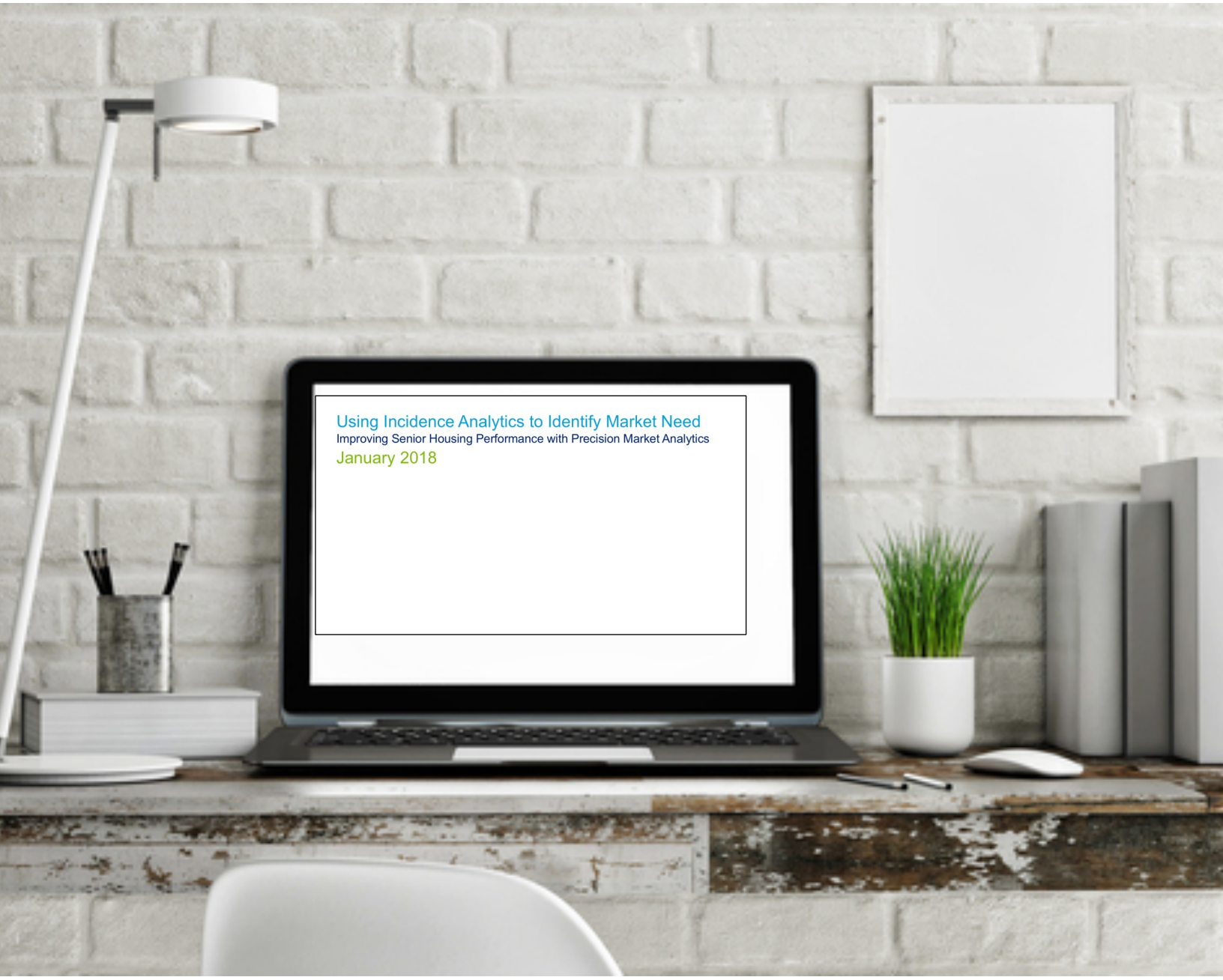
# Senior Living SMART

Webinar Transcription




Presented by:

VISION LTC

Hello everyone. Welcome to Senior Living SMART's Webinar if you registered for earlier today, Using Incidence Analytics to Identify Market Need, Improving Senior Housing Performance with Precision Market Analytics presented by Senior Living SMART and Vision LTC. This is Paul Trusik.

Without further ado, I would like to introduce both Arick Morton and Kyle Gartner of Vision LTC. Just a quick overview, Vision LTC is market analytics platform for the senior housing industry giving operators, lenders, developers, and owners unparalleled real-time insight into market dynamics nationwide. Vision LTC empowers stakeholders to rapidly assess, monitor, and project market conditions around the communities while quickly evaluating sites, acquisition opportunities, and new markets.

Joining us again, we have Arick Morton, the CEO, founder and leader of multiple healthcare IT startups with over 10 years of industry experience. Then also joining us, we have Kyle Gartner, VP of analytics, experienced finance and analytical background with an enthusiasm for healthcare and senior living industry.

Arick Morton: Thank you very much for the introduction. That's incredibly helpful. As we jump in here, we've got a pretty good overview of who Vision LTC is so I won't spend too much time there. I think that was well covered and we'll jump actually right in to our topic for the day, which is incidence analysis. What we want to spend our time today talking about is what is incidence analysis and why is it important for site selection, acquisition evaluation, and asset management in the senior housing industry? We'll spend a little bit of time just walking you through a quick presentation and we'll spend the majority of our time actually going through a demonstration of how we can use incidence analysis in real world setting.

Obviously, what is incidence analysis? I'll start there. Incidence analysis is looking at rates of disability or healthcare utilization inside of a population perspective. Customers are inside of a market area specifically for the purposes of evaluating the need for senior housing. What we'll talk about is first, why does that matter?

As many of you likely know, the senior housing industry is becoming more and more need driven. Surveys of seniors routinely indicate that they are dedicated to staying in their own homes as long as possible and there's a real generational increase in that sentiment as you start to look at the boomer population. That means folks are staying at home longer. We're seeing that start to percolate through the data. Residents are older when they're moving in. We're seeing age of initial entry into the senior housing care continuum increasing and then, we're seeing those residents who are coming into our communities, we're seeing that they have higher acuity and that which results in a lower length of stay than it has been in past.

The takeaway here is that as we as an industry sell an increasingly need-driven product, understanding the depth and breadth of the need in the market area around our location be they development opportunities, acquisition opportunities or our existing portfolio, it's increasingly important. If there's not enough prospective residents who have sufficient care needs to trigger a move in, we can't expect that we're going to make up that shortfall with residents who move in because they want to. Being able to get a grasp on what is the need inside of my market area is of increasing importance for industry stakeholders.

That begs the question how can we measure that need? How can we measure incidence? The good news is that there are a host of different data sources that offer insight into the depth of needs and they offer it at a relatively low geographic resolution and geographic level allowing us to really analyze the world at the primary market area level. We incorporate a large number of

those different data sets, but today, we'd really like to focus on four key data sets. The first two deal with more the need for memory care. Then the second two deal more with the need for assisted living and independent living.

The first data set I'll talk about is rates of cognitive impairment. It's a measure of the disability in cognitive function in the 75 plus population. It's collected at the household level by the Census Bureau, the American Community Survey and then, they publish that data at the census-tract level, which is about as low as a geographic resolution as you'll typically see so that allows us to rally get that data at a very granular level. Then what we can do with that data is analyze say what is the rate of cognitive impairment in my market area and then, we can also use that to kind of look at need, supply-demand benchmarks. How many cognitively impaired seniors are there for every memory care bed in the market?

The same is true of our second measure, which is dementia prescriptions. What we can do is look at the number of Medicare beneficiaries who are receiving a medication for one of the six dementia medications, Aricept, Namenda, those types of medications that comes from CMS and we get that as the prescriber level. We can look at a market area and say how many seniors receiving a medication for dementia are there and then, how many are there for every memory care bed that is in the market?

Moving into the next one that we'll look at here today is the activities of daily living disability rates. Many of you are likely familiar with ADLs as they're commonly called in the industry. They would be your dressing, bathing, grooming, your core activities of daily living. We can see the disability rates in that population in the 75 plus population that also comes from the American Community Survey at the census tract level and that gives us a sense of what is the size of the population who has a personal care need and we can look at that as a ratio of the number of assisted living beds in the market.

Then lastly for what we'll talk about here today is what's called instrumental activities of daily living disability rates or IADLs. Those would be your secondary activities of daily living - budgeting or money management, medication management, being able to keep up a home so the things that these are activities that are key to maintaining independence and oftentimes disability in this area will trigger a move into AL or potentially IL. We can look at that really as a ratio of the number of assisted living beds or independent living beds in the market just to get a sense of what the potential balance between supply and demand might be.

As we've dug into these data sets, what we found is that incidence really varies widely across the country. If we start off looking at the cognitive impairment rate, the 75 plus cognitive impairment rate and look at it at the metro level, you can see the distribution. You can see that only 9% of seniors over the age of 75 in Naples, Florida have a cognitive impairment. That number jumped to 19.6 in El Paso, Texas and 22.8% in Columbus, Georgia. If you're thinking about what would the implications be, a memory care project in Naples with the same income qualified population counts might be expected to have roughly half of the need of a project in Atlanta or Honolulu or El Paso. What that line you see here is actually all 900 MSAs in the United States actually mapped in ascending order of that cognitive impairment rate.

On the personal care side, we see the same story. You have Naples, Florida is about 6-1/2% jumping all the way to 27.3% in McAllen, Texas with a relatively linear distribution along the way. As you're thinking about what is the need for personal care services inside of an assisted living setting in various metros, you can see that there's again a very wide distribution based on where we're located.

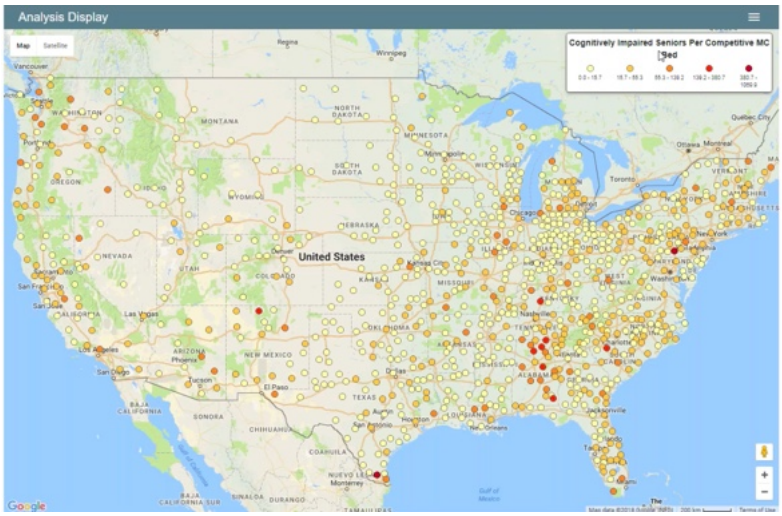
The key here is that we see a wide variance at the [MSA 00:09:02] level, but more importantly, we actually see a wide variance within MSA. This really underscores the importance of analyzing things at the primary market area level.

What we have here is two sites that are both in North Fort Worth. They're 12 miles apart. One's in Roanoke, Texas, which is just outside of Fort Worth, the Fort Worth city limits. Then the other is just right inside the Fort Worth city limits, the second site, the North Fort Worth site. What we've done is we've drawn a 5-mile primary market area around each of those locations and we've calculated the incidence rates within each site's respective market areas.

If you look on the left-hand side of the slide, what you can see is that the Roanoke site has about half of the need on each of those four metrics of the North Fort Worth site despite being only 12 miles away. This difference is quite large. It could have a significant impact on the success of a new project or an acquisition. If you said, "I like North Fort Worth. I'm looking at a variety of sites," it would be very reasonable to think that you can look at the North Fort Worth site or the Roanoke site and be deciding between the two given their relative proximity to one another, but if you didn't look at the need side, you might end up taking a site that has a significantly lower need.

The key is really being able to analyze incidence rates at that PMA level. What I'm going to do now is pass it over to Kyle so he can walk you through a few ways we can make use of this data on a practical basis.

Kyle Gartner: Great. Thanks, Arick. Let's transition now and go and look at different ways we can use this data in an actual analysis. We've got a couple examples set up where we'll start by trying to figure out where's the best place to build a new community? What's the next development project going to be for our senior housing organization? We'll start by looking at nationwide MSAs and basically ranking them or scoring them based on the incidence metrics that Arick was just telling us about. We'll come in here, pull up all of the markets, and each of these dots represent a different MSA in the US and they're color coded based on the number of cognitively impaired seniors per memory care bed in their respective MSAs.



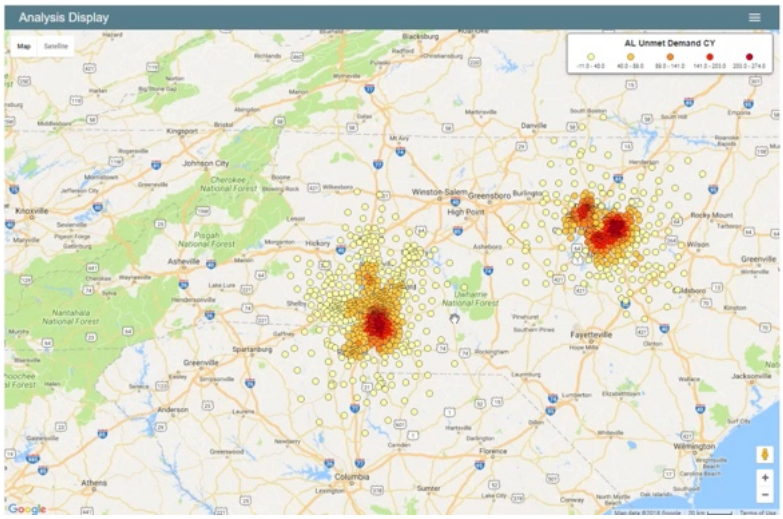

To give you an example of what we're looking at, if we click on the Atlanta market, you'll see that that entire metro area shaded in gray. We can then go and look up the metrics that we've been talking about, cognitive impairment rate, the impaired seniors per memory care bed and

so on. This is a lot of data to take on. Let's really focus our results on some different markets that meet or exceed our minimum thresholds.

For our example, we've got four different numbers we want to look at. We want to see a ratio of cognitively impaired seniors per memory care bed of greater than or equal to 10. We want to see the ratio between dementia beneficiaries and memory care beds greater than or equal to 10. For this development project, we're really interested in a larger market or a primary metro so we want to see total population of at least half a million. For those of you who might be looking at the smaller metros or tertiary markets, you can do the same thing if you wanted to look at something with 100,000, 200,000.

Then finally to make sure that our ratios aren't being skewed by the supply data, we want to see markets that have at least 25 beds of memory care in their MSA. We'll set up those filters. Then you can see we go from 900 to about 60 or so different areas. Some markets in California and then a lot in the East Coast and the Midwest if you will.

Now we're based in Raleigh, North Carolina so I'm a little biased when I zoom in and look at these. Charlotte meets our criteria. Greensboro meets our criteria. Chapel Hill, Durham meets our criteria.




Let's pull these up. Let's see what they look like in terms of the disability rates, see how they'd score. Are they interesting enough to go and do some more research on? Durham, for instance, has a cognitive impairment rate of 15.7% and it has a market-wide ratio of 25 cognitively impaired seniors for every memory care bed in the market. If we look at Charlotte, you'll notice that the cognitive impairment rate is the same. It's also 15.7%, but the ratio comes down from 25 to 18, and that's probably because of existing competition or existing supply in the market. We're looking at these. We decide all right, there's enough interest. There's enough incidence if you will to warrant doing some more research.

Now let's go and see what the actual sub-markets look like in this area. If we were to plot analysis points across all of Charlotte, all of Raleigh, all of Durham, and Chapel Hill trying to figure out what's the best street corner to build our next asset on and then, we'll score those new markets on the same incidence metrics that we've been talking about today. What I've just pulled up is an analysis of Charlotte, Durham, Chapel Hill, and the Raleigh metros, and we've plotted literally thousands of analysis points across these geographies and we're going to score them based on cognitively impaired seniors, dementia beneficiaries, and a couple other metrics

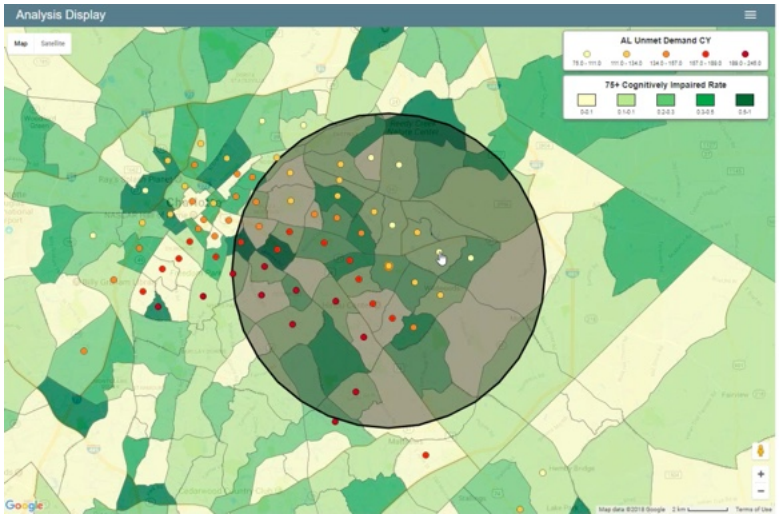
that you're probably familiar with and you're probably already using in your analysis today, things like demand formulas, income qualified counts. We can even look at population, another interesting demographics.

Let's set those up. We want to see a ratio of at least 10 impaired seniors per memory care bed. We also want to have 10 dementia beneficiaries per memory care bed. This is within a 5-mile market. Each dot represents the center of a 5-mile market area. We've got these, these are two of the same filters we used before. Let's see what it looks like when we apply these. All right, so we went from about roughly a 1500, 1600 analysis points spread across three large metros. Now we've got about 8 or 9 real clusters of incident demand or incident opportunity. You have really all of downtown Charlotte and Chapel Hill, downtown Raleigh, Apex, and then a number of neighborhoods in Charlotte and Rock Hill, South Carolina.

If we add some more context to the analysis using the tools that you're probably using today like an unmet demand formula or feasibility formula, so metrics for qualifying seniors with income so we want to see households over the age of 75 with at least $50,000 of annual income. When we apply those metrics, now we're even more focused on areas of opportunity - Durham, Chapel Hill, Raleigh, Apex, Davidson and then, downtown Charlotte, and a little part of Rock Hill.

Let's stick with Charlotte, it's a wonderful city. If we zoom in here and click on any of these analysis points, we'll open up the market area that we're looking at. I can go and see the ratios and the cognitive impairment disability rates. I can see how many people in the market are receiving dementia medication, almost 2500. If we want, we can go and look at the ADL disability rate, which is 13%. The IADL rate is 27%. Those are both very strong. All right, we've identified this neighborhood or this area if you will had really good opportunities. Now, I want to learn a little bit more about it.

We'll use that incidence data in a different way this time. We'll actually map it out at the census tract level so we can see within my 5-mile ring, where are the real dense areas of seniors who are affected by this type of disability or by this type of disease? The darker colored census tracts have a higher incidence rate. The whiter colored census tracts have a lower incidence rate. Each census tract represents more or less 3,000 people and the shape is determined by the Census Bureau. It's all population driven.



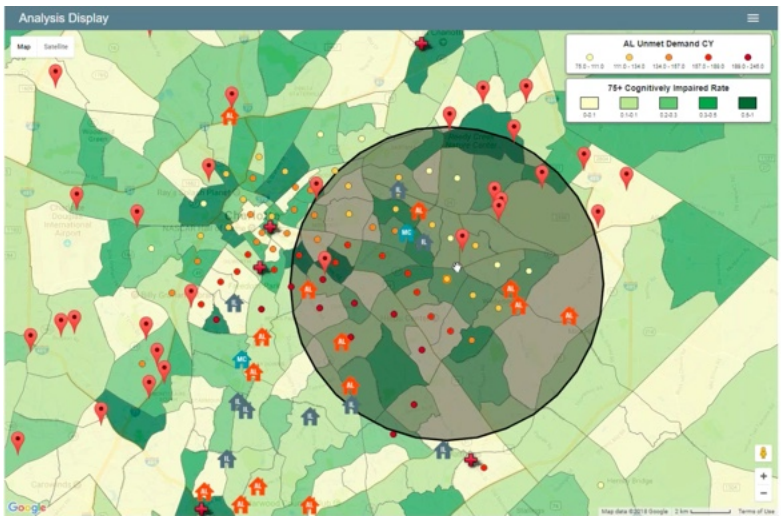

Let's assume that this is our community here. You can see if we go to the east, that incidence starts to drop off the farther we go. If we go to the north and to the northwest, it really

increases heavily, especially in these markets, in these census tracts, and in these census tracts. This is telling us if we're coming to this market trying to do some due diligence or trying to do some mailers or some type of marketing efforts, I'd really focus my time here because that's where the people who are afflicted by this disability and might need my service are actually living and located versus here, which has a relatively low incidence rate.

We can continue adding on to this data showing things like hospitals in the market, existing memory care providers, and I can start to build a better picture of what's going on here in Charlotte. Who are the hospitals in the area? How far are they from my potential site if my residents need services, things like that? Alternatively, who's the existing competition? Now I'm really building a good picture of what this looks like and I've decided all right, I need to talk to my broker or my business partners and see where's the land that's available here. I go and collect that information and I can actually map it. I've gone and done some work offline, collected the available land parcels in the market, and I want to see all right, what's available? How much space is there? Does it make sense to put a new building there?

Let's bring it all of it together. We have the cognitively impaired rate data at census tract view. We have some available land parcels mapped here. Let's show the hospital. Let's show the competition data and let's just get a good picture. Does it make sense? As you're going through this process and basically taking in this new data into your existing process, it's just helping you make decisions. Maybe you're trying to do some more due diligence on the market. You want to see what's going on.

With our tool, you can go even farther and say, "All right, what's the competition look like? Who's there?" save yourself some time from market shopping. We'll just take a quick peek here into the Waltonwood Community, check out their nice movie theater, and really get a sense of what's going on in the market. Who's there? Are there seniors who need to be served or can be served? How can I position my asset to do that? That's our development example.




Let's pivot now. Let's talk about how we can use incident data from an acquisition point of view or from an asset manager point of view. For this example, I'm going to pretend to be an asset manager at Brookdale and I'm trying to answer the question does it make sense to expand my memory care offerings in Charlotte, North Carolina? If it does make sense, how should I expand? Do I just convert an AL wing into a memory care wing? Do I do a new construction project? Do I try and buy something there?

Let's take a look at that. We have a couple different assets already located in the market. Let's go and see how they compare on all the different incidence metrics that we've talked about relative to the rest of my portfolio, the rest of the Brookdale portfolio. Right now, we're looking at the Brookdale South Charlotte asset. We're benchmarking it against all 782 Brookdale sites. We can see when it comes to cognitive impairment rate, dementia beneficiaries, the ADL rate, and the IADL rate, we're really on par with our average.

When I look at things like the ratios of impaired seniors versus supply or dementia beneficiaries versus supply, my site, which is here on the left, performs far worse or has far lower values relative to the rest of the benchmarks. That's telling me that this market is really saturated when it comes to the memory care beds or even to the assisted living beds even though my incidence rates are really strong.

When I come down here to look at the market conditions and I look at supply for my site relative to that around my average community, there's almost twice as many memory care beds around my community as there are the average site. Then when I look at that same information graphically, it's even more apparent, the difference between my community's market and the average market.

My South Charlotte site scores in the bottom 17th percentile of the entire Brookdale portfolio on this ratio of cognitively impaired seniors versus memory care beds, and in the bottom 20% of the dementia beneficiaries versus memory care beds. So if I'm looking at this community and I'm thinking all right, if I want to add memory care beds, this is probably not the facility to do it at.

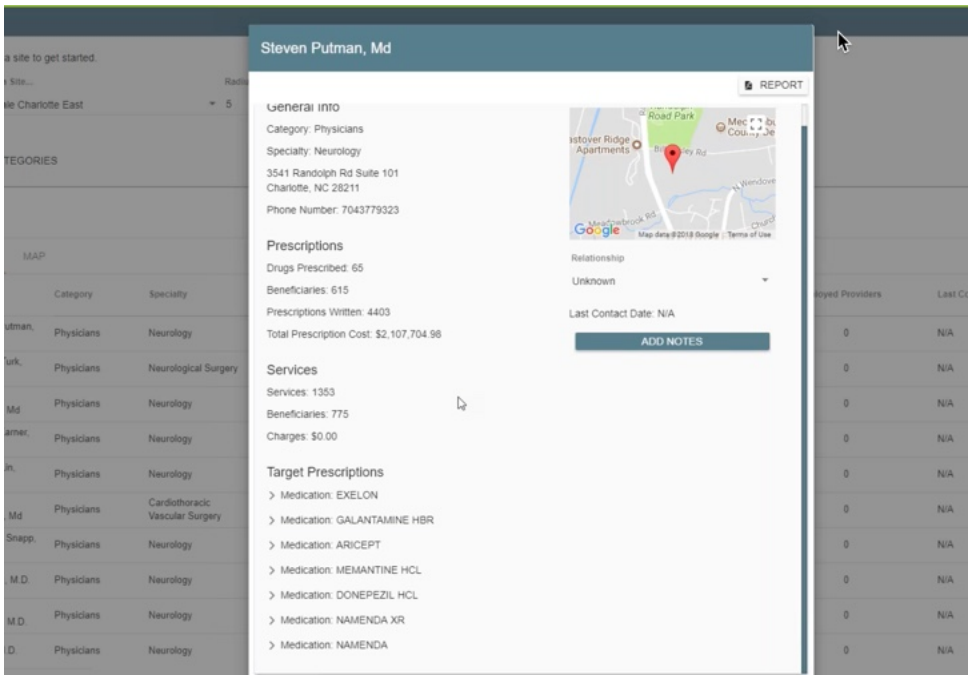
We had other assets in the market so let's go do the same process, the same analysis on those assets. We'll move just a couple of miles up the street to the Charlotte East property and we'll look through those same data points. What's the cognitive impairment rate? How many people are receiving dementia medications? You'll notice with this asset that not only are our impairment rates higher, our incidence rates are higher, but our ratios in this market are much stronger as well. So there's a higher number of people who have a need and there's also a less amount of services being provided to those in need.

When we look at the existing competition in the market, it's actually less than half of what the average Brookdale asset's exposed to. Coming down here, I can then see that this community is performing in the top 10%, in some instances, in the top 30% for most in the incidence metrics. For the cognitively impaired seniors versus memory care bed, and the dementia beneficiaries per memory care bed, who are in the top 78th and the top 92nd percentile respectively. This really stands out as an opportunity if I'm serious about expanding my memory care offerings. Just between these two assets alone, the difference is night and day.

Now we've identified this. We go back to our team. We do a little more research using our existing tools, our existing processes. We say, "Yeah, let's do it. Let's add 30 memory care beds to this asset."

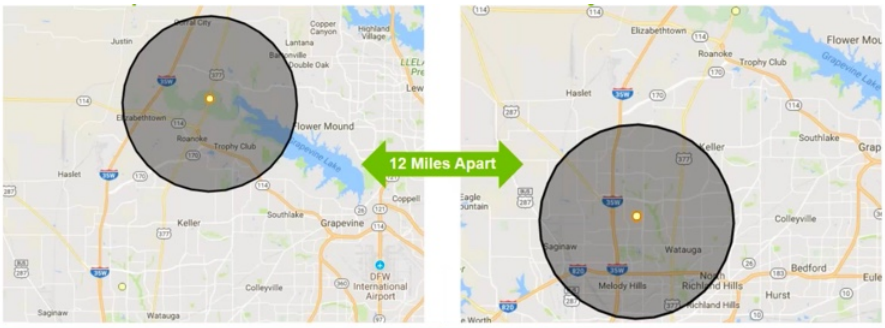
Brookdale Charlotte East, they start a construction project. Things are going well. We're really excited about it. Now comes a time where as the asset manager, I'm tasked with teaming up with the operations team and the marketing team to go and start building out the sales pipeline there. We can actually use the incidence data to help us on the operation side of things by connecting us with those local referral sources and those local professionals who engage with people who are afflicted by a cognitive impairment or an ADL disability.

To do that, we'll come over to our tool here where we can engage with different professionals in the market area and we're really going to focus on physicians for this example because they're the ones who are going to have the most touch points with these seniors. We want to see all the physicians within 5 miles of our community and then, we want to sort them based on how many patients they engage with or how many prescriptions they've written, things like that. We can go and identify different physicians. There's a number of neurologists within a few miles of our site. We can see who they are. We can see what type of prescriptions they've written and how many patients have received that prescription.




Dr. Puttman, for example, he's written prescriptions for Exelon, for Aricept, for Namenda, and some other medications that support people with dementia. Maybe we need to have a conversation with Dr. Puttman, tell him about the new services we're offering, start trying to build that community relationship with him. We can do the same for the other physicians in the area as well like Dr. Garner. We can really build a good understanding of the market, not just in the demand, but also in the professionals, and the clients, and the prospective residents. If I wanted to see this information on a map, I can do that as well so if I know my community's located here on the street corner, who's the closest physician to me? What's their specialty? Who are they working with, things like that.

With that, those are just a few different ways that you can use incidence data in your analysis whether you're trying to find opportunities to develop a new asset, you're looking at your existing portfolio and trying to get a perspective on what's the market look like around you, all the way to building your sales pipeline, and bringing new residents into your buildings.




| Roanoke Site | North Fort Worth Site |
|---|---|
| **Cognitive Impairment Rate** | |
| 10.1% | 20.8% |
| **ADL Disability Rate** | |
| 9.7% | 21.7% |
| **Number of Seniors Receiving Dementia Prescription** | |
| 10 | 204 |
| **IADL Disability Rate** | |
| 11.8% | 32.6% |

With that, we'll stop here and answer any questions you may have.

Paul Trusik: Wow. Thank you both. I think this is probably one of the most robust tools that I've seen in your dashboard tool, especially for visualization of data. I think that's super key to helping communities in organizations make well informed decisions. I think just in that brief demonstration of the dashboard tool, there's probably some opportunities for the communities to run a demo with you guys if they have any specific needs. I think, Arick, you may have covered this, one of the questions we had again, where's the data come from?

Arick Morton: Sure. As a general rule, we collect data from a wide variety of sources so those range from on the demographic side to the National Highway and Transit Safety Administration for traffic counts, CMS for a lot of health care utilization statistics, the census bureau, Esri and a range of other places. For this specific, we primarily get it from two sources, either the Census Bureau or CMS, CMS, more for the healthcare utilization side since we're typically dealing with only Medicare populations and then, the Census Bureau for some of the other data sets because they conduct obviously a nationwide survey on these particular issues.

Paul Trusik: Just another follow-up question to that, how frequently are the data sets updated? Is that quarterly? Is that on a monthly basis?

Arick Morton: Sure. It depends a little bit on the data set. Some of our data ranges from monthly, quarterly, annually. Specifically with these data sets that we've discussed today, those are generally updated on an annual basis since there's typically not a significant degree of change between the year so annual is the optimal refresh period.

Paul Trusik: Got you. Good to know. I know, Kyle, you covered a lot just in this brief period with what you can do with the dashboard between incidence analysis and pumping up the sales funnel. Is there anything else, any other ways you can use the data outside of what was covered?

Arick Morton: Sure. A couple other ways that we typically see these data used, one would be for on the referral source management side, Kyle briefly showed some of what we can do there, but we actually have a nationwide database of professional referral sources, which we can pinpoint around let's say an individual community and say, "Show me all the professional referral sources within a 5 mile radius around that site," just for example. That allows us to take that incidence data, bring it in in a way that can help from more of an operational perspective.

Then obviously you saw a little bit of some of the other ways that we can use this data, but primarily, we see folks think about everything from site selection on the development side to thinking through what is the thesis for an acquisition. What am I going to do with this community? Does the market support the assumptions that I'm making, all the way through to asset management? What's happening around my community? Should I be thinking about asset disposition? Should I be thinking about reemphasizing certain elements of my programming? What parts of the market are really growing? And how should I think about my community's positioning inside of the marketplace? Those are some of the major ways that we see this data used.

Paul Trusik: Great. We had another question just come in from a member. On the second part of that Charlotte analysis that you just demoed, the physician's material, is that part of a new referral insight tool?

Arick Morton: Yes, it is.

Paul Trusik: Great. Then how do you handle error rate for the ADL and IADL related data at the census tract level?

Arick Morton: Sure. Typically, we just pass that through. That's something that folks when they're looking at this information, will want to keep in mind. Generally speaking, the error rates are relatively within what you would expect that all demographics have an error rate. These error rates are really roughly in line so I think the difference between ... When you're looking at numbers, the absolute values I think are important, but what's really important is that looking at the relative numbers. Is this area to have relatively higher need or relatively less need? Also, those error rates tend to be what's generally considered acceptable range. That's how we think about those error rates, but it's definitely something to keep in mind.

Paul Trusik: Sure, always a small margin of error. Great. I think that's it as far as questions, all good questions from our registrants. I think next steps, what we're going to do, we're going to send out the slide deck to everyone who registered and attended. We're also going to include some additional information on Vision LTC. I believe right now we have a smart savings deal running through Senior Living SMART where members can get 50% off the first month with Vision LTC. We definitely encourage and we'll send out this information. Any community or organization that wants a one-on-one demo with Arick or Kyle, we'll provide that information in an email to you. I think that's about it. Did you guys have any other closing comments?

Kyle Gartner: We just wanted to say thanks to everyone who joined us today. We really appreciate your time and your interest. Paul, thanks for being a gracious host. A pleasure working together.

Paul Trusik: Yeah, absolutely. I just thank you both for this great information and presentation. I love this type of visualization. I'm more of an analytics person. Again, this is probably the most robust tool I've seen on the market within the healthcare field.

Again, thank you everyone for attending, How to Use Data to Uncover New Opportunities in Senior Living and we will be following up shortly with a reminder email with this presentation and recording. Thanks again everyone. Have a good rest of the week.