Following is the story of one home health agency that used the outcome-based quality improvement (OBQI) process to enhance outcomes for patients who experience pain that interferes with activity. This agency provides a model for continuous quality improvement as the staff applied the process, addressed implementation issues, and worked to ensure that their care processes helped patients experiencing pain improve.

This freestanding, non-profit home health agency serves an urban area. It is Medicare and Medicaid-certified and also accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Services include skilled nursing, physical therapy, occupational therapy, speech therapy, medical social service, and home health aide, as well as specialty programs for patients with chronic conditions. This is a relatively large agency providing approximately 2000 Medicare episodes of care per year and employing over 50 RNs. Medicare and Medicaid skilled services account for most of their reimbursement.

The agency began working with OBQI prior to the mandated OASIS data collection and national implementation of the OBQI process. The following summary of their experience follows the steps of the OBQI process. As this agency noted, planning for quality improvement should be accomplished in a relatively short time. “We took one month to look at our reports, identify the outcomes that we were selecting, and to initiate a plan of action, so it was a very fast turnaround.”

Selecting the Target Outcome
The outcome of improvement in pain interfering with activity was chosen based on the criteria suggested in the OBQI process: statistical significance, size of the outcome difference, number of cases involved, actual significance level, importance or relevance to agency goals, and clinical significance. Although currently pain interfering with activity is not risk-adjusted, in some of the earlier demonstration projects the outcome was risk-adjusted and the statistical significance criterion could be used. On their second outcome report their rate for improvement in pain interfering with activity was 64.7% and although not significantly different from reference (67.1%), had significantly declined from their prior year (72.2%, p = 0.00).

A committee composed of the Director and Assistant Director of Patient Services, Nurse Clinician, and two supervisors, all nurses, reviewed the OBQI reports and selected the target outcomes. Later, this committee was expanded to include the therapy supervisor as well. “We looked at our total outcome picture and identified areas that were significantly less than the reference or a significant change from our prior period. At the same time, we had a discussion about the particular areas of interest in program development and concerns or issues that were
reflective of a large number of our patients. We felt that pain interfering with activity was a very significant quality of life issue and had a significant effect on a person’s ability to manage independently in the home, and therefore would have a large effect on the need for ongoing services beyond our own skilled interventions. We thought it was a very important area for us to try to improve. We also were fortunate to have a pharmacy resident working with us and it was an opportunity to utilize the expertise of that pharmacy resident on a quality improvement project.”

The committee also reviewed its case mix report to assist in their choice of a target outcome. “The case mix report was something that we looked at. I think one of the benefits of the OASIS assessment was to give us a much bigger picture of what our patients’ cases look like. We had a significant number of patients with cancer, and a significant number of patients with wounds, and we had a good number of patients with orthopedic problems, so pain was going to be a component of our care planning for all of those patients.”

**Planning the Process of Care Investigation**

The agency’s process of care investigation followed the steps of (1) identifying what care should be provided to patients experiencing pain, (2) developing an audit tool and reviewing the care of patients who did and did not improve in pain interfering with activity, (3) determining areas of problems or strength from the investigation, and (4) specifying best practices for the target outcome.

In this agency, the review committee handed off the selected outcome to a new team that was given the overall charge to improve the patient outcome—improvement in pain interfering with activities. The initial review committee also appointed a facilitator and another person from the review committee to serve on the project team, and suggested the disciplines that would be most appropriate to include on the team. “Once the team actually meets it will identify whether there are other individuals or people representing certain experiences who should be invited into the committee, and that could happen at the beginning or at any time during the work of the committee.” The team working on improvement in pain included an occupational therapist, physical therapist, mental health nurse, nutritionist, home aide, nurse, pharmacy resident, a supervising nurse, and the director of patient services. In following years the team added more staff nurses. “We try to involve different people each time we have a project team so that it’s a learning experience.”

The basic criterion for the facilitator is experience and/or in-depth training in OBQI. The facilitator is usually a manager because they have more office time to handle the organization of the team’s work. “More recently we’ve tried to send more of our management team to OBQI training and we’ve been fortunate to be able to send one or two people each time to our state QIO training so that we have a wider pool of people who have more in-depth information.”

“We usually started this process by educating everyone on the principles of OBQI, the benefits, and the need to use data to clearly define what the problem might be and to identify opportunities for improvement.” The team members identified important care behaviors for patients with pain interfering with activity through various sources including literature searches, books on best practices/clinical paths, project team members’ expertise, and other experts. “We did a lot of
research on the effect of depression on patients’ function and their perception of pain, so that was one of the reasons we included the mental health nurse in our project.” They looked for “best practices” in addressing pain, including assessment and interventions, to create an audit tool to review their patient records.

“We used tally reports to look at individuals who had improved in pain interfering with activities versus patients who did not. We were able to identify other characteristics of the patients who did or did not improve, and that sometimes would offer us a view of where there might have been issues or opportunities. We did see a lot of patients with diabetes and arthritis. In fact, as this project went on we really focused it down in other years to just chronic pain and pain due to neuropathies and inflammatory processes, like arthritis.”

Conducting the Process of Care Review
The committee chose to do a chart audit of 30 randomly selected patients from the list of patients with an outcome for improvement in pain interfering with activity. Sometimes the entire team performed the chart audits during a meeting, but more often the facilitator and managers who have more office time did the audits. “We used the audit tool to look at the charts of a selection of those patients who did improve and patients who did not improve in pain interfering with activity. That gave us another body of information about what we were and were not doing. If we see an absence of an activity in the patients who did not improve it would suggest to us that an improvement plan might be to regularly include that activity with our patients.”

“We saw a need to improve in the area of intervention. We saw a lot of assessment, but not necessarily the interventions to make a difference, for example a referral to physical therapy, or obtaining medication for the patient, or teaching the patient about non-pharmacological pain relieving techniques.”

Developing the Plan of Action
The OBQI project team used the results of chart audits and analysis of the tally reports to develop their plan of action (POA). The plan was for remediation because the agency identified they wanted to improve. In looking back, the agency staff identified that their initial problem statements and care behaviors were too complex and they focused too much on documentation. In future years they worked on making their plans of action more focused and simplified.

Their problem statement was: For patients with pain interfering with activity, inadequate assessment, documentation, and care planning are evident.

One care behavior on the POA was: The patient will be assessed for activities that are affected, the frequency and amount of medication or non-pharmacological intervention, the degree of relief and duration of relief, the degree of sedation, the patient’s goal for pain relief, the patient’s fear of addiction, and knowledge of pain relieving interventions, side effects and ability to manage side effects.

This agency now participates in the national OBQI project with their Quality Improvement Organization (QIO). “One of the things that was very helpful, considering that we had been working on this for several years before we submitted a plan of action to our QIO, was that we.
got some very specific written feedback on our action plans. I think that’s a positive part of the process that is currently being provided. We would focus on documentation issues that we identified from the audit and also on various care planning activities. That was one of the suggestions that the QIO made to us, that a lot of our plan had been focused on documentation and that might make the chart look better but not necessarily get at an improvement in behavior. I found that was a helpful comment.’’

Some of the strategies or interventions the project team identified to implement the desired care behaviors included: in-service, a clinician newsletter, poster presentations, memos, voice mail, teaching guides, pharmacist consults, and supervisory visits. Working with a pharmacy resident was seen as very helpful. The resident served on the project team, made home visits, consulted with the staff nurses, and prepared resource materials for staff.

“Each group that’s working on a project will try to provide some very specific clinical information for the newsletter. Not ‘You should be doing this and you’re not,’ but ‘There’s this research that shows that there’s a benefit in doing this in order to relieve pain,’ or ‘Did you know this?’ Our clinicians really value that kind of information, so they read it. They look for it. We also built into our routine chart review and supervisory evaluation forms some indicator of the behaviors that we were trying to encourage in our staff.”

In this agency the project team completes the plan of action within one month and the facilitator is responsible for implementation—making sure that the documentation forms get changed, the in-services get scheduled, and that the audits get done.

**Monitoring the Plan of Action**

The initial monitoring was accomplished through auditing records, checking attendance lists at in-services, and keeping a log of requests for pharmacy consults. “As we are moving along we’re tweaking that plan of action and adding to it or changing it, and there will be points of time where we will evaluate through our monitoring activities how we’re doing.” Initially they did focused audits three times a year, but now that they are working to maintain their performance they included a couple of the key areas on pain in the agency’s overall record review process.

**Evaluating the Result of the Quality Improvement Project**

With the OBQI process, an agency re-examines its outcome rate for the targeted outcome one year from the initial report. On the follow-up outcome report they found that their outcome rate (61.8%) was not significantly different from reference (60.1%) and was higher, but not significantly, than the risk-adjusted rate for the prior period (56.2%, p = 0.15). Through their monitoring audits they documented that their care processes for assessment and intervention had improved, so the team expected to see a statistically significant improvement. “Well, I would say despite the fact that we did a lot of wonderful things to improve the assessment of pain and assisted our staff in dealing with pain, we were actually kind of frustrated because we weren’t seeing a significant improvement in our outcome.” Even though they could have been satisfied with their outcome data, the team decided to continue to work on this outcome.

The team felt their early efforts were very good and they did improve assessment and teaching and the staff’s knowledge in dealing with pain, but they believed they did not show significant
improvement because the staff was not accurately answering the OASIS question. “They were answering the question, ‘Yes, the patient had pain interfering with activity’ because the patient had pain and had not carefully assessed that the pain was interfering with activity, or had not answered the question correctly because the activity might not have been impaired.” They did not jump to this conclusion immediately. It was through careful investigation of the patient records and discussions with staff that they identified the problem with assessment on which they could then take action.

The OASIS item is specifically about pain interfering with activity or movement. The specific assessment guidelines appear in Chapter 8 of the OASIS User’s Manual. Following is the OASIS item and its definition.

(M0420) Frequency of Pain interfering with patient's activity or movement:
0—Patient has no pain or pain does not interfere with activity or movement
1—Less often than daily
2—Daily, but not constantly
3—All of the time

Definition: Identifies frequency with which pain interferes with patient’s activities, with treatment if prescribed.

If some staff assess this item as simply the occurrence of any pain and others assess it as pain that interferes with activity or movement, it affects the reliability of the measure and can influence the agency outcome results. This agency recognized that assessing the item correctly was important, but it was not the only thing to focus on to achieve improvement in the outcome.

“One of the things we did was to add other questions in the same area as the OASIS pain question that required the clinician to identify the activity that’s affected. We also ask on a follow up assessment ‘Has this improved since the last assessment?’ Because we want them to stop and think ‘If this has not improved what else do I need to do here.’ We also moved pain as an assessment question up right under vital signs so that it didn’t get lost in a lot of other stuff. It became that fifth vital sign – its location was more important. We give some check off suggestions to kind of head in the direction of some effective intervention.” These were added to nursing and therapy assessments and documentation. The agency was able to maintain their outcome comparable to the national reference indicated by no statistically significant difference on the subsequent follow-up outcome report.

Through the OBQI process, the staff has continued to learn about caring for patients with pain and they revise their care practices accordingly. “Chronic pain is very difficult to deal with. Often patients have given up on their ability to improve and physicians sometimes are not terribly motivated to make changes. We hear from our staff that they can call and report unrelieved pain, but the physician is not willing to add medication. We’ve been trying to focus on some of the adjunctive methods or non-pharmacological methods and making sure they do have appropriate medication. There are some drugs that are more effective, in particular for neuropathy or inflammatory pain, which seems to be the people who have more difficulty. For 2002 we focused just on patients with chronic pain and also identified that the pain teaching
guides that we had developed over the last couple of years were frequently not utilized by the clinical staff, so that was part of the problem statement. At that point it was an action plan for reinforcement.”

**Lessons Learned**
The staff identified some of the lessons they have learned over the years of working on OBQI. They include:

▲ Ensure good representation on the project team of the different services that are going to have an impact on that outcome in order to get buy-in from the different disciplines. Don’t overlook the importance of including home health aides.

▲ Make it a whole agency project.

▲ Assess the OASIS items correctly and check it when you do an audit.

▲ Drill down to a few very simple, clear interventions.

▲ Orient new clinical staff, both nursing and rehab, to OBQI and what the various project teams have identified and implemented to impact outcomes.

▲ Develop a plan for maintenance. “If you move onto another project, somehow integrate the best practices and the monitoring into your every day stuff.”

▲ The other thing that we learned was that there’s so much activity right up front and you think, ‘Well, you’ve done it,’ but really the more significant work is in the monitoring and change and the reinforcement. If you don’t evaluate what’s going on and take more action it won’t just happen on its own.”

▲ Make meeting time efficient. “I think over the years we’re having fewer meetings on these committees. We do more work in between. Not work that they need to do, but work so they have the information when they sit down.”

**Organizational Support for OBQI**
The staff identified that organizational support was critical. “I think it is extremely important because it involves time. If it is not important and you’re not giving the time and the attention then I don’t think you’d have the staff with you or the energy to really move it along. I think the staff time is allocated because the administration feels that it is important.”

“One of the things that we’ve done and learned is that it is absolutely important that you integrate it into everything you’re doing. For instance, when we were looking at the plan for in-service this coming year we looked at ‘Do we have in-service representing the projects that we have identified?’ We identify the behaviors or the knowledge deficits that our staff have and make sure the presenter hits on these areas. We built into our record review and joint visit forms some of the key areas so that every time any supervisor looks at a record or goes out with a staff member they’re looking to see if the person is carrying out this improved behavior.”

By using the OBQI process, this agency identified improvements for their care of patients experiencing pain interfering with activity. The OBQI process provided a systematic way to identify potential problems and develop plans of action to address their findings so that they were able to maintain outcome rates comparable to the national reference.