Professionals in long term care know that some quality problems stubbornly persist despite good intentions, excellent research-based guidelines, and rigorous training efforts. Improvements sometimes remain elusive even when goals are set and staff work hard.

Pressure ulcers are a classic example. While most clinical staff members understand the guidelines, they often struggle with integrating knowledge into daily work.

Bridging The Gap
A new pressure ulcer reduction program—known as On-Time Quality Improvement for Long Term Care (On-Time)—was developed by the Agency for Health Care Research and Quality (AHRQ) with support from the California Health Care Foundation in an effort to close the gap between staff knowledge and staff practice.

In this program, staff evaluate and redesign the processes and structures that systematically affect pressure ulcer prevention with the goal of facilitating good and consistent preventive care practices and to target resources to those at high risk of developing pressure ulcers.

One of the biggest challenges for pressure ulcer prevention in nursing facilities is how to get information in a timely manner to the multidisciplinary team and to identify patients who are at high risk for pressure ulcer formation.

Since certified nurse assistants (CNAs) spend the most time with residents, they are frequently the first to notice subtle health status changes; however, their observations often never reach the team members who are formulating care plans. In addition, nurses are sometimes reluctant to use CNA documentation because it may not accurately reflect resident health status and is often incomplete.

In some cases, communicating changes in resident status between CNAs and nurses is haphazard. As a result, nurses do not have the information they need to prevent pressure ulcers.

Moreover, most efforts to provide and review resident assessment information are focused on completing the minimum data set (MDS), not the weekly or daily information nurses need for timely identification of residents at risk for developing a pressure ulcer.

The Right Tools
The On-Time program utilizes a set of newly developed tools that staff may adapt and integrate into their current processes and structures. The tools, which were developed with input from frontline, dietary, and nursing staff in 11 pilot nursing facilities, include a documentation form, a documentation completeness or audit report, and four additional weekly clinical reports that help identify high-risk residents for pressure ulcer formation.

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There are three key components of the On-Time program:

- Assessing current CNA documentation, streamlining CNA documentation, incorporating best practice elements into daily charting, and consolidating CNA documentation into one form;
- Establishing audit and feedback processes to confirm CNA information completeness and accuracy; and
- Integrating weekly reports that identify at-risk residents into care planning processes and structures.

Creating a comprehensive data collection mechanism is another principal element of the program, which uses health information technology (HIT) of the facility’s choice. The data are used to generate a set of easy-to-use clinical reports that, when integrated into the day-to-day practice of the nursing facility, enhance clinical workflow, improve communication across disciplines, and promote sound decision making for improved care planning.

Implementing The Program

Successful implementation of the On-Time model entails the following three steps.

**Step One:** Streamline and standardize CNA documentation to capture relevant information. The heart of the On-Time program lies in the daily care documentation conducted by CNAs. Prototypes of the CNA documentation form and the On-Time reports are the starting point for implementing the program.

During the first stage of the initiative, documentation forms currently used by CNAs are reviewed; cross-referenced against regulatory requirements, facility care protocols, and best practice elements; and compared to the On-Time CNA form prototype.

Facility teams are guided through a self-assessment of CNA documentation at their facilities by an AHRQ-funded project coordinator. The result of this process is the development of a new CNA form designed to include best practice elements and to eliminate both redundancy and documentation of unessential items.

The new protocol allows CNAs to spend less time filling out redundant paperwork and more time focusing their documentation efforts on obtaining more precise information that is relevant to key risk factors and care planning. The On-Time program also enables CNAs to transition away from paper forms and begin using HIT to document daily charting. Under the pilot, the facilities’ project coordinators worked with their respective HIT vendors to ensure elements of the On-Time program are incorporated into the application.

<table>
<thead>
<tr>
<th>ON-TIME REPORTS</th>
<th>Report Name</th>
<th>Description</th>
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<tbody>
<tr>
<td>Completeness</td>
<td>Summarizes rates of completion and errors in CNA documentation and displays residents at high risk of pressure ulcers and poor nutrition.</td>
<td></td>
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<tr>
<td>Nutrition</td>
<td>Summarizes resident meal intake averages for four-week period, including weight loss or gain and last dietary consult date. Displays residents at high risk of pressure ulcers and poor nutrition.</td>
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<tr>
<td>Priority</td>
<td>Pulls and summarizes high-risk information from each report above; displays a list of all residents with red areas, as documented by CNAs; and summarizes key points of other reports with the goal of triaging residents at pressure ulcer risk to alert nurses quickly.</td>
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</tr>
<tr>
<td>Behavior</td>
<td>Captures a snapshot of aggregate resident behaviors at the unit level, displays behaviors by resident, and totals each behavior exhibited for the week.</td>
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</tr>
<tr>
<td>Trigger Summary</td>
<td>Displays a snapshot of pressure ulcer triggers at the unit level, calculates percent triggers per census, counts the number of pressure ulcer triggers by resident, and lists the total count for current and most recent week.</td>
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**Step Two:** Use reports for documentation auditing and establish a feedback process with CNAs. Data are captured and stored in a database as CNAs document daily care on each shift. The database then produces clin-
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Incorporating Data Into Care Practices

Step Three: Integrate and use clinical reports to enhance communication across disciplines and promote teamwork. The On-Time reports, designed with input from multiple disciplines, identify residents at highest risk for pressure ulcer development, show trends in multiple outcomes for these residents over time, and help staff monitor the effectiveness of care in a timely fashion.

The reports summarize and display information about residents’ nutritional status, behavior, pressure ulcer triggers, and priority areas for intervention. They provide both information about specific residents and a snapshot of the facility’s total resident population.

Trended analyses provided by the reports enable clinicians to be more proactive in their care planning approach.

For example, the Nutrition Report shows meal intake percentages as recorded by CNA staff, average meal intake trends over four weeks, weight gain or loss, and most recent dietary consult dates. If there is a slight downward trend in meal intake over time, the clinicians can take appropriate action before obvious signs of decline appear and the resident’s clinical condition worsens.

The Priority Report uses CNA documentation to alert the care team to residents that have experienced changes in their clinical status. It also identifies residents with decreased meal intake, weight loss, increased incontinence episodes, and the presence of a Foley catheter.

The Behavior Report displays disruptive behaviors that the care team can review quickly at the nursing station or at the bedside. A review of behaviors within the unit may be used to gauge staffing needs, while behaviors at the resident level can be reviewed and incorporated into overall resident assessments in order to determine associations with other health conditions.

The Trigger Summary Report displays the total number of pressure ulcer triggers for each resident, compared with the previous week, to keep the clinical team abreast of improvements or declines. Pressure ulcer triggers include weight loss of 5 to 10 percent within 30 days and/or greater than 10 percent in 180 days, average meal intake of 50 percent or less, daily urinary incontinence, more than three days of bowel incontinence, and the presence of a Foley catheter.

The report system is a good double-check of the facility’s current process.

Fostering Teamwork

Integrating the On-Time reports into daily work brings together everyone involved in resident care—CNAs, dietitians, social workers, MDS nurses, nursing coordinators, staff developers, and managers—and engages them in regular discussions about the results of CNA shift-to-shift observations.

The initial focus of the report use is on trending clinical information, since subtle changes in resident status can often go undetected as clinicians focus on the day-to-day health status of their patients.

The On-Time reports can also be used to augment information generated by existing facility reports and processes to promote early identification of residents at risk.

Some facilities integrated report use into existing facility team meetings or for other uses.

For example, Country Villa Woodman, Van Nuys, Calif., integrated the review of the Nutrition Report into an established weekly weight variance meeting.

Vernon Convalescent Hospital, in Los Angeles, established a new weekly team process to review the Priority Report to identify residents with red areas, as documented by CNAs. In this process, the wound nurse confirms the findings with CNA staff first, then follows up with clinicians to ensure appropriate interventions are in place.

According to Larry Oshinsky, administrator at Vernon Convalescent, the report system is a good double-check of the facility’s current process. “It’s a good backup to be sure nothing is missed, and our reduction in pressure ulcers tells us that it is working,” he says.

Donna Graff, director of nursing at Christian Home and Rehabilitation Center, in Waupun, Wis., says, “In the past, nursing staff received progress reports about residents on a quarterly basis. Now they’re getting status reports on a weekly basis and can make decisions based on the residents’ more...
immediate needs. The key is getting good, resident-specific information quickly.”

“One of the best things [about the program] is the focus on CNAs as important members of the team, providing critical information for clinical decision making,” says Lenora Jacobs, director of nursing operations at Laguna Honda Hospital and Rehabilitation Center in San Francisco.

“Their observations are very important to the licensed nurse.”

**Improved Communication**

Yet another important element of the On-Time program is the implementation of five-minute, stand-up meetings with CNA staff—a process introduced during the pilot project. While facilities already may have a similar briefing process in place, the On-Time approach is distinctive in keeping the meeting brief, focused, and data driven.

In these meetings, Nutrition Report results are reviewed by the dietitian or nurse along with CNA staff in order to confirm the accuracy of the results.

Once verified, clinicians are able to confirm that appropriate care plan interventions are in place and establish follow-up plans with frontline staff. During the stand-up meetings, the teams review the Nutrition Report, stay focused on resident meal intake, and keep meetings brief to minimize time CNAs are away from direct resident care.

On-Time also improves communication between CNAs and nurse staff regarding important changes in resident risks.

“The CNAs are very involved in our five-minute stand-up meetings,” says Ellen Knoll, quality improvement coordinator at Good Samaritan Village in Sioux Falls, S.D. “If the meeting facilitator is running late, the CNAs are gathering the team and making sure the meeting is being held. They want to share what they know about the residents because they know it is important.”

Keeping the meetings brief is an important element to maintaining staff commitment. As one facility explains, “If you keep the CNAs away from resident care for too long, they will stop...”
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coming altogether. Keep it brief, keep it focused, and you will be successful.”

According to Tammy Kean, clinical nurse consultant at National Church Residences, Columbus, Ohio, dietitians at two facilities are enthusiastic about reviewing the results of the Nutrition Report at their weekly five-minute standup meetings with CNA staff.

“The CNAs are very positive about the meetings, and they are communicating more,” she says. “Dietitians have a clearer picture of what residents are not eating, can address food preferences sooner, and are able to respond quicker to a resident having a downward trend in meal intake. They attribute this to trended information on the report and regular meetings with CNA staff.”

Positive Feedback

The On-Time program has also received some favorable comments from state surveyors, especially regarding the consolidation of CNA documentation and standardization of data elements.

The On-Time model’s capacity to link care plans to trended information on each resident supports and promotes individualized care planning, which is a priority of surveyors.

A facility in Southern California reported that its surveyors were very impressed with the CNA form. “Our documentation is clearer and more legible, and they really liked that,” a staffer says.

As use of the On-Time reports become more commonplace, there is increased realization of the importance of what CNAs document, and, in turn, there is increased recognition of CNAs as important team members.

Implementing On-Time helps nursing facilities move beyond a fragmented, paper-based environment toward a more efficient system of gathering and reporting relevant clinical information by CNA staff.

In addition to leveraging work conducted by CNA staff, a key ingredient for success is the integration of the program into daily workflow and care protocols, rather than the creation of a separate, additional project on top of caregivers’ existing duties.

The On-Time model is based on a unique integration of research evidence and quality improvement principles, with direct input from actual users, whose feedback and suggestions are incorporated to refine not only the clinical and HIT tools, but also the approach to care.

By consolidating information and reducing the number of required logbooks, the On-Time approach enables nursing facilities to replace disparate CNA paper forms with a standardized, streamlined process for gathering vital information. “I don’t have to go to five different flow sheets anymore; now the information is all right there,” says Becky Wilson, restorative coordinator at the Christian Home and Rehabilitation Center.

Melanie Capers, MDS nurse at Country Villa Wilshire Healthcare Center, Los Angeles, emphasizes the value of accurate consolidated data. “I have a much better clinical picture of the resident now by having all CNA documentation in one place, in one book. The CNA documentation is more complete and more accurate. It has definitely helped to improve coding,” she says.

In summary, facilities report that the On-Time process facilitates smoother daily workflow and more informed care planning. Priscilla McCray, dietary services supervisor at Country Villa Woodman, also attributes use of the new CNA form to improved CNA documentation of meal intake. “Our CNAs are documenting resident meal intake information more accurately, and the documentation is more complete. I believe it is due to the form changes; we now have specific meal choices on the form, and it is easier for the CNA to understand how to record meal intake,” she says.

CNAs Respond To Initiative

Early CNA feedback on the redesigned CNA documentation is very positive. Dorothy Owens, a CNA at Mercy Retirement Center, in Oakland, Calif., says, “I think our documentation is more complete now because while I am giving care I am also thinking about what I have to document, and I am focused on those things. Now I know what is important to report.”

Improvements in CNA job satisfaction and the promotion of interdisciplinary communication and collaboration across care teams have also been noted by participants as areas of improvement. “The systems that have been put in place have improved communication between CNAs and nurses. All departments benefit from the On-Time reports,” says Douglas Tucker, administrator at Country Villa Woodman. “CNAs are communicating much more with nursing. They feel more confident and comfortable talking with us now about residents and other issues.” Information they document every day is used regularly and visibly for team discussions and quality improvement efforts, he says.

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Implementations Confirmed

A preliminary evaluation of the program found that pilot facilities reduced
their high-risk pressure ulcer quality measures by 33 percent in a span of 18 months.

The facilities also reduced their use of other CNA and wound-tracking forms, while documentation completeness improved. Specifically, the number of forms used prior to implementation of the pilot program was reduced from 6.2 to 2.9 per facility following implementation of the pilot.

Preliminary results from the second phase of evaluation show a 13 percent reduction in the Centers for Medicare & Medicaid Services pressure ulcer quality measure after participating in the pilot for just six months.

Twenty-three facilities currently participate in the On-Time program. In addition, 16 new facilities in New York state are beginning the program under collaboration between the New York State Health Department and AHRQ.

The On-Time model was not designed to be a magic bullet solution to the problem of pressure ulcers. Rather, it is a flexible strategy that can be adjusted to each facility’s particular context, carefully restructuring workflow processes and communication patterns to assure a more attentive care procedure overall and prompt action on behalf of high-risk residents.

“Joining the collaborative project made sense for us,” says Vernon Convalescent’s Oshinsky. “We already had technology for CNA documentation but we weren’t sure what to do next, or how it fit into a bigger picture. Now we have a system that is geared toward outcomes and processes that are sustainable.”

Involvement of frontline caregivers from the onset, as well as mechanisms that ensure regular communication and input across disciplines and departments, is essential to the model’s success.

On a broader scale, the On-Time program has helped foster communication and collaboration across facilities. The participating facilities have formed a network dedicated to solving common challenges and created a community of innovators in long term care quality improvement.

For More Information

- Go to http://ahrq.gov/research/puwebcast.htm.

■ CNAs also tell us that they are more appreciated by other members of the care team.