of Medicaid Expenditures for Long-Term Services and Supports (LTSS), FY 1981-2014, Wenzlow, A., Eiken, S., Stredl, K., June 2016. Retrieved from www.medicaid.gov.

ⁱ Medicaid. *Home and Community Based Services 1915©*. Retrieved from www.medicaid.gov/medicaid/hcbs/authorities/1915-c/index

-
- ⁱⁱ Medicaid. *Home and Community Based Services 1915(i)*. Retrieved from www.medicaid.gov/medicaid/hcbs/authorities/1915-i/index
- ⁱⁱⁱ Medicaid. *Home and Community Based Services 1915(j)*. Retrieved from www.medicaid.gov/medicaid/hcbs/authorities/1915-j/index
- ^{iv} Medicaid. *Home and Community Based Services 1915(k)*. Retrieved from www.medicaid.gov/medicaid/hcbs/authorities/1915-k/index