LESSONS LEARNED, SUCCESSES, AND BARRIERS FOR THE ‘REAL-TIME’ AND QIO ‘ON-TIME’ PROJECTS

LESSONS LEARNED

1. **Partnerships are effective to initiate and support change.**
   Partnerships within facilities (multi-disciplinary teams) and among collaborating facilities promote shared learning about implementing quality improvement strategies. The value of partnerships was demonstrated in the following ways: facility team leadership feedback on implementation process, ‘Real-Time’ facilities continuing work by participating in HIT project, and QIO facilities interested in participating based on the interaction and collaboration with other facilities.

2. **Research findings help focus areas of improvement.**
   NPULS (National Pressure Ulcer Long Term Care Study) research results helped to focus improvement initiative. For example, use of standard medical nutritional supplements for residents at nutritional risk (weight loss and low meal intake). Research findings provide guidance for clinical decision making compared to clinical experience or opinions.

3. **To sustain quality improvement, the strategy and implementation plan must be incorporated into daily work and not perceived or treated as a separate, stand-alone project with add-on work.**
   - How should additional work processes associated with improvement efforts be supported?
     - Add no additional work processes. Redesign work to embed best practices into routine work practices.
   - How can facilities manage the burden of extra paperwork?
     - Add no extra paper work. Eliminate redundant paper work before adding anything new.
   - How can practice improvement be supported in an environment of limited staff resources and time?
     - Identify and eliminate waste (redundancy, extra steps, etc.) in process while implementing process redesign.

4. **Front-line staff involvement is essential throughout the improvement process; frequent feedback helps to shape process and promote staff “buy-in”**.
   Involving front-line staff in documentation redesign and discussing use of clinical reports made the resulting documentation process meaningful to users, promoted autonomy, and developed a sense of ‘a team approach’ to improving resident care. Multidisciplinary team members must be included early in the project when defining data elements and reports and included in workflow analysis and redesign efforts.

   Feedback should be obtained frequently throughout the process. ‘Real-Time’ project comments about CNA daily documentation form development and implementation are summarized:
   - Consolidated documentation saves time (multiple forms condensed to one).
   - Minimizing hand-written documentation is preferred and saves time (use of fill-in bubbles).
   - CNAs like the content and format of the standardized forms.
   - Valuable information is contained on reports provided back to facilities.
   - Overall, the daily forms look quite similar across facilities, which demonstrates agreement on critical items for CNAs to document.

5. **Standardize data elements, NOT forms.**
   Standardizing elements is critical for developing a shared database, developing reports, and incorporating best practices into daily workflow. The ‘Real-Time’ project demonstrated: 1) consensus on data elements across multiple organizations is facilitated by sharing information among facility teams, and 2) facilities have similar data needs, which make common data capture and reporting possible.
6. **To sustain a quality improvement effort, workflow must be redesigned.**
   Understanding how to integrate timely reports into care planning requires regular facilitation of the change strategy, education of staff, and redesign of workflow. New responsibilities to review and follow-up on each report must be incorporated into day-to-day activities.

**SUCCESSES**

1. **Developed a collaborative network of long term care facilities.**
   The content of the comprehensive CNA documentation process was a collaborative effort among care providers within and between facilities from across the US. The focus of the collaborative work evolved with the project: content of CNA documentation, report design, strategies to redesign workflow, and sustainability of project activities post AHRQ-funded grant.

2. **Developed standard core set of data elements for CNA documentation and standard clinical reports to support care planning activities.**
   Assessment and intervention elements specific to nutrition and incontinence protocols within the realm of CNA responsibilities were a core standard; facilities could customize additional elements as needed. ‘Triggers’ for protocol implementation appeared as shaded rows on documentation forms, providing a visual cue to the CNA that an intervention step was indicated and notification to charge nurse was required. Standardized elements incorporated data required for quality reporting, best practices, and state regulatory requirements. By taking an overall systems approach, in addition to incorporating National Pressure Ulcer Long-term Care Study findings, facilities were able to standardize content to meet a variety of requirements.

3. **Reduced number of CNA daily documentation forms.**
   Streamlining the documentation process included consolidation of different forms and logbooks used by CNAs. ‘Real-Time’ facilities redesigned and implemented standardized CNA documentation practices to reduce redundancy.

4. **Involved front-line staff and multi-disciplinary team members in quality improvement initiatives.**
   Front-line staff contributed to the development and implementation of their redesigned documentation process. Facility teams should include front-line staff (CNAs) in early project activities, e.g., evaluation and facility customization of standardized CNA forms. CNA involvement promotes ‘buy-in’ of project activities and reduces resistance to change in daily practices. It also promotes a sense of empowerment within CNA teams.

5. **Conducted assessment of opportunities to redesign workflow.**
   Assessed key processes of care and information flow to establish baseline and identify areas of opportunity for process redesign:
   - CNA documentation of resident daily flow record
   - Nursing care plan documentation and communication of resident care plan to clinical team
   - Multi-disciplinary team care planning and information access
   - Wound nurse pressure ulcer documentation, care planning, and reporting
   - Minimum Data Set (MDS) nurse information access and regulatory reporting.

6. **Redesigned clinical workflow to incorporate evidence-based best practices for pressure ulcer prevention into everyday workflow and care planning activities.**
   - Eliminated redundancy in documentation and workflow
   - Improved communication across care team and disciplines
   - Promoted information access across disciplines
   - Redesigned clinical care processes using standardized documentation prompts for optimal treatments
• Provided timely reporting of information to monitor resident status and treatments
  - Nutrition, Incontinence, Behavior, High Risk triggers for pressure ulcer development, and PU tracking
• Allowed facilities to do care planning based on research-based best practices.

7. **Developed strategies for sustainability, including evaluating low-cost technology solutions.**
   One component of sustaining the ‘Real-Time’ intervention is employing an IT solution to capture, store, and report data elements from documentation and summarize in clinical decision making reports. Various IT solutions were considered and implemented by facilities.

8. **Implemented ‘Real-Time’ standardized documentation forms and reports prior to HIT implementation.**
   ‘Real-Time’ and non-‘Real-Time’ facilities implemented standardized CNA core elements using paper forms as a first step before moving toward electronic data capture. This process allowed facility staff to become familiar with new, often more comprehensive documentation content. Then, implementation of HIT required staff to learn a new ‘format’ only but content was familiar.

9. **Disseminated ‘Real-Time’ innovations.**
   Experiences at non-‘Real-Time’ facilities reinforced our knowledge of what is critical in facilitating the dissemination and implementation of ‘Real-Time’ care process redesigns: the ‘Real-Time’ documentation forms can be adapted and refined per facility needs rapidly, CNAs engage in an effort focused on improving their daily work, and multi-disciplinary teams see value in clinical reports.

**BARRIERS**

1. **DON / Administrator turnover.**
   DONs at each facility are instrumental in providing internal leadership and spearheading communication of the importance of the project. Close communication with DONs was critical to integrate project activities into daily work and not be seen as a complete add-on. With a turnover in management, the relationship and communication between project team members and the facility was interrupted until management stabilized.

Our strategy was to communicate closely with a leadership team at each facility, including DONs and other facility leaders, to develop internal ownership of efforts and integrate this project into daily work and not as an add-on to traditional processes. We continued to the extent possible our working relationship with the team members in the absence of the DON. When a new DON was hired, we scheduled conference calls and/or site visits to meet the new DON and review project goals and timeline. In addition, providing data showing the team’s impact on pressure ulcer rates and operational efficiencies was compelling for most facilities to continue redesign efforts amidst turnover of key leadership.

2. **Clinical staff turnover.**
   Many facilities reported clinical staff turnover that resulted in the need to provide on-going education on documentation processes and project goals. Facility coordinators incorporated new CNA documentation into orientation education. In addition, documentation completeness reports focused on particular residents or staff members to provide focused feedback and identify staff-specific education needs.

3. **CNA documentation completeness.**
   Some facility completeness rates were low initially, but improved over time. Facilities reviewed completeness reports with staff and clarified accountability for completing documentation. Sharing reports with CNA staff tended to increase documentation rates. CNA documentation is critical to provide complete and accurate report
information. When reports are valued, report users have an incentive to follow up and ensure CNA
documentation is completed each week.

4. **Integration of reports into care planning processes.**
The project team supported facilities in understanding the content of reports and encouraging their use for care
planning activities. Assigning responsibility to individual team members to review and share specific report
information during interdisciplinary care team meetings was one strategy that worked for some facilities.
Another strategy that worked was to reduce the number of reports to review each week; some facilities were
able to commit to use a subset of reports available to them versus trying to incorporate all project reports. This
provided facilities with time to more fully understand report data and identify ways to incorporate information
into weekly team meetings, weekly stand-up rounds, and care planning conferences.

5. **Competing priorities that develop over time.**
The implementation phase for ‘Real-Time’ project activities is approximately 12-15 months. (Note: in the
dissemination initiative ‘On-Time Pressure Ulcer Prevention: Partnership with QIOs’ the implementation phase
is currently 2-3 months using Digital Pen Technology.) A stable project point person at each facility was
essential to maximize project impact. However, even when the person was stable (no turn-over), competing
priorities sometimes interfered with management of project activities.

The project team supported each facility’s project point person by conducting work plan reviews with each
facility team every 6 months. These reviews helped to confirm and meet project timelines and assess resource
utilization. Each project work step was detailed specifically so the team was able to assess barriers, delays, or
resource issues.