

The logo for DHG, consisting of the letters 'DHG' in a bold, blue, sans-serif font.

healthcare

INDEPENDENT LIVING PENETRATION RATES: ONE INDICATOR OF MARKET DEMAND

Independent living penetration rates are an important indicator of market demand for new developments and expansion projects. However, with varying methods of calculating demand, different terminology, and certain subjective assumptions, how can stakeholders interpret the results or understand what an acceptable penetration rate looks like?



INTRODUCTION

The analysis of penetration rates in this document represents the approach, methodologies and interpretations of DHG Healthcare, the national healthcare practice of Dixon Hughes Goodman LLP.

Over the past 10 years, DHG Healthcare has been collecting and summarizing information for our independent living benchmark database. Our original white paper released in October 2007 introduced our database and the concepts and methodology surrounding our independent living penetration rate analysis. While our method for calculating independent living penetration rates has not changed, this white paper introduces our new benchmarks which provide an enhanced look at penetration rates based on three different income qualifications: \$35,000 and higher, \$50,000 and higher and \$75,000 and higher.

DHG Healthcare has compiled a database of more than 130 financed senior housing projects that benchmarks important criteria, including penetration rates.

WHAT IS A PENETRATION RATE?

Penetration rates help measure the degree to which a market is either underserved or saturated. Simply put, what percentage of the qualified market must be captured to achieve stabilized occupancy? Different types of penetration rates measure market demand in various stages of a project's development.

DHG Healthcare typically calculates three penetration rates to assist in assessing market demand for an independent living project:

- Project Penetration Rate
- Net Market Penetration Rate
- Gross Market Penetration Rate

The project penetration rate and net market penetration rate measure market demand upon entry into the market place (i.e., the penetration year), whereas the gross market penetration rate measures the level of saturation in the market over a period of time. Typically, lower penetration rates are considered favorable, but it is important to understand the penetration rates in the context of the dynamics of each individual market. Higher penetration rates can be an indicator that units may become more difficult to fill or stay full. However, higher penetration rates may not always indicate difficulty in achieving expected occupancy levels. Some markets experience higher acceptance of senior housing options and may support higher penetration rates.

The occupancy of existing communities can be a key indicator in determining the acceptance of a product and the depth of a market. The presence of existing communities that are fully occupied with active waiting lists may be an indication that the market is underserved. Alternately, low occupancy at existing communities might indicate that market supply exceeds demand. Other factors may exist, including the possibility that available product and service offerings do not meet the expectations of consumers in the market. Qualitative market research, such as surveys, focus groups and marketplace interviews can help providers gain a better understanding of the market's acceptance of different types of senior housing products and service offerings.



WHAT ARE THE BASIC COMPONENTS OF A PENETRATION RATE CALCULATION?

PRIMARY MARKET AREA DEFINITION

The primary market area (“PMA”) for senior living services is typically defined as the geographic area from which the majority of prospective residents live prior to assuming occupancy at a project. The PMA for a project is typically determined by the origin of its depositors or lead base, the historical experience of the provider (if applicable) and/or the experience of existing providers in the PMA.

PERCENTAGE OF SENIORS ORIGINATING FROM THE PMA

Once the PMA is determined, the percentage draw from the PMA is applied in order to estimate how many age- and income-qualified households would originate from the PMA versus other areas. The DHG database, the assumed draw from the PMA, typically ranges from 50 to 80 percent. The draw percentage from the PMA can be lower if a project is located in an area considered to be a retirement destination, a market with high in-migration or a market with a large adult caregiver influence.

AGE AND INCOME QUALIFICATION

In order to qualify for residency at a senior living community, a prospective resident must meet a particular age requirement and demonstrate sufficient financial resources to pay the initial entrance or community fee (if applicable), required monthly service fees and other living expenses. Accordingly, management typically establishes certain criteria to identify prospective residents who would be eligible to reside in an independent living unit (i.e., annual income of approximately 1.5 to 1.7 times the annualized monthly service fee at the project). In general, DHG uses \$35,000, \$50,000 and/or \$75,000 income qualifications when calculating penetration rates depending upon the circumstances of the project.

For the purpose of quantifying the number of age-qualified households in the PMA, households age 75 or older are typically the most likely to move to an independent living unit at a community. According to “Today’s Continuing Care Retirement Community,” a white paper issued in December 2010 by LeadingAge (formerly the American Association of Housing and Services for the Aging) and the American Senior Housing Association (“ASHA”), the average age of residents moving into independent living at a continuing care retirement community (“CCRC”) is 80 years old with the age of entry for rental communities being even higher.



Many rental independent living communities attract residents with lower income levels and rely on asset spend down to afford their accommodations.

The NIC aggregate penetration rate measures the general saturation of a market area based on the inventory of units, regardless of annual household income or ability to pay.

NUMBER OF EXISTING AND PLANNED UNITS IN THE PMA

Determining the number of existing and planned units to include in a penetration rate analysis is one of the more subjective components affecting the calculation. While there may be a number of existing and planned units in the PMA, it is important to consider which units are actually comparable to a project. Do the units have a similar pricing structure and income qualification? What are the product and service offerings at the community? DHG Healthcare typically uses a conservative approach and considers all units with similar services and/or levels of care to be competing for the same pool of age- and income-qualified households within a PMA.

NUMBER OF UNITS AVAILABLE DUE TO ATTRITION

In order to calculate the net market penetration rate, the number of units to be absorbed in a given year must be determined. Available units could enter the marketplace via planned expansions or new communities and through the turnover of existing units in the PMA. Therefore, it is necessary to take into consideration the number of existing units in the PMA that would be vacated due to attrition. According to ASHA's "The State of Seniors Housing 2013," the median annual resident turnover rates for rental and entrance fee units are 31.6 percent and 12.2 percent, respectively.

IS THERE AN INDUSTRY STANDARD PENETRATION RATE?

While there are multiple penetration rate methodologies, each one serves a different purpose and uses a different set of components. DHG Healthcare and other industry professionals generally calculate penetration rates in a similar manner; however, the National Investment Center for Seniors Housing and Care ("NIC") calculates penetration rates in a unique way – through an aggregate penetration rate. The NIC aggregate penetration rate is calculated by classifying all senior living communities into three categories based on the type of unit that comprises the majority of the total units at the community (Majority Independent Living, Majority Assisted Living and Majority Nursing Care). The NIC aggregate penetration rate for independent living is calculated by dividing the total inventory of senior living units at communities where independent living units comprise the largest share of the inventory by the number of households age 75 or older. Since NIC collects data on senior housing communities located in the top 140 metropolitan statistical areas ("MSAs"), the NIC aggregate penetration rate can provide context when the aggregate penetration rate for a market area is compared to the aggregate penetration rate for the MSA closest to the market area, the top 31 MSAs, the top 32 to 100 MSAs and 40 additional MSAs.

Unlike the NIC aggregate penetration rate, the penetration rates shown in market feasibility studies likely consider the saturation of a market area in regard to the number of age and income qualified senior households and also consider the ability of seniors to pay for the housing, services and/or care offered by the project. In general, market penetration and saturation rates show the market's total inventory of units relative to market depth, whereas project penetration rates show a project's inventory of units relative to market depth. These calculations assume that all communities in the market are competing for the same or similar pool of age- and income-qualified households.



HOW DOES DHG HEALTHCARE CALCULATE PENETRATION RATES?

For purposes of demonstrating the calculation methodologies of the three penetration rates utilized by DHG Healthcare, the following assumptions are used:

Table 1 – Assumptions	
Parameter	Assumptions
Number of planned units at the project	150
Existing inventory of available comparable units	500
Number of existing entrance fee units	375
Number of existing rental units	125
Number of planned units at comparable communities	75
Stabilized occupancy percentage at the project	95%
Percentage of units to be occupied from the PMA	75%
Percentage of units to be occupied by age 75 and older	90%
Number of age- and income-qualified households – Current Year – 20xx	3,000
Number of age- and income-qualified households – Penetration Year ⁽¹⁾ – 20yy	3,750
Number of age- and income-qualified households – Stabilized Year ⁽²⁾ – 20zz	4,500

Notes: (1) The penetration year is the year the project is planned to open or the first full year of occupancy.
(2) The stabilized year is the year the project is expected to reach stabilized occupancy.

GROSS MARKET PENETRATION RATE

The gross market penetration rate (sometimes referred to as a market saturation rate) is the percentage of age- and income-qualified households in the PMA that the total market would need to capture for the entire market to achieve stabilized occupancy.

The gross market penetration rate is calculated by dividing the total number of existing and planned independent living units in the PMA by the number of age- and income-qualified households in the PMA. Whereas project penetration and net market penetration rates show a snapshot in time and typically are calculated in the year of opening, the gross market penetration rate is calculated in the current year and the projected year (often five years into the future) in order to show the rate of change between years.

The following table presents an example of a gross market penetration rate calculation at the \$35,000 income qualification.

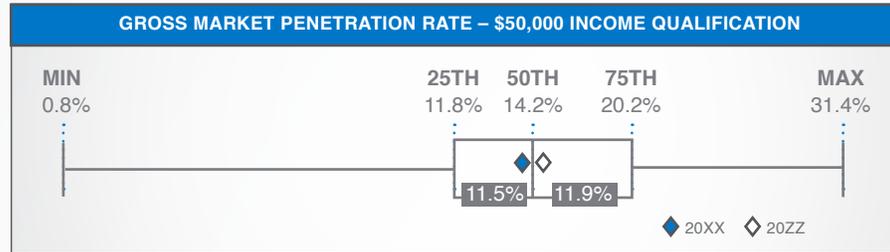
Table 2 – Gross Market Penetration Rate Example		
	20xx	20zz
Market inventory of retirement communities:		
The project	-	150
Existing units in the PMA	500	500
Other planned units in the PMA	-	75
Total units available in the PMA	500	725
Percent of units to be occupied from the PMA	75%	75%
Total units to be occupied from the PMA	375	544
Total number of units to be occupied within the PMA at 95% occupancy (a)	356	517
Number of age- and income-qualified households (b)	3,000	4,500
Gross Market Penetration Rate (a/b)	11.9%	11.5%

A decrease or small increase in the gross market penetration rates is a favorable indicator, suggesting that the planned units only have a slight impact on the market.



Penetration rates within the “box” fall in line with the middle 50 percent of senior living communities in the DHG Healthcare database. Penetration rates that fall outside of the “box” without further evaluation.

The example box and whisker graph presents the gross market penetration rate benchmarks for a \$50,000 income qualification.



PROJECT PENETRATION RATE AND NET MARKET PENETRATION RATE

The project penetration rate is the percentage of age- and income- qualified households in the PMA the project would need to capture in order to achieve stabilized occupancy in the year of opening.

The net market penetration rate is calculated by dividing the number of available independent living units in the PMA by the number of age- and income-qualified households in the PMA. Available units include planned units of the project, proposed units at other communities and units becoming available due to attrition. This calculation is particularly significant when more than one project is entering the market during the same time frame.

Calculations for both are based on demographics interpolated for the year the project would be available for occupancy. The following table presents an example of a project penetration rate and a net market penetration rate calculation.

The net market penetration rate represents the percentage of age- and income-qualified households in the PMA that the available units in the market would need to capture in order for the entire market to achieve stabilized occupancy in the year of the project’s opening.

	Planned Units	
	Project	Competition
Planned Units	150	75
Percent of planned units to be filled from PMA	75%	75%
Planned units to be filled from the PMA	113	56
Percent of units occupied by age 75 and older	90%	90%
Planned units from the PMA occupied by age 75 and older	101	51
Total units to be occupied at 95% occupancy	96 (a)	48 (b)
	Existing Units	
Units Available Due to Attrition	Entrance Fee	Rental
Number of units	375	125
Attrition Rate ⁽¹⁾	12.2%	31.6%
Number of units from Attrition	46	40
Percentage of Attrition units from the PMA	75%	75%
Total existing entrance fee and rental units available due to attrition	34	30
Total existing units available due to attrition at 95% occupancy (c)		61
Number of age- and income-qualified households		3,750
Less: inventory of available comparable units ⁽²⁾		(475)
Net number of age- and income-qualified households (d)		3,275
NET MARKET PENETRATION RATE ((a+b+c)/d)		6.3%
PROJECT PENETRATION RATE (a/d)		2.9%

(1) Source: The State of Seniors Housing, 2013.

(2) Reflects the 500 existing comparable units in the PMA, assuming a 95% occupancy rate (475 units).



WHAT ARE “ACCEPTABLE” PENETRATION RATES?

DHG Healthcare has calculated independent living penetration rates for senior housing projects in numerous markets across the United States. The DHG Healthcare database has been filtered to eliminate outliers based on the number of age- and income-qualified households and project size. New features of our database include benchmarks for penetration rates at income qualification levels of \$35,000 and above, \$50,000 and above and \$75,000 and above. This provides an opportunity to assess the market depth and supply at varying levels of affordability and measure against the same income qualifications of other markets.

Table 4 shows the penetration rate benchmarks derived from the DHG Healthcare database. Quartile divisions are calculated by ranking the penetration rates in the database in ascending order and dividing into quartiles after eliminating outliers. The 25th percentile of the database represents the first quartile (the point at which 25 percent of the senior living projects in the database are at or below), the 50th percentile represents the median and the 75th percentile represents the third quartile.

In general, penetration rates are favorable if they fall between the 25th and 75th percentiles. If a penetration rate falls below the 25th percentile, although perceived as favorable due to the low capture rate, the project may experience a longer than anticipated fill-up period due to lack of market awareness or acceptance of the senior living product even with a large number of age- and income-qualified households in relation to the number of independent living units. If a penetration rate falls above the 75th percentile, the market may be saturated and the project may have a more difficult time filling units. However, some markets may support higher penetration rates and indicate additional demand, if the majority of the competitors have high occupancies with active waiting.

For gross market penetration rates, the change in penetration rates from the current year to the projected year measures the impact of the project and other planned units on the market as a whole. A small change in the gross market penetration rate is a favorable indicator, suggesting that the planned units only have a slight impact on the market. A decrease in the gross market penetration rate over a period of time is considered favorable, indicating that the number of age- and income-qualified households in the market is growing at a faster rate than units are being added to the market.



The following table provides the DHG Healthcare benchmarks for the gross market, project and net market penetration rate at the \$35,000, \$50,000 and \$75,000 income qualifications.

Table 4 - Independent Living Penetration Rate Benchmarks					
	MIN	25TH	50TH	75TH	MAX
Gross Market Penetration Rate					
\$35,000 Income Qualification	2.4%	7.7%	11.6%	16.6%	39.7%
\$50,000 Income Qualification	0.8%	11.8%	14.2%	20.2%	31.4%
\$75,000 Income Qualification	1.2%	17.4%	25.3%	30.9%	53.6%
Project Penetration Rate					
\$35,000 Income Qualification	0.1%	1.2%	1.7%	2.6%	5.6%
\$50,000 Income Qualification	0.1%	1.4%	2.6%	4.0%	9.2%
\$75,000 Income Qualification	0.2%	2.7%	5.1%	10.0%	20.3%
Net Market Penetration Rate					
\$35,000 Income Qualification	0.2%	2.3%	4.6%	5.9%	11.3%
\$50,000 Income Qualification	0.6%	3.8%	6.4%	9.0%	16.6%
\$75,000 Income Qualification	1.1%	7.7%	12.4%	17.2%	37.7%

DOES THE PENETRATION RATE REALLY TELL THE WHOLE STORY?

These penetration rate methodologies are generally used to provide information about market demand when the product has already been programmed and designed or to refine positioning strategies during conceptual stages of new developments or expansion projects. When a project is in the development stage, other tools, such as consumer research, should be used to determine unit mix, pricing, services and programming.

The purpose of the benchmarks is not to provide a definitive answer about whether a project will be successful or whether a market can absorb a certain number of new independent living units. These benchmarks are designed to allow one project, community or market area to be compared to other projects or a group of projects. Benchmarks should be used to provide context and facilitate meaningful discussion about a project or a market area and should be considered in conjunction with other indicators of market demand.



When evaluating a market and analyzing penetration rates, consider the following factors or questions:

- Occupancy levels and waiting lists at existing communities within and near the PMA. If overall market occupancy is low, has the market already reached its saturation point?
- Timing of other proposed projects in the PMA
- Design of the units and community spaces at the project
- Contract offerings (i.e., rental vs. entrance fee, lifecare vs. fee-for-service)?
- Alternative residential and care options for potential residents
- Marketing plans and efforts of the developer or manager
- Demographic trends of the PMA
- Local economic conditions and the real estate market.
- Awareness of consumers about senior housing options. If the consumer is unfamiliar with the product offering, what are the financial implications of educating the marketplace?
- Size of the lead base and/or velocity of pre-sales (10 percent deposits) at the project?

SUMMARY

DHG Healthcare calculates three penetration rates in evaluating market demand: the project penetration rate, the net market penetration rate and the gross market penetration rate. By using the benchmarks provided by DHG Healthcare, a provider can understand how a community or market compares to other independent living providers across the country. However, penetration rates should not be relied upon as a stand-alone factor in determining a project's potential for success. Even when penetration rates are "acceptable," they should be considered in conjunction with one another as well as other factors that may impact performance.

When developing, marketing and financing a project, it is important to work with leaders in the senior living field who will provide the most current knowledge base available. The team of professionals on a project should have the ability to analyze data and address issues through every step of the process, regardless of the methodology used. Furthermore, it may be important to test different assumptions for the variables in the penetration rates (i.e., income levels, PMA draw assumptions, etc.) to gain a thorough understanding of various sensitivities or "what if" scenarios.

All things considered, understanding penetration rate methodologies and their implications assists project sponsors and stakeholders by creating a culture of planning and by positioning a project for future success.



ABOUT THE AUTHORS



MEREDITH BENEDICT

Meredith has more than 20 years of experience in the senior living industry providing consulting and strategic planning services. She has been involved in the development of senior living communities, expansions and campus repositionings, including market assessment and demand analyses, financial feasibility studies and other advisory services.

MEREDITH.BENEDICT@DHGLLP.COM



STEPHANIE JOHNSON

Stephanie has more than 15 years of experience in the senior living industry providing consulting and strategic planning services. She has been involved in various phases of the development of senior living communities including feasibility studies, financial analyses, market and product demand, and pricing and service profiles for new, existing and expanding retirement communities.

STEPHANIE.JOHNSON@DHGLLP.COM



LISA LEGEER

Lisa has more than 20 years of experience in the senior living industry providing consulting and strategic planning services. She has been involved in all phases of the development and operation of senior living communities, including market assessment and demand analyses, financial feasibility studies, performance improvement and other advisory services.

LISA.LEGEER@DHGLLP.COM



CHRISTINE RICE

Christine has more than 15 years of experience in the senior living industry providing consulting and strategic planning services. She is responsible for all aspects of market research and primarily performs market demand analyses and market feasibility studies for senior living communities.

CHRISTINE.RICE@DHGLLP.COM



SOURCES

1. "The State of Seniors Housing 2013." American Seniors Housing Association. September 2013.
2. "Today's Continuing Care Retirement Community (CCRC)." American Association of Homes and Services for the Aging and American Seniors Housing Association. July 2010.
3. "New Principles for Market Analysis." Methodology Task Force, 2015.

ABOUT DIXON HUGHES GOODMAN'S SENIOR LIVING PRACTICE



The DHG Healthcare Senior Living Practice extends well beyond traditional accounting and business advisory services. We have extensive experience helping clients plan and develop operationally and financial sound projects. We have taken great care in assembling a team of professionals with senior living experience in a broad range of financial, development, marketing and operational disciplines.

We assist clients with strategic and development planning; business and financial advisory; performance improvement; reimbursement and regulatory compliance; health information technology; litigation support; and, audit and tax. Collectively, we have supported senior living providers across the country with projects representing in excess of \$9 billion of capital raised.

Keith Seeloff leads the Senior Living Practice, which comprises a team of 20 professionals providing business advisory services for proposed and existing CCRCs, assisted living facilities, skilled nursing facilities and other retirement housing projects. With more than 30 years of experience in healthcare and senior living, Keith has been a key participant in over 100 continuing care retirement community (CCRC) development projects, including startup communities, existing campus repositioning and obligated group financings, resulting in over \$10 billion in tax-exempt bond financing. Keith is an accomplished presenter on topics affecting the senior living industry.

KEITH.SEELOFF@DHGLLP.COM

ABOUT DHG HEALTHCARE

DHG Healthcare is ranked by Modern Healthcare as the 9th largest privately-held healthcare consulting firm and serves the industry with approximately 300 dedicated healthcare industry professionals across consulting, assurance and tax. DHG Healthcare's consulting business includes a distinctive capabilities and solutions portfolio sharply focused on critical business issues facing healthcare organizations in today's transformative environment.

We have aligned our practice organizational structure and delivery framework to support transformational themes related to the achievement of 'risk capability' as critical to the successful future of our healthcare clients.

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