ARENA CASE STUDY

Nationwide Senior Living Provider



Executive Summary

A major nationwide senior living provider was experiencing many of the workforce challenges that are common across the industry today. While their previous efforts had reduced turnover, the impact had fallen short of their goals. Their senior leadership team was looking for innovative, data-driven ways to tackle these challenges, which brought them to Arena. They ran a pilot in specific facilities and roles, and observed overall employee turnover for recommended applicants was 28% lower than non-recommended—which justified a broader nationwide deployment across the organization.

The Situation

A major nationwide senior living provider was experiencing high employee turnover in both clinical and non-clinical roles. This turnover was impacting productivity, efficiency, and quality.

Recruiters and hiring managers were spending too much time hiring new people for the same roles over and over again. The resulting vacancy rates meant that the workers who stayed were asked to work more and longer shifts, increasing burnout and dissatisfaction.

Community managers were noticing not only that employee turnover costs were high, but also that their less experienced caregivers found it more difficult to provide the high quality of care and resident satisfaction they aspired to.

Previously, the Human Resources team had done an analysis of the top factors that were driving turnover (listed in the callout box to the right) and put together a three-year plan.

Their employer brand was updated with a renewed focus on mission and culture. Caregivers were reminded of the importance of hiring and retaining the right people to provide a high quality of care. And recruiter compensation packages were adjusted to include turnover in addition to time-to-fill.

Top factors driving workforce turnover

- Many positions required certifications that made it more difficult to find applicants
- 2. Compensation in many regions was less competitive than other industries
- 3. Some facilities were in less desirable areas without access to public transportation

The challenge became clearer through the numbers. Overall workforce turnover was similar to the industry average with some areas reaching well above that. Turnover lead to vacancies, and some markets where constantly missing a significant share of their workforce. Cost to onboard a new clinical employee was approximately \$5,000 and non-clinical was \$2,500—meaning that the marginal cash cost of workforce turnover added up to millions of dollars every year.

The Solution

While many in the senior living industry think these issues are unsolvable and "just part of doing business", this senior leadership team was looking for innovative, data-driven ways to tackle their challenges, which brought them to Arena's data, AI, and predictive analytics.

The Arena Workforce Prediction Platform collects a large amount of data about each person that applies

The Arena Approach

Arena's work with this senior living provider began with a pilot to prove the technology before a broader deployment. The data team at Arena analyzed their historical workforce turnover data and proposed specific facilities and roles for the pilot.

Arena then combined the data about job applicants with outcome data from the senior living provider (in the form of employee hires and terminations). Next,

Getting Started with Arena

Collect a large amount of data on job applicants and employees

Select pilot groups and build customized models for each location, department, and role



(ATS and HRIS) and define recruiting workflows & experience



Automate continual refresh of outcome data over time to improve accuracy

for a role with the organization and uses it to predict likely outcomes for that applicant, including tenure, engagement, punctuality, and resident satisfaction.

The platform collects three different kinds of data

- Application data includes the information that would typically be found in a resume or job application – which we get from their Applicant Tracking System (ATS)
- Third-party data may include some data about individuals that is publicly available, and also data about roles and organizations, and local hiring conditions
- Interaction data comes from our platform and includes the responses to questions along with the applicant's behavior, in the form of clicks and keystrokes

Arena's team of data scientists looked for patterns and built customized retention predictions for each location, department, and role.

In parallel our Client Success team worked with the provider to:

- Integrate our cloud-based platform with their Applicant Tracking System (ATS) to exchange new job applications and predictions automatically
- 2. Define the user experience for job applicants, recruiters, and hiring managers
- Automate periodic refresh of employee outcome data from their Human Resources Information System (HRIS) to improve accuracy and keep pace with changes in the organization over time using machine learning

The Results

The pilot was a resounding success.

- During the pilot, overall workforce turnover for Arena recommended applicants was 28% lower when measured at the 60-day milestone, and 22% lower at the 90-day milestone
- The average monthly completion rate for job applicants was **75%**
- Arena generated predictions for **over 10,000** job applicants across all roles

In addition to improving employee turnover, Arena also helped improve recruiter and hiring manager adoption of their Applicant Tracking System by sending recommended applicants via email with direct links to each applicant in the system.

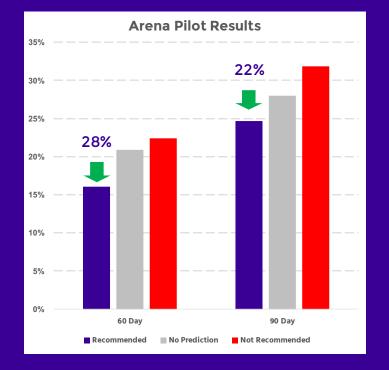
After demonstrating success during the pilot, this senior living provider decided to expand their use of Arena across all of their locations nationwide.

Lessons Learned

During our work with this senior living provider we learned two major lessons that proved to be important to driving success.

The first is to analyze historical employee turnover data early in the conversation. Initially, there were varying opinions on how to approach the pilot, but after our team performed an analysis of their outcome data, it allowed us to have a fact-based conversation about trends and problem areas and recommend a specific plan for the pilot.

The second is the importance of driving recruiter and hiring manager adoption of the predictions. If employees do not use the predictions to inform hiring then the organization will not realize the benefits of the technology. This makes educating recruiters and hiring managers during onboarding critically important.



"Obviously, it's going to hit your financials, but most importantly it's going to affect resident care ... our residents really rely on consistent team members" – Regional Director

"Instead of my coordinators spending their time training new people, they are really honing and polishing their service delivery, so that at the end of the day, we've grown, and our quality has improved"

- Executive Director

The most effective tactics for driving adoption were:

- Paying careful attention to the applicant experience and seamlessly integrating the platform into the application process to ensure that a large percentage of applicants will complete the process and get a prediction
- Recognizing that recruiters and hiring managers in the senior living space have unpredictable schedules and are rarely in front of a computer, we delivered predictions for new applicants via periodic, mobile-friendly emails
- Developing performance reporting for the leadership team to monitor adoption and employee turnover at the regional and individual community level

The Way Forward

While our work together has been successful, we see a tremendous potential to create additional value in the future by:

- Incorporating additional applicant data to continue to improve the predictive power of our algorithms
- Predicting additional outcomes, such as employee engagement, resident satisfaction, punctuality, and sales yield
- Investigating additional workforce decisions, such as promotions, transfers, team assembly, and incumbent attrition



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