

On-Time Quality Improvement Manual for Long-Term Care Facilities

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The information in this *On-Time Quality Improvement Manual for Long-Term Care Facilities* manual is intended to help long-term care facilities adopt and implement the On-Time Quality Improvement program. It is intended as a reference and not as a substitute for professional judgment. The findings and conclusions are those of the authors, who are responsible for its content, and do not necessarily represent the views of AHRQ. No statement in this manual should be construed as an official position of AHRQ or the U.S. Department of Health and Human Services. In addition, AHRQ or U.S. Department of Health and Human Services endorsement of any derivative products may not be stated or implied. None of the investigators has any affiliations or financial involvement that conflicts with the material presented in this manual.

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Introduction

The On-Time Quality Improvement Program is a practical approach to quality improvement (QI) in long-term care, embedding QI strategies and best practices into health information technology (HIT). The On-Time QI for Long-Term Care Program (On-Time) was developed with funding from the Federal Agency for Healthcare Research and Quality (AHRQ), in collaboration with the California Health Care Foundation (CHCF), New York Department of Health, California Department of Public Health, Quality Improvement Organizations (QIOs) in the District of Columbia and California, and more than 75 nursing homes across the United States.

On-Time focuses on:

- Leveraging the documentation and knowledge of Certified Nursing Assistant (CNA) staff, who serve as primary informants to licensed staff,
- Supporting clinical decisionmaking based on best practice guidelines through use of HIT in routine practice,
- Establishing practices for proactive risk identification and early intervention as part of frontline caregivers' daily work, and
- Providing ongoing feedback on process and outcomes to frontline teams.

While pressure ulcer prevention is the initial clinical area of focus, AHRQ is applying the On-Time approach to other clinical areas, such as falls prevention and management, pressure ulcer healing, and prevention of emergency department and inpatient hospital transfers.

Challenges of Improving Pressure Ulcer Prevention Practices in Nursing Homes

Pressure ulcer incidence and prevalence remain high among nursing home residents despite much effort to create and implement guidelines for prediction and prevention of ulcers (e.g., AHRQ guidelines on prevention and treatment of pressure ulcers, American Medical Directors' Association guidelines to prevent pressure ulcers). Pressure ulcers, defined as "any lesion caused by unrelieved pressure resulting in damage of underlying tissue," are a serious and common problem in frail and elderly adults.¹ Pressure ulcers cause pain and disfigurement, interfere with activities of daily living, and are associated with longer hospital stays and increased rates of morbidity and mortality.² In long-term care facilities, reported rates of pressure ulcer incidence range from 2.2 percent to 23.9 percent³ and prevalence rates range from 2.3 percent to 28 percent.⁴

Every year, pressure ulcers affect more than 1 million acute care and nursing home patients. More than \$355 million is spent annually on pressure ulcer treatment in long-term care settings.^{2,3,5} The cost of pressure ulcers is high, projected between \$1.3 billion and \$6.8 billion,^{1,6,7} and ulcers have serious consequences: resident morbidity, mortality, and loss of quality of life. Additional costs are associated with liability and litigation. While the financial costs associated with pressure ulcers are high, the human toll of pain, depression, altered self-image, stress, infection, and increased morbidity and mortality is immeasurable.

Efforts focused on reducing pressure ulcer incidence are common. Despite knowledge about how to prevent pressure ulcers in nursing homes, rarely have improvement efforts integrated tools or

resources needed to support implementation efforts into everyday practice within a nursing home. Too often, practice improvements are designed and implemented without thinking through how they will be integrated efficiently with existing staff workflow and documentation processes.

Purpose of the On-Time QI Manual

This manual is an introduction to the On-Time QI approach. It provides an overview of the tools and process improvements and describes the implementation process. Target users are stakeholders interested in nursing home QI (e.g., departments of health, Quality Improvement Organizations), nursing home leaders responsible for deciding QI priorities, and nursing home personnel responsible for quality improvement. In each section, we highlight areas to note: On-Time tools, process improvement key action steps, implementation tips, and quotes from teams who have implemented On-Time.

The On-Time Manual is organized as follows:

On-Time Overview

- On-Time Results to Date
- On-Time Guiding Principles
- On-Time Tools
- On-Time Implementation Process
- Where To Learn More About On-Time
- Resources

Getting Started

- Readiness for On-Time
- Resources Needed
 - Technology
 - Staff
 - Facilitation
- On-Time Work Plan

On-Time Implementation

- Step 1: Standardize CNA Documentation Data Elements and Redesign Workflow
- Step 2: Monitor CNA Documentation
- Step 3: Implement Process Improvement Using Nutrition and Weight Summary Reports
- Step 4: Implement Process Improvement Using Trigger Summary Report
- Step 5: Implement Process Improvement Using Priority Report
- Step 6: Implement Process Improvement Using Optional Red Area Report
- Step 7: Monitor Impact

References

1. Morris J, Lipsitz L, Murphy K, et al., eds. Quality care in the nursing home. St Louis: Mosby Lifeline; 1997.
2. Miller H, Delozier J. Cost implications of the pressure ulcer treatment guideline. A report to the Agency for Health Policy and Research, Panel for the Treatment of Pressure Ulcers. Rockville, MD: AHCPR; August 1994.
3. Cuddigan J, Ayello EA, Sussman C, eds. Pressure ulcers in America. Prevalence, incidence, and implications for the future. Reston, VA: National Pressure Ulcer Advisory Panel; 2001.
4. Coleman EA, Martau JM, Lin MK, et al. Pressure ulcer prevalence in long-term nursing home residents since the implementation of OBRA '87. Omnibus Budget Reconciliation Act. J Am Geriatr Soc 2002;50:728-32.
5. Berlowitz DR, Brandeis GH, Anderson J, et al. Effect of pressure ulcers on the survival of long-term care residents. J Gerontol A Biol Sci Med Sci 1997;52A:106-10.
6. Horn SD, Bender SA, Bergstrom N, et al. Description of the National Pressure Ulcer Long-Term Care Study. J Am Geriatr Soc 2002;50:1816-25.
7. Horn SD, Bender SA, Ferguson ML, et al. The National Pressure Ulcer Long-Term Care Study: pressure ulcer development in long-term care residents. J Am Geriatr Soc 2004;52:359-67.

On-Time Overview

On-Time is a program that reengineers nursing home workflow processes around improving clinical outcomes and integrates health information technology (HIT) and clinical report information into those processes. The program incorporates culture change, workflow redesign principles, and current best practices and provides specific tools and process improvements to caregivers in nursing homes.

This section answers the following questions:

- Why should a long-term care facility be interested in the On-Time program?
- What are the guiding principles used to develop On-Time?
- What are the On-Time tools?
- What is the On-Time implementation process?

On-Time Results to Date

Participating facilities have found many positive effects of the On-Time program. On a broad scale, On-Time has:

- Improved clinical outcomes (pressure ulcer rates),
- Increased Certified Nursing Assistant (CNA) engagement in process improvement,
- Improved communication about high-risk residents among the entire care team, and
- Improved prevention practices and timely interventions for high-risk residents.

Results to date follow:

- Reduced in-house incidence of pressure ulcers:
 - Forty-three percent decline (from 4 percent to 2.3 percent) based on initial implementation of program with 21 facilities with high level of implementation.
 - Fifty-five percent decline 12-months postimplementation based on New York State On-Time early results for the rapid implementers (n=3 facilities).
- Reduced number of high risk residents with pressure ulcers (Centers for Medicare & Medicaid quality measure):
 - One-third reduction within a year based on pilot program among 11 participating nursing homes.
 - Decline of 30.5 percent (from 13.1 percent to 9.1 percent) based on initial implementation of program with 21 facilities with a high level of implementation.
 - Decline of 30 percent (from 11.7 percent to 8.2 percent) 9-months postimplementation based on New York State On-Time early results for the rapid implementers (n=3 facilities).

- Increased engagement of CNA clinical care staff in On-Time process improvements:
 - “CNAs are enthusiastic about On-Time processes and really feel like part of the team now.” – Director of Nursing
 - ”Reviewing the reports with dietitian, nurse, and other CNAs is very helpful. We have a lot of information to share. We feel like we are being listened too.” - CNA
- Earlier and more consistent identification of high- risk residents:
 - “CNAs are clearly identifying residents who are declining. They are picking up on residents who can’t feed themselves, not eating; anything they see that is different is being reported.” – Nurse Manager
- Improved communication among entire multidisciplinary team:
 - “CNAs are more comfortable approaching dietitians throughout the day to communicate issues.” - Dietitian
- Sustained process Improvements:
 - “The On-Time approach has helped our pressure ulcer prevention become part of everyday practice.” – Director of Nursing

On-Time Guiding Principles

The set of principles used as a foundation for developing the On-Time program are:

- Multidisciplinary teams are essential for quality improvement (QI) efforts.
- CNAs are critical members of the multidisciplinary team and can be better used in QI efforts with a clear role and well-structured process.
- QI efforts integrated into daily work are more readily adopted and sustained.
- HIT alone will not lead to improved quality. Use of HIT for improved clinical decisionmaking requires redesign of workflow and links to specific process improvement activities.
- Tracking tools help teams monitor progress.

On-Time Tools

The On-Time tools are organized into four categories:

1. Set of CNA documentation data elements developed and refined by more than 50 facilities to standardize and streamline CNA documentation processes and incorporate key measures of clinical best practices for CNA and care team use.
2. Clinical decisionmaking reports (On-Time reports) that are viewed weekly and contain trended information using daily CNA data: (1) Completeness Report for CNA documentation, (2) Nutrition Report, (3) Weight Summary Report, (4) Trigger Summary Report that identifies residents at high risk for pressure ulcer formation, (5) Priority Report that provides an overall summary of changes in resident clinical status from

previous week, and (6) Red Area Report that identifies residents with red areas on the skin.

3. Process improvements linked to use of each On-Time report.
4. Tracking Tools to monitor progress of implementation strategies. Tracking tools are available for each On-Time report and demonstrate effectiveness of process improvement efforts.

On-Time Implementation Process

On-Time implementation is a 15- to 24-month facilitated QI program that is then embedded in ongoing practice. On-Time implementation has five phases:

1. HIT and On-Time Program setup: Includes completing action items related to HIT (if necessary), identifying staff and facilitator resources, establishing the workplan, and developing a plan for measuring impact.
2. Documentation review and redesign: Focuses on review of CNA documentation data elements and process redesign.
3. Process improvement implementation: Involves the facility team working with a facilitator to implement On-Time reports and process improvements on all units.
4. Impact monitoring: Includes gathering and reporting impact data at baseline (preimplementation) and every 6 months.
5. Program maintenance: Includes plans to sustain process improvements as part of ongoing operations.

Minimal requirements for successful implementation follow:

- An engaged project management nursing team that includes Director of Nursing (DON) or Assistant DON, staff development, and quality improvement staff,
- Multidisciplinary clinical team participation that include CNAs, nurses, dietitians, rehabilitation therapists or restorative nurses, and social work staff,
- HIT for CNA daily documentation that meets On-Time requirements, including standardized CNA documentation elements,
- Redesigned key CNA documentation processes,
- Implementation of at least four On-Time process improvements (described in subsequent sections),
- Established procedure for monitoring impact and providing feedback to frontline team members,
- Facilitator/consultant who facilitates the implementation process and serves as a resource to the facility team and HIT vendor.

Where To Learn More About On-Time

A short streaming video that includes discussions about On-Time from staff at three pilot facilities in Wisconsin, California, and Arizona is available at:

<http://www.ahrq.gov/RESEARCH/ontime.htm>.

Resources

Articles on pressure ulcer prevention in long-term care facilities include:

1. Horn SD, Sharkey SS, Hudak S, et al. Pressure ulcer prevention in long-term care facilities: a pilot study implementing standardized nurse aide documentation and feedback reports. *Adv Skin Wound Care* 2010;23(3):120-31.
2. Hudak S, Sharkey SS, Engleman M, et al. Pressure ulcer plan is working. *Provider* 2008 May;34(5):34-9.
3. Hudak S, Sharkey SS. Health information technology: are long term care providers ready? San Francisco: California HealthCare Foundation; April 2007.

Key references of clinical evidence supporting strategies used to develop the On-Time tools include:

1. Pressure Ulcer Guideline Panel. Pressure ulcers in adults: prediction and prevention. Guideline Report No. 3. Rockville, MD: Agency for Health Care Policy and Research; 1993. AHCPR Publication No. 93-0013.
2. Clinical Practice Guideline: Pressure ulcers. Columbia, MD: AMDA; no date. Product Code CPG2-12. Available at: www.amda.com/tools/cpg/pressureulcer.cfm.
3. Brandeis GH, Ooi WL, Hossain M, et al. A longitudinal study of risk factors associated with the formation of pressure ulcers in nursing homes. *J Am Geriatr Soc* 1994;42:388-93.
4. Ek AC, Unosson M, Larrson J, et al. The development and healing of pressure sores related to the nutritional state. *Clinical Nutr* 1991;10:245-50.
5. Breslow RA, Bergstrom N. Nutritional prediction of pressure ulcers. *J Am Diet Assoc* 1994;94:1301-6.
6. Gilmore SA, Robinson G, Posthauer ME, et al. Clinical indicators associated with unintentional weight loss and pressure ulcers in elderly residents of nursing facilities. *J Am Diet Assoc* 1995;984-92.
7. Lyder CH. Pressure ulcer prevention and management. *JAMA* 2003;289:223-6.
8. Saliba D, Rubenstein LV, Simon B, et al. Adherence to pressure ulcer prevention guidelines: implications for nursing home quality. *J Am Geriatr Soc* 2003;51:56-62.
9. Berlowitz DR, Young GJ, Hickey EC, et al. Quality improvement implementation in the nursing home. *Health Serv Res* 2003;38(1 Pt 1):65-83.

Getting Started

This section addresses the following questions:

- How do we assess readiness to implement On-Time?
- What resources are needed to implement On-Time:
 - Technology?
 - Staff?
 - Facilitator?
- What is the overall workplan?

Readiness for On-Time

A nursing home is ready to implement On-Time if the following are true:

- **High pressure ulcer rates and priority on reducing in-house pressure ulcer incidence rates.** Typically, On-Time nursing homes have an in-house pressure ulcer incidence rate greater than 2 percent on at least one nursing unit.
- **Leadership commitment and endorsement and support of top leadership to enhance care processes related to pressure ulcer prevention.** While frontline staff are the cornerstone of On-Time, a nursing home is not ready to start On-Time without the support of top leadership.
- **Experience with quality improvement (QI).** A nursing home is more likely to implement On-Time successfully if it has experience with QI, such as implementing a QI project in the last 6 to 12 months or participating in State or national quality improvement efforts, such as the Advancing Excellence Campaign.
- **Existing health information technology (HIT) for Certified Nursing Assistant (CNA) daily documentation or in planning stage.** Facilities that have electronic documentation in place for CNAs are less likely to experience project delays. The facility does not depend on vendor timelines since software is installed already and CNA staff are familiar with using computers for daily documentation. This eliminates time and costs associated with new software training.

Resources Needed

Technology

The technology requirements are:

- Facility has an HIT system for CNA daily documentation.
- Vendor software meets the On-Time requirements for standardized CNA data elements and On-Time reports.

Table 1 illustrates next HIT steps for a facility given their current state of CNA documentation:

- CNA staff are completing daily documentation on paper.

- CNA staff are documenting electronically but using software that has not met On-Time requirements.
- CNA staff are documenting electronically and using software that has already met On-Time requirements.

HIT Steps for On-Time Implementation Based on Current CNA Documentation

	CNA Documentation Current State	Select Vendor	Install Software and Train Staff	On-Time HIT Requirements Added to Software and Tested	HIT Ready for On-Time Implementation
1	Paper based	✓	✓	✓	✓
2	CNA electronic documentation module does not meet On-Time requirements			✓	✓
3	CNA electronic documentation module meets On-Time requirements *				✓

* Several long-term care HIT vendors have programmed the “On-Time” tools into their software and have completed rigorous testing to confirm that requirements are met.

HIT Steps Description

HIT Action Step	Description
Select vendor	Facility chooses software vendor to support, at a minimum, CNA daily documentation and access to On-Time reports. A facility is not required to use a specific HIT vendor to participate in the program.
Install software and train staff	Vendor and facility establish: <ul style="list-style-type: none"> • Timeline and detailed plan for installing and testing hardware and software and then • Schedule for training facility staff on software use.
On-Time HIT requirements added to software and tested	Using On-Time HIT specifications, facility works with vendor to ensure that On-Time program requirements are added to the vendor software and then tested to ensure they are working as designed. The On-Time facilitator manages this work step with the HIT vendor, including: <ul style="list-style-type: none"> • Requirements review to confirm that vendor understands On-Time requirements and to work with developers on details of specifications, feasibility, and timeline. • Gap analysis to identify what needs to be added to current software. • Timeline monitoring to integrate On-Time requirements into software. • Coordination of formal HIT testing process.

As of September 2010, 10 vendors were compliant with On-Time.ⁱ

Staff

The table below provides information on staff resources needed to implement On-Time, responsibilities of each, and estimated time commitment.

Role	Staff Members	Responsibilities	Time Estimate
Clinical leadership	Director of Nursing Services (DNS)	Provide leadership, support, and guidance for the team effort; hold team accountable; help remove barriers; resolve issues	Project oversight throughout
Team coordinator	QI personnel; Assistant DNS, staff educator, MDS nurse	Provide day-to-day project coordination; act as resource to core team and facility staff; act as liaison to facilitator; schedule team meetings, ensure staff attendance, ensure project compliance	4 to 8 hours/month
Core team/ champions	Dietitian, nurse managers, charge nurse, CNAs, staff educator/ QI from each unit; MDS nurse	Serve as champions for the QI effort; support front line team; relay project information to frontline staff	Meetings: 1 to 2 hours/month Participation in all team meetings/conference calls (30-minute calls) <ul style="list-style-type: none"> • Bi weekly for the first 9 to 12 months • Monthly for the next 6 to 9 months
Ad hoc team members	Social services, rehab, restorative, activities	Attend team meetings; implement discipline-specific process improvements	Meetings: 0 to 2 hours/month
Frontline team staff	CNAs, nurses on all units	Attend team meetings; implement process improvements	Process improvements: 30 minutes to 1 hour/ month
HIT contracting and support	Administrator, HIT personnel	Maintain vendor relationship; ensure requirements are integrated; support use of software	Time commitment varies by level of CNA electronic documentation before On-Time

ⁱ The vendor names are provided for informational purposes only. Their inclusion does not imply endorsement by the Agency for Healthcare Research and Quality or the U.S. Department of Health and Human Services: American Data - ECS (Electronic Chart System), EHealth Solutions – SigmaCare, Healthcare System Connections, HealthMedX – Vision, Lintech - Clinical EMR Suite, Mylex Corporation, Optimus EMR, PointClickCare - Point of Care, Reliable, and Resource Systems – CareTracker.

Facilitation

Facilitation Skills and Experience

Based on experience to date, On-Time facilitation requires three categories of skills and experience:

1. Clinical informatics: Serve as liaison between facility and HIT vendor.
2. Project management: Oversee the project, develop and manage the workplan, and establish plans for impact monitoring data collection and reporting.
3. Process improvement: Facilitate the team's implementation of On-Time process improvements.

Facilitation Responsibilities

One or more people assume facilitation responsibilities. Responsibilities and time commitment vary throughout the implementation process and depend on level of support from facility leadership and available internal IT resources, e.g., IT department.

On-Time Work Plan

Each team reviews the generic On-Time work plan (see below) and customizes to their specific situation.

Sample On-Time Implementation Work Plan Template (Q = quarter)

	Task	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
1	Set up HIT and On-Time program	X	X	X					
2	Redesign CNA documentation		X	X					
3	Implement On-Time Process improvements			X	X	X	X	X	
4	Monitor impact	X			X		X		X
5	Develop plan to sustain								X

In addition, On-Time implementation efforts have involved collaborative working sessions with other participating facilities. At these meetings, facility team members (1) discuss and compare experiences and outcomes to date, (2) discuss issues and problems with the project and ways they could be addressed, and (3) share successful strategies for implementing and sustaining On-Time process improvements.

On-Time Implementation

Step 1: Standardize CNA Documentation Data Elements and Redesign Workflow

This section describes the steps to confirm whether your facility's Certified Nursing Assistant (CNA) daily charting standardized documentation includes the data elements needed to implement the On-Time program. CNA elements required for On-Time populate the weekly On-Time reports and therefore must be a part of routine documentation. This section discusses three documentation processes that may be affected by potential changes in CNA charting.

This section provides an overview of the key steps for a team to consider:

- Conduct inventory of current CNA documentation.
- Conduct gap analysis between facility and On-Time data elements.
- Identify impact of On-Time documentation and transition to electronic CNA documentation on processes relevant to On-Time quality improvement (QI):
 - Weight documentation and review.
 - Behavior observations and followup.
 - Skin observations and followup.

Conduct Inventory of Current CNA Documentation

The first step in establishing or confirming standardized data elements for CNA daily documentation is to review existing documentation requirements.

- If CNAs are documenting on paper, then ask the team to furnish a packet of forms that CNAs are responsible for completing on a daily or weekly basis. Any form that CNAs fill out should be included in this packet, including checklists or other forms that may be kept on clipboards or in logbooks; forms may vary for day, evening, and night shifts.
- If CNAs are documenting electronically, then ask the team to provide screenshots of each screen a CNA accesses to complete required charting for each shift. In some cases, the vendor can provide a list of documentation elements or show nursing how or where to access the information in the system.

Conduct Gap Analysis

The next step is to conduct gap analysis of CNA documentation elements required for the On-Time program. Elements that must be included in CNA daily or weekly documentation to meet minimum program requirements are reviewed with the team. Most teams find this review very helpful to provide the “big picture.” Often, teams offer feedback that many of the elements are part of their current charting. Required data elements are linked to best practices and are the result of research that analyzed factors associated with fewer residents developing pressure ulcers.

To conduct the gap analysis, compare CNA documentation elements required for the On-Time program against elements currently available on existing CNA documentation forms or electronic documentation. Using the worksheet below (Table 1), mark whether each On-Time

required element is available or not available in your facility’s CNA documentation; all elements not available represent the documentation gap.

In reading Table 1, note the following column heading definitions:

- Row #. Row numbering for easier navigation of the document.
- On-Time Requirement. Information required for the On-Time program. An X indicates the information must be included in your new computer system for CNA documentation.
- Data Element. Data that display on paper forms or electronic documentation screens.
- Facility: Element Available. The element is currently included in facility’s CNA documentation.
- Facility: Element Not Available: The element is not included in facility’s CNA documentation.

Table 1.1. Sample CNA Documentation Data Elements Comparison Grid: Worksheet

Row #	On-Time Requirement CNA Data Elements	Facility: Element Available	Facility: Element Not Available
	Weight	X	
	Eating		
	Unavailable for Meal		X
	76-100%	X	
	51-75%	X	
	26-50%	X	
	1-25%	X	
	Refused	X	
	NPO		X
	Tube feeding		X
	Bowels		
	No bowel movement		X
	Continent stools	X	
	Incontinent stools	X	
	Loose stools	X	
	Bladder		
	Did not void		X
	Indwelling catheter	X	
	Continent urine	X	
	Incontinent urine	X	
	Skin Observations		
	Red areas		X
	Open areas		X
	None of the above observed		X
	Behavior Symptoms		
	Frequent crying		X
	Repeats verbalization		X
	Repeats movement		X
	Yelling/screaming		X
	Kicking/hitting		X
	Pinching/scratching/spitting		X
	Biting		X
	Wandering		X
	Abusive language		X

	Threatening behavior		X
	Sexually inappropriate		X
	Resistant to care		X
	None of the above observed		X

CNA documentation review process helped in the transition from our paper documentation to the new software. The CNA data elements review process forced us to really look at what we were asking the CNAs to document for feeding, nutrition, and behaviors. We took extraneous elements out of the system.

—Director of Nursing

Completing the data elements grid and analyzing CNA documentation at a data element level provides a comprehensive view of what is documented and enables the team to see the following:

- Redundancies in data documentation.
- Inconsistencies in data elements.
- Unclear or ambiguous elements.
- Elements required for On-Time that are missing or inconsistent with current documentation.

Before moving forward, the team addresses the identified gaps and confirms plans to include required data elements in CNA documentation.

Frequently Asked Questions

Q: Who should be involved in conducting and reviewing the gap analysis?

A: A core team representing multiple disciplines is involved. Consider including representation of any user of CNA documentation data elements. For example, dietitians and MDS (Minimum Data Set) nursesⁱⁱ are users of meal intake documentation; social work is a user of behavior observations.

Q: Why is it helpful to include the CNAs in this process?

A: CNA staff are more accepting of documentation changes when they are included in the revision process. In addition, CNAs are valuable resources because they can identify points for clarification and items missing from documentation. Issues or challenges that CNAs experience with specific components of their documentation and system inefficiencies often surface during these discussions and pave the way toward identifying opportunities for improvements.

ⁱⁱ The MDS nurse collects information required by the Centers for Medicare & Medicaid Services.

Q: How long will a gap analysis take us?

A: Analyzing the gap between current CNA documentation elements and On-Time required elements typically takes one or two meetings. The subsequent discussions to eliminate redundancies and nonessential elements and agree on the final list of standardized documentation elements generally take an additional three or four working sessions with the core project team.

Q: Do we have to include all the On-Time required data elements?

A: Skin and Behavior observation elements are two optional documentation components for On-Time; all other elements are required. If a facility opts not to include Skin or Behavior elements in the initial stage of On-Time implementation, then they can be added at a later date.

Q: Can we include data elements not on the On-Time required list?

A: Yes. On-Time does not limit elements that a facility may want to capture in day-to-day documentation; the objective of the process is to ensure that On-Time elements are included in documentation.

Q: Are there areas where most teams get stuck?

A: No. Teams often choose to spend additional time on the data elements review to confirm that all elements are essential and not redundant, in order to gain efficiencies. Also, team discussions often reveal process issues to be included in the next step of process redesign, such as, “Is the element documented more than once or repeated by other disciplines?” For example, it may be discovered that CNAs, nurses, and dietitians each record resident weights. This is an example of an opportunity to redesign the process by eliminating duplicative effort and reducing risk of errors.

Review New CNA Documentation Processes

Three CNA documentation processes might change when switching from paper to electronic documentation and implementing On-Time. If CNA staff are already charting electronically, then these process changes were likely addressed previously. The documentation processes that could be affected by CNA documentation changes are:

1. Resident weight.
2. Skin observations [optional documentation requirement].
3. Behavior observations [optional documentation requirement].

Resident Weight

Weights are an essential element to support the On-Time Program; therefore, it is necessary to ensure that accurate weight values are entered into the system. Facilities have varying processes to capture and record resident weights. In some cases, CNA staff or restorative aides capture weights and then record values in a weight logbook or other record. Subsequently, licensed staff review weights for variances and determine if weights are acceptable or if any need to be repeated and validated.

Teams should consider the following if entering resident weights into an electronic module for the first time:

- Who will capture resident weight?
- Who will enter weight into the new computer system?
- Will weights be recorded in a logbook or other form before entry into the computer system?
- What mechanism will be in place to confirm weights were entered into the system? Is there a checklist or signoff sheet?
- Will licensed staff confirm that weights are accurate before values are entered into the system?
- Will there be a mechanism in place to confirm weights are entered correctly? Is there variance checking? Does the computer alert the user if weights are out of range upon entry? Is there a report to view weight variances?

Skin Observations

Many facilities require CNA documentation of skin observations, with documentation required either each shift, daily, or on shower days only. When incorporating On-Time skin observations into electronic documentation, teams are instructed to consider the following:

- Will CNAs record skin observations each shift of each day by recording what is observed during his/her shift, whether observation is new or previously observed? In this scenario, if a CNA observes red areas for 3 consecutive days, then red areas would be recorded for 3 days.
- Will CNAs record skin observations only if they are new to the CNA? In this scenario, if a CNA observes red areas for 3 consecutive days, then red areas would be recorded once, upon first observation only. The remaining documentation would indicate no new observations.
- Will CNAs be required to inform licensed staff of red areas observed before charting? In this scenario, the licensed staff confirms the observation before it is entered into the system.
- Instruct CNAs to chart no observations noted when there are no observable red areas of the skin. If a CNA chooses to leave skin observation blank instead of charting no observations noted, then it would count as incomplete or missing documentation.

Behavior Observations

CNA documentation of resident behaviors is often a new process for a facility. As with documentation of skin observations, processes and training are established to support the CNAs completing the new documentation. When incorporating On-Time behavior observations into electronic documentation, teams are instructed to consider the following:

- Will CNAs record behavior observations each shift of each day by recording what is observed during his/her shift, whether observation is new or previously observed?
- Will CNAs be required to inform licensed staff of behaviors observed before charting?

- Will CNAs chart no observations noted when there are no observable behaviors? If a CNA chooses to leave behavior observation blank instead of charting no observations noted, then it would count as incomplete or missing documentation in a summary report.

Frequently Asked Questions

Q: What do teams find works best for the weight documentation process?

A: Teams find that establishing a process to validate accuracy of a resident's weight prior to entering weight into the HIT system does two things:

- Eliminates eventual steps required to remove an incorrect weight entry from the system and saves staff time;
- Prevents incorrect weight entries from being included in weight calculations (e.g., weight loss calculations) and acted upon. Licensed staff responding to inaccurate weight loss calculations may create mistakes in care planning.

Q: What validation and data entry processes are implemented to confirm accuracy of weight entries?

A: Validation and data entry processes can be implemented in a variety of ways. Examples of options outlined at a high level for consideration include the following.

Validation

- Lead CNA checks new weights and notifies nurse of needed followup. In this scenario, CNA compares recent weight to previous value and reports to licensed staff based on agreed-on parameters, such as weight change of 1 pound, 2 pounds.
- Nurse manager checks new weights, signs off if weight is ready for entry into system, and follows up if reweight is needed.
- Dietitians check new weights, sign off if weight is ready for entry into system, and follow up if reweight is needed.

Data Entry

- CNA, nurse, or dietitian enters weights into system.

Q: Why are skin and behavior observations optional?

A: Facilities may not want to change current processes. CNAs may not be in the habit of documenting skin and behavior observations and facility leadership may opt to postpone including an entire new component of documentation until On-Time implementation is underway.

Summary of Key Points

- Confirming CNA documentation data elements is necessary to implement the On-Time program.
- While a minimum set of On-Time data elements is required, each facility can include facility-specific elements to meet CNA daily documentation requirements of the facility.
- Reviewing three documentation processes that may be affected by the potential changes in CNA charting will help teams as they transition from paper to electronic documentation.
- While the focus is on CNA documentation, a core group of multiple disciplines (nursing, CNAs, dietary, social services) must be involved in review and redesign of CNA documentation elements and processes.

Step 2: Monitor CNA Documentation

This section describes the On-Time Completeness Report and how it is used to monitor completeness of Certified Nursing Assistant (CNA) daily documentation. Ensuring documentation completion by the CNA staff is an important first step in implementation of the On-Time program. All On-Time reports use CNA documentation; therefore, complete daily documentation by CNAs is essential for successful implementation of the program.

The report information helps staff monitor CNA documentation completeness trends and identify areas that may require followup. Nurse managers, charge nurses, staff educators, MDS (Minimum Data Set) nurses, and other members of the multidisciplinary team can use the report to monitor documentation completeness at the unit or shift level, provide feedback to staff, and focus inservice sessions. The report displays the amount of documentation completed each week but can be used to complement efforts to improve documentation accuracy. We will distinguish between documentation completeness and accuracy and will describe how both completeness and accuracy are addressed in On-Time processes.

This section provides:

- An orientation to the Completeness Report.
- Examples of process improvements using Completeness Report information to monitor CNA documentation.
- Implementation tips from nursing homes that have integrated the Completeness Report into daily and weekly practice.
- Frequently asked questions about using the Completeness Report.

Orientation to the CNA Documentation Completeness Report

What Is the Completeness Report?

The Completeness Report provides nursing home staff with a way to audit the completeness of CNA documentation on a weekly basis at the facility and nursing unit level. The Completeness Report displays weekly documentation percentages for the documentation elements required for the On-Time program:

- Meal Intake.
- Bowels.
- Bladder.
- Behaviors.
- Skin Observations.

The Completeness Report provides a trended view of completeness rates displaying 4 weeks of data for the current and previous 3 weeks. Nurses can review trends to determine if CNA staff are documenting better, worse, or about the same as previous weeks. By displaying completeness percentages by specific areas of charting, nurse managers and staff educators can focus education and target inservices on areas with low completion rates. Ongoing use of the report provides feedback to staff on CNA progress.

The report information is displayed for each unit in two sections: All shifts combined (Table 1) and shift detail (Tables 2-4). The all shifts combined view displays the five sections of charting required for the On-Time program and 4 weeks of completion percentages for all shifts. The shift-detail view displays documentation completeness for each shift.

Table 2.1. Sample Completeness Report: All Shifts

Documentation Section	5/29/06	6/5/06	6/12/06	6/19/06
Meal Intake	92.2	93.1	90.4	92.0
Bowels	67.6	74.9	66.2	58.3
Bladder	54.8	61.7	78.2	86.9
Behaviors	53.1	69.9	87.1	91.0
Skin Observations	79.3	76.3	77.7	78.9

Table 2.2. Sample Completeness Report: Day Shifts

Documentation Section	5/29/06	6/5/06	6/12/06	6/19/06
Meal Intake — Breakfast	98.2	97.2	99.1	99.4
Meal Intake — Lunch	88.4	90.2	92.2	96.6
Bowels	67.6	74.9	66.2	58.3
Bladder	54.8	61.7	78.2	86.9
Behaviors	53.1	69.9	87.1	91.0
Skin Observations	79.3	76.3	77.7	78.9

Table 2.3. Sample Completeness Report: Evening Shifts

Documentation Section	5/29/06	6/5/06	6/12/06	6/19/06
Meal Intake — Dinner	90.0	92.0	80.0	80.0
Bowels	67.6	74.9	66.2	58.3
Bladder	54.8	61.7	78.2	86.9
Behaviors	53.1	69.9	87.1	91.0
Skin Observations	79.3	76.3	77.7	91.9

Table 2.4. Sample Completeness Report: Night Shifts

Documentation Section	5/29/06	6/5/06	6/12/06	6/19/06
Bowels	67.6	74.9	66.2	58.3
Bladder	54.8	61.7	78.2	86.9
Behaviors	53.1	69.9	87.1	91.0
Skin Observations	79.3	76.3	77.7	78.9

Table 2.5. Completeness Report Definitions

Column Headers	Definition
Documentation Section	Meal Intake (displays day and evening shift views) Bowels Bladder Behaviors Skin Observations
Week	Displays week ending date for 4 consecutive weeks
Percentages (for each section and each week)	The percentage calculation is the same for each section: <ul style="list-style-type: none"> • The number of times an entry was made for each charting section is counted and then divided by the total number of possible entries for the current week. • The value displays as a percentage. • The percentages indicate portion of residents on a nursing unit having documentation completed. For example, 99.4 percent meal intake for breakfast means that 99.4 percent of residents on the nursing unit have their meal documentation charted.

What Questions Does the Completeness Report Answer?

- What are the completeness percentages over the past 4 weeks for each section? Are areas improving?
- Are any sections of documentation consistently low?
- For sections with low percentages, are low rates shift related or staff specific?
- Are there differences across shifts? For example, is meal documentation consistent for day (breakfast and lunch) and evening (dinner) shifts?

Process Improvements Using Documentation Completeness Report

Each unit establishes a process for using the Completeness Report to audit CNA charting. Consistent followup will promote early identification of declines in charting completeness. Teams can follow up to determine problem root cause, shift issue, or specific individuals who are having problems documenting and then schedule appropriate inservices or one-on-one education.

Recommended steps include:

1. Assign responsibility to monitor all or specific sections of charting using the Completeness Report. For example:
 - Dietitians often take the lead in monitoring meal consumption;
 - MDS nurse or social worker may monitor behavior documentation;
 - MDS nurse or staff educator may assume responsibility for bowel and bladder documentation; and
 - Wound nurse may monitor documentation of skin observations.
2. Schedule weekly review of the Completeness Report until rates are consistently above 75 percent for 8 consecutive weeks.
3. Establish a schedule for ongoing monitoring using Completeness Report.
 - Once completeness percentages are consistently above 75 percent, establish a schedule for routine followup, such as biweekly or monthly for each nursing unit.
4. Determine and implement followup process to confirm complete documentation each shift.

Implementation Tips

- Develop a structured process with clear accountability to monitor CNA documentation completion rates. Start with weekly review of Completeness Report until high completion rates are sustained, and then continue review monthly.
- Involve director of nursing or nurse manager in monitoring CNA documentation. Active involvement of management results in more successful implementation than if teams rely solely on staff educators.
- Involve CNAs in team meetings from the start of the project. An effective monitoring process focuses on learning “where and why” completeness is an issue. It also helps target interventions (education and new processes) to address specific issues on a shift or on a particular documentation data element. Report information is not punitive.
- Use CNAs for documentation mentoring.
- Develop procedures to ensure that documentation is completed by agency staff.

“Following up on Completeness Report results has been helpful to identify staff with knowledge deficits and focus discussions on specific areas of charting that require followup.”

— *Staff Educator*

“We always suspected that we had documentation completeness issues but the Completeness Report brings it out in the open; now it is easy to see the big picture and specific areas with issues. We weren’t able to review charting easily with previous paper charts.”

— *Director of Nursing*

Frequently Asked Questions

Q: Our health information technology (HIT) system provides a CNA documentation compliance report. Can I use this report?

A: Your facility's clinical application may provide a feature to monitor documentation completeness more frequently than the weekly On-Time Completeness Report. It may also have a feature to monitor other components of CNA daily documentation. These vendor reports may be helpful for day-to-day compliance monitoring of all CNA daily documentation. The trended views of the On-Time Completeness Report provide insights into documentation patterns over time and show weekly improvement or problems in specific areas of CNA charting required for On-Time.

Q: Can we assign the nurse manager to monitor the Completeness Report?

A: Each facility determines who is responsible for monitoring the report; it varies by facility. The essential step is the assignment of responsibility and routine followup. In many facilities, the staff educator either takes the lead or coleads the process.

Q: Our completeness rates are good for all sections except bowel documentation. We do not understand why this is happening.

A: Facilities frequently report having low completeness rates for bowel documentation during the early implementation phase. Often, teams report that CNAs are leaving the bowel section blank if a resident does not have a bowel movement during their shift. The On-Time program requires the charting option "no bowel movement" to be included in the bowel documentation section of the CNA charting module. Without this option, it is unclear if the CNA is indicating that the resident did not have a bowel movement or if the CNA failed to chart the information during the shift. If your software is On-Time compliant, a low completion rate for bowels indicates CNAs are not documenting.

Q: If we have zeros or 3 percent for our behavior documentation, does this mean that we have little to no behavior issues on that nursing unit?

A: If you have included behavior documentation in your CNA module, then your CNA staff is not charting behavior information. As with bowel and bladder sections of documentation, the On-Time program requires the option "no behaviors observed" in the behavior section. This eliminates any confusion about report results; low completeness percentages indicate incomplete documentation.

Q: We have been using the Completeness Report and our rates have been improving but we find that some of our documentation is not accurate. Can the Completeness Report help with accuracy?

A: The Completeness Report does not provide specific details of charting accuracy. It is common for inaccuracies in documentation to surface during followup with CNA staff on completeness questions. Facilities often uncover accuracy issues that may have gone undetected if they had not been following up on completeness problems. Teams report that establishing a routine process of

monitoring CNA documentation completeness helps improve completeness and starts to identify and help address accuracy issues. The process helps identify the need to reeducate staff on proper documentation and clear up staff misunderstandings.

For example, one facility discovered that not all CNAs understood what was meant by incontinence; another facility learned of gross inconsistency among staff on documentation of meal intake. Another facility learned that CNAs did not understand which resident behaviors were to be reported. It is important to note that documentation accuracy will be addressed throughout the On-Time process as clinical reports based on CNA documentation are used in daily practice.

Q: We have been monitoring completeness rates each week for months, following up with CNA staff on each shift, having pizza parties, and offering other incentives for CNAs to complete their documentation yet we struggle to obtain high completeness rates. What else can we do?

A: In On-Time, the first step to improve CNA documentation is establishing a routine process to monitor CNA documentation completeness. However, for some facilities we have found that this step alone may not be enough to achieve or sustain high completion rates. We encourage the team to move on to the next On-Time implementation step after 1 to 2 months.

The next process improvement incorporates the use of the Nutrition Report and implementing weekly 5-minute stand-up meetings, or huddles, with CNA staff. In this process improvement, CNA staff begin to see the link between their daily documentation and clinical reports used by the multidisciplinary team. CNAs report feeling valued by team members and ultimately become more accountable for their documentation when they see how licensed staff use it. Therefore, it is common to see a dramatic improvement in documentation as On-Time is implemented, not just when focusing on CNA documentation completeness.

We will provide more details about the use of the Nutrition Report and the 5-minute stand-up process in the section on the Nutrition Report.

Completeness Report Tracking Tool

The Completeness Report Tracking Tool helps the team monitor CNA documentation completeness and better understand the root cause of low completeness. The tool can be used to support initial implementation of CNA documentation monitoring and then to conduct random checks once completeness rates stabilize at 75 percent or above.

A sample Completeness Report tracking tool is shown in Table 4. Teams are instructed to track documentation areas that are below 75 percent complete and note reasons for the low rates. Weekly trends and patterns can be detected and appropriate training or other interventions scheduled.

Table 2.6. Sample Completeness Report Tracking Tool

		Date	Date	Date	Date	Date	Date
	Meal Intake below 75 percent						
1	Day shift having problems						
2	Evening shift having problems						
3	Night shift having problems						
4	New staff/agency staff this week						
5	Specific individuals having problems, require inservice						
6	Cause unknown						
7	Other						

Summary of Key Points

- Establishing processes to use the Completeness Report as part of routine practice helps CNAs improve documentation completeness and accuracy.
- CNA documentation completeness and accuracy will improve as the information is used on a regular basis by the entire team.
- It is okay if a facility does not achieve 100 percent completeness. Move on to the next steps in the On-Time implementation process once a monitoring process is established.
- Routine review and feedback to CNAs about their documentation help identify misunderstandings and areas for further education. When reviews are punitive, there is less focus on learning and understanding how to improve.

Step 3: Implement Process Improvements Using Nutrition and Weight Summary Reports

This section explains how the Nutrition and Weight Summary Reports can be used to identify residents at nutritional risk and therefore at risk for pressure ulcer development. The reports can be used to ensure that appropriate interventions are in place to prevent weight loss from occurring and pressure ulcers from forming. The reports can also ensure that interventions are communicated among disciplines and that a well-defined followup plan is in place.

The Nutrition and Weight Reports can be used separately or in tandem for daily, weekly, or monthly meetings or specific process improvement initiatives. Since they often are used together, the Nutrition and Weight Reports will be discussed together in this section.

This section provides:

- An orientation to the Nutrition and Weight Summary Reports.
- Examples of process improvements that use Nutrition and Weight Summary Report information to identify residents at potential nutritional risk.
- Implementation tips from nursing homes that have integrated the Nutrition and Weight Summary Reports into daily practice.
- Frequently asked questions about using the Nutrition and Weight Summary Reports.

Orientation to the Nutrition and Weight Summary Reports

Nutrition Report

The Nutrition Report provides the dietitian, nurse manager, wound nurse, and MDS (Minimum Data Set) nurse an overall portrait of resident nutrition status. This report can be used in preparation for team briefings and followup with frontline staff prior to care planning.

The Nutrition Report displays weekly nutrition information, meal intake, and weight at a resident level and by nursing unit. The report sorts residents into high and medium nutritional risk categories and displays average meal intake for each of the last 4 weeks. It also indicates any weight change in pounds.

Grouping the residents by high and medium risk helps the team focus on specific residents and target followup questions for staff. Trended data provide dietitians and nurses with an opportunity to spot subtle upward or downward trends that may not be apparent during shift or daily review. A downward trend in resident meal intake is an early warning signal of potential nutrition decline and triggers further investigation by the clinical team to confirm that appropriate interventions are in place.

Residents are included in the report if they have at least one of two nutritional risk factors for the report week: decreased food intake or weight loss. Decreased meal intake is defined as meal consumption at 50 percent or less for two meals in one day at least one time during the report week. Weight loss refers to any weight loss during the report week and is determined by subtracting the current week's weight from the most recent weight.

Residents meeting both nutrition risk criteria are considered at high nutritional risk; residents meeting one of the two nutrition risk criteria are at medium nutritional risk. Residents at high risk and medium risk display on separate report tables.

Table 3.1. Sample Nutrition Report: High Risk*

Resident Name	Resident ID	Decreased Intake: First Date	Avg Meal Intake % Week 03/05/07	Avg Meal Intake % Week 03/12/07	Avg Meal Intake % Week 03/19/07	Avg Meal Intake % Week 03/26/07	TF	Weight Change Lb
A	001	03/26/2007	50	41	36	29	X	-1.5
B	002	03/27/2007	94	92	97	85	-	-3.3
C	003	03/29/2007	54	52	48	52	-	-1.5
D	004	03/31/2007	86	89	71	59	-	-10.5

* High risk = decreased meal intake and weight loss during the report week.

Decreased intake: first date = Date of the current week the resident first had meal intake of 50 percent or less for two meals in one day.

Average weekly meal intake = Average percentage of meals consumed for one full week, including breakfast, lunch, and dinner; takes into account missed meals, refusals, and NPO (nothing by mouth) status.

TF = Tube feeding. If resident is taking tube feedings, X will display.

Weight change in lb = Any weight loss during the report week. Determined by subtracting current week's weight from most recent weight.

This report is used with other clinical information about the identified residents to answer the following questions:

- How many residents trigger for high risk?
- How many residents trigger for medium risk?
- Is report information consistent with resident clinical picture?
- Is the resident with poor meal intake also receiving tube feedings?
- Is there a downward trend in average meal intake over the past 4 weeks? Upward trend?

Weight Summary Report

The Weight Summary Report is typically used by the dietitian and provides a profile of resident weight history, including indicators of weight loss over a 30- to 180-day period. The information can be reviewed together with the Nutrition Report for early detection of trends or associations between meal intake and weight values. In addition, the Weight Summary Report is a useful tool for MDS nurses when preparing MDS assessments.

The Weight Summary Report displays 4 weeks of trended weight information for each resident, calculates weight changes, and displays whether there has been significant weight loss (more than 5 percent, more than 10 percent) in the past 30 and 180 days.

The Weight Summary Report is used to answer the following questions:

- How many residents had weight loss during the report week?
- How many residents had 5 percent or greater weight loss within the last 30 days?
- How many residents had 10 percent or greater weight loss within the last 180 days?

Table 3.2. Weight Summary Report

Resident Name	Resident ID	Wt 180 Days Prior	Wt 90 Days Prior	Wt 30 Days Prior	Wt for Week Ending 5/8/10 Week 4	Wt for Week Ending 5/15/10 Week 3	Wt for Week Ending 5/22/10 Week 2	Wt for Week Ending 5/29/10 Week 1	Wt Change Lb	≥5% Wt Loss ≤30 Days (Any)	≥10% Wt Loss ≤180 Days (Point – Point)
A	#####1	285.3	275.0	254.5	252.4	256.1	251.7	253.8	2.1, 5/19/10		11.3%
B	#####2	172.1	175.3	180.0	180.0	170.0	181.0	171.0	-10.0, 5/19/10	5.6%, 5/12/10 5.0%, 5/24/10 5.5%, 5/24/10	

Weight 180 days prior = Weight of the resident approximately 180 days prior to the most recent resident weight.

Weight 90 days prior = Weight of the resident approximately 90 days prior to the most recent resident weight.

Weight 30 days prior = Weight of the resident approximately 30 days prior to the most recent resident weight.

Weight for week = Trended view of lowest weight for each week in a 4-week period. Week Ending Date should be displayed in the four column headers.

Weight change lb = Change in weight (lb) from the previous weight to the most recent weight (Most Recent Weight – Previous Weight).

≥5% Wt Loss ≤30 days (ANY) = All occurrences of a resident weight loss of ≥5% within in the last 30 days.

≥10% Wt Loss ≤180 days (Point – Point) = Resident weight loss ≥10% in the last 180 days. Take Weight 180 Days Prior value and subtract most recent weight (180 days prior – most recent).

Process Improvements Using Nutrition and Weight Summary Reports

Once a team is familiar with the Nutrition and Weight Summary Report definitions, they agree to a timeline for implementing process improvements: Certified Nursing Assistant (CNA) 5-minute standup meeting and supplemental weight monitoring.

5-Minute Standup Meeting

The objective of the CNA 5-minute standup meeting is to integrate the use of the Nutrition Report into clinical practice, facilitate communication across disciplines, and include CNA staff in discussions with nursing and dietary staff. While a facility may already have a similar briefing process in place, the On-Time standup is distinctive in being a weekly meeting that is brief, focused, and data driven. The meeting has several objectives:

- Elicit CNA feedback on resident eating habits and preferences that may provide insights for dietitian and nurse followup;
- Confirm that appropriate care plan interventions are in place and establish followup plans with frontline staff; and
- Promote CNAs as an integral part of team discussions and key informants to licensed staff.

The recommended steps for implementing the CNA 5-minute standup meetings are:

1. Identify meeting facilitators and participants. Team participants include CNA staff, nurse manager, and dietitian. Ad hoc participants include assistant director of nursing, MDS nurse, staff educator, social workers, and rehab staff.
2. Establish meeting schedule. Select a day and time to conduct weekly meetings. It is important to elicit input from CNA staff when selecting a meeting time that is least disruptive to their daily routine.
3. Plan meeting. Facilitators typically print the reports, scan the list of residents who trigger for high and medium risk, and, using clinical judgment, select residents for discussion.
4. Follow meeting discussion format:
 - Confirm that report results are accurate and reflect resident clinical condition. Do residents with poor meal intake match what CNA staff observe during mealtimes? If not, why?
 - Review list of residents who trigger for high nutritional risk:
 - Can CNAs provide insights into poor meal intake (e.g., food preferences, changes in resident eating habits)?
 - Confirm that appropriate interventions are in place. Are changes to care plan needed? Are consults needed? What is the responsibility of each team member? What is to be reported on, when, and to whom? Ensure that the team understands the action plan and followup.
 - Review list of residents who trigger for medium nutritional risk and repeat the process listed above for high nutritional risk.

5. Implement and refine the process. Implementation of 5-minute standup meetings typically occurs in a staged approach. First, try the process on one or two nursing units. Second, refine the process as needed. Determine plan to include evening shift.
6. Implement facilitywide. After a trial of 5-minute standup meetings on one or two units is complete, determine the rollout plan for facilitywide implementation. Consider identifying internal mentors to help facilitate implementation.

Implementation tips follow:

- Consider starting the 5-minute standup meetings on nursing units having the highest number of pressure ulcers.
- Avoid scheduling the meeting during a shift change. Often, CNAs are hurrying to finish outstanding work or complete documentation at the end of their shift and cannot focus on a meeting.
- Forge strong relationships with Dietary and Nursing. A strong Dietary and Nursing collaboration results in more effective meetings. It is recommended that dietitians take the lead in facilitating the meeting with the nurse manager/coordinator as cofacilitator. Dietitians can make changes immediately to diet and food preferences and make timely recommendations for referrals during meetings.
- Follow the structured meeting format focusing on resident meal intake. If the meetings cover too many topics, CNAs may lose interest or meetings may take too long. Keep the discussion focused around Nutrition Report results so that meetings are brief and on track. Also, adhering to a standard meeting format helps the CNA team prepare for the meetings.
- Conduct meetings weekly. Some teams made decisions to hold meetings less frequently but learned that holding the meetings weekly is important for timely communications and keeping CNAs engaged. Teams that reduced meeting frequency eventually reinstated weekly meetings.
- Consider implementing on evening shift once the process is refined. This allows CNAs on different shifts to have a voice. In addition, dietitians have found that CNAs on evening and night shifts provide feedback about resident intake that is unique to their shift.
- Ask unit managers and team members that have implemented the 5-minute meetings to serve as mentors to other facility units.

“CNAs are enthusiastic about the meetings, really feeling like part of the team now.”
— Director of Nursing

“The On-Time process increases CNA awareness of how their documentation is used by licensed staff in resident care planning.”
— Assistant Director of Nursing

“Standup meeting increased motivation by CNAs to improve completeness and accuracy of daily documentation.”
— Director of Nursing

“Because of the 5-minute meetings, CNAs are more comfortable approaching dietitians throughout the day to communicate issues.”
— Dietitian

“CNAs watch for small subtleties in their residents’ eating patterns and they are picking up on eating issues earlier.”
— Dietitian

Supplemental Weight Monitoring

Dietitians use the Weight Summary Report as a complementary tool to support existing processes for resident weight management; the process varies by facility and dietitian. Dietitians frequently report gaining efficiencies by using the report since monitoring resident weight trends is often a manual effort.

“Weight trend information is the most helpful. Previously, we did our own calculations using current weight and previous weight.”

— Dietitian

Monitor Progress

The Nutrition Report Tracking Form is used in conjunction with the report. Facility teams use the tools for the initial 4 to 8 weeks of implementation to monitor team progress during 5-minute standup meetings. Once teams are comfortable with the meeting format and process, the tracking tool is completed every 3 to 6 months to confirm that processes are maintained.

The tracking form is used to record meeting information for 6 weeks. Information tracked includes number of high- and medium-risk residents who trigger reports and number of interventions each week. The tracking form is helpful early in On-Time implementation to help teams see trends in number of residents who trigger and why, as well as the recommended interventions. Dietitians typically take the lead in completing the tracking form but this may vary by facility.

Table 3.3. Sample Tracking Form: High-Risk* Residents

		Date	Date	Date	Date	Date	Date
Nutrition Report and CNA 5 minute standups							
Unit Information							
1	# Residents on unit						
2	# Residents on unit with pressure ulcers (all stages): new ulcers						
3	# Residents on unit with pressure ulcers (all stages): existing ulcers						
4	Total time spent						
High-Risk Results							
5	# Residents who triggered						
6	# Residents on hospice						
High-Risk Interventions							
7	# Diet changes						
8	# Food preference changes						
9	# Referral: Speech						
10	# Referral: Rehab						
11	# Referral: Psych						
12	# Referral: Hospice						
13	# Referral: Labs						
14	# Referral: Gastro/ENT						
15	# Referral: Other						

* Tracking forms are available for high risk, medium risk, or combination high and medium risk.

Frequently Asked Questions

Q: Will review of Nutrition Report help us to improve accuracy of our CNA documentation?

A: Consistent review by dietitians and nurses of resident meal intake averages and weight information prompts more frequent followup with CNA staff to confirm accuracy of data entry. As documentation issues are identified, educational inservices can be used to focus on these issues and to address problems. With this focused approach to training, CNAs are more receptive and engaged in improving daily documentation. The result is better understanding by CNAs of proper documentation of meal consumption and weights, resulting in improved report data for clinician use.

Q: Should we review both the high- and medium-risk residents during the meeting?

A: Many teams start by reviewing the high-risk residents, but dietitians have provided feedback that included residents who triggered as medium nutritional risk. This practice has led to earlier identification of nutritional needs.

Q: The Nutrition Report does not provide our nurses with all of the information needed to care for their residents. Shouldn't the report provide more information?

A: The Nutrition Report is not intended to provide a comprehensive clinical picture of the resident (e.g., respiratory or cardiac condition, new medications, pain, infection). The report is intended to summarize CNA daily documentation for the past week and alert clinicians to residents who may be at nutritional risk. This information, along with other assessment data, may provide insights into residents' overall clinical condition.

Q: We have a resident listed as medium nutritional risk but the dietitian notes that he should be high risk; nothing displays in the weight loss column and he has lost weight.

A: Residents not weighed last week (during the report week) cannot display as high risk since recent weight loss is a criterion for inclusion on this list. Thus, if your facility policy is monthly weights, then the high-risk list will be computed only the week when weights are recorded and for residents on weekly weights.

Q: Why isn't the most recent weight displayed on the high- and medium-risk Nutrition tables? It would be helpful to see the most recent weight.

A: The Weight Summary Report displays weight values for the past 30, 90, and 180 days. The information that displays on the Nutrition high risk and medium risk lists represents a summary of information based on the most recent week: meal averages and weights. The goal is to focus on recent resident changes. If a previous weight were to display (perhaps a weight from 3 weeks prior), the clinician might incorrectly assume the weight value links to the current meal intake information. In addition, previous weight values were likely acted upon during previous report reviews. Therefore, the weight change in pounds is based on a weight recorded during the week the report was generated and reviewed.

Q: How are meal averages computed for residents who are NPO (nothing by mouth) or have refused meals? Will their meal averages be lower than actual?

A: If an option of Refused Meal or NPO is selected, the value used in the meal average calculation is zero.

Q: Our dietitians prefer their process to review meal intake information with the CNA staff and do not want to implement the 5-minute standup meeting. What should we do?

A: It is common for dietitians to feel they are on top of residents' nutrition status and risk and they typically have well-defined processes to work with CNA staff and nurses. The 5-minute standup meeting is not designed to interfere with existing processes. It is meant to encourage structured communication among dietitians, CNA staff, and nurses to elicit CNA feedback about resident meal intake patterns and to contribute to a multidisciplinary team approach. The meetings are focused on Nutrition Report results and provide an opportunity to elicit feedback from the staff who spend the most time with the residents, the CNAs. Dietitians typically embrace the process after one or two meetings and describe positive experiences regarding interactions with CNAs and information shared. On-Time facilitators highly recommend a trial implementation of the process on at least one nursing unit to overcome preconceived notions or resistance.

Q: Our staff prefer holding the weekly meetings during shift changes; it is too difficult for our CNAs to leave the units to attend meetings.

A: It is not uncommon for teams to initially shy away from holding meetings with CNA staff at times other than existing meeting times; shift change is often the easiest time to hold the meetings. Conducting 5-minute standups with CNAs at shift change is highly discouraged because of distractions (end of shift rush to complete work, finish documentation, and leave for the day). Teams discover after one or two meetings that CNAs are highly enthusiastic about participating in the meetings and sharing knowledge of their residents with clinicians. Teams report that CNAs are often the first to arrive to meetings and express concern when meetings are delayed or canceled.

Q: We just started our 5-minute standups and are having trouble keeping the meetings to 5 minutes; they often last 30 minutes or longer. How can we shorten the meetings?

A: All teams report meetings lasting longer than anticipated when initially implemented. Once dietitians are familiar with report information and CNAs are clearer about the meeting's purpose, meetings are often completed in less than 10 minutes. Dietitians and nurses report that CNAs come prepared to discuss their residents and are aware of information to share with clinicians after one or two meetings.

Summary of Key Points

- Using the Nutrition and Weight Summary Reports motivates CNAs to document completely and accurately and engages them in the quality improvement process.
- Using a structured meeting format and team discussion driven by report results leads to collaboration and good use of time for the entire team.

- The 5-minute standup meeting:
 - Highlights the importance of the CNA role in team communications and the CNA as key informant to licensed staff.
 - Enhances multispecialty communication in a team format.
 - Identifies opportunities for nutritional interventions earlier.
 - Detects documentation issues and fosters targeted training to improve accuracy.

Step 4: Implement Process Improvements Using the Pressure Ulcer Trigger Summary Report

This section describes the On-Time report, Pressure Ulcer Trigger Summary Report (Trigger Summary Report) and how it may be used to identify residents at potential risk for pressure ulcer development. The report information helps staff focus on high-risk residents to determine if they need additional followup, such as referrals, tests, or changes in the care plan. The nurse, wound nurse, physical therapist, and other members of the multidisciplinary quality improvement team can use the report to monitor residents weekly.

This section provides:

- An orientation to the Trigger Summary Report.
- Examples of process improvements using Trigger Summary Report information to identify when additional preventive interventions or further assessments are needed.
- Implementation tips from nursing homes that have integrated the Trigger Summary Report into daily practice.
- Frequently asked questions about using the Trigger Summary Report.

Orientation to the Trigger Summary Report

The Trigger Summary Report provides a weekly snapshot of a resident's risk for pressure ulcer development. Risk is based on eight triggers associated with pressure ulcer development. These triggers are derived from Certified Nursing Assistant (CNA) documentation and are described below. The report lists residents with at least one trigger, which triggers are present, and total number of triggers for each resident for the report week.

The report information is displayed in two sections: Resident Level and Nursing Unit Level.

The resident-level view (Table 1) displays residents with at least one trigger activated during the report week. Each trigger is marked and the total triggers for the current and previous week are displayed. The report displays residents in descending order of total number of triggers for the report week, providing clinicians with information to help them easily focus on the highest risk residents and confirm that appropriate interventions are in place. The side-by-side comparison of the sum of current and previous week's triggers makes it easier to detect upward or downward trends in total number of triggers for a 2-week period.

Table 4.1. Sample Pressure Ulcer Trigger Summary Report: Resident-Level Section

Name	Resident ID	Wt Loss $\geq 5\%$ in ≤ 30 Days	Wt Loss $\geq 10\%$ in ≤ 180 Days	2 Meals $\leq 50\%$ in 1 Day	Weekly Meal Intake Average $< 50\%$	Daily Urinary Incontinence	> 3 Days Bowel Incontinence	Foley Catheter	Current Pressure Ulcer	Triggers Last Week	Triggers This Week
Res1	0001			X	X	X	X		X	3	4
Res2	0002	X			—	X	X	X		2	4
Res3	0003			X			X	X	X	5	4
Res4	0004		X			X	X	X		0	4
Res5	0005		X	—		X	X	X		2	4
Res6	0006			X	—	—	X	X		0	3

Weight loss $\geq 5\%$ in ≤ 30 days = Resident weight loss greater than or equal to 5% within the last 30 days from the date weight is recorded.

Weight loss $\geq 10\%$ in ≤ 180 days = Resident weight loss greater than or equal to 10% within the last 180 days from the date weight is recorded.

2 Meals $< 50\%$ in 1 day = Consumption of less than 50% for each of 2 meals in a single day.

Weekly meal intake average $< 50\%$ = Average intake of breakfast, lunch, and dinner of less than 50% for the report week.

Daily urinary incontinence = Documented urinary incontinence daily for the report week.

> 3 days bowel incontinence = Documented bowel incontinence at least once per day for at least 3 days during the report week.

Use of Foley catheter = Documented Foley catheter use.

Current pressure ulcer: Presence or absence of an ulcer. Does not display a count of all pressure ulcers. Information is taken from nursing documentation of wound assessments.

Dash = No data available.

The Pressure Ulcer Trigger Summary Report: Resident-Level Section answers the following questions:

- How many residents have at least one trigger?
- How many residents have more than 3 triggers for current week? 4 triggers?
- For residents with the highest number of triggers, which triggers are present?
- How many residents had an increase in the number of triggers by two or more from the previous report week?
- How many residents had a decline in the number of triggers from the previous week?

The unit-level section of the report (Table 2) is used to monitor the overall prevalence and trends of pressure ulcer triggers on a specific nursing unit. This information may be useful for program monitoring and planning or identifying inservice needs of staff. The unit-level view displays the number of residents (and percentage of total nursing unit census) who meet each trigger; a 4-week trend displays.

Table 4.2. Pressure Ulcer Trigger Summary Report: Unit-Level Section

Pressure Ulcer Triggers	Week 4	Week 3	Week 2	Week 1
	5/8/10	5/15/10	5/22/10	5/29/10
Wt loss \geq 5% in \leq 30 days (ANY)	1 (3%)	2 (6%)	1 (3%)	1 (3%)
Wt loss \geq 7.5% in \leq 90 days (point - point)	1 (3%)	1 (3%)	1 (3%)	1 (3%)
Wt loss \geq 10% in \leq 180 days (Point - Point)	1 (3%)	2 (6%)	1 (3%)	2 (3%)
2 meals \leq 50% in 1 day	5 (14%)	4 (11%)	4 (11%)	7 (20%)
Weekly meal intake average <50%	3 (9%)	3 (9%)	2 (6%)	3 (9%)
Daily urinary incontinence	2 (6%)	3 (9%)	3 (9%)	5 (14%)
>3 days bowel incontinence	5 (14%)	4 (11%)	3 (9%)	7 (20%)
Foley catheter	8 (23%)	7 (20%)	5 (14%)	8 (23%)
Current pressure ulcer	0 (0%)	0 (0%)	0 (0%)	0 (0%)

Column values for each week:

Number = Number of residents on the nursing unit with specified trigger for the week (Weeks 1, 2, 3, and 4).

Percentage (in parentheses): Percentage of residents on the nursing unit who had the specified trigger for the week (Weeks 1, 2, 3, and 4).

The Pressure Ulcer Trigger Summary Report: Unit-Level Section indicates how many residents:

- Are experiencing \geq 5% weight loss in \leq 30 days? \geq 10% in 180 days? Is the number of residents losing weight improving or worsening?
- Have a weekly meal intake average less than 50%? What percentage of total unit census does this represent? Is this improving or worsening over the 4-week period?
- Have daily urinary incontinence? What percentage of total unit census does this represent? Is this trending upward or downward over the 4-week period? Is it staying the same?
- Have more than 3 days of bowel incontinence each week? What percentage of total unit census does this represent each week?

- Have Foley catheters?
- Overall, what are unit trends for pressure ulcer triggers? Are they stable? Getting worse? Getting better?

Process Improvements Using Trigger Summary Report

Once a team is familiar with the Trigger Summary Report definitions and layout of information, teams implement a series of process improvements described below:

- Report Validation Exercise: Root Cause Analysis of Facility-Acquired Pressure Ulcers.
- Identification and Communication of High-Risk Residents.
- Rehabilitation Focus on High-Risk Residents.
- Monitoring of Unit-Level Trends of High-Risk Triggers.

Report Validation Exercise: Root Cause Analysis of Facility-Acquired Pressure Ulcers

Report validation helps motivate the team to see the value of the information and consider ways to use the report in one or more process improvements. In this exercise, findings of root cause analysis for recent in-house acquired ulcers are compared to Trigger Summary Report results. Did the resident who developed an ulcer also appear on the Trigger Summary report in the 2 to 3 months leading up to ulcer development? If so, how many times did the resident appear on weekly Trigger Summary Reports? How many triggers were activated each week? In most cases, the team will find that residents who developed a pressure ulcer were on the Trigger Summary Report prior to ulcer development.

This exercise emphasizes how the Trigger Summary Report could have raised team awareness and targeted pressure ulcer prevention before the resident developed an ulcer. Staff often gain a new perspective about the value of report results after completing this exercise, paving the way for clinician adoption of this and other reports to support clinical decisionmaking and care planning

Recommended steps follow:

1. Select two nursing units with recent development of in-house pressure ulcers and for the same 2- to 3-month period:
 - Review findings of pressure ulcer root cause analysis.
 - Review Trigger Summary Reports for these residents.
2. During this review, consider the following questions:
 - How many residents who developed an ulcer also displayed on the Trigger Summary Report?
 - For residents who developed an ulcer and also displayed on the report:
 - How many report weeks did each resident display?
 - Are there patterns in total number of triggers among residents? For example, did all residents have four or more triggers activated?

- Were the same triggers activated or did they vary by resident? Were any patterns noted?
 - From the root cause analysis:
 - What contributing factors were found to be associated with pressure ulcer development (e.g., steroid use, contractures, refusal of care, specific behaviors)?
 - Are the findings from the Trigger Summary Report and root cause analysis similar? If not, what were the differences?
 - Are there opportunities for improved prevention using the Trigger Summary Report?
3. Review findings with the team and answer these questions:
- How could the Trigger Summary Report information have been used to be more proactive in prevention efforts?
 - Using findings from the review, establish facility-specific criteria to identify residents at risk using the Trigger Summary Report, such as:
 - Residents having 3 or more triggers.
 - Residents with an increase in number of triggers by 2 or more; for example, resident trigger count increases from 1 to 3 or 2 to 4.

Implementation tips follow:

- Some teams found it helpful to conduct the review on nursing units having the highest number of in-house acquired pressure ulcers.
- The wound nurse or quality improvement analyst typically leads this effort with nurse manager involvement.
- In the root cause analysis, several teams discovered factors beyond CNA documentation linked to pressure ulcer development, such as hospice, resident refusal of care, and steroid use. A team can consider developing a list of additional risk factors, based on findings, to use in conjunction with the Trigger Summary Report to identify residents at risk on a weekly basis.

Frequently Asked Questions

Q: We have a resident who developed a pressure ulcer but did not show up on the Trigger Summary Report. Why not?

A: Not all of the risk factors for pressure ulcer development are provided on the Trigger Summary Report. The triggers are based on CNA documentation. It is possible that a resident who developed a pressure ulcer in-house did not show up on the Trigger Summary Report. However, On-Time team experience supports that a resident with several triggers on the report is at high risk for developing a pressure ulcer.

Identification and Communication of High-Risk Residents

The Trigger Summary Report can be used to improve communication about residents at highest risk to CNAs or existing multidisciplinary teams. Using the Trigger Summary Report, the team members can focus discussion on residents with a high number of triggers or an increased number of triggers, assess appropriateness of interventions, and monitor interventions for residents with improvement from the previous week.

Recommended steps follow:

1. Identify existing interdisciplinary meetings or rounds to use Trigger Summary Report, such as:
 - Wound Management or Skin Integrity meetings.
 - Weekly care planning meetings.
 - Incontinence Management meetings.
 - Behavior Management meetings.
 - Prep for Wound Rounds.
2. Review Trigger Summary Report and identify high-risk residents each week, using criteria determined by team, such as:
 - A resident with 3 or more triggers this week OR
 - An increase in triggers by 2 or more from previous week; for example, resident trigger count increases from 1 to 3 or 2 to 4.
3. Discuss high-risk residents during forum identified in step 1. Possible questions include:
 - Are report results consistent with resident's clinical picture? If no, why not? Is there a documentation issue?
 - Are interventions in place for triggers that are activated?
 - Are number of triggers increasing or decreasing from the previous week?
 - How many residents are new admissions? Does the report provide insight on new admissions?
 - Do team members need to follow up?
4. Establish a unitwide communication strategy for high-risk residents. For example:
 - Post resident names on 24-hour report and for discussion at morning meetings.
 - Post the weekly reports in nursing station.
 - Note on CNA assignment sheet if a resident has, for example, 4 or more triggers to indicate high risk.
5. Establish a plan to implement on all nursing units and agree to a timeline.

Implementation tips follow:

- Review existing interdisciplinary meetings and determine the best way to incorporate the Trigger Summary Report into those meetings. This report is often used in conjunction with other On-Time or facility reports.
- Do not expect or rely on the Trigger Summary Report to drive the entire process (keep in mind that other information will be used such as lab results, vital signs, other assessment findings). But the report will help keep the teams focused week after week and increase awareness of the importance of CNA input and documentation.

Frequently Asked Questions

Q: The Trigger Summary Report does not provide our nurses with all of the information needed to identify residents at high risk for pressure ulcer. Shouldn't the report provide more information?

A: The Trigger Summary Report is not intended to provide a comprehensive picture of the risk factors for pressure ulcer development. The report is intended to summarize CNA daily documentation items related to pressure ulcer development for the past week and alert clinicians to residents who trigger. This information, along with other risk assessment data, such as the Braden scale, should identify the highest risk residents but may not catch everyone.

Q: Do we need to adhere to the recommended high-risk criteria: ≥ 3 triggers and increase by 2 or more in total triggers from previous week?

A: Using 3 or more triggers or an increase of 2 or more triggers is a suggested place to start. As a team gets familiar with the report, it is often helpful to provide an easy way to start reviewing the report information and help focus on a subset of residents. Many teams expand the focus as they gain experience using reports in process improvements. The experience of teams is that pressure ulcers are more likely to form earlier in residents with multiple risk factors.

Q: Should we expect all new admissions to show up on the Trigger Summary Report?

A: No. Only new admissions with triggers will show up on the report. On-Time teams have reported that the Trigger Summary Report is a valuable tool to monitor risk factors for new admissions. The team can use trigger information to discuss patterns and confirm appropriate care plan interventions are in place.

Q: Is it unusual to see the same residents show up on the report week after week?

A: No. On-Time teams report that a resident with several triggers typically shows up on the report each week. The goal is to improve proactive team communication and coordination of care. It is important to identify that the resident is at high risk for pressure ulcer development, confirm that preventive interventions are in place, and discuss alternative strategies based on CNA input.

Q: What do we do if we disagree with report results? For example, one resident on the report triggered for daily urinary incontinence and this is not accurate.

A: Similar to the Nutrition Report, consistent review by nurses of resident meal intake averages, weight information, and continence trends prompts more frequent followup with CNA staff to confirm accuracy of data entry. As documentation issues are identified, educational inservices can be used to focus on these issues and to address problems.

Q: We currently use the EQUIP program to identify residents at high risk. How does the Trigger Summary Report differ?

A: The EQUIP reports use MDS (Minimum Data Set)³ data, which are mostly quarterly data. The On-Time Trigger Summary Report uses CNA data from the most recent week; On-Time report data are more recent.

Q: Is there a way to involve our wound nurse?

A: Here is a process many teams use. The wound nurse meets weekly with nurse managers to discuss residents with 3 or more triggers on the Trigger Summary Report. These residents are discussed, the charts are reviewed, and other clinical factors that the team found to be associated with in-house ulcers are discussed.

“The report helped to identify additional factors linked to pressure ulcer development and alerted management that weekend followup practices were inconsistent and an area for improvement.”

— *Nurse Manager*

“The change from week to week is very good; the information helps the team see what is going on when you are not there, and provides a different picture.”

— *Wound Nurse*

Rehabilitation Focus on High-Risk Residents

Members of the rehabilitation team can use the Trigger Summary Report to prompt communication with nursing and dietary team members and to confirm that interventions for pressure ulcer prevention are in place for high-risk residents.

Recommended steps follow:

1. Assign member of rehabilitation team to review Trigger Summary Report.
2. Set criteria to identify residents at highest risk (e.g., presence of 3 triggers).
3. Review weekly reports and identify high-risk residents.
4. Review existing care plans for high-risk residents and determine if there are or need to be rehabilitation interventions in place with these residents, such as positioning devices.
5. Meet with nurses and CNAs to confirm that interventions are understood and provided.
6. Determine timeline for followup with nurses and CNAs.

On-Time teams typically identify one unit to pilot this process with the rehabilitation team.

³The Minimum Data Set is maintained by the Centers for Medicare & Medicaid Services.

“Report has been helpful in flagging residents to be considered for more indepth review by rehab and closer monitoring by nursing.”

— *Director of Rehabilitation*

Monitoring of Unit-Level Trends of High-Risk Triggers

A team may consider using the Trigger Summary Report: Unit-Level Section to monitor unit trends in high-risk triggers.

Recommended steps follow:

1. Assign responsibility for evaluating and monitoring unit trends.
2. Review weekly trends and answer these questions:
 - What are the most frequent triggers?
 - Is there an increase in triggers unitwide that indicate a need for process improvement interventions or staff inservice?
 - Is there a decrease in triggers unitwide that indicate improvement? If yes, what worked?
3. Communicate and discuss findings with nursing unit team. Identify team members, meeting forum, and meeting frequency.
4. Determine followup actions:
 - Reinforce existing process improvements: Are current prevention strategies affecting one or more of the eight risk factors? For example, is a new bladder training program reducing the percentage of residents with daily urinary incontinence?
 - Identify new process improvements: Consider targeting one or more negative trends to improve and develop an implementation plan.
 - Prioritize targeted process improvements. For example, areas that have greater than 50 percent prevalence or a monthly increase of more than 20 percentage points may take priority over other initiatives.

Frequently Asked Questions

Q: Who uses the unit-level section of the report the most?

A: Upper management and quality improvement staff use the Nursing Unit-Level Section. Directors of Nursing, nurse managers, quality improvement nurses, and special project teams can review and analyze specific and overall trends of pressure ulcer triggers for the entire nursing unit and see upward or downward trends over a 4-week period. Impact of new programs or existing quality improvement efforts, such as bowel or bladder training programs, can be evaluated for effectiveness. New strategies to reduce Foley catheter use, for example, can be monitored using this report. Unanticipated unit trends or an increase in specific risk criteria can drive new quality improvement initiatives or focused staff inservices.

Trigger Summary Tracking Form

The Trigger Summary Tracking Form is used to help the team monitor their use of the report information and track progress. The tracking form helps teams track:

- Number of residents who trigger each week.
- Associated resident characteristics, such as tube fed, bedfast, wheelchair bound, experiencing a decline in activities of daily living, or hospice care.
- Number of recommended interventions.

Table 4.3. Sample Trigger Summary Tracking Form

	Trigger Summary Report Review	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Unit Information							
1	# Residents on unit						
2	# Residents on unit with NEW pressure ulcers (all stages)						
3	# Residents on unit with existing pressure ulcers (all stages)						
Residents Who Trigger							
4	# Residents with ≥ 4 triggers						
5	# Residents with ≥ 3 triggers						
6	# Resident with increase in triggers by ≥ 2 from previous week						
Residents Who Are Also							
7	# High risk on Nutrition Report						
8	# Tube fed						
13	# Admitted within past 7 days						
14	# Admitted within past 30 days						
Interventions							
15	# Referral: Dietitian						
16	# Referral: Wound nurse/team						
17	# Referral: Speech						
18	# Referral: Rehab						
19	# Referral: Psych						

Summary of Key Points

- The Trigger Summary Report can be used by multiple disciplines to meet discipline-specific objectives. In On-Time, one report can be used for multiple process improvements.
- The Trigger Summary Report can be used as a complementary tool for existing processes such as root cause analysis of in-house acquired pressure ulcers.
- The process improvements using Trigger Summary Report:
 - Engage multiple disciplines in using information based on weekly CNA documentation.
 - Improve timely identification of residents at risk for pressure ulcer development.
 - Increase proactive communication among multidisciplinary team members regarding high-risk residents.

Step 5: Implement Process Improvements Using the Priority Report

This section describes how to use the Priority Report and how a team can integrate the report into practice. The Priority Report is used to identify residents at risk for developing a pressure ulcer.

This section provides:

- An orientation to the Priority Report.
- Examples of process improvements that use information from the report to determine if further assessments or followup are needed.
- Implementation tips from nursing homes that have integrated the Priority Report into daily or weekly practice.
- Frequently asked questions about using the Priority Report.

Orientation to the Priority Report

The Priority Report identifies residents with changes from the previous week in five areas that place a resident at potential risk for developing a pressure ulcer:

- Decreased meal intake,
- Weight loss,
- Increased incontinence episodes,
- Change in or increased behavior problems, and
- New or worsening pressure ulcer.

This report, often used in conjunction with other On-Time reports, offers the nurse a quick view of residents experiencing subtle or significant changes from the previous week that may be associated with pressure ulcer development. The report can assist the nurse in prioritizing residents who need further assessment to rule out a significant change in clinical condition. It also helps to prioritize discussions with team members to determine appropriate followup.

Residents with changes from the previous week in at least one of the five risk areas display on the Priority Report (Table 1). All documentation used in this report is derived from Certified Nursing Assistant (CNA) documentation except new or worsening pressure ulcer, which is obtained from nurse charting of wound assessments.

Table 5.1. Sample Priority Report

Name	Resident ID	Decreased Meal intake AND Weight loss	Weight loss $\geq 5\%$ ≤ 30 days	Urinary Incontinence Increase	Behaviors ≥ 3	Worsening Ulcer	New Ulcer
Res 1	000011	X	X		7		
Res 2	000012	X		X	4		
Res 3	000013			X	3		
Res 4	000014		X				X
Res 5	000015					X	

Decreased meal intake AND weight loss = Both criteria true for the report week:

- Decreased meal intake = Meal consumption 50% or less for two meals in one day at least one time during the report week.
- Weight loss = Any weight loss during the report week. Determined by subtracting current week's weight from most recent weight.

Weight loss $\geq 5\%$ in ≤ 30 days = Any occurrence of resident weight loss of $\geq 5\%$ within the last 30 days.

Urinary incontinence increase = Increase either in the number of shifts or number of times the resident was incontinent from the previous week.

Behaviors ≥ 3 = Three or more different behaviors for a resident documented during the current week (number of behaviors displays).

Worsening pressure ulcer = Indication by nurse that the wound appears worse from previous wound assessment.

New pressure ulcer = Newly identified pressure ulcer from the previous week.

The Priority Report answers the following questions:

- How many residents have documented changes from the previous week?
- How many resident are at high nutritional risk (decreased meal intake AND weight loss)?
- How many residents had an increase in urinary incontinence from the previous week?
- How many residents had more than three behavior problems for the report week?

Process Improvements Using the Priority Report

The On-Time team integrates the use of the Priority Report into routine practice to help monitor changes in resident status and prioritize residents for team discussions.

Recommended steps follow:

1. Assign a team member to review the report weekly.
 - Review information from the current week and compare against the previous week.
2. Identify residents for followup. Possible questions to ask members of the multidisciplinary team include:
 - Are report results consistent with resident's clinical picture? If not, why not? Is there a documentation issue?
 - Are nurses aware of potential changes in resident status? How many residents are new admissions? Does the report provide insights?
 - Do team members need to follow up? Confirm communication plan and next steps.
3. Decide on best communication mechanism (e.g., shift report, 24-hour report, weekly meeting).
4. Establish a plan to implement the process on all nursing units and agree to a timeline.

Examples of team members reviewing the Priority Report include:

- Unit coordinator and dietitian review the Priority Report in conjunction with the Nutrition Report prior to 5-minute standup meetings to help focus on high-risk residents.
- Nurse managers and MDS (Minimum Data Set) nurse use this report to identify residents with potential changes in health status, and flag residents to discuss at the morning meeting.

Frequently Asked Questions

Q: Our CNAs do not document information about ulcers. Where is the information on worsening and new ulcers coming from?

A: The worsening and new ulcer data come from nursing documentation.

Q: Is this a good report to have our social worker use?

A: Yes. Several On-Time teams indicated that the social worker found this report quite helpful to monitor residents' behaviors, have discussions with CNAs, and identify CNA inservice needs.

Q: We identify changes in resident status on a daily basis. How will this process add value to what we already do?

A: The Priority Report information flags changes in the past week. Often, trends or subtle changes are not picked up on review of information for the last 24 hours.

Q: Why are the Nutrition Report indicators, decrease in meal intake and weight loss, repeated on this report?

A: The indicators for high risk on the Nutrition Report are included on the Priority Report because this is a snapshot of key items across Nutrition, Trigger Summary, and Behavior Reports. Often, this report is used first by the nurses to understand priority changes and decide whether to drill down into more specifics using other On-Time Reports.

Summary of Key Points

- Using the Priority Report helps focus on residents with changes in clinical status from the previous week in factors placing residents at potential risk for developing a pressure ulcer.
- Nursing often finds this a valuable report to start with each week to identify changes in items related to pressure ulcer risk. The Nutrition, Weight, and Trigger Summary Reports provide additional information to drill down into details.

Step 6: Implement Process Improvements Using Red Area Report: Optional

This section describes the Red Area Report and how it can be used as a checklist by licensed staff to monitor red areas on the skin, as documented by Certified Nursing Assistants (CNAs). This report and associated process improvements are valuable to a facility if CNAs document skin observations electronically and the facility wants to use CNA documentation in a formal skin monitoring process.

This process improvement is considered optional because not all facilities have CNAs recording skin observations daily and therefore lack access to the Red Area Report electronically. This process improvement may be implemented if your facility has the following:

- Health information technology system that supports CNA skin observation documentation.
- Policy in place that specifies how CNA documentation of skin observations is used by licensed staff.
- Process for communicating skin observations.

This section provides:

- Orientation to the Red Area Report.
- Suggested steps to implement a process improvement using the On-Time Red Area Report.
- Implementation tips from nursing homes that have implemented this process improvement.
- Frequently asked questions.

Orientation to the Red Area Report

The Red Area Report lists residents with noted red areas based on CNA daily skin observations. A resident with at least one documented occurrence of a red area during the report week will display in the report.

The Red Area Report can be used as a worksheet for followup, with space for notes. The computer generates resident names, based on CNA data entry of skin observations. The remainder of the report is blank for handwritten notes. In the sample report (Table 1), the following columns are blank for note taking: Requires Followup, Followup Notes, New, Existing, and Initials. Sample information has been inserted to show how columns may be completed.

Table 6.1. Sample Red Area Report

Name	Resident ID	Requires Followup	Followup Notes	New	Existing	Initials
Resident 1	000011		Resident was leaning on table when CNA noted both elbows red; no longer red.			LLB
Resident 2	000012		Coccyx red: nurse already noted, treated			LLB
Resident 3	000013					
Resident 4	000014		Left heel red, new area			LLB
Resident 5	000015		Blemish on side of face, no red area			LLB

Process Improvement Using Red Area Report

Facility teams determine how the Red Area Report is used. We provide examples of process improvements for teams to consider. While specific work steps may vary by facility, the primary objective is to establish a formal process to confirm red areas on residents that display on the report.

Step	Recommended Action	Report Worksheet
1	Print and review list of residents on the report. Mark the report to indicate residents not known by nurse as having red areas and therefore requiring followup. The nurse typically does not mark residents if red areas are previously reported and are being treated.	"Requires Follow-Up". Mark residents requiring follow-up with check or 'x'.
2	Assign staff member to recheck residents who require followup.	
3	Recheck residents for red areas.	
4	Update report worksheet with findings and return to charge nurse.	<ul style="list-style-type: none"> Write notes in "Followup Notes" section. Mark "New" or "Existing" red area. Leave "New" and "Existing" blank if no red area is noted.
5	Charge nurse follows up on new information per facility protocols (e.g., implement standard interventions, notify provider and other team members, post on shift or 24-hour report).	
6	Post red area list on communication board or medication cart (optional).	

The nurse identifies the need for additional education for CNAs if errors in CNA documentation are noted or if residents with known red areas are not on the Red Area Report.

The staff educator:

1. Reviews the completed worksheet and follows up on residents that do not have red areas after rechecked by nurse.
2. Determines education or inservice needs and follows up.

Implementation tips follow:

- Identify “super users” in CNA staff to promote accurate documentation of red areas in skin observation section by following up with staff each day and helping to answer questions from other CNAs as needed. Super users can be “go-to” CNAs for nurses for followup. Examples of nurses assigned to review the Red Area Report include charge nurse, wound nurse, and staff educator.
- Try a variety of processes used by teams to follow up and address nurse notations on the worksheet:
 - Wound nurse follows up.
 - Lead CNA or CNA in role of skin advocate follows up. In this scenario, the nurse reviews the report and marks residents for followup by a CNA. The CNA lead uses the worksheet to follow up with peers to confirm that red areas are present or no longer present. The lead CNA communicates to the nurse, who conducts a followup skin assessment or provides other directives to CNAs.
 - Wound nurse and lead CNA tag team followup. In this scenario, the wound nurse establishes a relationship with one or more CNAs who serve as part of the wound nurse team to routinely follow up on Red Area Report information. The wound nurse then updates the red area worksheet.

“Using the Red Area Report has helped the project team identify staff inservice needs. It has resulted in very productive discussions that led to team leaders making changes to the communication process.”

— *Staff Educator*

“Use of the Red Area Report helped the communication between CNAs and nurses expand from a CNA verbal report to the nurse to CNA and nurse collaborative discussions of ‘what is a red area’ and ‘what are care plan interventions’ that CNAs need to focus on.”

— *Unit Manager*

Frequently Asked Questions

Q: If a CNA documents “red area” one time during the week, will the resident show up on the report?

A: Yes. If red area is entered by the CNA at least once during the week, the resident will display on the weekly report. Teams use the report as a worksheet to doublecheck that red areas have all been followed up on. Some health information technology systems provide additional documentation details, including the person who documented the information and the date.

Q: Red area documentation by CNAs is often inaccurate. How have other teams addressed this issue?

A: When On-Time teams start this process, often they find more reported red areas than actual. However, the teams report that the focus on red areas is very positive for CNA education and CNA communication with nurses. It also helps raise CNA awareness of pressure ulcer prevention efforts. Over time, red area documentation improves in conjunction with improved team communication. Consider the following educational strategy to improve CNA understanding and documentation of red areas:

- Involve staff educator, wound, or skin team nurse to provide an inservice on proper documentation of red areas.
- Work with lead CNA to help with training of peers (develop a plan to include all shifts and weekend staff).

Q: We already have a process for CNAs to verbally report a red area to the nurse before documenting. How will using the Red Area Report help us?

A: Teams use the Red Area Report as a worksheet to confirm that followup on red areas has occurred and that care plans are updated each week. Using the Red Area Report does not replace the verbal reporting that is in place, but rather is a doublecheck that nothing falls through the cracks.

Q: Can the discussion of red areas be part of the 5-minute standup meetings?

A: Often On-Time teams will discuss residents with red areas at the 5-minute standup meetings. This reinforces the importance of CNA documentation accuracy and the CNAs’ role in care planning.

Q: Can we use the report as a worksheet for the CNAs?

A: Yes. Each facility interested in establishing a formal process to monitor red areas, as recorded by CNA staff, develops a process that works best for the facility.

Q: What have facilities found most helpful about this process?

A: Teams have reported that CNAs are more aware of the definition of “red area” due to ongoing feedback from nurses. In addition, teams report that CNAs have an increased understanding of

the importance of their role in picking up on resident red areas. CNAs report that they are paying more attention to skin observations during daily routine care. Teams report an increase in CNA accountability and improved nurse followup.

Q: Our CNAs are instructed to report red areas as soon as they are discovered; we do not wait until the end of the shift or day. This does not seem like a timely process.

A: The process to review the Red Area Report does not replace facility procedures for CNAs to report red areas immediately upon discovery. The process serves as an adjunct to current practice.

Q: Do teams report the process to monitor red areas as being too time intensive?

A: Most teams that have implemented this process say that review of the Red Area Report does add time but the upfront effort to routinely follow up with CNAs leads to an increased awareness by CNA staff and thus fewer red areas and fewer pressure ulcers to manage. Teams report that the time invested in this process is shorter than the time invested in managing a pressure ulcer from identification to heal.

“The process serves as a good doublecheck and we are picking up a few red areas that we may not have known about.”

— *Nurse Manager*

Summary of Key Points

- Using the Red Area Report:
 - Improves CNA accountability for skin observation documentation.
 - Identifies inservice needs for CNAs.
 - Provides a doublecheck to confirm that nursing has followed up on all reported red areas on the skin.

Step 7: Monitor Impact

This section provides an overview of the measures and tools that can be used to monitor the impact of the On-Time process improvements. Monitoring impact is an important step for several reasons:

- Provides feedback to the team,
- Shows the results of implementing new processes, and
- Helps identify the need for process refinements.

Each facility establishes a process to gather and summarize key measures on an ongoing basis. Key measures include clinical outcomes, measures of quality of care, and process measures, including Certified Nursing Assistant (CNA) documentation completeness rates. Key measures are collected at baseline and before implementing On-Time process improvements; they continue on a quarterly basis after implementation.

The primary quality measure monitored in the On-Time quality improvement (QI) program is pressure ulcer incidence. In addition, teams monitor two Centers for Medicare & Medicaid (CMS) quality measures: pressure ulcers in high-risk residents and weight loss. The primary process measure monitored is CNA documentation completeness rates before and after On-Time QI implementation to track how On-Time QI efforts affect the CNA documentation process.

This section provides:

- Definitions of key measures.
- Data collection strategies and tools.
- Frequently asked questions.

Clinical Outcomes

Since preventing the development of pressure ulcers is the central focus of On-Time, the clinical outcome measures are related to pressure ulcers. Each team establishes a process to collect and track the primary measure: incidence of new in-house pressure ulcers. In addition, On-Time teams monitor two CMS quality measures: pressure ulcers in high-risk residents and weight loss. This section provides definitions of each measure, details regarding the data, and data collection tips.

Clinical Outcome Measure Summary

Clinical Outcomes	Measure
Pressure ulcer rates	Incidence of new in-house acquired pressure ulcers at the unit level CMS quality measures (Nursing Home Compare Web site): High risk residents with pressure ulcers at the facility level
Weight loss	CMS quality measures (Nursing Home Compare Web site): Weight loss at the facility level

Incidence of New In-House Acquired Pressure Ulcers

The incidence of new in-house acquired pressure ulcers is monitored monthly for each unit. It is defined as the percentage of residents on unit (or facility) with newly developed in-house pressure ulcers that month. Specifically:

- Numerator = Number of residents with one or more newly identified pressure ulcers developed this month while the resident was in the facility (in-house acquired). Do not count ulcers that developed outside the facility (e.g., in hospital or prior to admission).
- Denominator = Average monthly census for the unit (calculated based on method in place at facility).

Important measurement considerations include:

- **Definition of pressure ulcer:** Any sore/lesion caused by unrelieved pressure resulting in damage to underlying tissue and that usually occurs over bony prominences (AHCPR, 1992). Pressure ulcers most commonly occur over the coccyx or sacrum, trochanter, and heels. They also occur over any bony prominence or area exposed to pressure. Include

Stages I through IV and unstageable. Do not include vascular or diabetic ulcers or skin tears.

- **In-house acquired vs. outside-acquired** (or present on admission or readmission) are to be determined according to CMS guidelines: if the ulcer is first observed within 24 hours of admission (regardless of state), it is present on admission. If it is first observed more than 24 hours after admission, it is in-house acquired.

Typically, in-house pressure ulcer rates can be computed from data reported on existing facility pressure ulcer monthly reports. A tool is provided to guide a team through the calculation. These data can be collected on paper or electronically, depending on facility current processes. A data collection tool is provided at the end of Step 7.

Frequently Asked Questions

Q: Who typically collects this information?

A: In most cases, the wound nurse, director of nursing, or assistant director of nursing is responsible for gathering and computing the monthly in-house pressure ulcer incidence rate for each unit. Since they usually review the monthly pressure ulcer reports produced by each unit nurse coordinator, it is a natural step for them to report the in-house rates.

Q: Our nursing units produce monthly reports of all pressure ulcers on the unit, including the new in-house pressure ulcers. Can we use this information?

A: Yes. These data can be used. There are several options to calculate the in-house incidence rate for each unit if this is not done currently: (1) The data collection tool can be used to calculate the in-house incidence rate; or (2) a team can consider using an electronic spreadsheet to capture monthly reporting data and calculate the in-house incidence rates.

Q: We have in-house pressure ulcer rates calculated at the facility level. Is this good enough?

A: No. Since each unit is implementing the On-Time program, it is important to track the data specific to each unit to show progress and provide feedback to each team.

Q: How often are pressure ulcer incidence data reviewed with the teams?

A: Teams establish a schedule that works for them. Typically, the pressure ulcer incidence data are graphed and reviewed with the teams at least every quarter. Many teams review the data monthly.

CMS Quality Measure: Pressure Ulcers in High-Risk Residents

The CMS high-risk pressure ulcer measure is monitored because it is easily gathered and is a commonly accepted measure of quality. Although a measure of prevalence (not incidence), it is affected by reduction in pressure ulcer incidence. This measure is available on a quarterly basis (lagged measure 6 months old) for monitoring and review by the facility.

This measure is defined as the percentage of high-risk residents with pressure ulcer (includes both in-house and outside acquired). The publicly reported quality measures are available at the CMS Nursing Home Compare Web site.

CMS Quality Measure: Weight Loss

The weight loss measure, a clinical outcome measure related to pressure ulcer development, is monitored because it is easy to collect and often shows improvement prior to reducing the pressure ulcer incidence rate. The CMS measure for weight loss is available on a quarterly basis (lagged measure 6 months old) for monitoring and review by the facility.

This measure is defined as the percentage of residents with significant weight loss (5 percent in 30 days or 10 percent in 180 days). The publicly reported quality measures are available at the CMS Nursing Home Compare Web site.

Frequently Asked Questions

Q: We already track facility-level in-house pressure ulcer rates. Do we have to calculate unit-level in-house pressure ulcer rates?

A: Unit-level data are strongly suggested for several reasons. Unit-level data can be shared with staff on each unit so that they can participate in monitoring their progress. Implementation of On-Time process improvements takes place at the unit level. Corresponding unit-level measures of impact, when available, help monitor impact for each unit and provide feedback on progress. The overall facility rate may mask variations across units and may not reveal units that have increasing rates even when the overall facility rate is declining.

Q: Why are we using both in-house pressure ulcer rates and the CMS quality measure to monitor impact?

A: On-Time teams monitor both measures for different reasons. The unit-level in-house pressure ulcer rates are the primary clinical outcome measures targeted by the On-Time process improvements. These data are available in a timely manner and can be directly related to resident characteristics and prevention efforts on each unit. The CMS quality measure, reported with a 6-month lag time, is monitored because of its strategic importance to the facility. It is publicly reported and used in the 5-star rating system.

Q: Where can I access the CMS quality measure data?

A: The CMS Nursing Home Compare Web site: <http://www.medicare.gov/NHCompare>.

Q: Are the CMS quality measures reported at the unit or facility level?

A: The CMS quality measures are reported only at the facility level.

Q: Since there is a 6-month lag in the CMS data, do we report these data on a different schedule than the in-house pressure ulcer rates?

A: The quality measure data can be reported at the same time as other measures but you should clearly note that the data have a 6 month lag due to the CMS reporting schedule.

Process Measure

As discussed in the CNA documentation completeness step, we suggest that teams monitor and provide feedback to team members on the CNA documentation completeness rates at the unit level. This shows immediate impact of QI efforts and demonstrates credibility that QI efforts are leading to improvement.

Below are the definition of CNA documentation completeness rates, details regarding the data, and data collection tips for teams to consider.

The CNA documentation completeness rate is a process measure monitored to assess On-Time impact. A central focus of the On-Time program is standardizing and redesigning CNA documentation elements and then summarizing CNA documentation in On-Time clinical reports. One direct result of On-Time implementation is that CNA documentation completeness rates go up in direct proportion to the use of On-Time reports in process improvements. More complete CNA documentation provides better information for the entire team to use in planning care and assessing the needs of residents.

The CNA documentation completion rate is the average percentage of documentation completed over a week for all residents on a unit:

- Numerator = Number of shifts with completed documentation during report week.
- Denominator = Total number of shifts that the resident is in the facility during the report week.

Completeness rates are calculated at baseline and 12-month postimplementation.

Completeness rates are computed for specific sections required for the On-Time program:

- Meal intake.
- Bowels.
- Bladder.
- Behaviors (optional).
- Skin Observations (optional).

CNAs are expected to complete these sections each shift of every day, and 100 percent completeness is expected.

The baseline completeness rate is measured by conducting an audit of a sample of charts on each unit. The postimplementation completeness rates are measured using On-Time Completeness Report data.

Frequently Asked Questions

Q: How many charts should I audit to establish a completeness rate at baseline?

A: Typically, teams select 10 charts to audit completeness rates at baseline.

Q: How are these data reported to the teams on an ongoing basis?

A: Typically, the Documentation Completeness Report information is shared and posted on each unit on a regular basis (weekly or monthly). Often, teams produce graphs to show the trends to team members.

Summary of Key Points

- Establishing a process to monitor key measures to assess impact is an important step at the start of On-Time and throughout implementation.
- Key measures are used by the leadership group to monitor impact and are presented to frontline teams to provide feedback on process improvement efforts.

Tool: Pressure Ulcer Incidence Data Collection

Directions:

1. Complete the identification fields for Facility and Unit #.
2. For each month, enter the unit census (indicate when calculated: first of month, end of month, midmonth, average daily census [ADC]).
3. For each month, enter the *number of new pressure ulcers Stage I through IV and Unstageable* (in-house acquired in one column and outside acquired in another column):
 - Do not count existing pressure ulcers that developed in previous months.
 - Do not count existing pressure ulcers on residents new to the unit.
 - Include all newly acquired pressure ulcers. A single resident may have more than one newly acquired pressure ulcer.
 - If a resident has at least one in-house acquired and at least one outside acquired, the resident should be counted in both the in-house and outside totals.

Definition of pressure ulcer: Any sore/lesion caused by unrelieved pressure resulting in damage to underlying tissue and usually occurring over bony prominences (AHCPR, 1992*). Pressure ulcers most commonly occur over the coccyx or sacrum, heels, and trochanter. They also occur over any bony prominence or area exposed to pressure. Include Stages I through IV and Unstageable. **Do not include vascular or diabetic ulcers and skin tears.**

In-house acquired vs. outside-acquired (or present on admission or readmission) are to be determined according to CMS guidelines: if the ulcer is first observed within 24 hours of admission (regardless of state), it is present on admission. If it is first observed more than 24 hours after admission, it is in-house acquired.

* Bergstrom N, Allman R, Carlson C, et al. Pressure ulcers in adults: prediction and prevention. Clinical practice guideline number 3. Rockville, MD: Agency for Health Care Policy and Research; 1992. AHCPR Publication No. 92-0047. Available at: <http://www.ncbi.nlm.nih.gov/bookshelf/br.fcgi?book=hsahcpr&part=A4409>.

Facility Name: _____

Unit # (name): _____

Completed by: _____

Date: _____

Census was calculated (please circle): First day of month Middle of month Last day of month ADC

Month	Census	In-House Acquired Pressure Ulcers		Outside Acquired Pressure Ulcers		Comments: Events With Possible Impact on Number of Ulcers
		Number of New In-House Acquired Ulcers	Number of Residents With New In-House Acquired Ulcers	Number of New Outside Acquired Ulcers	Number of Residents With New Outside Acquired Ulcers	
Jan 2010						
Feb 2010						
Mar 2010						
Apr 2010						
May 2010						
Jun 2010						
Jul 2010						
Aug 2010						
Sep 2010						
Oct 2010						
Nov 2010						
Dec 2010						