

Shannon E. Finley

HCA 6213-67699 Cases in Healthcare Quality

**Improving Visitor Authorization Requests for Independent Living Residents at a
Continuing Care Retirement Community through PDSA**

Introduction:

The safety and security of the residents in Continuing Care Retirement Communities are of the utmost importance. It is one of many benefits residents expect when moving to one of these communities. Knowing that security staff are on top of who should and should not be admitted to the community is critical, especially in light of brutal attacks that took place in one central Florida community in November 2024. Theft and exploitation by staff and intruders posing as staff can also wreak havoc on what should be idyllic living situations. When communities restrict permission to enter a community to staff and residents, being able to efficiently and effectively request admittance for visitation can become an inconvenience to residents when the “system” appears to fail. This was the case for one central Florida community of more than 670 independent living residents.

The residents of John Knox Village of Central Florida, a Continuing Care Retirement Community, located 30 miles north of Orlando, Florida, are a technologically savvy population. For nearly a decade, residents have been submitting requests for visitors to enter the gated community through an online form on the community's resident portal (resident-facing intranet). Over the course of 10 years, the community has navigated three community portals, each with its own set of positive and negative attributes. The first two resident portals included basic visitor request forms, which triggered an email notification to the Security Team. Security would then

enter the guest's contact information into security's visitor management software, along with their anticipated arrival and departure dates. The two previous resident portals had no significant issues reported. When guests would arrive, security personnel were ready for them at one of the two visitor gates accessible to community guests.

In August 2024, the community introduced a new resident portal after the previous vendor failed to meet the community's growing technology needs. While the new portal was more robust in other areas, this new portal lacked an adequate mechanism to collect and distribute the necessary information for independent living visitor requests. The new portal did offer a visitor management system as part of the package, however, it proved to be better suited for an assisted living or skilled nursing environment, with features such as appointment dates and time slots similar to those found in a physician's office or a restaurant reservation system. As a workaround for accurately collecting guest information, John Knox Village's administration and website administrators chose to temporarily build a form on their externally facing website, which is not published or indexed to the public, to collect and distribute information in the same manner as the previous two resident portals.

Over the course of the last year, residents have voiced complaints that the "system" is not working correctly and that the security staff are not aware of guests' anticipated arrival. Staff, knowing that their primary role is to keep unknown people out of the Village, often erred on the side of caution and did not admit or slowed the admittance of resident-approved guests due to poor communication and a breakdown in processing resident guest requests.

Enhancements were made within months of launching the third resident portal and visitor request form, allowing for the daily export of new requests submitted to the database as a Microsoft Excel-accessible file, in addition to the individual email notifications sent to staff as

requests are being submitted. The daily exported file is sent to staff members each morning at 12:03 a.m., and includes only new requests since the previous days' export. Additionally, confirmation emails were added to be sent to the resident upon submission of their request, so that they would know their request had been correctly submitted and would have a confirmation receipt. Initially, the resident only saw a confirmation web page upon completion of the request. Resident complaints of security not being prepared for a guest's arrival persisted even with these early process improvements.

Diagnose the Problem:

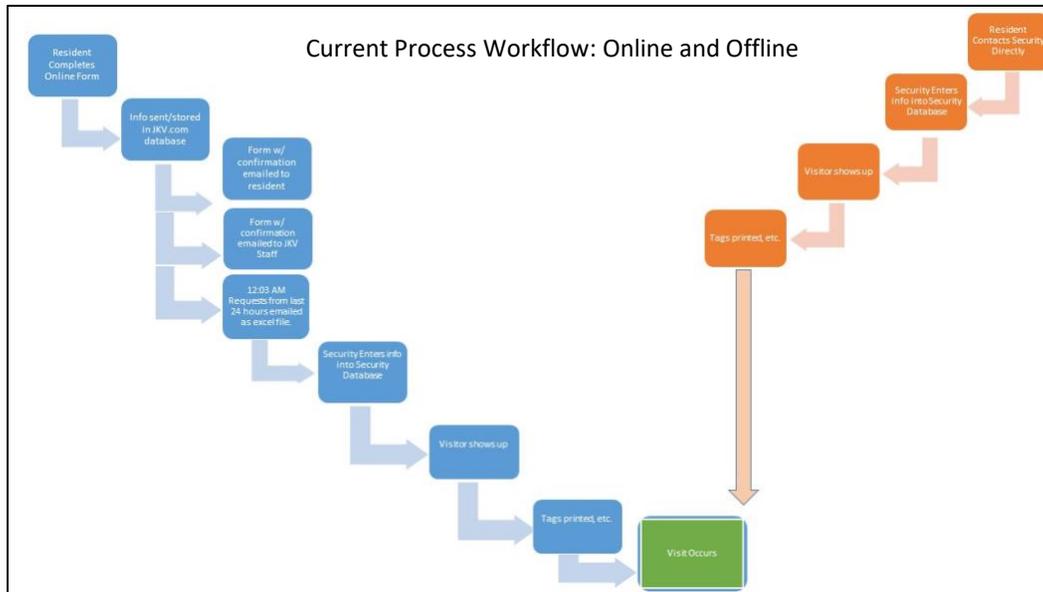
Despite the process of submitting online visitor requests and notifying staff of the requests not changing from the two previous iterations of the online request system, problems continue to be reported to management by residents that the security gates were not aware of their guests' arrival. After nearly a year of the new site being in use, it was decided to review the process for improvements.

Plan, Do, Study, Act (PDSA) was chosen by the process improvement team because it enabled management and frontline staff to review the current process, make minor adjustments, test it on a week-by-week basis, and make further adjustments as necessary.

As part of the planning phase, a small cross-functional team was assembled to review and diagnose the issue. The team included Stan DeCosta, Director of Campus Services, James Ashworth, Security Manager, and Shannon Finley, the Marketing and Communications Specialist. The Security Manager is part of the frontline staff who encounter residents and visitors daily and reports directly to the director of campus services. The marketing and communications specialist is responsible for maintaining both the resident portal and the online visitor request form, which is built as a hidden page on the corporate external website and

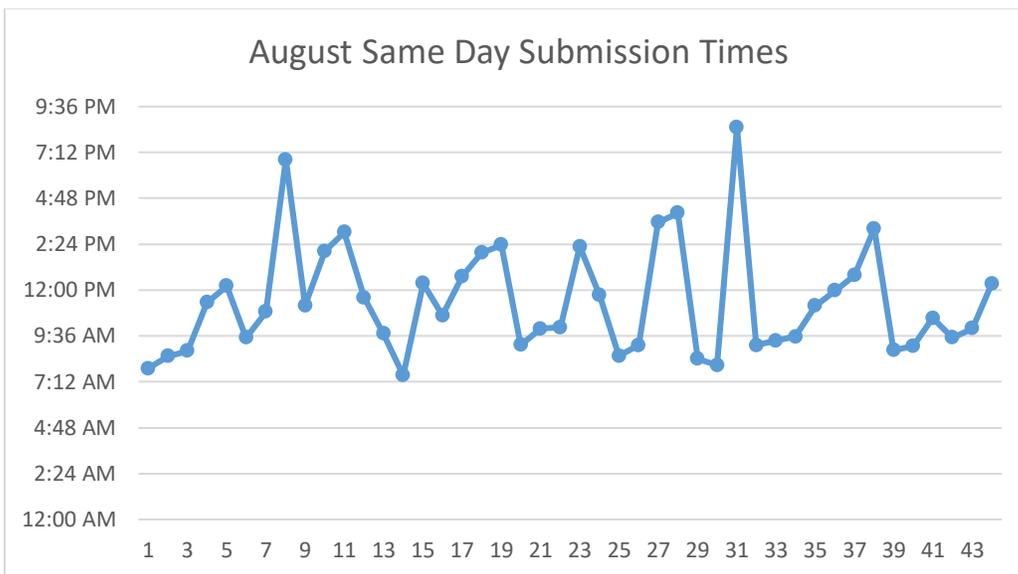
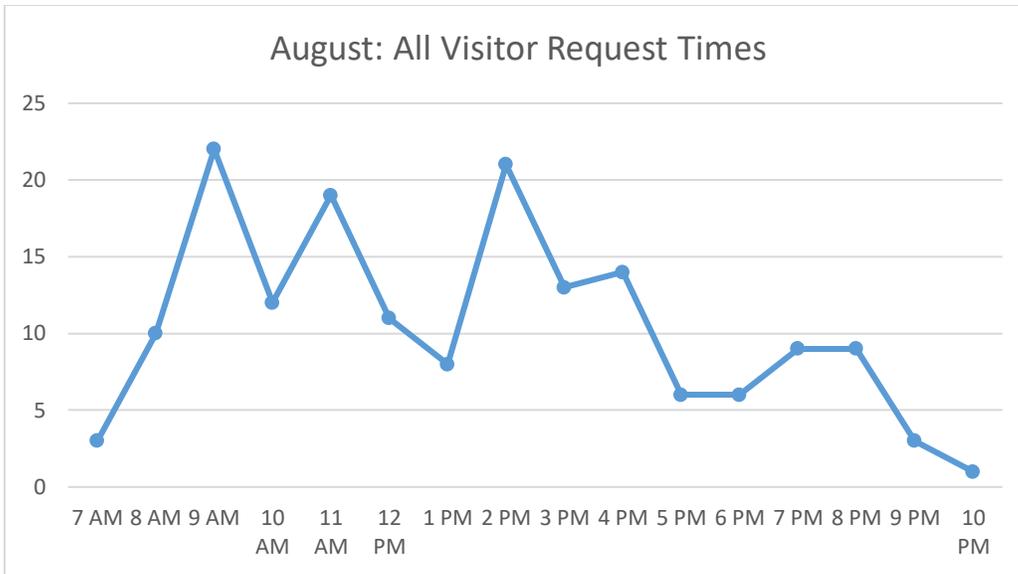
accessed via a link published on the resident portal. Both the director of campus services and the marketing and communications specialist receive direct resident feedback as part of a monthly meeting of the Residents' Council Communications Committee.

After assembling the team to diagnose the problem, the current process workflow was documented and confirmed by frontline staff.



Besides reviewing the current process, the marketing and communications specialist exported a list of visitor request entries for the month preceding the team meeting to determine the number of requests made each month, the amount of notice a resident provides to Security prior to their guest's arrival, and the time of day requests are being made.

After exporting the previous month's requests, the data was sorted by request submission date and guest arrival date to extract entries submitted on the same day as a guest's arrival. While examining the data, it was determined that in August, 26% of requests were made on the same day as a guest's arrival. Upon further examination, the submission times ranged from 7 a.m. to 10:00 p.m.



In addition to online requests, residents can also contact security directly to report a guest's arrival. These requests can be made by phone or in person at a gatehouse. If a request is made directly to Security, the officer collecting the information enters it into Security's visitor management software immediately. In rare instances, the data is collected and passed to a second officer for entry at a later time. Gatehouse 3, which is used exclusively by residents for entering and exiting the community, is the primary gate responsible for answering resident phone calls, as visitors are not allowed to enter through this gate, and it experiences the lowest amount of traffic.

During the planning phase, the team set off to 1). Determine why online visitor requests are not in the security system when a guest shows up at the security gate, and 2). Make necessary adjustments to the system to ensure that no requested visitor is delayed from a visit or turned away.

During the initial meeting, the team briefly discussed the process flow for Security receiving guests' names for the assisted living and skilled nursing areas of the community to determine if any issues exist in those areas as well. Guest names for assisted living are provided to Security by an administrative assistant one day in advance. No problems take place with their process for delivering and receiving names or preparing for guests' arrival.

Skilled nursing guests are also provided with one day's notice; however, they also have drop-in guests. Since the main security gate is located right outside the skilled nursing building, guests are directed to the building and watched from the Gatehouse. Once inside the building, guests are logged in to Accushield, a visitor management system used in both assisted living and skilled nursing's main reception areas, where a guest's contact information is collected along with a temperature reading.

The number of guests per week for assisted living and skilled nursing varies between 10 and 50 per site per week. Independent living receives an average of 45 guest requests per week.

During the initial discovery meeting, the security manager was asked to identify which gatehouses or staff members were responsible for entering online requests into security's visitor management system. The security manager advised that Gatehouse 1 was currently responsible for entering the information on the first shift at approximately 7 a.m. No one was closely monitoring emails throughout the day and processing same-day requests.

A survey was also developed to gauge overall resident satisfaction with security and the "process" of registering their guests. Survey questions included:

Question:	Answer Options:
Overall, how would you rate your experience submitting your request?	1 to 5 star rating
Did you have any issues completing the online form for your request?	Multiple choice: No/Yes
Overall, how would you rate your experience submitting your request?	Open-ended question
Was the Gatehouse expecting your visitor when they arrived, or did a Security officer need to call you to confirm that it was ok to let your guest enter?	Multiple choice: A) Security did not have my guest in the system and called me to allow them in B) security was ready for my guest
Do you have any additional comments you would like to provide regarding your visitor request?	Open-ended

Best Practices to Be Implemented:

After the initial planning meeting, it was determined to make minor adjustments to the way online requests were processed:

1. Instead of Gatehouse 1 being responsible for entering the requests from the previous 24 hours at 7 a.m., this responsibility was shifted to Gatehouse 3 after the data file is received at 12:03 a.m. Since Gatehouse 3 does not accept guests entering the Village, it is a logical location due to its low traffic entering the community and the time of day.
2. Monitoring and entering same-day requests as they came in to the security email address was also shifted to Gatehouse 3. If there is a short window of time between the request and the anticipated guest arrival, the officer at Gatehouse 3 would call the resident to confirm receipt of the request.
3. A new standard operating procedure was implemented and communicated to residents, which required that all visitor requests be entered online by 9 p.m. the day before the

visit. If requested after 9 p.m., residents are asked to call the Gatehouse to provide contact information for their guests.

Measuring and Analyzing Results:

Results for the three PDSA cycles were measured and analyzed both quantitatively and qualitatively. Each week, the marketing and communications specialist exported the online form submissions to review the number of same-day guests being submitted online. These results were compared against the previous weeks' submissions as well as the month-over-month change. Security staff was also tasked with monitoring and reporting any guest arrivals that were not logged to the security software in advance.

A survey was developed to gauge overall satisfaction with Security and the "process" of submitting online results. The survey was emailed to residents who submitted a request during August and was also sent to residents who submitted requests during the first two-weeks of the PDSA cycle (September 13 to September 30).

The final qualitative measurement was to monitor resident complaints of guests not being admitted to the community as requested through the online Feedback and Suggestions forum on the resident portal.

Evaluating the Effectiveness of the Improvement:

Quantitatively, the effectiveness of the improvement will be evaluated by comparing online submissions over the course of the three week PDSA against August's submissions to determine if the number of same-day requests decreases over time. The goal is to reduce the number of same-day submissions by 50%. Improvement will be monitored each Friday morning, when a new data file of visitor requests is exported and compared against the previous week. The

data will also be compared against the same time period from the month prior, to determine if the number of same-day requests has decreased.

Qualitatively, the effectiveness of the improvement will be determined by the number of resident complaints filed, either through online feedback and suggestions or with members of the residents' council. Additionally, the visitor request survey was deployed on September 16 to residents making visitor requests in August, and redeployed on October 1 to residents who submitted requests between September 13 and September 30 to see if overall satisfaction and negative comments decreased. A satisfaction score of 4 stars or higher will be considered satisfactory.

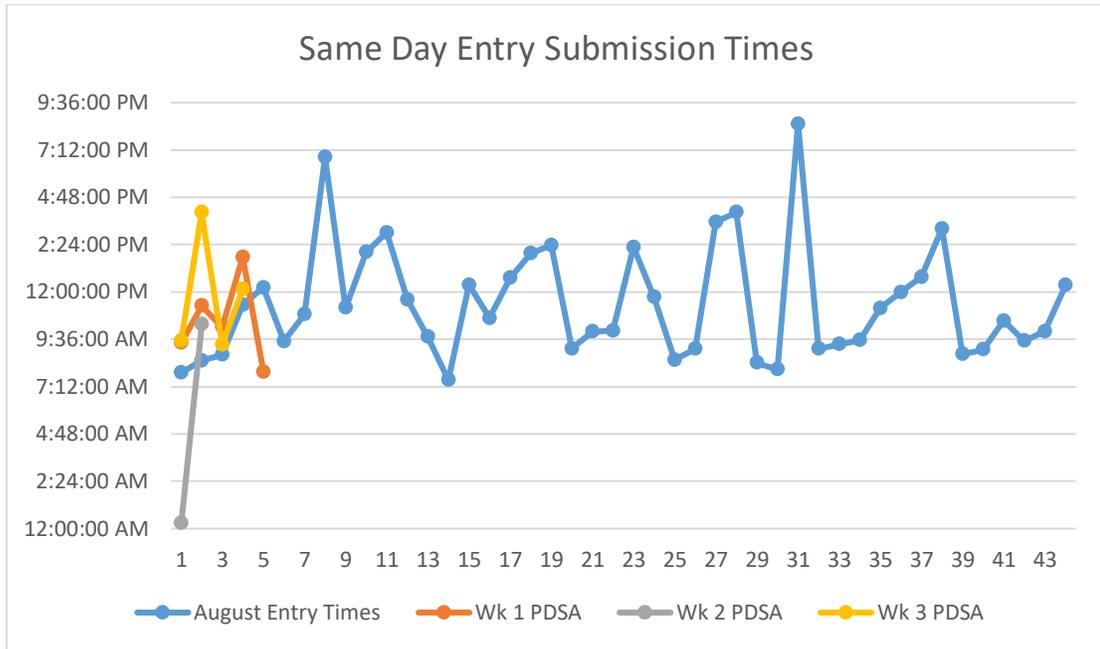
Over the course of the PDSA cycle, Security will track same-day request calls and report on the number of visitors approaching the gate who are not on the list.

* Data Note: On Monday, September 22, a computer system upgrade took place at all three gatehouses. Residents were given three days' notice that guests' entry to the community may be delayed due to the upgrade and were asked to submit their requests by 9 p.m. on Sunday, September 21. Only one resident complained through the Feedback and Suggestions forum that the gate was not ready, despite the request being taken by phone and the resident being thanked for calling. No complaints were made for online requests during this software upgrade.

Conclusion and Comments:

One week after updating the process, same-day submissions decreased from 29% the same week in August to 11% one week after implementing the changes. Overall, 26% of submissions throughout August took place the same day as a guest's arrival. During the second week, 4.44% of submissions were made on the same day as a visit. During the third week, same-

day submissions were 7.5% of all weekly submissions, or 7.7% of all submissions since the process improvement was implemented.



At the onset of the process improvement, eighty-two surveys were sent to residents who submitted a visitor request during the month of August. Of the 82 surveys sent out, 51 surveys were completed after one week of being emailed. Of the survey completers, 90% of respondents rated their experience of submitting an online request as four or five stars out of five for a cumulative score of 4.6 stars. Ten percent rated their experience three stars or less. Of the 51 survey respondents, three reported experiencing issues with completing the online form. Only one of the open-ended responses indicated that there was an actual issue with the process between form submission and guests arriving at a security gate. Of the 51 respondents, six indicated that Security was not prepared for their guests, while 45 acknowledged that Security was ready for their guests. One respondent's feedback closely aligned with and included the same suggestions for improvement as the improvements that were being implemented as part of this quality initiative.

Of the 40 surveys sent out to residents who submitted visitor requests, during the first two PDSA cycles, 18 surveys were completed. Overall satisfaction score rose from 4.6 stars to 4.8. One request indicated having an issue submitting the online form, but no detail was provided for the issue, and an overall 5-star rating was given by the same respondent. One respondent indicated that security was not ready for their guests and the process was poorly handled by the security guard at the gate. They noted that he was rude and curt. The resident indicated that no recent issues have taken place, and that the rude security encounter occurred earlier in the year.

Three weeks after implementing the process improvement, which included making changes to the recommended submission time, adjusting which security location enters guest contact information, and determining who monitors for same-day short-notice submissions, a reduction in same-day requests and an increase in staff readiness to greet guests have occurred. Same day submissions decreased and online feedback and comments were nonexistent. No issues were reported by security with the exception of the complaint from the phone request during the computer software upgrade.

The quality improvement team will continue to monitor progress and promote the recommended submission times and process. In addition, management is evaluating the implementation of long-term/permanent guest passes for resident-approved relatives and trusted friends who are frequent visitors to the Village, to eliminate the need for repeated requests on a weekly or monthly basis for these trusted individuals.

References:

Saldibar, Susan. *Accushield Case Study: “How an Independent Living Community Caught a Thief in His Tracks.”* www.seniorlivingforesight.net, Apr 16, 2024, <https://www.seniorlivingforesight.net/how-an-independent-living-community-caught-a-thief-in-his-tracks/#:~:text=%E2%80%94Operator%20of%20a%20Memphis%2Dbased,front%20desk%20kiosk%20in%20place.>

Bugnitz, Chris, MD, Sandberg, Kelly C., MD. *Creating Effective PDSA cycles.* Elsevier.com, April 2025. <https://www.sciencedirect.com/science/article/abs/pii/S1538544225000331?via%3Dihub>

Exhibit A: Same Day Submission Times for August and the three week PDSA Cycles.

Submission Date	August Submission Times	Submission Date	Wk 1 PDSA Submission Times	Submission Date	Wk 2 PDSA Submission Times	Submission Date	Wk 3 PDSA Submission Times
8/11	7:32:17 AM	9/13	7:56:02 AM	9/23	12:16:14 AM	9/29/2025 0:00	9:19:56 AM
8/1	7:53:40 AM	9/18	9:24:42 AM	9/25	10:22:27 AM	10/1/2025 0:00	9:32:12 AM
8/22	8:04:11 AM	9/14	10:13:07 AM			9/28/2025 0:00	12:09:22 PM
8/21	8:23:55 AM	9/15	11:17:27 AM			9/30/2025 0:00	4:01:57 PM
8/1	8:31:42 AM	9/13	1:46:07 PM				
8/19	8:33:18 AM						
8/1	8:48:53 AM						
8/28	8:50:49 AM						
8/28	9:04:56 AM						
8/23	9:06:23 AM						
8/19	9:06:41 AM						
8/16	9:08:02 AM						

8/23	9:20:46 AM						
8/3	9:30:10 AM						
8/30	9:30:57 AM						
8/23	9:33:19 AM						
8/10	9:43:15 AM						
8/16	9:58:58 AM						
8/30	9:59:50 AM						
8/16	10:02:29 AM						
8/28	10:32:03 AM						
8/12	10:40:39 AM						
8/3	10:51:25 AM						
8/24	11:10:25 AM						
8/6	11:11:43 AM						
8/2	11:20:23 AM						
8/9	11:36:50 AM						
8/17	11:43:31 AM						
8/24	11:58:43 AM						
8/2	12:13:10 PM						
8/31	12:19:49 PM						
8/11	12:20:59 PM						
8/14	12:42:34 PM						
8/24	12:45:57 PM						
8/15	1:57:11 PM						
8/7	2:01:31 PM						
8/16	2:16:38 PM						

8/15	2:22:15 PM						
8/8	3:00:49 PM						
8/24	3:13:08 PM						
8/19	3:32:54 PM						
8/19	4:01:42 PM						
8/3	6:49:40 PM						
8/22	8:30:44 PM						