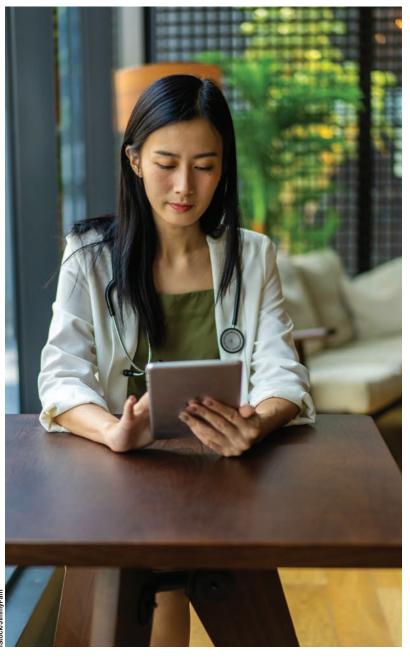
# Addressing Home Healthcare Staffing Challenges Through Geo-Intelligent Scheduling



Industries that face challenges in staffing and scheduling have successfully addressed these issues through the implementation of intraday staffing automation. Home healthcare, however, introduces an additional dimension: locationspecifically, efficiently scheduling the appropriate healthcare worker based on their projected location at a given time with the location of a patient who needs care. Geo-Intelligent Scheduling has the potential to effectively address the unique staffing/scheduling challenges in home healthcare: the ability to get the right clinician to the right patient at the right location at the right time by taking into account the realtime location of the patient and clinician throughout the day. Geo-Intelligent Scheduling also has the potential to automatically create route-optimized intraday schedules for clinicians and increase effective staffing capacity by over 16% with no additional labor cost. Finally, Geo-Intelligent Scheduling can potentially improve appointment-time adherence, automate Electronic Visit Verification compliance, enhance patient/clinician communication, and improve employee retention through self-scheduling empowerment.

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he home healthcare market is experiencing unprecedented growth. Each day in the United States over 10,000 adults turn 65 years old (United States Census Bureau, 2019) and surveys indicate that most seniors prefer to remain living independently in their own homes (AARP, 2018). COVID-19 and fear of future pandemics may exacerbate this trend. As the aging-in-place senior population increases, the need for home healthcare workers is growing rapidly. According to the U.S. Bureau of Labor Statistics (2019), the number of home healthcare workers will grow by 36% from 3,253,000 in 2018 to 4,438,000 in 2028. That's almost 1.2 million more new workers. According to the Home Care Salary & Benefits Report from the New Jersey-based Hospital & Healthcare Compensation Service, turnover for home healthcare workers in the United States was 21.89% in 2019 (Holly, 2019). If this remains the same, over 1.44 million new workers will actually be required.

## The Home Healthcare Industry Challenge

According to the Home Health Care News Staffing Report (2019), staffing challenges have a meaningful impact on multiple aspects of home healthcare business success:

- 96% of respondents to a survey said that staffing challenges have impacted their organization's ability to grow (with 66% calling them very impactful).
- 75% of respondents said that staffing challenges have impacted their organization's ability to ensure compliance (with 28% calling them very impactful).
- 88% of respondents said that staffing challenges have impacted their organization's ability to improve patient outcomes (with 33% calling them very impactful).

When asked which areas companies expected to make an investment toward having an impact on staffing, the results were as follows:

- Training: more comprehensive onboarding process: 41%; continuing education: 29%
- Incentive programs: financial incentives: 35%; rewards programs: 32%
- Improved scheduling: prescheduled overtime: 5%; using technology to address staffing/scheduling: 37%

It is the last of these that this article will explore how technology can help address home healthcare staffing and scheduling challenges.

# **Key Challenges in Home Healthcare Staffing/Scheduling**

In addition to the challenges associated with scheduling and staffing in hospitals, medical offices, and nursing homes, home healthcare introduces an additional dimension-locationwhere the patient is and where the healthcare workers are relative to the patient when an appointment is being scheduled. Specific issues that must be addressed for home healthcare worker staffing include: whether the worker has a reliable means of transportation, whether workers are compensated for travel costs to and from patient appointments, safety concerns workers may have in going to some locations, and whether pay is competitive with comparable "in-building" jobs. In addition, some visits require that workers use Electronic Visit Verification (EVV), which requires them to call a special number using the patient's phone number when they are at the patient's location. This may be a problem if the patient does not have a landline phone, or if the caregiver forgets to make the call, and/or the line is busy when they call in (Cunningham, 2019).

### **Improving Staff Utilization**

Optimizing schedule routes for efficiency is important. For example, if home healthcare workers average six visits per day, improving route efficiency could enable them to average seven per day. That is a capacity improvement of 16.7% the equivalent of 50 additional workers for a 300-person home healthcare organization. Another factor to be considered is ensuring compliance with a minimum number of weekly appointment requirements. If a salaried clinician is required to have a minimum of 25 appointments per week, it is important to keep track of which clinicians are not currently meeting quotas and provide them with a means of achieving them, either through additional appointment offers (push approach) and/or clinician appointment selfscheduling (pull approach).

### **Improving Patient and Worker Satisfaction**

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next appointment times and can create a "ripple effect" through the rest of the day. Workers calling in sick or traffic conditions can also create havoc on the daily scheduling as visits must be covered or rescheduled. Clinical skills and distance to patient location must be considered when assigning alternative clinicians. It is important to proactively communicate changed appointment times and clinician names to the patient which directly impacts patient satisfaction. Communication with workers in the field is important in terms of ensuring on-time visits and patient satisfaction regarding upcoming appointment times/locations, best route to patient location taking into account current traffic conditions, and access to patient environment information (e.g., which door to use, presence of a dog, etc.).

#### **Geo-Intelligent Scheduling**

Other industries that have challenges in staffing and scheduling have successfully addressed staffing issues by implementing intraday staffing automation. For example, in the contact center industry, which has roughly the same number of workers in the United States as the home healthcare industry, intelligent intraday automation technology that enables companies to quickly identify staffing variances through continual reforecasting, and empowering workers with the ability to adjust their schedules anywhere/anytime with a mobile app, has reduced intraday staffing variances by over 50% (Chance et al., 2017). Taking into account the location of the patients, Geo-Intelligent Scheduling can automatically create schedules for clinicians that can reduce commute times between patients by as much as 35%. By monitoring real-time traffic conditions and real-time location, Geo-Intelligent Scheduling technology can determine appointments that are at risk of not starting on time, and can notify clinicians of when they need to leave to make their next appointment, as well as the best route to get to their next appointment. It can contact the patient to let them know the expected arrival time of the clinician, and can identify alternative clinicians to address open visits, including where each clinician will be at that time of day, and communicate the new visit opportunity to clinicians. It can also provide clinicians with information that could assist them in executing an effective patient visit such as patient hearing issues, preferred door to access, knocking versus ringing the doorbell, and the like. It will also automatically log departure time of clinicians to meet EVV compliance requirements, without the clinician having to manually record arrival and call in to a number or a phone app.

Geo-Intelligent Scheduling can provide clinicians with information about their weekly appointment compliance and provide them with the ability to self-schedule additional appointments to meet their quota. According to a 2017 survey by WorkFlex Solutions, 85% of workers said they would change employers for more self-scheduling empowerment, whereas only 60% said they would change employers for less pay (Schwartz, 2017).

## **Geo-Intelligent Scheduling Checklist for Home Healthcare Providers**

The following is a checklist that home healthcare providers can use as a guideline when considering geo-intelligent scheduling products:

- 1. Does the product integrate with my existing EMR?
- 2. Does the product provide an easy way for schedulers to see appointment issues

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such as "no clinician currently assigned" or "clinician will be late getting to his/her next appointment?"

- 3. Does the product provide recommendations for how to best address appointment issues based on user-configurable parameters (e.g., clinician skills, past experience with patient, distance to patient, and hours worked)?
- 4. Does the product enable administrators to easily communicate with clinicians in the field regarding new appointment opportunities, or schedule changes?
- 5. Does the product automatically keep track of actual distance travelled for mileage reimbursement?
- 6. Does the product automatically record appointment arrival and departure times for EVV purposes?
- 7. Does the product include a mobile app for clinicians that enable them to:
  - View their daily/weekly schedule and receive upcoming appointment reminders
  - Review scheduled appointments/hours relative to daily/weekly quota
  - View the best route to get to their appointments taking into account real-time traffic conditions
  - Enable them to easily communicate with schedulers and patients regarding appointment schedule issues
  - View and accept/reject new appointment opportunities offered by administrators
  - Preview and self-select new appointment opportunities that have already been prescreened/preapproved.
- 8. Can the product be introduced with minimal information technology risk and minimal administrator and clinician training?

In assessing return on investment from Geo-Intelligent Scheduling products, some items that home healthcare providers may wish to evaluate include the impact that improved scheduling efficiency can have on clinician utilization, the impact that improved communication can have on clinician retention and patient satisfaction, and the impact that improved operational transparency can have on overall performance and compliance. One way of thinking about investment in Geo-Intelligent scheduling technology is comparing the cost against the additional investment in administrative staffing that would be to achieve comparable benefits.

## Conclusion

Geo-Intelligent Scheduling technology can substantially improve clinician utilization and reduce turnover through increased self-scheduling empowerment, and can go a long way toward enabling home healthcare companies to grow their business, improve compliance metrics, and retain clinicians in an increasingly tight job market. Geo-Intelligent Scheduling Technology's ability to also deliver EVV compliance distinguishes it as an attractive alternative to the EVV point solutions currently on the market.

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