Outcome-Based Quality Improvement (OBQI) Manual

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Centers for Medicare & Medicaid Services

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CHAPTER 1 – INTRODUCTION

A. UNDERSTANDING OBQI

The Outcome-Based Quality Improvement (OBQI) Manual is part of a series of four manuals produced by the Centers for Medicare & Medicaid Services (CMS). The OBQI Manual describes the OBQI Outcome Report in detail and is intended to assist home health agencies use the data in the report and implement the steps in Outcome-Based Quality Improvement (OBQI). The other three manuals are available on the CMS website and include:

- The Outcome and Assessment Information Set (OASIS-C) Guidance Manual, which introduces agencies to OASIS and the collection of uniform health status data on patients receiving home health care;

- The Outcome-based Quality Monitoring (OBQM) Manual, which focuses on understanding and using the information in the Agency Patient-Related Characteristics Report (formerly the Case Mix Report) and the Potentially Avoidable Event Report (formerly the Adverse Event Outcome Report);

- The Process-Based Quality Improvement (PBQI) Manual, which describes the Process Quality Measure Report and discusses its use for quality improvement purposes.

B. OUTCOME-BASED QUALITY IMPROVEMENT (OBQI) IN CONTEXT

In 1999, all Medicare-certified home health agencies began collecting standardized patient status information through the use of the Outcome and Assessment Information Set (OASIS). The OASIS items had been developed, tested, and refined over the prior decade through an extensive research and demonstration program funded largely by the Centers for Medicare & Medicaid Services (CMS, then known as the Health Care Financing Administration), the Robert Wood Johnson Foundation, and New York State. The items were designed to enable the rigorous and systematic measurement of patient home health care outcomes, with appropriate adjustment for patient risk factors affecting those outcomes. The current version of OASIS (OASIS-C) allows for the measurement of selected evidence-based process quality measures as well.

Home health agencies (HHAs) are provided with feedback reports from the OASIS data collected and transmitted to their respective state agencies in four unique reports -- Agency Patient-Related Characteristics Report (formerly the case mix report), the Potentially Avoidable Event Report (formerly the adverse event outcome report), the Outcome-based Quality Improvement (OBQI) Outcome Report, and the Process Quality Measure Report (available 2010). These reports allow agencies to incorporate OASIS-based reports into their overall patient care quality monitoring and improvement programs.

This manual focuses on the use of OBQI report outcomes for quality/performance improvement. The outcomes are derived from OASIS data and measure changes in a patient's health status between two or more time points. An example of an OASIS-based outcome measure is whether a patient improves in the ability to ambulate independently between home health start of care (SOC) and discharge, with ambulation ability measured according to the precise zero-to-

six scale in the OASIS ambulation item. The OBQI reports provided to HHAs include a series of outcomes for their patients in the current year compared to prior year and to national reference (i.e., benchmarking) values. HHAs can use the OBQI outcome measures as part of a systematic approach to continuously improving the quality of care they provide. To be most valid, the comparisons must adjust for patient risk factor differences (both over time for the agency and between the agency and the reference group). Risk adjustment is critical because a patient's outcomes depend on his/her risk factors as well as on the home health care he/she receives.

OBQI Outcome Reports include 37 risk-adjusted outcome measures (i.e., the measure have been adjusted to take into account the unique characteristics of the agency's patients). These reports allow an HHA to proceed into the second phase of OBQI, called outcome enhancement. It is the outcome enhancement activities that allow an agency to focus its quality (or performance) improvement activities on select target outcomes, to investigate the care processes that contributed to these outcomes, and to make changes in clinical actions that will lead to improved patient outcomes. If the agency carefully implements the steps in this process, this change in patient outcomes is expected to be evident when the next report is accessed.

C. OVERVIEW OF THIS MANUAL

The focus of this manual is on the use of the Outcome Report for quality/performance improvement. The manual first provides additional background and context on OBQI (and OASIS) in Chapter 2, and then proceeds to discuss the steps and activities of outcome enhancement in detail in the remaining chapters. Chapter 3 discusses interpretation of the Outcome Reports, followed by content on selecting target outcome(s) in Chapter 4. It is the selection of specific outcomes that allows an agency to focus its quality improvement activities on specific areas. Chapter 5 then describes the activities involved in the investigation-of-care processes that lead to specific outcome results. Chapters 6 and 7 discuss developing and implementing a written plan of action to modify care delivery -- the steps that the agency puts in place to improve patient outcomes. In Chapters 8 and 9, internal agency processes that are important for successful implementation of outcome enhancement are presented. Chapter 8 focuses on teamwork, while Chapter 9 emphasizes internal agency training in outcome enhancement. The manual concludes with a summary of strategies important for establishing an effective OBQI system.

Home health agencies vary widely in the type and sophistication of their current quality monitoring and improvement programs and processes. Some agencies only follow very basic quality assurance activities (i.e., using one person to seek out and address only serious problems), while others have sophisticated quality (or performance) improvement programs in place (i.e., using teams to focus on process improvement at regular intervals). Depending on an agency's current quality initiatives, moving toward OBQI can be relatively straightforward (for agencies currently following quality improvement principles) or a longer, more deliberate path.

The manual attempts to reach this variety of audiences by including multiple learning activities and approaches within the specific chapters. Frequently-Asked Questions, for example, are presented at the end of each chapter. The portion of the manual describing the key steps in outcome enhancement (Chapters 3-7) features exercises, worksheets, and checklists to facilitate understanding. Agency strategies, which present the "lessons learned" from a variety of agencies implementing OBQI, also are included as attachments to most of the chapters. Table 1.1 lists the location of the practice exercises and agency strategies that can be found in

this manual. Because outcome enhancement activities are conducted individually by each agency, we recognize the value of such exercises and learning from peers.

The appendices to the manual also contain valuable information for an agency's use. Appendix A includes "How-to Read" guidelines for the Outcome, Agency Patient-Related Characteristics, and Patient Tally Reports. This background content is key to understanding the information contained in the reports and should be reproduced for any individuals with whom you share your reports. Key terms related to OBQI are defined in Appendix B.

TABLE 1.1: Location of Learning Activities and Agency Strategies for Outcome Enhancement Steps.

Steps in Outcome Enhancement (Phase 2 of OBQI)	Location of Practice Exercises in This Manual	Location of Agency Strategies to Implement Step
1. Interpret Outcome Report	Chapter 3, Attachment B (Exercise 1)	Chapter 3, Attachment D
2. Select Target Outcome(s)	Chapter 4, Attachment A (Exercises 1)	Chapter 4, Attachment C
3. Investigate Care Producing the Outcome	Chapter 5, Attachment C (Exercises 1, 2, 3, 4)	Chapter 5, Attachment D
4. Write Statement of Problem/ Strength in Care Provision	Chapter 6, Attachment B (Exercises 1, 2)	Chapter 6, Attachment C
5. Develop Best Practices	Chapter 6, Attachment B (Exercises 3a-d, 4)	Chapter 6, Attachment D
6. Develop Action Strategies	Chapter 7, Attachment B (Exercises 1a & b)	Chapter 7, Attachment F
7. Monitor and Evaluate the Plan of Action		Chapter 7, Attachment G

D. WHAT THIS MANUAL IS AND WHAT IT IS NOT

This manual is designed to facilitate an understanding of the outcome enhancement phase of OBQI. It presents the steps of the outcome enhancement process in detail, beginning with the interpretation of the Outcome Reports through the final processes of implementing and monitoring the Plan of Action. For each step, illustrations, exercises, and examples are included to assist agency staff in learning and understanding this portion of the process -- with the goal of assisting agencies to implement OBQI as an integral part of their quality improvement program.

CHAPTER 2 – OUTCOMES AND OBQI

A. WHAT IS SO IMPORTANT ABOUT OUTCOMES?

Traditionally, quality of health care has been examined from three fundamental perspectives:

- **Structural measures of quality**: we can assess the adequacy of the "inputs" to care such as the care setting, the qualifications of care providers, and the equipment and technical devices used. This is the structural perspective of quality, and the specific measures used to assess quality from this perspective (such as percentage of RNs with bachelor's degrees at a given home care agency) are termed *structural measures* of quality.

- **Process measures of quality**: we can examine the "throughputs" to care such as specific interventions, comprehensiveness of assessment, and adequacy of care planning. This is the process perspective of quality, and the specific measures used to assess quality from this perspective (such as the whether a depression assessment is conducted at admission) are termed *process measures* of quality.

- **Outcome measures of quality**: we can assess "outputs" of care by examining what happens to the health status of patients as a result of care. This is the outcome perspective of quality. Influencing outcomes is the fundamental reason we provide health care. The specific measures used to assess quality from this perspective (such as whether a surgical wound healed during the care interval) are termed *outcome measures*. The rationale for using outcome measures for quality improvement rests with the aforementioned fact that outcomes are why we provide health care.

Many health care stakeholders rely on accurate clinical outcome data. Payers (such as Medicare, Medicaid, managed care plans, etc.) want to know what they obtain on behalf of their patients for the dollars spent. At the Federal level, outcomes have been stressed for home health agency survey and certification since the Omnibus Budget Reconciliation Act of 1987. Accreditation programs, including those operated by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), the Community Health Accreditation Program (CHAP), and the Accreditation Commission for Health Care, Inc. (ACHC), also focus on outcomes.

In addition to payers and regulators, consumers and their representatives also are using information on outcomes to evaluate healthcare providers. The National Quality Forum (NQF), a nonprofit organization that endorses national consensus standards for measuring and publicly reporting on performance, has endorsed a total of 23 quality measures for public reporting of care received in the home health setting – 10 process measures, 9 outcome measures and one potentially avoidable event measure. Equally important, home health agencies have always been concerned with measuring their own performance relative to other providers or to standards. The home health industry has strongly supported development of an outcome-based approach to quality improvement. This healthy interest in self-analysis at the agency level is at least as strong as the external forces arising from payers, regulators, and consumers.

With respect to OASIS-based outcome measurement and outcome-based quality improvement (OBQI), it is important to clarify what is meant by patient outcomes.

WHAT OUTCOMES ARE:

- Outcomes are health status changes between two or more time points, where the term "health status" encompasses physiologic, functional, cognitive, emotional, and behavioral health.
- Outcomes are changes that are intrinsic to the patient.
- Outcomes are positive, negative, or neutral changes in health status.
- Outcomes are changes that result from care provided, from natural progression of disease and disability, or from both.

According to these statements, an outcome is a health status change that occurs over time, where the change is intrinsic to the patient. Thus, a change in the patient's environment, such as the provision of a walker or handrails in the patient's residence, is not considered an outcome according to this definition—such changes are services or processes of care. Because the nature of the change can be positive, negative, or neutral, the actual change in patient health status can correspond to improvement, decline, or maintenance (i.e., no change) in patient condition. The definition of an outcome does not include a presumed direction; therefore, any deviation (or nondeviation) in health status between the initial time point and the follow-up time point constitutes an outcome.

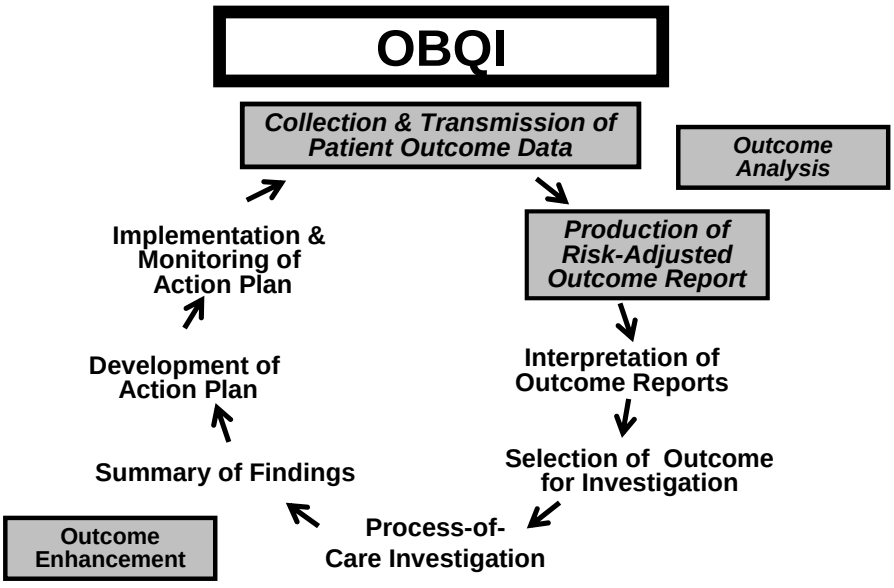
Change in health status over the time interval during which care is provided can occur either as a result of the care provided or the natural progression of disease and disability. The challenge in outcome analysis is to attempt to somehow separate changes due to care from those due to natural progression. This is achieved through a process termed risk adjustment. Statistical risk adjustment refers to a collection of analysis methods designed to separate the relationships of outcomes with care provided from the relationship of outcomes with natural progression of disease and disability, which is critical to accurate outcome analysis. In essence, the general intent of risk adjustment is to compensate or adjust for differences in risk factors (between the agency and a comparison sample) that should be taken into consideration if outcomes are to be compared validly.

Assessments, care plans, clinical pathways, costs, and utilization of home care services have erroneously been labeled "outcomes" by various parties, creating considerable confusion. The confusion is due largely to two factors. First, as the outcomes movement has grown and become fairly pervasive, an almost inherent need has emerged to place a number of topics under the rubric of outcomes that simply do not belong there. The second factor is that at times, those who promote outcomes, give presentations on topics related to outcomes, coordinate quality improvement programs, or write on such topics have not always been clear on precisely what they mean by outcomes. Because of a rather human tendency to re-label older or more traditional ideas and methods within the context of a new or novel movement, care planning, treatment regimens, cost, and utilization have been called outcomes at times. They are *not*. OBQI is premised on a clear and practical definition of outcomes as changes in patient health status between two or more time points.

B. WHAT IS OBQI?

OASIS data items and OASIS data do not represent an end in themselves. Rather, they are the means to achieve outcome measurement and OBQI. This is an ongoing process of outcome data analysis, report generation, and activities to improve target outcomes, as shown in Figure 2.1. The process begins with the collection of uniform data (i.e., OASIS data) for the agency's patients. The data are then analyzed to produce an agency-level report showing the agency's present performance in terms of patient outcomes relative to a national sample of home care patients and comparisons of an agency's present performance in terms of patient outcomes relative to the preceding time period for the agency. Outcome reports incorporate risk adjustment through grouping or statistical methods, as appropriate. As noted earlier, risk adjustment refers to the process of compensating or controlling for the potential influence of risk factors variables that can affect outcomes. These two steps comprise the outcome analysis phase of OBQI.

FIGURE 2.1: Two-Stage OBQI Framework.



The Outcome Report produced from the analysis helps agencies to identify those outcomes that are inferior or superior relative either to the prior time period or to the national sample. Therefore, the remaining steps of OBQI, termed outcome enhancement[1], *start* with those outcomes, termed target outcomes, identified for further investigation. By selecting target outcomes, providers can focus their attention and energies for quality improvement on the care processes that produced the target outcomes. Evaluating or investigating processes of care entails reviewing the care provided for those patients who contributed to the target outcomes but is not limited to including process measures from the Process Quality Measure Report. This

[1] Appendix B to this manual contains a glossary of terms related to OBQI.

review can take several forms, ranging from informal discussions and brainstorming with agency care providers to structured clinical record reviews.

The review process results in findings that must be translated into recommendations for changing or reinforcing certain aspects of care provision. These recommendations need to be systematically documented in a written plan of action for each target outcome (usually only a few target outcomes are chosen to provide a focus for quality improvement activities). The plan of action needs to be thoroughly implemented and continually monitored, which requires a strong agency commitment to changing care delivery for each target outcome.

Subsequent Outcome Reports will indicate how well the care process changes have worked—in terms of patient outcomes. Thus, in reviewing its next Outcome Report, the agency should examine its target outcomes and the changes in those outcomes between the prior and current outcome reporting periods. When OBQI is successfully implemented and becomes a "steady-state" activity, it emerges as a powerful agency tool to continuously improve care for the benefit of patients.

C. REPORTS TO BE USED FOR OUTCOME ENHANCEMENT

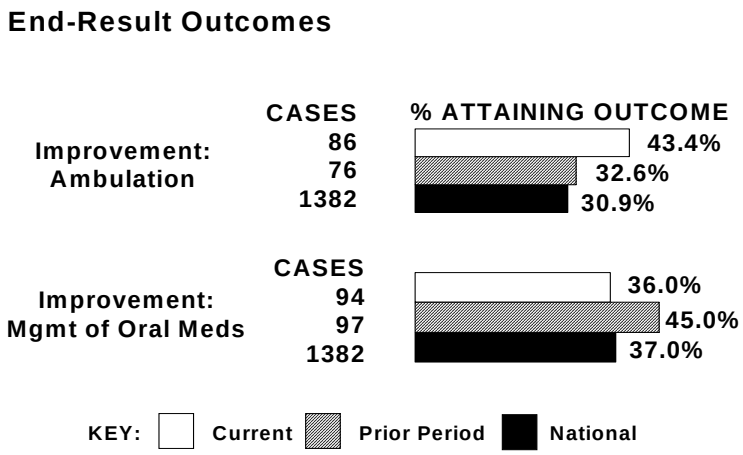
Four types of performance-related reports can be generated from OASIS data. OBQI Outcome, Potentially Avoidable Event, and Agency Patient-Related Characteristics Reports will be defined here, though two of the reports also are discussed in the manual, *Quality Monitoring Using Agency Patient-Related Characteristics and Potentially Avoidable Event Reports*. The Process Quality Measure Report is discussed in the CMS *Process Quality Measure Manual*.

First, as noted earlier, an annual report can be produced that compares an agency's outcomes to that of a national reference sample and to its outcomes for the prior year. An excerpt from an agency-specific Outcome Report is shown in Figure 2.2. Because the fundamental reason for providing home health care is to influence the well-being of patients, Outcome Reports reflect an agency's true bottom line from the perspective of the impact of care provided on patients' health. To be most meaningful, such reports must be risk adjusted to take into consideration the difference between a given agency's patient characteristics and those of the comparison group (a national reference sample or the same agency from a prior time period). (The first Outcome Report that agencies receive will not have a "prior" result.)

The Outcome Report excerpt in Figure 2.2 presents results for two outcomes for the agency to which the report corresponds: Improvement in Ambulation and Improvement in Management of Oral Medications. The numbers of patients on which findings are based for the current (i.e., this year), prior (last year), and national (reference) samples are given in the "CASES" column. The percentages of patients attaining the outcome for each group (current, prior, or national samples) are presented as bar graphs. In this illustration, the agency's performance was substantially better for the first outcome (Improvement in Ambulation) relative to both the preceding year and the national reference sample.[2] For the second outcome (Improvement in Management of Oral Medications), the agency's performance dropped substantially from the preceding year but was only one percentage point lower than the national reference sample.

[2] In the actual reports on which Figures 2.2, 2.3, and Table 2.2 are based, statistics are compared using significance tests. The significance levels for the differences are omitted in this section for ease of reading and to focus on principles rather than technical details.

FIGURE 2.2: Excerpt - Outcome Report.



Outcome Reports can be generated for a number of clinical outcomes including physiologic, functional, cognitive, and mental health outcomes as well as utilization outcomes such as hospitalization, emergency care, and discharge to community. OASIS data can be used to construct a wide variety of outcome measures applicable to the general home care population or to specific types of patients. Thirty-seven outcome measures are reported on the CMS Outcome Reports. These measures are presented in Table 2.1. The outcomes were selected on the basis of both clinical and statistical criteria. In general, these outcomes meet the following criteria:

- They display sufficient variation within the home care patient population (i.e., they are neither extremely rare nor universally common).
- They can be affected by the care provided by a home care agency.
- They are amenable to risk adjustment (i.e., risk factors are readily measured and empirically demonstrate a statistical relationship with the outcome).
- They reflect meaningful aspects of health status or quality of life for home care patients.

The specific outcome measures were finalized after intensive review of the risk models developed from the national OASIS data. Only the most scientifically sound measures are included in the reports.

TABLE 2.1: OASIS-Based Outcome Measures.

END-RESULT OUTCOMES [a]	
Clinical Status Improvement	Improvement in Anxiety Level Improvement in Behavior Problem Frequency Improvement in Bowel Incontinence Improvement in Confusion Frequency Improvement in Dyspnea[b] Improvement in Pain Interfering with Activity[b] Improvement in Speech and Language Improvement in Status of Surgical Wounds[b] Improvement in Urinary Incontinence Improvement in Urinary Tract Infection
Clinical Status Stabilization	Stabilization in Anxiety Level Stabilization in Cognitive Functioning Stabilization in Speech and Language
Functional Status Improvement	Improvement in Ambulation/Locomotion[b] Improvement in Bathing[b] Improvement in Bed Transferring[b] Improvement in Dressing – Lower Body Improvement in Dressing – Upper Body Improvement in Eating Improvement in Grooming Improvement in Management of Oral Medications[b] Improvement in Light Meal Preparation Improvement in Phone Use Improvement in Toileting Hygiene Improvement in Toilet Transferring
Functional Status Stabilization	Stabilization in Bathing Stabilization in Bed Transferring Stabilization in Grooming Stabilization in Light Meal Preparation Stabilization in Management of Oral Medications Stabilization in Phone Use Stabilization in Toileting Hygiene Stabilization in Toilet Transferring
UTILIZATION OUTCOMES	Acute Care Hospitalization[b] Discharged to Community Emergency Department Use without Hospitalization[b] Emergency Department Use with Hospitalization

[a] End-result outcomes are health status outcomes. Utilization outcomes suggest but do not unequivocally reflect health status changes (and, as a result, can be regarded as proxy or surrogate outcomes).

[b] These outcomes are publicly reported on Home Health Compare.

The second OASIS-derived report, the Agency Patient-Related Characteristics Report describes the characteristics, circumstances, disabilities, and diseases of patients admitted to an agency over the past period relative to both a national patient-related characteristics reference sample and the patient-related characteristics of the agency during a prior time period. This report can be helpful in influencing many decisions an agency makes about patient care delivery, including allocating or reallocating staff, including possibly changing staff mix, because changing patient characteristics from the preceding period may highlight the need for alternative staffing arrangements. As shown in the excerpt from the Agency Patient-Related Characteristics Report in Table 2.2, information on demographics, payer source, etc., is presented. This information can be of value not only from the point of view of resource allocation but also for areas such as marketing and striking a desired balance between managed care patients and non-managed care patients.

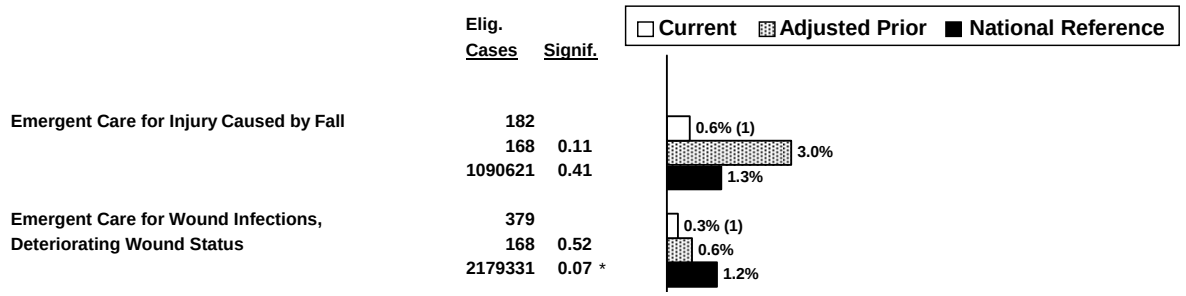
TABLE 2.2: Excerpt – Agency Patient-Related Characteristics Report.

	Current Mean	Ref. Mean	
PATIENT HISTORY			
Demographics			
Age (years)	70.75	72.78	*
Gender: Female (%)	69.4%	62.9%	**
Race: Black (%)	1.7%	10.7%	**
Race: White (%)	97.5%	85.5%	**
Race: Other (%)	0.8%	3.8%	**
Payment Source			
Any Medicare (%)	80.4%	82.6%	
Any Medicaid (%)	12.9%	14.3%	
Any HMO (%)	3.0%	5.8%	**
Medicare HMO (%)	1.3%	2.2%	
Private third party (%)	19.9%	21.9%	
Episode Start			
Episode timing = Early (%)	74.7%	78.7%	*
Episode timing = Late (%)	20.5%	14.1%	**
Physician date vs. SOC/ROC (days)	0.33	0.26	
Referral date vs. SOC/ROC (days)	1.22	1.10	

	Current Mean	Ref. Mean	
LIVING ARRANGEMENT / ASSISTANCE			
Current Situation			
Lives alone (%)	33.3%	32.4%	
Lives with others (%)	34.7%	34.9%	
Lives in congregate situation (%)	32.0%	32.7%	
Availability			
Around the clock (%)	39.0%	38.2%	
Regular daytime (%)	0.9%	3.9%	
Regular nighttime (%)	0.5%	2.0%	
Occasional (%)	22.0%	21.3%	
None (%)	37.7%	34.5%	**
CARE MANAGEMENT			
ADLs			
None needed (%)	63.4%	71.9%	**
Caregiver currently provides (%)	21.9%	16.9%	
Caregiver training needed (%)	10.0%	7.4%	
Uncertain/Unlikely to be provided (%)	3.7%	2.8%	
Needed, but not available (%)	1.0%	1.8%	

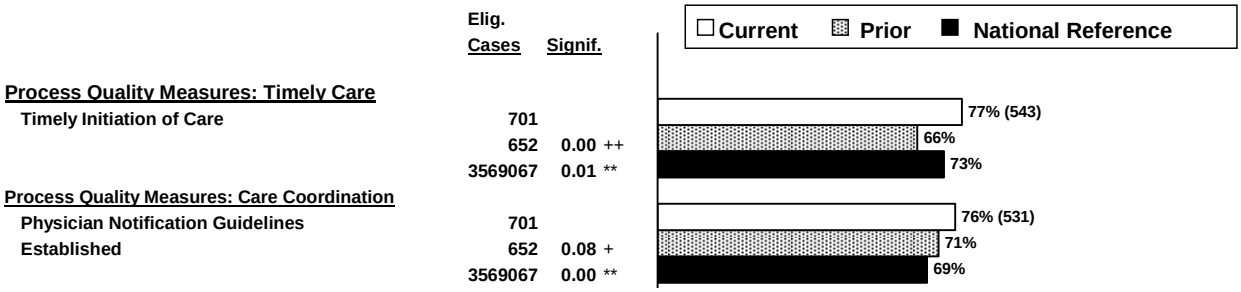
Third, a Potentially Avoidable Event Report that documents selected untoward or negative events for an agency's patients can be produced (Figure 2.3 presents an excerpt of this report). Such reports are available for each agency describing the number and the percentage of patients receiving emergent care for falls and several similar measures. In addition, agencies receive a list of all patients experiencing each untoward event. This permits agency staff to investigate the clinical records for these patients in order to determine whether the untoward event may have been avoidable with more appropriate care. Details on interpreting and using the Potentially Avoidable Event Report for quality monitoring and improvement are provided in the *Outcome-Based Quality Monitoring (OBQM) Manual*.

FIGURE 2.3: Excerpt – Potentially Avoidable Event Report.



The fourth report, the Process Quality Measure Report, provides rates of use of specific best practices for home health care. The format is similar to the OBQI and OBQM reports. However, process quality measures are not risk adjusted. Figure 2.4 provides an excerpt of a sample Process Quality Measure Report. More detail on these reports can be found in the *Process Quality Measure Manual*.

FIGURE 2.4: Excerpt – Process Quality Measure Report.



D. MOVING TOWARD OUTCOME MANAGEMENT

The original purpose of OASIS was to serve as the core data set for outcome-based quality improvement (OBQI). The OBQI approach entails collecting patient data using OASIS at regular intervals (at start of care and every 60 days until and including time of discharge). OASIS data are computerized, edited, and transmitted to a central source (the central source for Medicare is the State agency specified by CMS). An Outcome Report that compensates for differences between the agency and the comparison or benchmark group is then produced, completing the outcome analysis component of OBQI shown in Figure 2.1. As discussed, an agency selects certain target outcomes for improvement (unfavorable outcomes) or for reinforcement of excellent care processes (favorable outcomes). The care provided for the selected target outcomes is then evaluated using a variety of potential methods. (Another report produced from OASIS data, the Patient Tally Report, allows agencies to select cases/episodes for this assessment and evaluation of care.) Upon completion of the evaluation, a plan of action is documented that specifies which care processes will be changed, how they

will be changed, who will be responsible for monitoring the implementation of the change, and how the change process will be evaluated. As noted, this completes the activities of the outcome enhancement component. The impact of these activities can be determined through the next Outcome Report by assessing whether the target outcomes actually were enhanced.

Figure 2.5 highlights the main features of the OBQI outcome management model. Note that this overall approach enables agencies to incorporate resource management with outcome management for the explicit purpose of enhancing cost effectiveness. In this figure, the different typeface sizes are intentional. The magnitude of the typeface for each domain in the figure reflects its progressively greater importance. As indicated in Figure 2.5, after OASIS data are collected, they permit an evaluation of outcomes. This enables an agency to manage clinical processes that affect outcomes. Clinical process management includes those activities to encourage the use of evidence-based best practices in care delivery. In the context of assessing outcomes managing processes in this way, resource allocation and management are naturally affected. Staffing patterns, as well as frequency of services, can be altered with a clear bottom-line assessment of the impacts of such alterations on what happens to patients. As this is done iteratively over a period of months and years, quality of care can be enhanced (as we have seen in the OBQI demonstration programs), and care can be rendered more cost effective. In an era when we are experiencing considerably greater emphasis on outcomes and fewer dollars available from payers, this model of managing outcomes and subsequently costs can be of considerable value to agencies.

FIGURE 2.5: The Outcome Model.

FREQUENTLY ASKED QUESTIONS

1. I feel my agency's patient population is very unique. Will the Outcome Reports be able to take these patient characteristics into account?

Your concern highlights the importance of risk adjusting the Outcome Reports—to take into consideration the difference between a given agency's patient characteristics and that of the comparison group. Risk adjustment compensates for or controls the potential influence of patient characteristic variables (i.e., risk factors) that can affect outcomes.

2. ***How often are OBQI reports available?***

The OBQI process uses several different reports: 1) the OBQI Outcome Report compares an agency's outcomes to that of a reference sample and to its outcomes in the prior year (if applicable). When risk adjusted, this report takes into consideration the difference between a given agency's patient characteristics and the characteristics of the comparison group(s); 2) the Agency Patient-Related Characteristics Report that describes the characteristics, circumstances, disabilities, and diseases of the patients at start (or resumption) of care, length of stay, and reasons for emergency department use and hospitalization for a specified time period and compares these findings to a national reference standard as well as the HHA in the preceding time period; and 3) the Patient Tally Report that presents outcome results and patient characteristics variables for each patient whose data contributed to the Outcome Report. Additional reports include the Potentially Avoidable Event Report (which is advised for quality monitoring purposes) and the Process Quality Measure Report. These are available for download from the CASPER reporting system for HHAs. The data underlying the reports are updated monthly, and the latest reports that can be requested are for time periods ending roughly two months prior to the date of the request. For agencies with late submissions or corrections, it is possible that different results would be reported for the same time period new reports are requested after those submissions have been processed. CMS has periodically provided additional reports to assist agencies in the analysis of their outcomes, such as the trend analysis reports available in CASPER.

3. When a patient is admitted, we set goals for that patient according to his or her specific condition and situation. How can you compare outcomes between patients when the goal isn't the same for all patients?

There is considerable confusion surrounding outcomes. As the outcome movement has progressed, many topics have fallen under the category of outcomes that simply do not belong there. OBQI is premised on a clear and practical definition of outcomes as changes in patient health status between two or more time points.

According to that definition, patient goals or expected outcomes are not outcomes in OBQI. Goals are what clinicians establish (with the patient) with the hope and intention to bring the patient to a certain point in terms of health status. Goals or expected outcomes are typically highly individualized or uniquely tailored to a specific patient's plan of care, as they should be. If the patient's health status changes to indicate that the goals were met, then we have goal attainment. One care provider may set very stringent goals and another may set goals that can be fairly easily attained. It is critical to eliminate this type of subjectivity in OBQI. Therefore, actual change in health status, independently of whether subjectively determined goals are met, must be used for OBQI. If providers are compared on the basis of these types of outcomes rather than subjectively determined goals, we have a more objective standard for evaluating outcomes of care.

CHAPTER 3 – INTERPRETING OUTCOME REPORTS

A. INTRODUCTION

In the first steps of the outcome analysis phase of OBQI (collecting uniform data), an agency establishes processes to collect and transmit clean, high-quality patient data for use in computing outcomes. The conclusion of the first phase of OBQI involves CMS analyzing the data and producing several types of agency-level (aggregate) reports. These reports allow the agency to move to OBQI's second phase, which includes the use of outcome data in quality/ performance improvement (QI/PI) activities.

This chapter focuses on interpreting the OBQI reports available to agencies. The Agency Patient-Related Characteristics Report and the Potentially Avoidable Event Report are discussed in more detail in the *Outcome-Based Quality Monitoring (OBQM) Manual* and the Process Quality Measure Report is discussed in the *Process-based Quality Improvement (PBQI) Manual.* These manuals are available on the CMS OASIS Web site. The Patient Tally Reports and their use in outcome enhancement (the second phase of OBQI) are described in Chapter 5.

B. DATA ANALYSIS

A brief overview of the data analysis process is helpful for understanding Outcome Reports. Patient-level outcomes are calculated by matching each patient's OASIS data from start (or resumption) of care with data for the same patient at transfer (to an inpatient facility) or discharge time points and comparing the patient's status at the two time points. (Patients who die at home are not included in Outcome Reports.) Individual patient-level outcome data are then aggregated to the agency level and compared to a reference sample.

Variables that describe patient attributes or circumstances likely to impact health status (such as a patient's environmental or living conditions, demographics, and baseline health status data) are also computed. Individual patient-level information is aggregated to the agency level to describe the health status of all the agency's patients at start or resumption of care for the Agency Patient-Related Characteristics Report. These measures also are compared to a reference sample and to the agency's own patients from a prior time period.

These differences between the agency's patients and the comparison group (reference group or prior group) are taken into account in additional analyses to "risk adjust" many of the outcomes in an individual agency's Outcome Report. **Risk adjustment** is a statistical technique that minimizes differences between groups of patients when making comparisons. For instance, if the average age of an agency's patients is 88 years, and the average age of patients in the reference sample is 72, the age difference alone might explain why the agency's outcomes are different than the reference group outcomes. To make valid outcome comparisons between a given agency and the reference sample, it is necessary to "level playing field." Thus, risk adjustment will statistically "factor out" (or account for) differences in an agency's patients vs. the reference sample. Risk adjustment minimizes the possibility that differences in outcomes between comparison groups are due to factors other than the care provided by the agency. Section E of this chapter discusses risk adjustment in additional detail.

C. REPORTS PRODUCED FROM OASIS DATA

As noted in Chapter 2, multiple types of OASIS-based reports are available for each agency's patient sample. The four agency-level reports available include an OBQI Outcome Report, a Potentially Avoidable Event Report, an Agency Patient-Related Characteristics Report (to accompany each type of Outcome Report), and a Process Quality Measures Report. A Patient Tally Report also is available to assist HHAs in identifying patients for quality/performance improvement activities (e.g., which patients did not achieve outcomes). In addition, CMS has periodically provided additional reports to assist agencies in the analysis of their outcomes, such as the trend analysis reports available in the CASPER manual. The Outcome Report, the accompanying Agency Patient-Related Characteristics Report, and the Patient Tally Report are the primary reports utilized in OBQI. The remainder of this chapter will focus on the use of the principal OBQI Outcome Report. The Patient Tally Report and its use in OBQI are discussed in Chapter 5.

D. REVIEWING AND INTERPRETING OUTCOME REPORTS

An illustrative page from a sample Outcome Report is presented in this section in Figure 3.1. Key concepts are discussed here to aid in understanding the reports. (Appendix C provides a Section 508 compliant version of a hypothetical Outcome Report.)

The episodes of care represented in these reports are the same as all other reports based on OASIS data. Each episode of care must have a beginning (i.e., a SOC or ROC assessment) and a conclusion (i.e., a transfer or discharge assessment) to be considered a complete case. A patient who is admitted to your agency, then is transferred to an inpatient facility WITHOUT discharge, then resumes care, and is subsequently discharged, is represented as two episodes of care. One episode includes data from start of care to transfer to inpatient facility, while the second goes from resumption of care to discharge. This episode of care is not the same as a payment episode under PPS.

The report heading at the top indicates the dates of the report period (by month) and the number of cases (i.e., episodes) included for the agency, the reference sample, and the prior period. The report period is one year, ending with the month specified by your agency when requesting the reports. The number of your agency's cases includes all patients with complete episodes of care (defined as having a SOC/ROC assessment matched with a transfer/discharge assessment) during the 12-month report period. The reference cases -- the patients to whom your patients are being compared -- are composed of all patients served by home health agencies that are subject to the OASIS reporting requirement, subject to data quality screening criteria. Prior cases are those with complete episodes of care in the 12-month period preceding the requested current period.

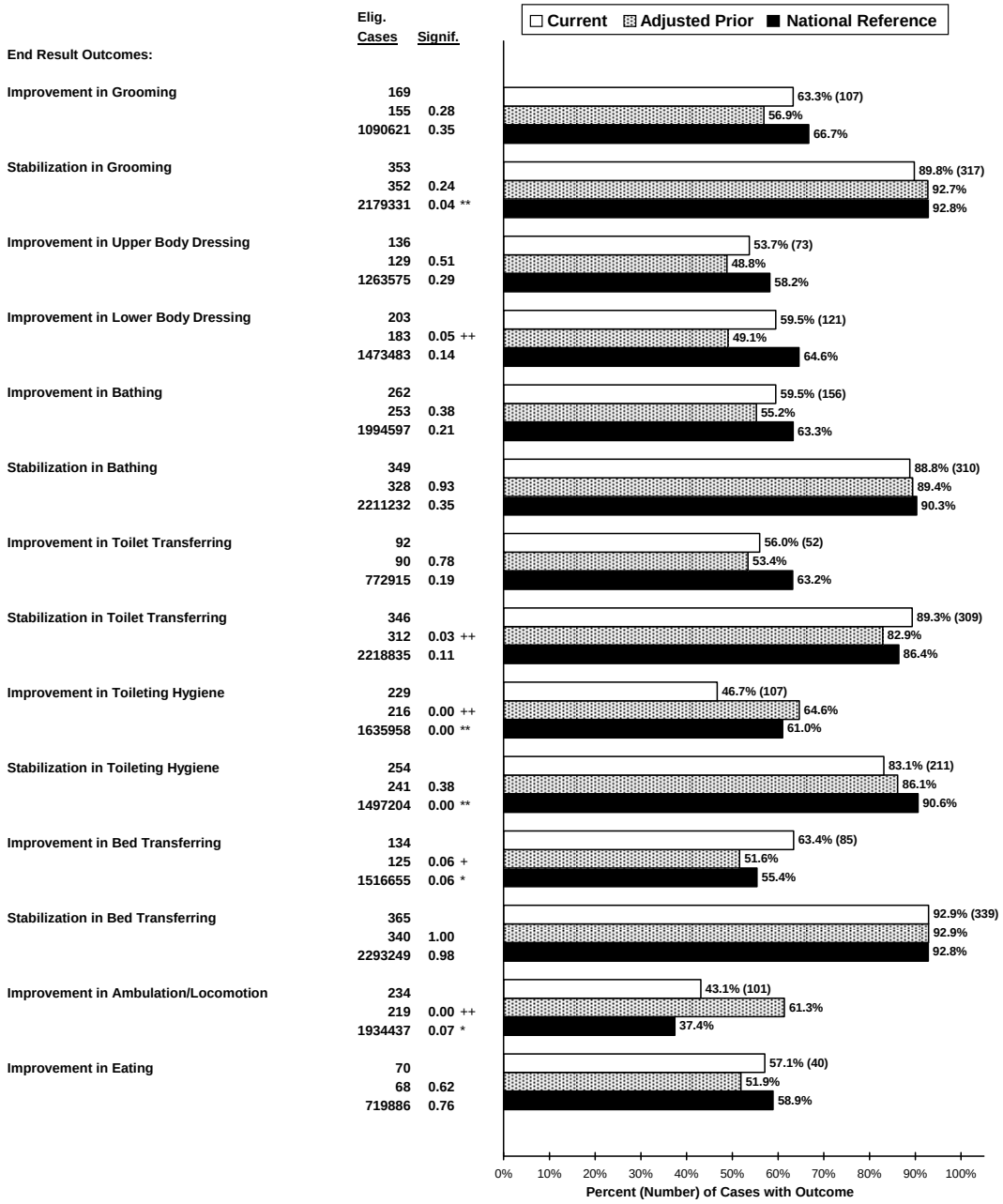
The bar in the bar graph for each outcome measure, which is labeled "adjusted prior" in the risk-adjusted report represents the outcome rate calculated from the agency's patient care episodes reported for the previous period. For example, if you request an Outcome Report for the 12-month period ending December 31, 2011, your agency's current period will include episodes of care that ended between January 1, 2011 and December 31, 2011. The prior period will include episodes ending between January 1, 2010 and December 31, 2010, and the reference period will include episodes ending between January 1, 2011 and December 31, 2011. The "reference" rate will always apply to the same period as the "current" outcome rate.

FIGURE 3.1: Illustrative Page from Sample All Patients' Risk Adjusted Outcome Report.

Agency Name: FAIRCARE HOME HEALTH SERVICES
Agency ID: HHA01
Location: ANYTOWN, USA
CCN: 007001 **Branch:** All
Medicaid Number: 999888001
Date Report Printed: 03/21/2012

Requested Current Period: 01/2011 - 12/2011
Requested Prior Period: 01/2010 - 12/2010
Actual Current Period: 01/2011 - 12/2011
Actual Prior Period: 01/2010 - 12/2010
 # Cases: Curr 402 **Prior** 374
Number of Cases in Reference Sample: 2325615

All Patients' Risk Adjusted Outcome Report



* The probability is 10% or less that this difference is due to chance, and 90% or more that the difference is real.
** The probability is 5% or less that this difference is due to chance, and 95% or more that the difference is real.
\+ The probability is 10% or less that this difference is due to chance, and 90% or more that the difference is real.
++ The probability is 5% or less that this difference is due to chance, and 95% or more that the difference is real.

Risk-Adjusted Outcome Report

Thirty-seven outcomes are displayed in the risk-adjusted Outcome Report. Titles at the top of each page indicate which section of the report is being reviewed.

Each of the risk-adjusted outcomes has a unique statistical risk model that considers differences in the agency's patient population as compared to the reference group. In addition, because the agency patient characteristics may change over time, the comparison of current period and prior period are also risk adjusted. (The process of risk adjustment is described in additional detail in Section E and Attachment C to this chapter.)

Each outcome measure has a separate **bar graph** that indicates the percentage of cases where the outcome was achieved. Three bars are presented, corresponding to the "current," "reference," and "prior" cases. (Of course, the first report an agency receives will not have a "prior" bar.) In addition to the percentage of "current" cases, the actual number of agency cases where the outcome was achieved are presented in parentheses at the end of the corresponding bar.

The current rate reflects the agency's actual or observed outcome rate for the current period. The reference rate is the observed national rate adjusted to reflect the difference between the agency's predicted rate and that of the national home health patient population. The adjusted prior rate is the prior year's observed outcome rate, adjusted by the difference between the predicted rates for the prior and current years' patients, respectively.

Types of Outcome Measures Included

The Outcome Report includes two main categories (or types) of outcome measures. The first page(s) of each report includes **end-result outcomes**, which are a variety of health status outcomes. The report includes physiologic, functional, cognitive, and emotional status end-result outcomes. The last page of each report depicts **utilization outcomes**. The utilization outcomes relate to use of health care services resulting from a change in patient health status. Occasionally these outcomes are described as proxies for significant change in health status.

Utilization outcomes are computed for the entire sample of cases. That is, all the agency's Medicare and Medicaid case episodes enter into the computation for these outcomes, since all had the potential to receive emergent care, to be hospitalized, or to be discharged to the community.

End-result outcomes, however, are only computed for those cases that were not transferred to an inpatient facility. This is why the sample size(s) for the end-result outcomes displayed in the Outcome Report typically are smaller than the sample size(s) for the utilization outcomes.

Definitions of "Improvement" and "Stabilization"

The end-result outcomes are of two types: **improvement** outcome measures and **stabilization** outcome measures. It is important to understand the definitions of each type of measure.

A patient improves in a specific outcome when the scale value for the health attribute under consideration shows an improvement in patient condition when the two time points are

compared. If the patient is less disabled or less dependent at discharge than at start (or resumption) of care, then the patient has improved.

A patient stabilizes in a specific outcome when the scale value for the health attribute under consideration shows nonworsening in patient condition when the two time points are compared. If the patient is no more disabled/dependent (that is, has not worsened) at discharge than at start (or resumption) of care, then the patient has stabilized.

For example, a patient who was disabled in bed transferring (according to OASIS item M1850) at start of care and became less disabled (but not necessarily totally independent) at discharge has improved in bed transferring. If the patient did not worsen, then he/she has stabilized. Thus, the opposite of stabilization is a patient who declines.

The actual outcome measures that correspond to improvement or stabilization simply quantify the above concepts. Consider again the measure for Improvement in Bed Transferring. The OASIS transferring scale used for data collection takes on values between 0 and 5, with higher values indicating progressively more disability/dependence. A patient whose value on this scale at start (or resumption) of care is 2, and whose value at discharge is 1, has improved in bed transferring. Likewise, the patient whose value on this same scale at start (or resumption) of care is 3, and whose value at discharge is 0, also has improved in bed transferring. When you aggregate all your agency's cases' transferring results, you determine in what percentage of cases the transferring ability improved. The remainder stayed the same or got worse.

A similar computation occurs for the measure of Stabilization in Bed Transferring. Recall the definition of stabilization as nonworsening. A patient stabilizes in bed transferring if, from start (or resumption) of care to discharge, the value on the scale moves toward 0 (reflecting improvement) or remains the same. The patient whose value on the bed transferring scale at start (or resumption) of care is 3, and whose value at discharge is also 3, thus has stabilized in bed transferring. When an agency aggregates all its patients' bed transferring stabilization results, the result is the percentage of cases that stabilized in bed transferring. The remainder worsened.

It should be noted that stabilization rates typically are higher than improvement rates. This is due to the fact that improvement rates include only those cases where patients actually improve, while stabilization rates include both cases where patients improve and those where patients stay the same (i.e., did not worsen).

Some patients are excluded from the improvement or the stabilization computations. Any patient whose status at start (or resumption) of care is optimal for the health attribute under consideration is excluded from the improvement computation. Such a case is excluded because the patient could not possibly show improvement, since he/she is as "good" as they can possibly be for this attribute. All the patients included in the improvement computation had the potential to show improvement; the percentage (and the actual number of cases) listed at the end of the bar actually did improve.

Similar to exclusions from the improvement measures, some cases are excluded from the stabilization computation. Any patient whose status at start (or resumption) of care is at the most severely impaired level for the health attribute under consideration is excluded from the stabilization computation. This patient could not possibly show worsening, so is excluded.

The improvement and the stabilization outcome measures are computed separately. That is, all the agency's care episodes are first considered for a single improvement measure, those at the most independent level of the scale are excluded, and then the improvement measure is computed. The excluded care episodes are returned to the analysis group, so that all the agency's cases are likewise considered for a single stabilization measure. Those at the most dependent level of the scale are excluded, and the stabilization measure is computed.

Cases can be excluded from one improvement measure but included in another—due to different characteristics being reflected on the specific OASIS data items. This is why the number of cases listed on the Outcome Report varies from measure to measure. However, the number of cases listed for a specific measure will never be higher than the total number of cases included in the report.

Statistical Significance

Statistical significance is relevant when outcomes are compared between sets of patients (for example, "current" vs. "reference" samples). The **statistical significance** of the comparison merely expresses the probability that any outcome difference computed between the two sets of patients would have occurred if the two groups were really the same in terms of outcomes. It may be easier to understand if you consider statistical significance the probability (measured in percentages) that the difference in outcomes between the agency "current" column and the "reference" column is due to chance. If the significance is greater than 0.10, then we consider the probability high that the difference was due to chance. Thus, your energy and attention should not be focused on those outcomes. Conversely, you should look very closely at outcomes with a significance of 0.10 or less, since the probability that the difference between the "current" outcome and the "reference" outcome is due to chance is quite low. Statistical significance of 0.10 or less is indicated with a single asterisk (for reference comparisons) or “plus” sign (for comparisons to prior time periods). Statistical significance of 0.05 or less is indicated with a double asterisk or “plus” sign.

In Appendix A of this manual you will find the *Guidelines for Reviewing the Outcome, Agency Patient-Related Characteristics, and Patient Tally Reports.* These guidelines are important to increase your understanding of the various report components. You also are strongly advised to reproduce these guidelines and to share them with any individual or groups who review your reports.

E. RISK ADJUSTMENT

Some emphasis has been placed on the fact that most of the outcomes have been "risk-adjusted." What precisely does this mean?

Assume that an agency's outcomes are inferior to those of the national reference sample. Why might that be? One explanation, of course, is that the agency's outcomes truly are inferior. A second (alternative) explanation is that the agency's patients are at greater risk for poor outcomes. To determine which of these explanations is true requires risk adjusting each agency's outcomes.

Risk adjustment statistically "factors out" (or accounts for) differences in one agency's patients vs. the reference sample or patients from the prior time period. Risk adjustment minimizes the

possibility that differences in outcomes between comparison groups are due to factors other than the care provided by the agency.

Multivariate modeling using various logistic regression techniques is the most common approach to statistical risk adjustment. This involves developing a predictive formula for a specific outcome using a national sample of patients. The predictive formula (or model) expresses a predicted outcome as a function of a combination of risk factors. The predictive model is applied to obtain a predicted outcome for each of the agency's patients. These are averaged to determine an agency-level expected outcome rate. The adjusted national reference rate is calculated by adding to the (observed) current national rate an adjustment factor that is the difference between the agency's expected rate and the national expected rate. This rate is compared to the agency's actual outcome to determine whether care was superior or inferior relative to the national rate. In this way, the patient characteristics and risk factors most closely associated with specific outcome measures are taken into account. We at least minimize (if not totally remove) the explanation that outcome differences are due to the presence of an individual agency's patients being at greater "risk" for poor outcomes. Table 3.1 lists the steps followed in risk adjusting the outcome measures.

TABLE 3.1: Steps in Risk Adjustment.

1. Determine the relationship between a given outcome measure and those patient-level attributes (risk factors) that influence the outcome. A total of 272 patient-level attributes are available from OASIS-C items and are eligible for consideration as risk factors.

2. Based on the relationships determined in Step 1, calculate predicted outcome values for each case/patient in the agency.

3. Aggregate individual case/patient predicted outcome values to determine an agency-level expected rate for the outcome.

4. Determine the agency's actual (observed) outcome rate and compare it to the expected rate.

5. Display the observed rate as the agency's "current" rate for the outcome and the adjusted national rate as the "reference" rate.

6. Display the prior observed rate, adjusted by the difference between the predicted rates for the prior and current years' patients, respectively.

It is important to recognize that each outcome measure has its own risk model. That is, the risk model for the outcome of Acute Care Hospitalization is developed separately from the risk model for the Improvement in Grooming measure. OASIS items are used in developing the risk models. Some items are used in many models, while others may be used in only a few. Predicted values are calculated each time Outcome Reports are produced. Risk adjustment models are re-estimated (re-validated, re-done) every three to five years or when new versions of OASIS are released.

Because each agency's expected outcome rate is computed for its own patients, the agency-level expected outcome rate will vary from agency to agency. Remember that this rate is what is displayed as the "reference" value on an agency's Outcome Report. Therefore, Agency A's

"national reference" value is likely to differ from Agency B's "national reference" value on the same outcome appearing in the risk-adjusted report, due to the difference in Agency A's patient characteristics compared to Agency B's patient characteristics. (In contrast, the "reference" value for the outcomes displayed in the descriptive report will be constant from one agency to another, due to the fact that this value represents the average, or mean, outcome rate across all agencies.)

Attachment C to this chapter provides additional detail on risk adjustment for those with more interest in the multivariate statistical approach. Because the risk models for each outcome are developed and validated separately with each round of analysis, the models are not included here.

F. DATA SHOCK

At times, agency staff may be surprised by the reports. It is likely that some outcomes will fall above the reference averages, some will fall below, and some will not be statistically different from the norms. It may be quite unsettling to see an outcome that is significantly worse than the reference sample, since staff correctly respond to this as reflecting actual care that was delivered to actual patients. The initial reaction when reviewing the report may be defensiveness or denial. Some of the comments agency staff may express when receiving an Outcome Report are, "There is no way that this report reflects our care...we have an excellent staff, so this must be a problem with the OBQI system," or "The reason that our reports look the way they do is that the contract staff didn't understand the data collection." Another reaction that staff sometimes experience when seeing an Outcome Report is a tendency to "explain" outcome results by emphasizing the fact that the agency's patients are unique compared to the reference sample; that is, staff members may forget that differences have been "factored out" in the risk adjustment process. Agencies may also be disappointed that their current performance improvement activity is different than expected, or if they did not improve their outcomes significantly, or there is a decline. It is important to look at the dates of the data being reported. It may take 12 – 15 months to fully see the improvement in the Outcome Reports. Watch for trending of the data with each report as well as internally monitor your best practices to know which direction your data is going.

With the receipt of Outcome Reports, there may be a tendency to blame the data. "I know that our staff is not consistent in responding to that OASIS data item, so obviously our patient outcomes can't be validly compared to others" is an example of a reaction that blames the data. In investigating care provision, such inconsistencies may be found, but we encourage agencies to look more deeply into the actual patient care that was provided.

It will be important for those leading the quality improvement efforts in the agency to try to move themselves and others past these immediate reactions and into the investigation of care processes that may have led to the outcomes. Staff may need a reminder that the report has been adjusted statistically for risk factor differences between the agency's patients and the reference sample of patients. Reinforcement about the integration of OASIS items into the assessment forms and staff training on how to report data accurately may be required. Failure to move past initial reactions can slow down or halt the outcome enhancement process, thus jeopardizing the opportunity to take an in-depth look at the clinical actions that could have influenced the outcomes and the chance to improve patient care (or reinforce excellent care behaviors).

G. PRESENTING THE OUTCOME REPORT TO STAFF

Clinicians obviously have every intention of providing high quality care to their patients, and they typically are interested in seeing concrete evidence of their success in these efforts. At the same time, they may have concerns that their care sometimes has fallen short of their own expectations, and they wonder whether these perceived "deficiencies" are revealed in the reports.

Many agencies find that presenting Outcome Reports to staff is challenging, both from an emotional perspective and from the perspective of explaining a large amount of information in a concise, clear manner. It may require explanation of concepts, definitions, and the principles of a data-driven system of outcome measurement. It will be important to clearly explain the format of the report and definitions of key terms. It may be helpful to show staff an OASIS question with multiple responses, and then demonstrate how different responses from SOC/ROC compared to Discharge illustrate stabilization, improvement, or decline. It is also helpful to ensure that they understand the composition of the reference sample as the cumulative data from the national data repository. Staff will probably need to be reminded that differences between the agency's cases and the reference sample are taken into account in the analysis of data, since staff tend to try to "explain away" differences in outcomes due to the uniqueness of the agency's patients (e.g., "our patients come home much sicker than any other agencies' patients"). Explaining risk adjustment can be very challenging. Use a simpler approach such as “golf handicaps” for every agency, so that agencies with more sick/dependent patients can be compared to other agencies with a younger, healthier population.

It is important to present reports not as a "report card," but as an opportunity to identify areas of patient care that can be improved or that are superior to the reference sample. Select a small set of outcomes to introduce to staff if the entire Outcome Report will be overwhelming. If an agency has a "mixed report" (i.e., some outcomes that are superior to the reference sample and some that are worse), present at least one outcome of each type, and select outcomes that are statistically significant. Some agencies choose to delay the report's presentation to staff until after a smaller group has already identified specific outcomes to target for the quality improvement activities. If this is true, staff should be given the reasoning behind the decision to delay the presentation of the Outcome Report. When presenting reports to staff, it is important to keep the presentation short, simple, and clear. Handouts or slides may be helpful. Above all, be patient and emphasize the important role that quality data play in a quality improvement system.

H. REPORT CONFIDENTIALITY

The outcome and patient tally reports are produced for the internal use of Medicare-certified home health agencies and for use by State Agencies for defined business purposes. The primary purpose of the reports is to improve the quality of care in agencies. The reports do not meet privacy requirements and are not releasable to the public. As a reminder, a confidentiality disclaimer is printed on the last page of each report section. CMS releases a subset of the measures to the public on the Home Health Compare website.

The patient tally reports, produced for agency use from OASIS data, are expected to remain confidential. The tally reports contain protected health information (PHI); thus, confidentiality is required by the Conditions of Participation for certified home health agencies (and for all others

required to meet the Conditions of Participation). The tally reports contain a confidentiality disclaimer on each report page.

I. SUMMARY

Outcome Reports will generate many reactions from all the individuals and groups reviewing them, including excitement, defensiveness, and confusion. In order to achieve the best results from the outcome enhancement activities, be prepared to move quickly past the initial reactions to the report and on to the steps in outcome enhancement, the quality improvement aspects of OBQI. These steps are addressed in the next sections of this manual.

FREQUENTLY ASKED QUESTIONS

1. Why is there a difference in the number of cases listed in the upper right corner of the reports than the number reported for each individual outcome?

The "# of Cases: Curr " in the upper right corner of the reports lists all the cases that were available for calculating the end result or utilization outcomes. In contrast, the number of cases listed for each outcome is the number of patients that might have achieved that outcome. For example: In the Outcome Reports for Faircare Home Health Services in Figure 3.1, there were 169 (out of the total of 402 cases) who could have shown improvement in grooming (i.e., were not fully independent at start or resumption of care) for Faircare's current period. By subtraction, this means that 233 patients (402 - 169 = 233) were fully independent in grooming at start or resumption of care; these patients were excluded from the computation of the improvement outcome measure.

2. How can the same patient be counted for both the "improved" and the "stabilized" outcomes?

A single patient is included in any outcome for which he/she meets the inclusion criteria. On the report, each outcome shows the aggregated results (for all of the agency's patients) for that particular outcome. For each outcome, you are looking at the percentage of the agency's patients that achieved that unique outcome. Stabilization outcomes include patients that improve and patients that stay the same (i.e., do not worsen). Remember that stabilization means "nonworsening."

3. Why do you use resumption of care information in the Outcome and Agency Patient-Related Characteristics Reports? Resumption of care is not the start of an episode.

For outcome reporting, we refer to care episodes, not payment episodes. Because the status of the patient, the patient's care needs, and the care provided often change after an inpatient stay, the care episode from start of care to transfer is considered separately from the care episode after the patient's return to care after an inpatient stay.

4. I really have trouble understanding "statistical significance." Where does that number come from? What does it really mean? ?

Significance testing evaluates the probability that the difference in outcomes between the agency and the reference value is chance fluctuation. Statistical methods are used to assess this probability. It may help to consider the statistical significance as a percentage. For example, look at the outcome of Improvement in Upper Body Dressing on the report in Figure 3.1. In this report, 53.7% of the agency's current patients and the 58.2% of the reference group's patients who could have improved in dressing upper body actually did show improvement. The statistical significance shows that there is a .29 (29%) probability that the difference between the agency and the reference is due to chance, or only a 71% probability that the difference actually exists (i.e., in this case, the agency's outcomes are perceived as no different than those of the reference since there is a high probability that the difference seen is due to chance).

FREQUENTLY ASKED QUESTIONS

5. I don't understand the meaning of risk adjustment. How is this actually done?

The basic purpose of risk adjustment is to ensure a fair comparison of outcomes by taking into consideration patient characteristics at the start of a home care episode that may affect the likelihood of specific outcomes during this episode. A predicted value for a specific outcome is computed based on an analysis of the relationships between that outcome and its multiple risk factors in the reference group of patients. A formula then is developed that expresses the probability of the outcome as a mathematical function of the most relevant risk factors. Using this formula for each of a specific agency's patients, the expected value for the agency's rate on a specific outcome measure can be estimated. The actual outcome rate achieved by the agency (its current value) then is compared to the national reference value, which is the national rate adjusted for the difference between the agency's expected rate and the national expected rate.

The potential risk factors used in this process are derived from OASIS data items. A total of 272 risk factors are considered as candidates for inclusion in each outcome measure's risk model. The specific risk factors actually used in risk adjusting an individual outcome are selected from this group of potential factors based on clinical meaningfulness and importance as well as statistical effectiveness. Therefore, the number and type of risk factors included in risk adjustment models differ from outcome to outcome.

Please see Attachment C in this chapter for more details on the risk-adjustment process.

6. How could we respond to hostile agency staff members who react negatively to the information on the Outcome Report?

Rather than retroactively trying to diffuse anger and hostility after presenting the entire report to staff, focus on proactive education and advance preparation to increase the likelihood that most will understand the meaning of the report when it is presented. In a large agency, it may be best to provide the preparatory education to selected staff members, including key supervisory and management personnel as well as strong "peer leaders." If those key people develop a good understanding of the contents, they can help to determine the information to be presented later to all staff and the methods of presentation. They are also likely to reinforce the education of others.

7. When I compare outcome values for my OBQI reports with those on Home Health Compare, they don't match. Why not?

Outcome rates presented on the Outcome Report and Home Health Compare are both adjusted to take into account differences in patient case mix among home health agencies. However, on the Outcome Report, the agency outcome value is the actual outcome rate achieved by that agency's patients, and the ***national value is adjusted*** *by applying a risk adjustment factor based on the difference between that agency's patients and the national home health patient population. For Home Health Compare, the actual national value is reported, and each* ***agency's outcome value is adjusted*** *using the same risk adjustment factor (in reverse) as is used on the OBQI Outcome Report. Because both reports use the same risk adjustment factor, the difference between the agency value and the national value should be similar on both reports.*

ATTACHMENT A TO CHAPTER 3

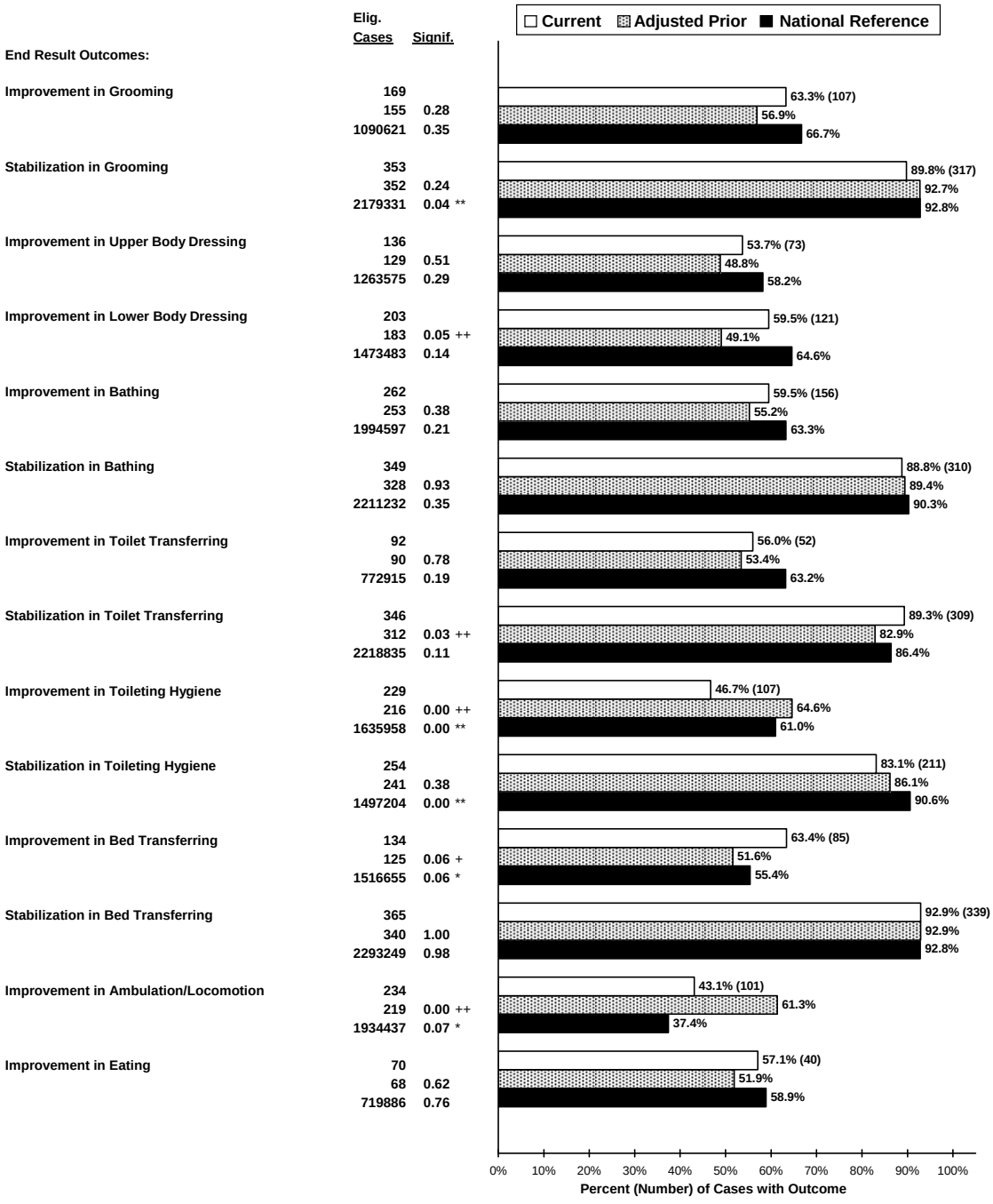
ILLUSTRATIVE OUTCOME REPORT FOR FAIRCARE HOME HEALTH SERVICES

(A Section 508 compliant version of this same report can be found in Appendix C.)

Agency Name: FAIRCARE HOME HEALTH SERVICES
Agency ID: HHA01
Location: ANYTOWN, USA
CCN: 007001 **Branch:** All
Medicaid Number: 999888001
Date Report Printed: 03/21/2012

Requested Current Period: 01/2011 - 12/2011
Requested Prior Period: 01/2010 - 12/2010
Actual Current Period: 01/2011 - 12/2011
Actual Prior Period: 01/2010 - 12/2010
 # Cases: Curr 402 **Prior** 374
Number of Cases in Reference Sample: 2325615

All Patients' Risk Adjusted Outcome Report



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Date Report Printed: 03/21/2012

Requested Current Period: 01/2011 - 12/2011
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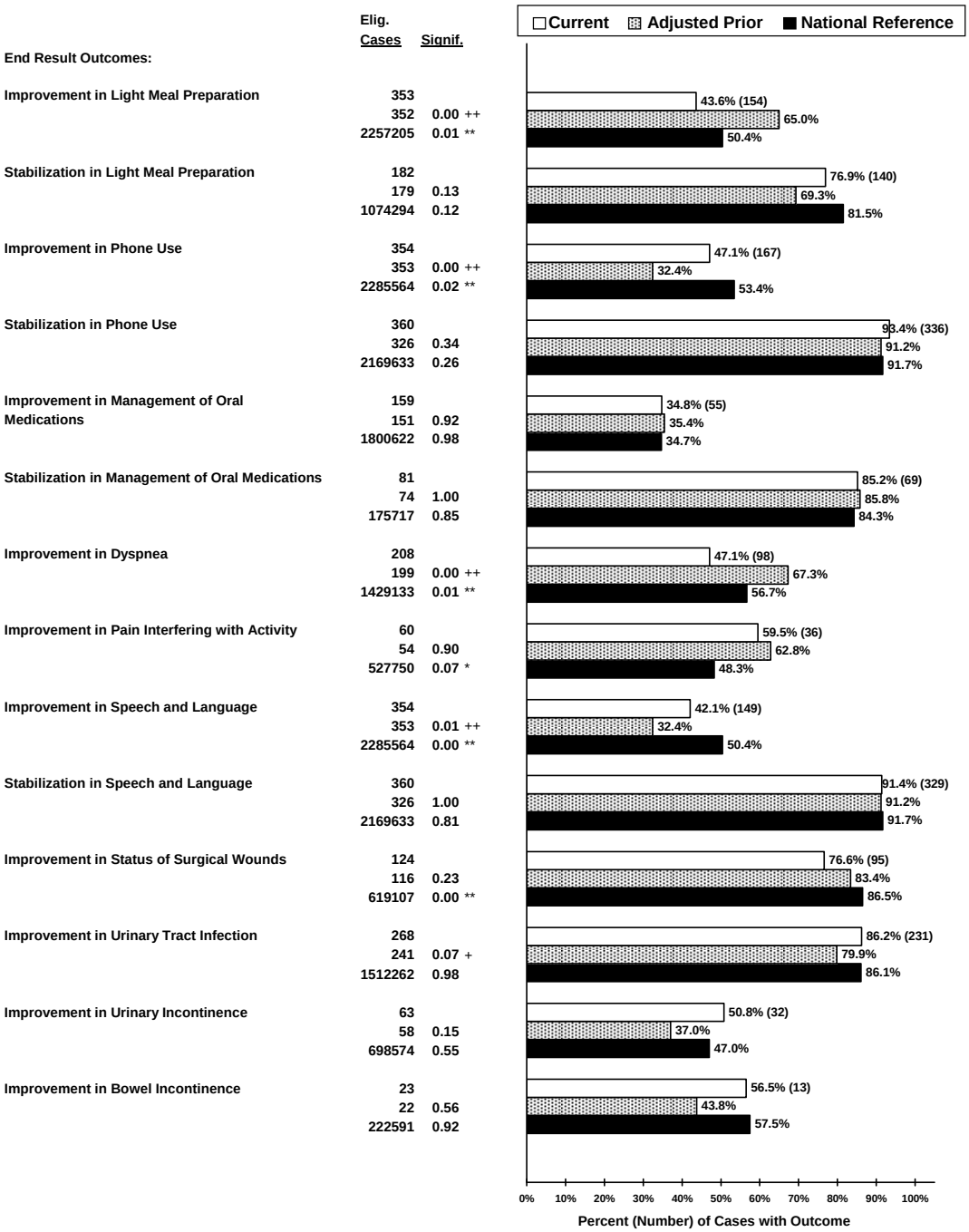
Cases: Curr 402 Prior 374
Number of Cases in Reference Sample: 2325615

All Patients' Risk Adjusted Outcome Report



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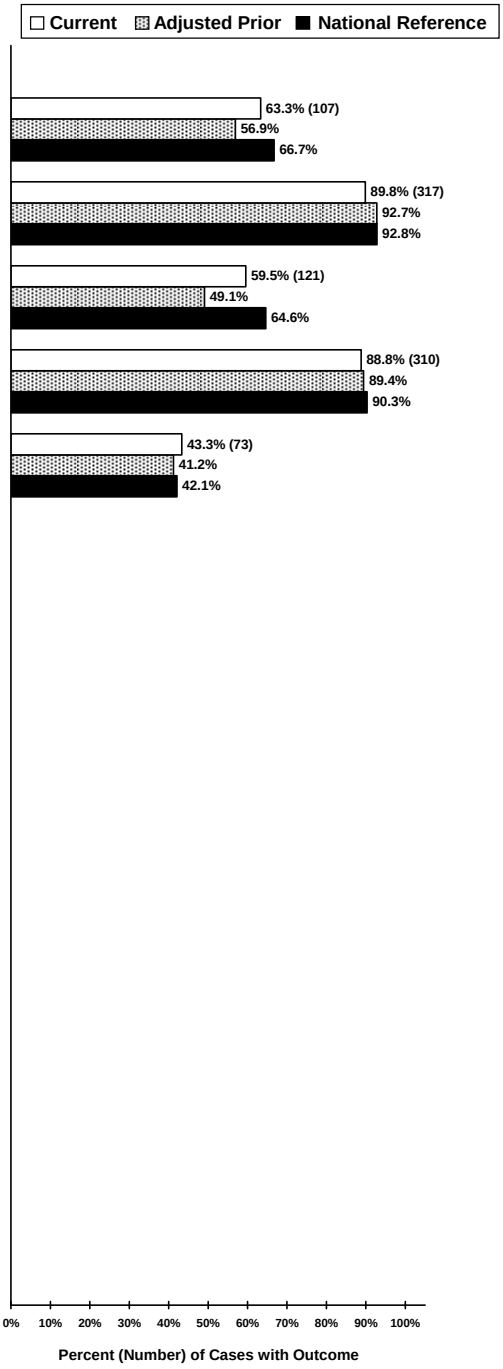
Actual Prior Period: 01/2010 - 12/2010
 # Cases: Curr 402 **Prior** 374
Number of Cases in Reference Sample: 2325615

All Patients' Risk Adjusted Outcome Report

End Result Outcomes:	Elig. Cases	Signif.
Improvement in Confusion Frequency	169	
	155	0.28
	1090621	0.35
Stabilization in Cognitive Functioning	353	
	352	0.24
	2179331	0.04 **
Improvement in Anxiety Level	203	
	183	0.05 ++
	1473483	0.14
Stabilization in Anxiety Level	349	
	328	0.93
	2211232	0.35
Improvement in Behavior Problem Frequency	169	
	155	0.81
	1090621	0.77

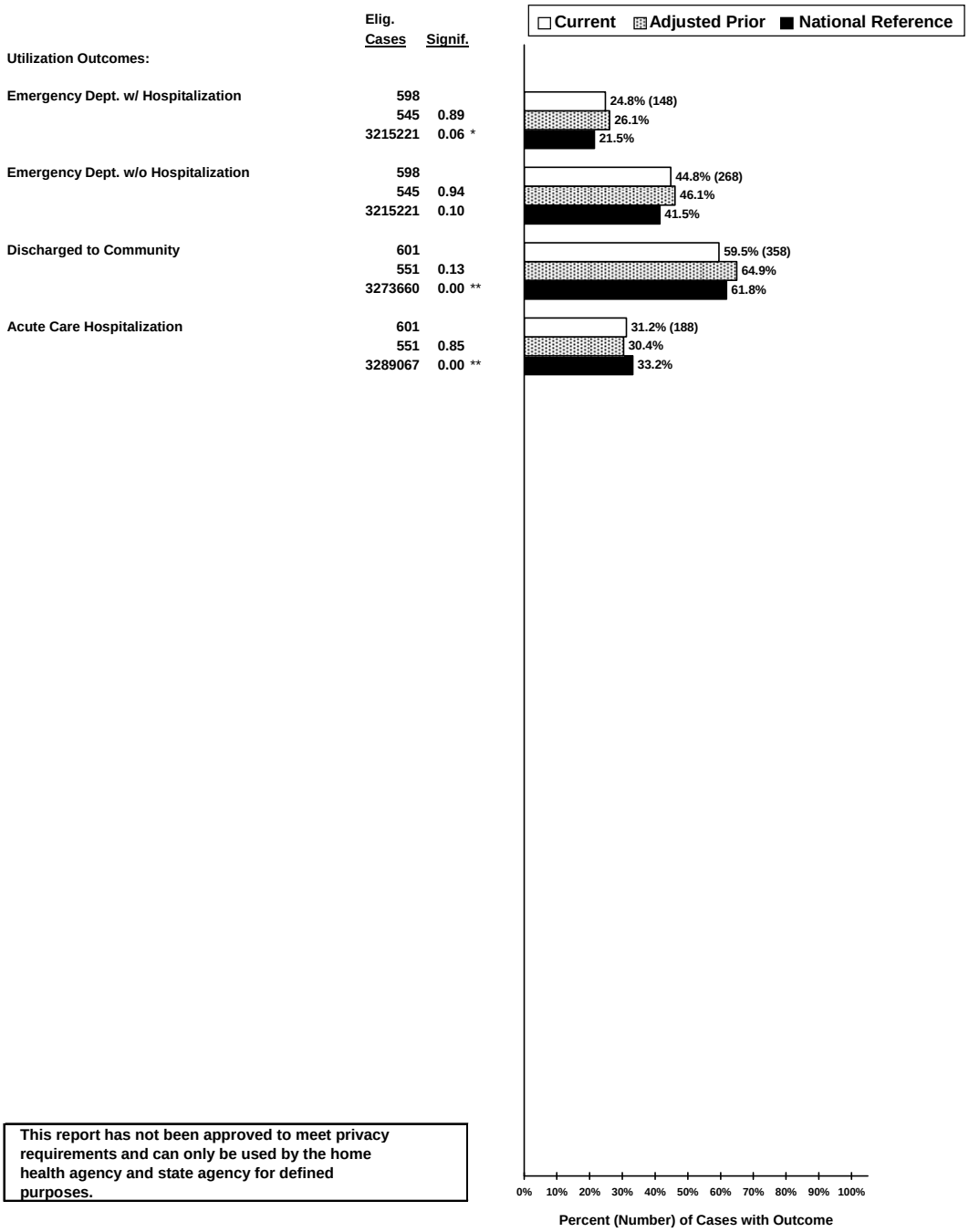


* The probability is 10% or less that this difference is due to chance, and 90% or more that the difference is real.
** The probability is 5% or less that this difference is due to chance, and 95% or more that the difference is real.
\+ The probability is 10% or less that this difference is due to chance, and 90% or more that the difference is real.
++ The probability is 5% or less that this difference is due to chance, and 95% or more that the difference is real.

Agency Name: FAIRCARE HOME HEALTH SERVICES
Agency ID: HHA01
Location: ANYTOWN, USA
CCN: 007001 Branch: All
Medicaid Number: 999888001
Date Report Printed: 03/21/2012

Requested Current Period: 01/2011 - 12/2011
Requested Prior Period: 01/2010 - 12/2010
Actual Current Period: 01/2011 - 12/2011
Actual Prior Period: 01/2010 - 12/2010
Cases: Curr 601 Prior 551
Number of Cases in Reference Sample: 3289067

All Patients' Risk Adjusted Outcome Report



This report has not been approved to meet privacy requirements and can only be used by the home health agency and state agency for defined purposes.

* The probability is 10% or less that this difference is due to chance, and 90% or more that the difference is real.
** The probability is 5% or less that this difference is due to chance, and 95% or more that the difference is real.
\+ The probability is 10% or less that this difference is due to chance, and 90% or more that the difference is real.
++ The probability is 5% or less that this difference is due to chance, and 95% or more that the difference is real.

ATTACHMENT B TO CHAPTER 3

EXERCISES IN INTERPRETING OUTCOME REPORTS

EXERCISE 1: Interpreting Outcome Reports

Directions: Using the sample *All Patients' Outcome Report* for Faircare Home Health Services found in Attachment A, answer the following questions.

Locate the end result outcomes:

1. Which end result outcome has the largest sample size of Faircare's patients?

   _____

2. Which end result outcome has the smallest sample size of Faircare's patients?

   _____

Locate the utilization outcomes:

3. Three utilization outcomes are statistically significant when compared to national reference data. Which statistically significant outcomes are unfavorable for Faircare compared to the reference? _____

4. Why is the number of cases different for the utilization outcomes (on the last page of each report) compared to the outcomes on the first page? _____

Review all outcomes:

5. How many total outcomes for Faircare are statistically significant and favorable compared to national reference data? _____

6. How many total outcomes for Faircare are statistically significant and unfavorable compared to national reference data? _____

7. How many total outcomes for Faircare are statistically significant and favorable compared to prior data? _____

8. How many total outcomes for Faircare are statistically significant and unfavorable compared to prior data? _____

EXERCISE 1 ***(RESPONSES)***

1. Stabilization in Bed Transferring, which was computed for 365 patients.

2. Improvement in Bowel Incontinence, which was computed for 23 patients.

3. Emergency Dept. w/ Hospitalization and Discharged to the Community are statistically significant and unfavorable to the reference.

4. The utilization outcomes were computed for the entire sample of patients, while the end result outcomes were computed only for those patients not discharged to an inpatient facility.

5. Four outcomes (Improvement in Bed Transferring, Improvement in Ambulation/ Locomotion, Improvement in Pain Interfering with Activity, and Acute Care Hospitalization) are statistically significant and favorable compared to national data.

6. Nine outcomes (Stabilization in Grooming, Improvement in Light Meal Preparation, Improvement in Phone Use, Improvement in Dyspnea, Improvement in Speech and Language, Improvement in Status of Surgical Wounds, Stabilization in Cognitive Functioning, Emergency Dept w/Hospitalization, and Discharged to Community) are statistically significant and unfavorable compared to national data.

7. Six outcomes (Improvement in Lower Body Dressing, Improvement in Bed Transferring, Improvement in Phone Use, Improvement in Speech and Language, Improvement in Urinary Tract Infection, and Improvement in Anxiety Level) are statistically significant and favorable compared to prior data.

8. Three outcomes (Improvement in Ambulation/Locomotion, Improvement in Light Meal Preparation, and Improvement in Dyspnea) are statistically significant and unfavorable compared to prior data.

If you have questions or are puzzled, review Chapter 3.

EXERCISE 2: Interpreting Outcome Reports

Directions: Using the sample *All Patients' Outcome Report* for Faircare Home Health Services found in Attachment A, answer the following questions.

1. What is the current reporting period? _____ to _____

Looking at the bar graphs:

2. What data collection period does the white bar refer to? _____ to _____

3. What data collection period does the gray bar refer to? _____ to _____

4. What does the black bar compare the agency to? _____

Identify an **improvement** outcome measure:

5. What is the number of cases included for the current period? _____

6. What is the number of cases included for the prior period? _____

7. What is the reference number of cases for this measure? _____

8. What is the statistical significance level (%) for the current vs. reference comparison? _____

9. What is the statistical significance level (%) for the current vs. prior comparison? _____

10. Based on the statistical significance level (%), should you concentrate on this outcome? Why or why not? If so, will you focus on the national or prior comparison?

Next, identify a **stabilization** outcome measure:

11. What is the number of cases included for the current period? _____

12. What is the number of cases included for the prior period? _____

13. What is the reference number of cases for this measure? _____

14. What is the statistical significance level (%) for the current vs. reference comparison? _____

15. What is the statistical significance level (%) for the current vs. prior comparison? _____

16. Based on the statistical significance level (%), should you concentrate on this outcome? Why or why not? If so, will you focus on the national or prior comparison?

Next, identify a **utilization** measure:

17. What is the number of cases included in the current period? _____

18. What is the number of cases included in the prior period? _____

19. What is the reference number of cases for this measure? _____

EXERCISE 2: Interpreting Outcome Reports

20. What is the statistical significance level (%) for the current vs. reference comparison? _____

21. What is the statistical significance level (%) for the current vs. prior comparison? _____

22. Based on statistical significance level (%), should you concentrate on this outcome? Why or why not? If so, will you focus on the national or prior comparison?

EXERCISE 2: Interpreting Outcome Reports

(RESPONSES)

1. The current reporting period is 01/2011-12/2011.
2. The white bar refers to Faircare's current data collection period (01/2011-12/2011).
3. The gray bar refers to Faircare's prior data collection period (01/2010-12/2010).
4. The black bar compares Faircare to the national reference sample, which consists of all OASIS data in the national repository.

(For questions 5-10, exact responses will depend on which improvement measure is chosen. For illustrative purposes, Improvement in Bathing will be used.)

5. The current period has 262 cases for Improvement in Bathing.
6. The prior period has 253 cases for Improvement in Bathing.
7. There were 1,994,597 reference cases.
8. The statistical significance level between current and a reference sample is 21% (0.21).
9. The statistical significance level between current and prior data is 93% (0.93).
10. Because the statistical significance level is higher than 10% (0.10) for both comparisons, this is not a good outcome on which to focus.

(For questions 11-16, exact responses will depend on which stabilization measure is chosen. For illustrative purposes, Stabilization in Grooming will be used.)

11. The current period has 353 cases for Stabilization in Grooming.
12. The prior period has 352 cases for Stabilization in Grooming.
13. There were 2,179,331 reference cases.
14. The statistical significance level between current and reference samples is 4% (0.04).
15. The statistical significance between current and prior cases is 24% (0.24).
16. Because the statistical significance level for the reference sample comparison is lower than 10%, this would be a good outcome on which to focus.

(For questions 17-22, exact responses will depend on which utilization measure is chosen. For illustrative purposes, Discharged to Community will be used.)

17. The current period has 601 cases for Discharged to Community.
18. The prior period has 551 cases for Discharged to Community.
19. There were 3,273,660 reference cases.
20. The statistical significance level between current and reference cases is 0% (0.0).

EXERCISE 2: Interpreting Outcome Reports

(RESPONSES)

21. The statistical significance level between current and prior cases is 13% (0.13).

22. Because the statistical significance level for the reference sample comparison is lower than 10% (0.10), this is a good outcome on which to focus.

If you have questions or are puzzled, review Chapter 3.

ATTACHMENT C TO CHAPTER 3

OVERVIEW OF RISK ADJUSTMENT METHODOLOGY USED FOR HOME HEALTH AGENCY OBQI REPORTS

1. WHAT RISK ADJUSTMENT IS AND WHY IT IS NEEDED

Outcome analysis involves comparing outcomes of patients discharged from an individual home health agency (e.g., Agency A) with the outcomes of home health patients throughout the United States. The basic purpose of risk adjustment is to ensure a fair comparison by taking into consideration patient characteristics at admission that may affect the likelihood of specific outcomes during a home health episode of care.

For example, suppose the hospitalization rate is 40% for Home Health Agency A, but the national average is 30%. Based on these statistics alone, one might conclude that Agency A provides inferior care, because a much higher proportion of its patients required hospitalization. However, suppose the average age of patients at Agency A is 15 years older than the national average and the agency has a higher proportion of patients with cognitive impairment than the national average. In this instance, it is understandable or expected that Agency A's hospitalization rate would be higher since the characteristics of its patients at admission is very different from that of the national home health patient population.

The various characteristics or conditions of patients, existing at admission, that increase or decrease the likelihood of hospitalization, are termed *risk factors* for hospitalization. *Risk adjustment* is a method of compensating for differences in patient risk factors between two samples or groups of patients. In this example, using risk adjustment helps to ensure that the comparison of hospitalization rates between Agency A and a national reference group is meaningful, despite differences in patient characteristics.

It is possible to enumerate a large number of risk factors that *might* influence a given outcome. For instance, there are 272 patient characteristics, or risk factors, derived from OASIS items, which have been found to have some influence on one or more patient outcome measures. However, many of these risk factors may not have a clinically and statistically meaningful influence on a particular outcome. The key to risk adjustment is to find those risk factors that can be empirically determined to exert the most influence on a particular outcome for most patients. In general, risk factors for an outcome are chosen first by conceptually and clinically selecting factors that appear to influence the outcome. These selected factors are then assessed empirically to determine whether their presence or absence has a substantial affect on that outcome. Typically, a limited number of risk factors (from 10 to 40) have been found to exert a meaningful influence on each of the OASIS-derived outcomes used in outcome analysis for outcome-based quality improvement (OBQI).

2. RISK ADJUSTMENT METHODOLOGY

For purposes of discussion, assume that the outcomes of patients discharged from Home Health Agency A are to be compared with the outcomes of patients from all home health agencies throughout the United States. In this case, we will refer to the patients from Home

Health Agency A as the *test group* and those from the nation as the *reference* or *comparison group*. The comparison group can be a sample selected from the nation's home care patients for a given time interval (e.g., a year), or it can consist of the entire population of home care patients for that time interval. The comparison (or reference) group used for OBQI reports generated by CMS is 100% of all patients for whom OASIS data were submitted to the CMS national repository, whose episode of care occurred within the specified time interval.

One method of risk adjustment is to produce a *predicted value* for each outcome based on an analysis of the empirical relationships between that outcome and its risk factors in a reference group sample of home health patients. For example, by statistically analyzing the relationship between a series of risk factors and the outcome, *improvement in bathing,* in a national reference group of patients, one can develop a formula expressing the probability of this outcome as a mathematical function of the most relevant risk factors. Using this formula for each of Agency A's patients, it is possible to estimate the expected value for Agency A's outcome rate for all its patients who were disabled/dependent at the beginning of their care[1]. If the actual outcome rate for Agency A's patients is higher than the expected outcome rate for Agency A, then Agency A would be considered above average on this particular outcome. Conversely, if it were lower, then Agency A would be considered below average for this outcome. Furthermore, it is possible to quantify the magnitude of the *expected versus observed* difference and compute statistical significance, i.e., the probability that a difference of a particular magnitude could occur by chance alone.

There are a variety of ways to estimate a statistical model that can be used to calculate a predicted outcome as a function of multiple risk factors. Several alternative methods were tested in the research work leading to the development of OASIS OBQI reports. The methodology ultimately selected for the demonstration program and national implementation of OBQI reporting is logistic regression. Logistic regression is a statistical technique commonly used to analyze the relationship between multiple predictors (e.g., risk factors) and a dichotomous (yes/no) outcome (e.g., improved/not-improved). Using this technique, a prediction model was constructed for each outcome based on an analysis of risk factors and outcomes using reference group data. The prediction model is a mathematical formula that reflects the empirical influence of multiple risk factors on a particular outcome.

Risk model development is a repetitive process involving the selection of risk factors according to statistical and clinical criteria reflecting their importance or meaningfulness in predicting an outcome. For each outcome, the risk factors estimated to have the most influence are identified and assessed empirically for inclusion in the prediction model. A prediction model for each outcome is developed based on a combination of risk factors determined to be both clinically and statistically relevant for that outcome. Once developed, the predictive power of each model is tested by applying it to one or more validation samples, consisting of cases set aside from the original sample used to develop the risk models.

The risk adjustment models derived from this process are then used to calculate predicted values for each patient for all outcome measures, from which expected outcome rates for each home health agency are calculated. The risk-adjusted Outcome Report presents a graphical comparison of each agency's actual or observed outcome rate with a risk-adjusted national

[1] Certain patients are excluded from the calculation of specific outcomes. For example, Improvement in Bathing is only defined for patients who were disabled/dependent in bathing at the start of the care episode. Therefore, the expected outcome rate is calculated including only those patients to whom that specific outcome measure applies.

reference rate, for each of 37 outcomes. This risk adjustment methodology also allows an agency to compare outcomes for the current year with outcomes for the prior year, adjusting for changes in agency patient mix.

3. RISK FACTORS INCLUDED IN MODEL DEVELOPMENT PROCESS

The measures that are used as potential risk factors in the risk adjustment process are derived from OASIS data items, including factors such as age, patient living situation, diagnoses, wounds, dyspnea, urinary incontinence, sensory impairments, dependence in bathing, pain, etc. The risk factors are based on the start or resumption of care assessment and therefore represent baseline patient status for the episode of care. Many of these risk factors also appear in the Agency Patient-Related Characteristics Report provided to home health agencies. At least 100 patient-level attributes will be considered as risk factors based on the OASIS-C instrument. As indicated above, the specific risk factors that are used for risk adjustment of a particular outcome measure are selected from this large pool of potential risk factors based on clinical meaningfulness and importance as well as statistical effectiveness. Therefore, the number and type of risk factors included in risk adjustment models will differ from outcome to outcome.

ATTACHMENT D TO CHAPTER 3

AGENCY STRATEGIES TO FACILITATE INTERPRETING OUTCOME REPORTS

1. The group responsible for reviewing and interpreting the Outcome Reports should be selected in advance of reviewing the report.

2. The review group will proceed much more efficiently in interpreting the Outcome Reports if they have had some training and practice before reviewing the report.

3. Training should include a discussion of definitions of key terms and concepts used in the Outcome Reports. It will be beneficial to spend adequate time identifying the different exclusions for "improvement" versus "stabilization" outcomes and the definitions of statistical significance and risk adjustment.

4. Before conducting practice reviews of sample reports, carefully go through the guidelines for reading the reports, identifying the meaning of each component of the report.

5. Practice reviews will acquaint the group with any new terminology and will help prepare them for the emotional responses they (and staff members) are likely to experience when reviewing their own Outcome Report.

6. Review group members will likely need to remind each other frequently that most outcomes have been risk adjusted, so differences cannot just be "explained away" as being due to differences between the agency's patients and the reference group.

7. It is important for this group to spend some time determining how to prepare the agency staff for review of Outcome Reports.

    - When should the first training for staff be conducted?
    - Should presentations occur at smaller meetings or in "all staff" meetings?
    - Should the full report be presented immediately when it becomes available or after target outcomes have been selected and can be reported?
    - Exactly what information should be presented?
    - Who should do the presentations?
    - What staff reactions are likely to occur? How should these be handled in a positive, productive way?
    - What instructional methods will be used for the presentation (e.g., sample reports, audio-visuals, etc.)?

CHAPTER 4 – SELECTING TARGET OUTCOMES

A. INTRODUCTION

As noted earlier, obtaining your Outcome Report concludes the first phase of OBQI. The second phase, called **outcome enhancement**, addresses the question, "How can patient outcome data be used to improve the care provided by my agency?" During this phase, it is necessary to identify specific areas for follow-up, conduct an investigation to determine causative factors for the outcome of interest, and determine how to follow up on findings through developing and implementing a plan of action. Subsequent Outcome Reports will allow evaluation of the impacts of the action plan in terms of patient outcomes (i.e., did they improve, stay the same, decline?).

The specific steps in outcome enhancement are:

- selecting specific outcomes from the risk-adjusted or descriptive Outcome Reports;
- evaluating the care that produced these outcomes in your agency;
- developing a plan of action to improve care (or to reinforce care where outcomes are superior to the reference); and
- implementing and monitoring the plan of action in the agency.

This chapter focuses on the first of these steps—the selection of a small number of outcomes (termed **target outcomes**) for further investigation by agency staff. Later chapters of the manual introduce techniques for investigating specific aspects of care corresponding to the selected outcome(s) and describe how to summarize findings and to develop a plan of action to improve deficient care behaviors or to reinforce excellent care practices.

B. SELECTING OUTCOMES FOR FURTHER INVESTIGATION

Outcome Reports may contain several outcomes that agency staff strongly desire to investigate further. A careful review of the care associated with a specific outcome will occur in the next outcome enhancement step (termed the process-of-care investigation). It is important to limit the initial outcome enhancement activities to one or two outcomes. This allows sufficient time to conduct a more comprehensive review of the outcomes that have been selected and also to take a more focused approach to quality improvement activities.

Several criteria should be considered when making a decision on which outcome(s) to investigate. The following criteria should be utilized to select a target outcome for the subsequent investigation of care provision. Before applying the criteria, you may first want to consider the results of your prior outcome enhancement activities by assessing the differences between “current” and “prior” outcomes. If your agency would like to continue to focus on a target outcome, that decision may supersede the criteria described in this section. However, when selecting a new target outcome, the following criteria should be applied.

Criteria for Selecting Target Outcomes for the Process-of-Care Investigation.

1. Statistically significant outcome differences
2. Larger magnitude of the outcome differences
3. Adequate number of cases
4. The actual significance levels of the differences
5. Importance or relevance to your agency's goals
6. Clinical significance

1. *Statistically Significant Outcome Differences*: The first criterion that should be applied is the one of statistical significance—is there a statistically significant difference between the agency's performance on a specific outcome and that of the reference group (or prior performance)? Unless statistical significance can be demonstrated for a difference between the current sample of cases and the comparison sample, any “apparent” difference between the groups being compared may be nonexistent. Therefore, it is best to select only outcomes with statistically significant differences between groups for the subsequent investigation of care provision. As noted earlier, we recommend a significance level of $p \leq 0.10$ (i.e., statistical significance no higher than the 0.10 level) except under extenuating circumstances as discussed under criterion 4 below. If no statistically significant differences exist, the other criteria for selecting outcomes can be considered. Criterion 4, which deals with the actual significance level, should not be overlooked in such cases. If more than three outcomes show significant differences, additional criteria should be applied to narrow the target outcomes to a maximum number of two or three. On the Outcome Reports, these statistically significant outcomes are easily detected -- they have single or double asterisks (* or **) in the "Signif." column (for national reference comparisons) or single or double “plus” signs for comparisons to prior time intervals (+ or ++).

2. *Larger Magnitude of Outcome Differences*: Various factors influence the statistical significance of outcome differences. Two of the most influential factors are the actual extent or size of the underlying outcome difference in the two populations being considered (e.g., agency's cases versus a national reference sample of all patients in the United States) and the sample sizes. If sample sizes are quite large, it is possible for a relatively small outcome difference to be statistically significant. Therefore, in addition to statistical significance the actual magnitude of the outcome difference should be examined.

   The magnitude of the differences is assessed by reviewing the actual percentage of patients achieving the outcome in both the current and reference groups. For example, an outcome difference of two percentage points between groups in terms of hospitalization rates, although possibly statistically significant if sample sizes are large enough, is not as important as a difference of 10 (or more) percentage points. Similarly, even if both are statistically significant, an outcome difference of three percentage points for the measure of Improvement in Bathing may be far less important to investigate than a difference of 15 percentage points for Improvement in Bed Transferring. In short, statistical significance should be considered a necessary condition for selecting target outcomes, but by no means is it sufficient by itself. The actual magnitude of the outcome difference should be

taken into consideration as well as other criteria such as clinical relevance and importance to the agency.

3. *Adequate Number of Cases:* Also related to the issue of sample size is the fact that an extremely small sample size can result in an artificially large (or small) percentage of patients who achieve (or do not achieve) the outcome. For example, in a sample of 10 eligible cases, a change of only one case will cause a 10% change in the observed outcome rate. For this reason, it is recommended that at least 30 eligible cases be represented in the outcome computation when evaluating potential target outcomes. Remember that the number of cases for a specific outcome is located in the center column of the Outcome Report, between the name of the specific outcome measure and its associated bar graphs. Aside from the total number of cases needing to be greater than 30, no other specific case numbers are required to consider an outcome as a candidate for further investigation.

4. *The Actual Significance Levels of the Outcome Differences*: Particularly in those instances where Outcome Reports have no statistically significant differences at the 0.10 level (this can and does happen), be aware that the actual significance level is important. For example, in comparing outcomes for an agency relative to a national reference sample, the difference in Improvement in Dyspnea might have a significance level of 0.52, while the difference in Improvement in Lower Body Dressing is significant at the 0.12 level. Neither of these significance levels is 0.10 or lower, and neither would be asterisked on an Outcome Report. Nevertheless, the significance level for the outcome of Improvement in Lower Body Dressing is considerably smaller (i.e., closer to the significance level cutoff of 0.10). In this case, it is much more probable that an actual or underlying difference exists for the outcome of Improvement in Lower Body Dressing than for Improvement in Dyspnea. Therefore, it is more logical to select the dressing outcome as a target outcome.

   On the other hand, if two outcomes produce significance levels that are nearly the same, other criteria should be taken into consideration in deciding between them as target outcomes (of course, it may be appropriate to select both). It is never recommended to select target outcomes whose differences are significant at levels greater than 0.25; it is simply too probable that there really is no underlying difference between the agency's outcome rate and that of the comparison group in such situations.

5. *Importance or Relevance to Your Agency's Goals*: In view of an agency's overall goals or the specific objectives for the QI program, certain outcomes may assume greater importance than others for further investigation. For example, suppose a particular agency provides a much higher proportion of wound care than most other types of care. For purposes of both patient well-being and marketing, this agency may be seeking to attain excellent outcomes for wound care patients. In this case, the agency QI staff might choose to investigate (and either remedy or reinforce) the care associated with wound outcomes rather than those of functional status outcomes, assuming both types of outcomes yielded statistically significant differences of roughly the same order of magnitude. Alternatively, a new program to involve home health aides in the agency QI process might be under consideration or might have been implemented recently. In this case, agency staff might choose to investigate a functional status outcome as the target outcome because aide care is perceived to affect such outcomes more directly.

6. *Clinical Significance*: Two considerations are important in the context of clinical significance of outcome differences. First, if the outcome difference points to potentially serious clinical problems in quality of care, such outcomes have important clinical ramifications for immediate remediation. Second, it may be that the clinical focus is on caring for certain types of patients because of payer mix, the community served, or the nature of referrals. Depending on the agency's patient characteristics, the agency can focus on specific outcomes perceived to be important for dominant patient types. For example, if an agency has a high proportion of orthopedic patients, it may wish to investigate the outcome of Improvement in Ambulation. If it has a high proportion of patients with chronic impairment in personal care activities, it might choose the outcome of Stabilization in Bathing.

Apply the criteria for selecting target outcome(s) in the order presented above. Statistical significance is a primary condition for selecting target outcomes. In those instances where no outcome differences are statistically significant, an agency should pass directly to other criteria in choosing its target outcomes for further investigation. Even in this case, the agency should always examine significance levels and attempt to select as target outcomes those with significance levels that are smaller (i.e., closer to 0.10). In considering outcomes for which differences are statistically significant, the actual magnitudes of the outcome differences are important. Focus on large differences rather than small ones. Be sure that at least 30 cases are included in the outcome computation for a potential target outcome. If it appears that a serious problem exists in terms of a particular outcome being markedly inferior, this outcome clearly should be chosen as a target outcome—assuming the difference is statistically significant. The other criteria that pertain to relevance to agency's goals and clinical significance should be taken into consideration in the context of statistical significance and magnitude of the outcome differences. That is, when two or more outcomes are statistically significant and the magnitudes of the differences are roughly comparable, these additional criteria can be useful.

Although the imperative is not as strong as exists when outcomes are unfavorable to the reference, you may also consider as a target outcome one that reflects substantially superior performance (again, where the difference is statistically significant). In this case, agency staff will be interested in reinforcing aspects of care provision that have led to the exemplary outcome results. It has been observed that agencies often have more difficulty reinforcing superior outcomes than they do in improving less favorable outcomes.

When an agency receives subsequent OBQI reports, its outcomes will be compared to reference outcomes and to its own patients from the previous time period. While comparing outcomes to an external reference group will continue to be important, comparing agency's outcomes for the current time period to a prior time period will actually be more useful for quality improvement purposes. These comparisons enable agency staff to track outcomes over time, allowing evaluation of the impact of performance improvement activities or the influence of external factors in terms of patient outcomes. For instance, one agency measuring outcomes underwent a significant administrative restructuring, including the elimination of the QI Coordinator position, between Outcome Reports. Patient outcomes were significantly poorer after restructuring. Thus, the agency decided to reinstate the QI Coordinator position in order to maintain a strong CQI program. Ongoing measurement of outcome data allows the agency to evaluate their administrative decisions.

C. USING THE AGENCY PATIENT-RELATED CHARACTERISTICS REPORT TO ASSIST IN TARGET OUTCOME SELECTION

As described in Chapter 2, an Agency Patient Related Characteristics Report is a table that indicates how the patient-related characteristics of one home health agency compare to a national reference sample (and to the patient-related characteristics of the agency itself at an earlier time point). Agency patient-related characteristics refer to the patients for whom a home health agency provides care and provides a picture (or snapshot) of what a home health agency's patients look like at the beginning of a care episode. (The beginning of a care episode is marked by either a start of care or a resumption of care following an inpatient stay.) The report also includes information collected at transfer/discharge/death at home (e.g. length of stay). At the present time, the report is a picture of only Medicare or Medicaid patients since these are the only patients for whom agencies are transmitting OASIS data.

The Agency-Patient Related Characteristics Report can assist an agency to prioritize its potential target outcomes for consideration. If an agency, for example, has a high percentage of patients with musculoskeletal diagnoses at start or resumption of care, agency staff may be more inclined to choose a functional outcome than some physiologic outcomes. In other words, the Agency-Patient Related Characteristics Report assists in determining the clinical significance of specific outcomes.

Additional information on the Agency-Patient Related Characteristics Report, including data sources for some of the items, can be found in Appendix A of this manual. Changes in agency patient characteristics from one year to the next are considered when risk adjusting outcomes between the two years. Because the patient episodes included in the Agency-Patient Related Characteristics Report for the adverse event outcomes are defined slightly differently than are those for the risk-adjusted and descriptive Outcome Report, your agency should access the corresponding Agency-Patient Related Characteristics Report whenever reviewing and interpreting its Outcome Report.

D. WHO IN THE AGENCY SHOULD SELECT THE TARGET OUTCOMES?

When an agency is preparing to receive its Outcome Report, it often questions which agency staff members should be involved in the selection of target outcomes. Because the decision regarding target outcomes is likely to impact other agency decisions and resource allocation over the next several months, many agencies choose to involve their management group in the selection process. Agencies often also desire the participation of their designated quality improvement staff members. If the agency's management group is large, however, assigning the task to the entire group can be unwieldy. In this case, designating five or six key individuals to be part of this group allows the review and analysis of the reports to proceed more effectively. It can be beneficial to include at least one therapist in the group. This subgroup then can make recommendations to the entire management team for ratification. In a smaller agency, the entire management team may comprise this group.

Once the target outcomes are selected, agencies often share this information with the full staff, explaining the rationale in terms of the selection criteria. Some agencies use this opportunity to request endorsement of the target outcome selection from the staff. This serves to build staff buy-in to the outcome enhancement process from the start. After the target outcomes are

chosen, some agencies request volunteers from the entire staff to participate in the subsequent investigation of care that produced the outcomes.

Note that two presentations to staff regarding the Outcome Report have been mentioned thus far—a presentation of the Outcome Report and a presentation of the target outcome(s). Agencies may choose to do these presentations together rather than as two separate events. Additional discussion of group membership for target outcome selection is found in Chapter 8 of this manual; more information on training of agency staff in the Outcome Report and target outcome selection is included in Chapter 9.

E. TIMELINE FOR SELECTING TARGET OUTCOMES

As the first step in the outcome enhancement process, the selection of target outcomes must occur in a timely manner before any other activities can begin. Agencies that have successfully enhanced their outcomes on the next report have demonstrated their ability to move through the steps of the process without undue delay. It is important to recognize that care delivery cannot be modified until after the suggested changes are identified, meaning that the outcome enhancement activities are complete. Only patients whose care episodes occur after these activities are finished are likely to show any difference in outcomes. The longer it takes to complete the outcome enhancement activities, the less likely it is that a change in outcomes will appear in the next Outcome Report.

An effective time frame to use as a goal is for the target outcome(s) to be selected within two weeks of the reports' availability. To meet this expectation, the target outcome selection group must know how to interpret the reports and have an understanding of the criteria to be utilized in selecting the outcome(s) for further investigation. This presupposes that training has occurred for this group; the content of such training is discussed further in Chapter 9.

F. SUMMARY

Choosing an appropriate target outcome is a key first step toward enhancing outcomes for patients. Appropriate choices should be made to increase staff buy-in and participation in the outcome enhancement process, in addition to maximizing the ability to successfully enhance the patients' outcomes. Following the criteria for selecting target outcomes will assist agency staff in the latter, while keeping them informed of the steps will provide impetus for the former. By completing this step in a timely manner, an agency can move efficiently to the next steps in the outcome enhancement process.

FREQUENTLY ASKED QUESTIONS

1. How can we prepare our management personnel and staff members for understanding Outcome Reports and selecting target outcomes? It really seems overwhelming.

Don't try to do it all at once. In Attachment C at the end of this chapter, you will find suggestions for how to approach the selection of target outcomes. Additionally, Chapters 8 and 9 have much more information on assembling effective teams and training your staff. Begin by laying good, basic groundwork such as explaining the purpose of OBQI and the intent of the requirements for OASIS data collection and transmission. Much of that information can be found in Chapter 2 of this manual; Chapter 9 contains guidelines for training agency personnel that your agency may find useful. Key management personnel may need a more in-depth education than other staff. Creative agencies have found many ways to communicate the concepts to their staffs. Experience with demonstration agencies showed that clinicians are far more receptive when they understand the background, research, concepts, and regulatory mandates that have contributed to the development of the OASIS data set and OBQI. Once they begin to understand the background, you can proceed to introduce the concepts of outcome reporting, interpretation, and selection of target outcomes.

2. I can understand why it is best to act very quickly on the Outcome Report, but with everything else we have to do, it seems impossible to get everyone educated and the target outcomes selected in only two weeks. Do you have any suggestions?

The real key to being able to implement outcome enhancement quickly and efficiently is adequate preparation BEFORE the Outcome Report is available to your agency. Consult Attachment C of this chapter and Chapters 8 and 9 of this manual and begin to plan immediately. Make it your goal to have a core group of staff identified and educated prior to accessing the reports and then proceed to do as much staff training as possible before you have the reports.

ATTACHMENT A TO CHAPTER 4

EXERCISE IN SELECTING TARGET OUTCOMES

EXERCISE 1: Selecting Target Outcomes

Directions: Refer to the illustrative *Outcome Report* for Faircare Agency (p. 4.9-4.12). Review the report. Taking into consideration the target outcome selection criteria, select a target outcome and answer the following questions.

1. What outcome would you choose as a target outcome? _____

2. Why did you choose this outcome? **(Check all that apply.)**

   ☐ a) This outcome had a statistically significant difference from the reference sample or prior data

   ☐ b) This outcome had a large magnitude of difference from the reference sample or prior data

   ☐ c) I considered the number of cases in the samples

   ☐ d) This outcome had a statistical significance value closer to 0.10 and less than 0.25, even if it wasn't statistically significant

   ☐ e) This outcome is relevant to Faircare Agency's goals

   ☐ f) This outcome is clinically significant

3. If you chose **a**, what was the significance level? _____

4. If you chose **b**, what was the magnitude of difference? _____

5. If you chose **c**, how does this relate to your selection? _____

6. If you chose **d**, what was the probability that the difference was due to chance?

   _____

7. If you chose **e**, what were your reasons? _____

8. If you chose **f**, what were your reasons? _____

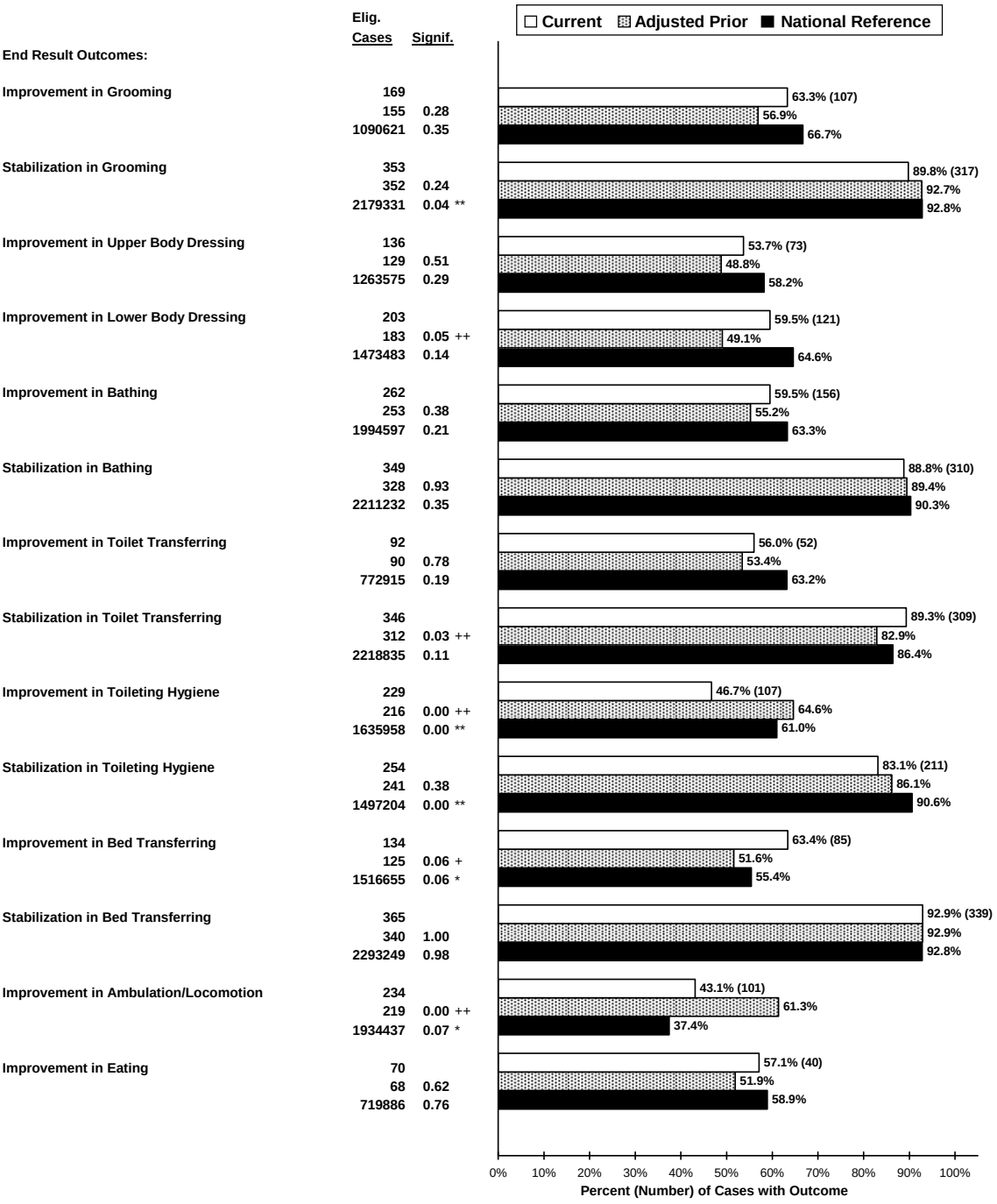
9. How many target outcomes would you have liked to select? _____

These exercises can be used as a "warm-up" activity for the Target Outcome Selection Team. If team members find it difficult, refer back to Chapters 3 and 4 before proceeding to review your agency's Outcome Report.

Agency Name: FAIRCARE HOME HEALTH SERVICES
Agency ID: HHA01
Location: ANYTOWN, USA
CCN: 007001 **Branch:** All
Medicaid Number: 999888001
Date Report Printed: 03/21/2012

Requested Current Period: 01/2011 - 12/2011
Requested Prior Period: 01/2010 - 12/2010
Actual Current Period: 01/2011 - 12/2011
Actual Prior Period: 01/2010 - 12/2010
 # Cases: Curr 402 **Prior** 374
Number of Cases in Reference Sample: 2325615

All Patients' Risk Adjusted Outcome Report



* The probability is 10% or less that this difference is due to chance, and 90% or more that the difference is real.
** The probability is 5% or less that this difference is due to chance, and 95% or more that the difference is real.
\+ The probability is 10% or less that this difference is due to chance, and 90% or more that the difference is real.
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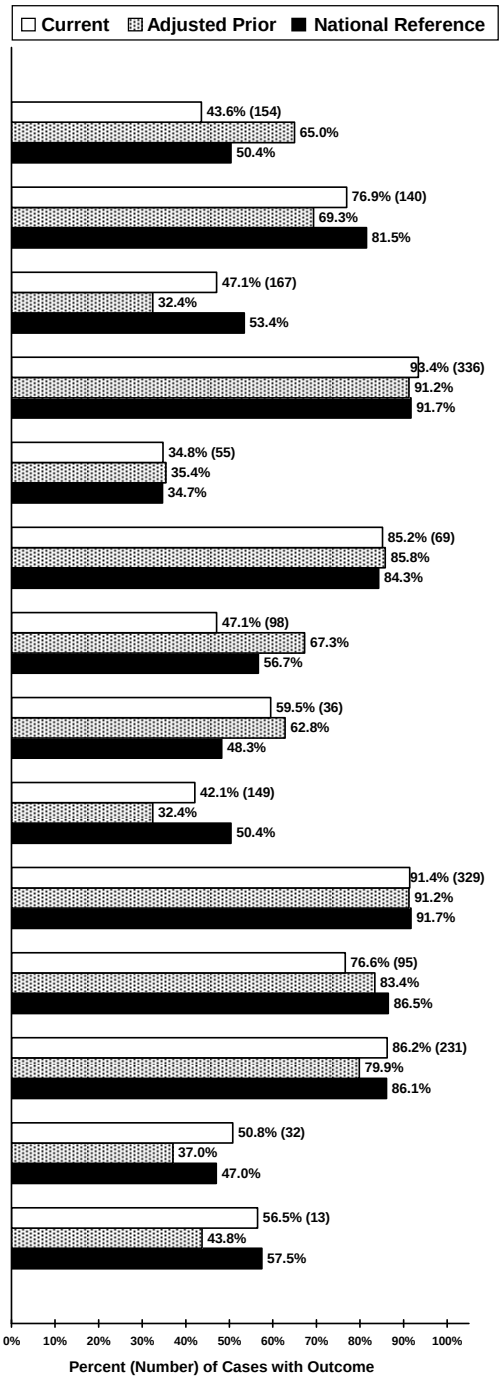

	Elig. Cases	Signif.	
End Result Outcomes:			
Improvement in Light Meal Preparation	353		43.6% (154)
	352	0.00 ++	65.0%
	2257205	0.01 **	50.4%
Stabilization in Light Meal Preparation	182		76.9% (140)
	179	0.13	69.3%
	1074294	0.12	81.5%
Improvement in Phone Use	354		47.1% (167)
	353	0.00 ++	32.4%
	2285564	0.02 **	53.4%
Stabilization in Phone Use	360		93.4% (336)
	326	0.34	91.2%
	2169633	0.26	91.7%
Improvement in Management of Oral Medications	159		34.8% (55)
	151	0.92	35.4%
	1800622	0.98	34.7%
Stabilization in Management of Oral Medications	81		85.2% (69)
	74	1.00	85.8%
	175717	0.85	84.3%
Improvement in Dyspnea	208		47.1% (98)
	199	0.00 ++	67.3%
	1429133	0.01 **	56.7%
Improvement in Pain Interfering with Activity	60		59.5% (36)
	54	0.90	62.8%
	527750	0.07 *	48.3%
Improvement in Speech and Language	354		42.1% (149)
	353	0.01 ++	32.4%
	2285564	0.00 **	50.4%
Stabilization in Speech and Language	360		91.4% (329)
	326	1.00	91.2%
	2169633	0.81	91.7%
Improvement in Status of Surgical Wounds	124		76.6% (95)
	116	0.23	83.4%
	619107	0.00 **	86.5%
Improvement in Urinary Tract Infection	268		86.2% (231)
	241	0.07 +	79.9%
	1512262	0.98	86.1%
Improvement in Urinary Incontinence	63		50.8% (32)
	58	0.15	37.0%
	698574	0.55	47.0%
Improvement in Bowel Incontinence	23		56.5% (13)
	22	0.56	43.8%
	222591	0.92	57.5%

***** The probability is 10% or less that this difference is due to chance, and 90% or more that the difference is real.
****** The probability is 5% or less that this difference is due to chance, and 95% or more that the difference is real.
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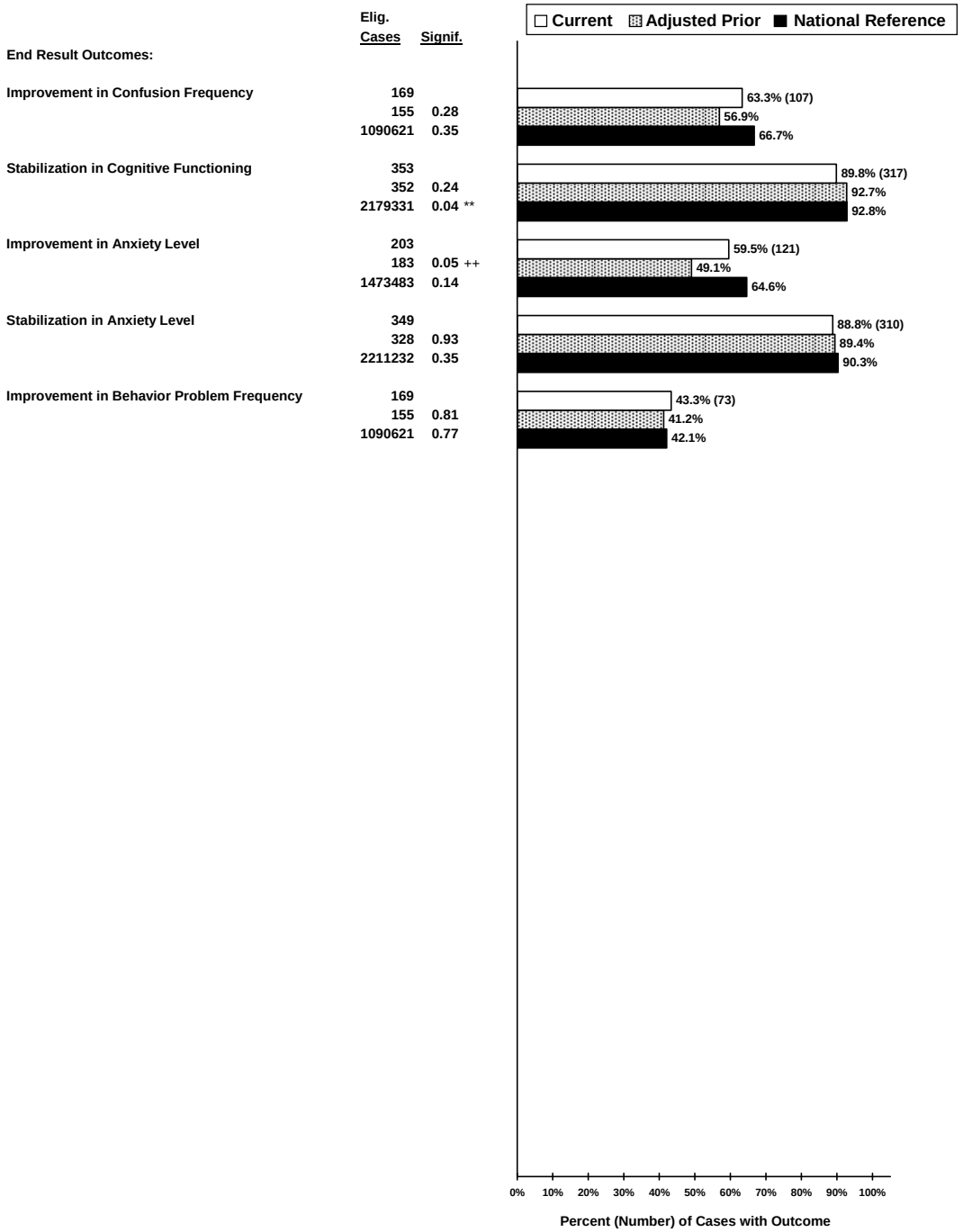
Cases: Curr 402 Prior 374
Number of Cases in Reference Sample: 2325615

All Patients' Risk Adjusted Outcome Report



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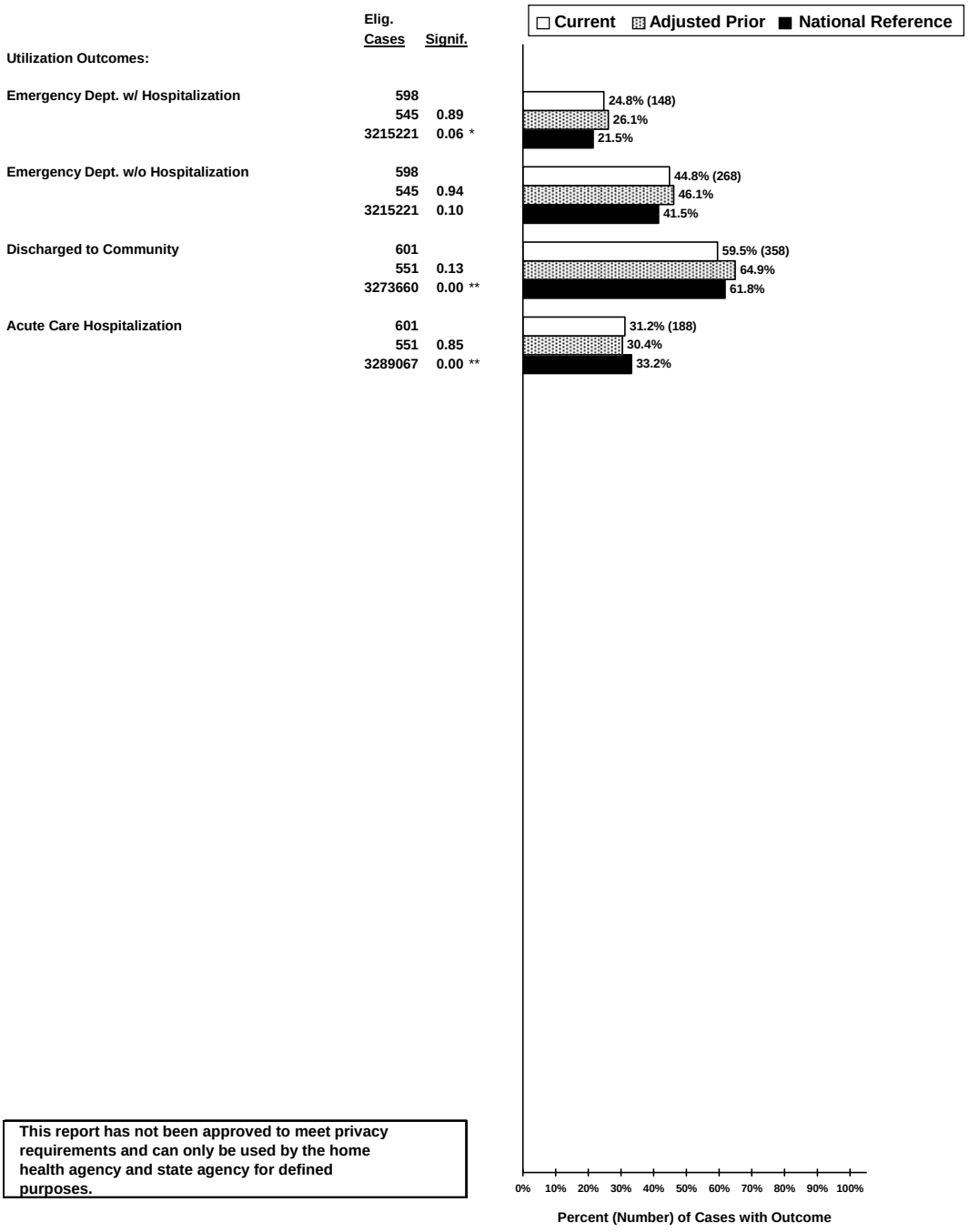
Requested Current Period: 01/2011 - 12/2011
Requested Prior Period: 01/2010 - 12/2010
Actual Current Period: 01/2011 - 12/2011
Actual Prior Period: 01/2010 - 12/2010
 # Cases: Curr 601 **Prior** 551
Number of Cases in Reference Sample: 3289067

All Patients' Risk Adjusted Outcome Report



This report has not been approved to meet privacy requirements and can only be used by the home health agency and state agency for defined purposes.

*** The probability is 10% or less that this difference is due to chance, and 90% or more that the difference is real.**
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ATTACHMENT B TO CHAPTER 4

WORKSHEET: SELECTING TARGET OUTCOMES

WORKSHEET: Selecting Target Outcomes

Directions: After thoroughly reviewing your agency's Outcome Report, determine which potential target outcome(s) you would choose for outcome enhancement activities. Mark those criteria below that you used to make this decision. Use this worksheet as you participate in team discussions to reach consensus about which target outcome(s) are chosen for the agency.

Target Outcome: _____

_____ Statistically significant comparison to the reference sample at _____ value (0.02, 0.10, etc.)

_____ Statistically significant comparison to the prior data at _____ value (0.02, 0.10, etc.)

_____ Has a substantial magnitude of difference in values (between current and reference values or current and prior values)

The magnitude of difference is _____ percentage points

_____ At least 30 cases reported

_____ Does not have statistically significant comparison to the reference but does have a comparison with a significance level approaching a value of 0.10 and less than a value of 0.25

The value is _____

OTHER CRITERIA

Caution: Do not consider these exclusively without first considering statistical significance and number of cases (greater than 30).

The outcome measure above:

_____ Has relevance to an agency goal

Please state _____

_____ Has relevance to a current QI/PI activity

Please state _____

WORKSHEET: Selecting Target Outcomes (Cont'd)

_____ Has relevance to an agency program

Please state _____

_____ Has relevance to an aspect of care or service

Please state _____

_____ Other: _____

This worksheet (one per target outcome) is designed for use by members of the Target Outcome Selection Team and can be retained by the team leader for documentation of team activities.

ATTACHMENT C TO CHAPTER 4

AGENCY STRATEGIES TO FACILITATE SELECTING TARGET OUTCOMES

1. The group that will be responsible for selecting the target outcomes should be trained in the process before the agency accesses its Outcome Report. This group may be the same group that initially reviews the Outcome Report (as discussed in Chapter 3), or it may be a subset of the review group.

2. The training for target outcome selection should include practice using the six criteria (for selecting target outcomes) with sample Outcome Reports. This training will help prepare the selection group for the emotional responses they (and staff) are likely to experience when they review their own agency's Outcome Report.

3. Practice enables the group to move efficiently through the target outcome selection process once the "real" Outcome Report is obtained. This facilitates timely completion of the remainder of the activities necessary to develop and implement the plan of action (described in following chapters of this manual).

4. The agency should plan its target outcome selection process to occur in a timely manner, preferably within a specific interval (e.g., within 1 to 2 weeks of receiving the Outcome Report).

5. Specific agency priorities (e.g., accreditation initiatives, agency-wide programs, facility- or corporate-based initiatives, etc.) should be made clear to this group before beginning the target outcome selection process. For this reason, it is important to include some members of the management team in this selection group.

6. For the most success in outcome enhancement, specific agency priorities should not rank higher in priority (or replace) the criteria for selecting target outcomes. That is, selecting target outcomes that are statistically significant, are based on a large number of cases (30 or more), and have the greatest magnitude of difference from the reference (or the prior year) should be the first criteria applied. After these priority criteria are met, the agency should consider its specific priorities to assist in making the final selection of target outcomes.

7. If the group is well prepared for the selection process, each member can review the Outcome Reports individually and identify potential target outcome(s) to pursue. Meeting time can then be used to reach consensus on specifying target outcomes rather than to conduct the entire review process.

8. The selection group should also allow time during their meeting to plan the additional outcome enhancement activities, particularly aspects related to personnel and timing. These activities are detailed in the remaining chapters of this manual.

9. Agencies sometimes attempt to select one (overall) target outcome that they perceive will also impact other outcomes. For example, an agency might select Improvement in Ambulation/Locomotion as the target outcome because they feel it will likely influence

Improvement in Dyspnea and Acute Care Hospitalization. Such rationale is incorrect and should be avoided. Each outcome is computed separately using its own unique risk factors. A target outcome should be chosen on it own merits, not because it is felt to be one where success in impacting one outcome will guarantee success in impacting others. Agencies that have tried this method have been disappointed in the results.

10. "Sister" agencies (with separate provider numbers) in a corporate environment are often pressured to combine their outcome enhancement efforts by selecting common target outcomes and developing plans of action that will be implemented in the agencies. This is most often unsuccessful, and a close review of the separate agencies' Agency-Patient Related Characteristics and Outcome Reports will often provide the reasons why. Each agency typically has its unique Agency-Patient Related Characteristics and Outcome Reports, staff, and culture, even within the same corporation. It is extremely unusual to find a common outcome for two agencies that meet the most important criteria. Beyond selecting target outcomes, other outcome enhancement activities require identifying the specific aspects of care provision that produced the outcomes and then addressing those aspects very directly. It is unlikely that even two somewhat similar agencies would find exactly the same kind of care provision problems existing in their agencies.

11. Once the target outcome selection process is concluded, agency staff should be informed of the selection(s) and the rationale. Some agencies ask for staff input at this point, even requesting staff to ratify the selection. This can increase staff buy-in to the process from the beginning of the outcome enhancement activities. Staff members are better prepared to provide such input if they have been given at least a gradual orientation to the Outcome Report and the OBQI process, which could be done long before the Outcome Report is accessed.

CHAPTER 5 – CONDUCTING THE PROCESS OF CARE INVESTIGATION

A. INTRODUCTION

Once an agency has selected its target outcome(s), it will proceed to the next step of outcome enhancement. This step involves investigating specific aspects of the patient care that affected the outcome(s) of interest. In many respects, the process of care investigation and subsequent action plan development are the "QI" phase of OBQI. The overall goal in these improvement efforts is either to improve inadequate care provision or to reinforce areas of superior care delivery. After investigating the likely causes of the specific outcome results, agency staff will develop a plan of action outlining strategies to implement changes (or reinforce effectiveness) in care provision. This chapter focuses on the steps to be followed in exploring the likely reasons for specific outcome results, termed the process of care investigation. The next chapter of the manual addresses development of the plan of action.

B. WHAT IS THE PROCESS OF CARE INVESTIGATION?

The process of care investigation is an extremely important component of OBQI. Outcome measurement only reports the agency's current performance on specific outcomes. In order for outcome measurement to improve patient care, the agency must: 1) systematically investigate the clinical actions contributing to outcomes; and 2) target those aspects of care provision necessary to change or reinforce that outcome. In other words, mere measurement of patient outcomes does not improve care—focused activity directed toward such improvement (or reinforcement) is necessary to see change in outcomes.

The process of care investigation consists of two key components—reviewing and analyzing care provided to patients and drawing conclusions from this analysis regarding specific aspects of care provision to change (or to reinforce, in the case of a superior outcome). In conducting the process of care investigation, the agency will:

1. Determine and undertake activities to evaluate and analyze the care that produced the target outcomes reported in the Outcome Report.

2. As a result of the analysis in the previous step, target specific aspects of care to change or reinforce. This is known as developing statement(s) of problem or strength in care delivery.

The process of care investigation is intended to be an integral part of the agency's QI activities. If an agency is already using QI techniques or approaches, this investigation will involve many of these processes. If an agency is unfamiliar with QI techniques or approaches, suggested references on quality improvement are included as an attachment to this chapter.

Even if agency staff is familiar with QI, OBQI differs from current QI activities in that OBQI begins with analyzing the data already collected. Chapter 3 focused on learning to interpret Outcome Reports. From the Outcome Report in Chapter 4, a target outcome was identified to either improve or reinforce. This contrasts with the QI approach many agencies use, which

begins with identification of a potential problem and is followed by collecting data to determine its validity. In OBQI, outcome reports based on OASIS data collection provide information about problem areas in patient care and about areas of patient care delivery where the agency excels. The scientific grounding of OBQI increases precision in identifying problems and allows agency staff to more efficiently focus and channel its efforts and resources.

C. BENEFITS OF THE PROCESS OF CARE INVESTIGATION

One significant benefit of the process of care investigation concerns its focus on identifying opportunities to improve patient care. This is done by selecting an outcome that is inferior to the reference group values (or to previous performance) and modifying specific aspects of patient care—or by selecting a superior outcome and reinforcing the positive care behaviors that influenced that outcome. In addition, the process quality measure report may shed additional light on whether specific care processes are associated with target outcomes. The investigation's focus is thus on aspects of care delivery that are within an agency's direct control.

By selecting and acting on target outcomes, staff members are able to prioritize their quality improvement activities and to maximize often limited resources. Improving the quality of care provided to patients is an important goal for all agencies. Instead of assessing the quality of patient care by anecdotal information or by examining rare events (e.g., falls), OASIS-based outcomes enable staff to precisely measure the effectiveness of interventions in terms of patient outcomes.

The process of care investigation also can improve customer satisfaction. The more efficient and streamlined the care that is provided to assist patients/clients to reach their health potential, the happier they and their families ultimately will be. Not only will patient customers be satisfied, but other customers such as physicians, managed care companies, insurance companies, and the community will be more satisfied and positive about the services. Think about what an effective marketing tool satisfaction is.

In the current home health care climate, it is necessary to scrutinize the costs of providing care to a greater degree than in the past. Costs and quality are the bottom line. When costs are decreased (for example, by decreasing visits), what is the impact on quality of patient care? This is a real concern when striving for greater financial efficiencies in care delivery. Outcome measurement allows agency staff to monitor quality concurrently with cost. Likewise, they can correlate outcomes to costs in terms of number of visits by each discipline. If an agency has an extremely positive outcome but it takes double the resources to produce, its worth must be determined. Can care be delivered in a more efficient and cost-effective manner while maintaining high quality? What better monitors than patient outcomes could an agency have to evaluate the effectiveness of its interventions?

D. PITFALLS TO AVOID

When conducting the process of care investigation, agencies have learned there are certain pitfalls to avoid. These pitfalls include:

- Drawing immediate conclusions without full investigation and prematurely moving into corrective action.

- "Blaming" the data collection or analysis methods for the outcomes without further investigation.

- Not involving staff in the process of care investigation.

- Not focusing on aspects of care provided to patients.

Drawing immediate conclusions and prematurely moving into corrective action is one of the most common pitfalls agency staff encounter when starting the process of care investigation. Staff may find it difficult to refrain from the temptation of drawing quick conclusions about what needs to be "fixed." Sometimes agency staff begin making these premature judgments when they first get their Outcome Report (e.g., "Well, it's obvious that our patients did not improve in ambulation because of the shortage of PTs in our area"). At all costs, this temptation of rushing to judgment should be avoided. This approach will cause an agency to move into corrective action too quickly, totally bypassing any investigation of the care provided. Without going through the steps of true process of care analysis, ineffective or even possibly inappropriate clinical action may be introduced. What if the previously mentioned patients did not lack for PT visits, but instead were not receiving adequate pain management? Drawing a quick conclusion about shortages of specific personnel types and addressing this perceived problem may or may not have any impact on patient outcomes over the subsequent measurement period. Commitment to improving care provision requires the willingness to truly *examine* the care previously provided. Process quality measures may be useful to agencies when examining agencies' key process areas that may be associated with the outcome.

Faulting the data collection process or analysis methods for the outcomes without further investigation is the second pitfall to avoid. Defensiveness can occur in agency personnel at any level, especially when outcomes are less favorable than expected. This emotion is demonstrated when individual staff members either question the data or point out the possibility that the patient characteristics at the agency are unique. Data accuracy questions can take a variety of forms. Staff may challenge the ability of data items to reflect changes in health status over time or the reliability of the data items when used by multiple disciplines. Staff might also question whether the data items capture an accurate picture of the patients' health or functional status at one point in time. This reaction is similar to the "data shock" response that can appear when the Outcome Report is first received. By anticipating some of these natural emotional responses, staff can move from initial defensiveness to acceptance of the report. Assist the staff to go beyond these types of responses by reminding them that the items have been tested for reliability, that outcome reports are not produced unless the data analyses prove valid, and that outcomes are risk-adjusted to account for differences in an agency's patient characteristics. It may also help to point out inconsistencies between verbal statements and the Agency Patient-Related Characteristics Report. Once the staff realizes that the focus of the investigation is the process of care, not on who is providing care, they are often able to move past this defensive reaction.

It is extremely important to involve clinical staff in the process of care investigation. Management staff should not conduct the entire analysis without involving members of the clinical staff. Be sure to involve representatives from all staff levels, disciplines, and service lines appropriate for the target outcome. This means that the group conducting the care

investigation is likely to change from one Outcome Report to the next as the specific target outcome(s) change. Such a change in group composition is to be expected and is regarded as an excellent opportunity to fully involve staff in quality improvement efforts. Clinician involvement in the investigation and planning for improvements is critical to achieve clinical staff "buy-in" for any changes in care delivery that will be part of the plan of action. After all, these are the staff members who actually deliver care, and their knowledge of these processes must be adequately recognized. Clinicians may actually be members of the investigation team, or the team can request clinician input and suggestions in other ways. Agencies should plan a concerted effort to assure that all staff members are continually informed of the OBQI happenings. If there is opportunity for all individuals to be part of the process of care review, even tangentially, there is less likelihood of resistance to change becoming an obstacle to subsequent modifications to care delivery. (Team building is discussed in more detail in Chapter 8.)

Reviews of successful process of care investigations (i.e., those that have positively impacted subsequent Outcome Reports) reveal a common characteristic—their clear focus on patient care processes. When analyzing care provided to an agency's patients, it is easy to focus on other aspects of agency structure (or even on factors external to the agency) and to attribute outcome differences to these factors. Assigning responsibility for outcome results to new paperwork requirements, a change in agency supervisory staff, new payment approaches, etc., can be seen as another way of "blaming" the effects of care on situations outside the care delivery situation. While system changes can impact the way in which care is provided, attributing all outcome results to such changes tends to divert the focus of the investigation away from the processes of care delivery, which are under agency control for the most part, to other factors often seen as "beyond our control."

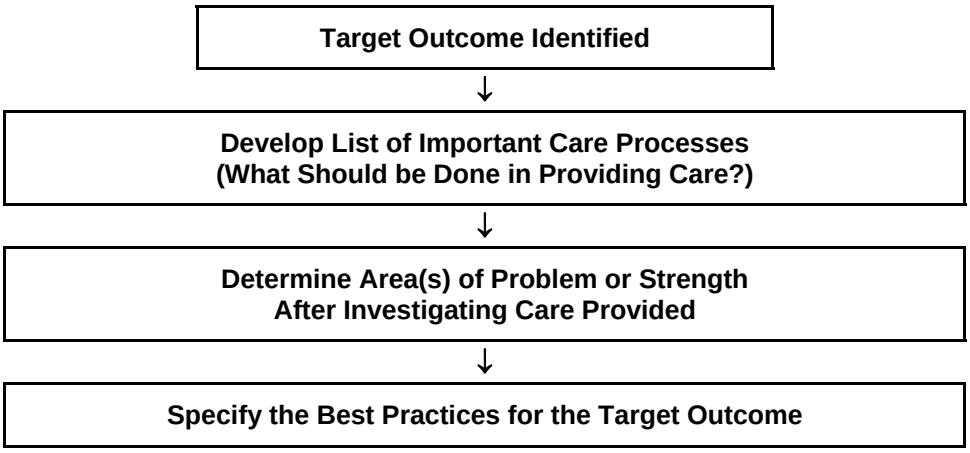
E. PLANNING THE INVESTIGATION

Each agency must determine who will be responsible for investigating the care that produced the outcome results. The most important consideration in this decision is how to include representation of staff who are regularly involved in or affected by the work processes related to the outcome being investigated. In any given agency, the team that determines the target outcome on which to focus may not be the same group that actually investigates the processes that affected the outcome. One agency used an Outcome Selection Team and a Care Process Action Team, for example. In this situation, the Outcome Selection Team selected the target outcome, while the Care Process Action Team conducted the actual process of care investigation. There could be a slight overlap of members between these two teams (for example, the individual responsible for quality improvement activities might belong to both teams). Chapter 8 of this manual includes additional information on selecting staff members to participate in the process of care investigation. When the various roles and responsibilities involved in the process of care investigation are understood, the management and staff will be able to make the best decisions about who will be involved in the agency.

However the group or team membership is determined, the focus now shifts to analyzing the specific aspects of care delivery that have contributed to the outcome. The initial steps of the process of care investigation will be to identify what <u>should</u> be done in providing care to certain patient types, followed by determining what actually <u>was</u> done in care delivery within the agency.

The team (or its leader) can also determine which QI techniques will be most helpful in conducting the investigation. As the team identifies potential care practices related to the target outcome and then identifies specific techniques to try to "get to the bottom of things," team members are likely to move beyond some of the initial emotional reactions and defensiveness about outcomes.

Investigation of the selected outcome (the target outcome) will eventually involve three key activities. These include identifying **pertinent important clinical actions** that are anticipated to occur in providing care, then determining the specific aspects of **problem (or strength) in care delivery** contributing to the outcome results after investigating the care that was provided, and then finally specifying the **best practices** that should be implemented (or reinforced). These steps are depicted below. The first two steps in this sequence are addressed in this section. (Chapter 6 addresses the final step.)



F. IDENTIFYING WHAT SHOULD BE DONE IN PROVIDING CARE

The first task in the process of care investigation is to identify clinical actions (or care processes) that have relevance for the outcome under investigation. Most agencies have rather clear expectations of appropriate clinical actions to take in providing care to specific patient types. Some expectations are outlined in agency clinical policies or other documents, so identifying what SHOULD be done in specific situations is not an unusual occurrence for clinical staff.

In a process of care investigation, the team will first identify (or list) important aspects of care delivery that correspond to the target outcome selected. These are the clinical activities that are expected to lead to optimal outcome results. The focus on the target outcome and on identifying clinical actions that are expected to impact it may be new to some agencies. These important aspects of care delivery are referred to as the care processes that are expected to occur (i.e., that should be done).

These important clinical actions should be developed as a list of important care processes corresponding to the target outcome selected. For example, if an agency is trying to define appropriate clinical actions to assist a patient to become independent in managing oral medications, the list might include the following points:

- Assess for presence of any sensory perceptual impairments.
- Assess for altered cognitive functioning that could affect his/her ability to manage medications.
- Assess for inadequate knowledge of medication regimen.

Other aspects of care (besides assessment) also should be included in the list, such as care planning, interventions (e.g., teaching), care coordination, and evaluation. The general purpose of this step in the investigation is to identify the specific care processes or clinical actions that have relevance for the target outcome. Due to differences in patient case load, physician practices, and other pertinent parameters of care, it is important for each agency to determine what works best for their patient population.

To assist in developing the initial list of important clinical actions, a team might review agency clinical protocols or standards, clinical practice guidelines, standardized care plans, publications, or other resources suggesting the types of care that are best provided to particular patients to attain the target outcome. Agencies may refer to the Process Quality Measure Report for specific evidence-based best practices. Revising and expanding the initial list by examining other sources of information assures that the list is as inclusive as possible at this time. In the above example of management of oral medications, after reviewing specific clinical practice guidelines or new research reports, it might be determined that assessment of impaired motor function is appropriate to add to the list of important care processes or clinical actions.

Expert clinical assistance should not be overlooked as a potential source of important care processes. Such assistance may be available from outside the agency (e.g., expert consultants, specialty organizations, etc.) or from expert clinicians on the agency's professional staff.

Brainstorming sessions are often a critical component in investigating the target outcome. At this stage in the care investigation, brainstorming helps the team identify the important clinical actions that will become the criteria utilized for the review of care provision. In fact, brainstorming can be helpful throughout the entire process of care investigation, from identifying how to get started to the final step of synthesizing findings and determining the next steps to take. Brainstorming sessions may be somewhat structured or kept quite informal, depending on the membership of the group and the leadership style of the group leader.

In an effort to decrease the time that care providers spend in meetings, some agencies have conducted a modified brainstorming process by internal mail or electronic discussion boards. Staff members submit suggestions of important clinical actions relative to patients affected by the target outcome. For example: "Our target outcome is Improvement in Management of Oral Medications. Please list the **specific** assessments, interventions, and care planning actions you consider for patients with a deficit in managing administration of oral medications. Please sign your name so we can contact you if clarification is needed. Return this survey by xx/xx/xx to M. Brown, QI Coordinator." As responses are received, the designated person compiles them, deleting only those that are completely identical. The completed list is then presented to the team at a meeting to pare it down to the most important care processes by using multivoting techniques (described in the attachment to this chapter). The multivoting process may need to be conducted more than once if the initial list is very large.

After the initial efforts in developing a list of important clinical actions that should be done, most teams find that they have identified so many important assessment or intervention processes appropriate to the target outcome that the list is unwieldy. At this time, it is necessary to narrow the list down to a manageable number of the most important clinical actions that will then be used as criteria for proceeding in the investigation. Brainstorming and multivoting are good tools for the team to use in identifying and prioritizing the optimal clinical practices. When the list is made final, the goal should be to have a list of prioritized assessment items, prioritized care planning components, and prioritized interventions that the agency feels should be included in delivering care related to the target outcome.

This list of important clinical actions is the resource an agency will use in its standardized review of care provision. The behaviors on the list must be sufficiently specific and focused so that the agency's care review can be conducted in a consistent manner, allowing for easily drawn conclusions about the information obtained. Quality Improvement Organizations have developed specific clinical review tools that may be helpful; these are available at: https://www.qualitynet.org.

G. CONDUCTING THE INVESTIGATION

The next step in the process is to investigate the care that was provided to patients whose outcomes were presented in the Outcome Report. During this stage, the team needs to ask and answer the question, "What are we currently doing in providing care, and how does it compare to our list of important care processes?" In the example presented above involving the improvement of oral medication management, team members would address the assessments for the presence of sensory perceptual impairments, altered cognitive functioning, and inadequate knowledge of the medication regimen, plus those other aspects of care planning and interventions deemed important.

Select an approach to reviewing care that is appropriate for the agency's structure, the time frame available in which to conduct the review, and other demands on internal resources. Possible ways to conduct this care review include a focused clinical record review, reports generated from electronic health records, interviews of clinical staff, observation of home visits, discussions at staff meetings, or use of structured case conferences. Evaluation of the Process Quality Measure Report may be useful for certain outcomes such as Acute Care Hospitalization, Emergency Department Use, or Improvement in Pain Interfering with Activity. Whichever approach is selected, remember that involvement of clinical staff is critical.

The following decisions will assist the investigation team to proceed with its activities.

- What care review approach (method) "fits" with the list of important care processes, with the allotted time frame for the review, and with other aspects of agency structure?

- Determine the care review format. Does a structured interview tool need to be created? Does a chart audit tool exist into which the important clinical actions could be inserted?

- Determine who will conduct the review. The team might add clinical staff at this point to allow the review to proceed more quickly.

- Determine the cases to be reviewed. Someone will need to select the specific patient cases whose care will be examined more closely. Selection of these cases will allow the individual reviewer's assignment to be communicated most clearly (i.e., "please review the three records placed on your desk this morning by Friday afternoon"). Section H of this chapter discusses use of an additional OASIS-based report, the Patient Tally Report, to determine appropriate cases to review.

- Determine the review time frame. How quickly does the care review data collection need to be completed (e.g., three days, a week)?

These key decisions establish a design for the investigation. The individual responsible for quality improvement in the agency will want to evaluate the design at the conclusion of the investigation to determine its strengths and weaknesses and to suggest refinements or revisions to be implemented in subsequent process of care investigations.

Many agencies have used **clinical record review** for QI or Utilization Review activities in the past. Such review can also be an important component of an OBQI process of care investigation, but there are some differences from the traditional approach to record review. The traditional approach has been to review records for completeness. The reviewer often checked to ensure that the 485 was present and signed by the physician in an appropriate time frame, that the number of visit notes matched the number of visits authorized by the physician (and billed by the agency), and other criteria of that nature. In OBQI, the focus of a clinical record review is on the processes of care being provided in the agency. For instance, if the clinician identified a problem, what intervention actions were provided, how was the problem reevaluated, and how does the care provided compare to the list of important care behaviors? Using a chart audit tool can facilitate the review of clinical records for the process of care investigation. (See Attachment A to this chapter for additional information on conducting a focused clinical record review for the process of care investigation.)

Another method to determine precisely which care processes are currently in place that relate to the outcome under investigation is to **interview** the agency's care providers. These conversations should be conducted in a nonthreatening way with the clear intent to gather information about the current processes involved in care provision. In order to synthesize information across multiple providers, it is important to have some structure for the interview. This would involve a standard set of questions (e.g., What do you do first when you begin an assessment for a cardiac patient? When do you first call the physician after the initial visit?, or Do you always assess the need for a physical therapist for nonorthopedic patients?). The list of important clinical actions is the source for standard interview questions. This way, interviews are conducted in a consistent manner, and it is easier to draw conclusions about the information obtained. In drawing conclusions from the interviews, notice specific aspects of care delivery that should be modified (or reinforced), as derived from comparison of current practice with the list of pertinent care processes.

Evaluation of the Process Quality Measure Report may be helpful for assessing care processes associated with several outcomes. For example, if the rate of Improvement in Pain Interfering with Activity is the target outcome, then process quality measures for pain: a) Pain Assessment Conducted; b) Pain Interventions in the Plan of Care; and c) Pain Interventions Implemented, may shed light on specific problematic care areas. If rates on any or all of these process measures are low, then the agency may need to focus on improving use of those best practices

as part of their OBQI plan of action. Other OBQI outcomes that may have associated process quality measures are Acute Care Hospitalization and Emergency Department Use.

H. SELECTING CASES FOR REVIEW OF CARE PROVIDED

Once the care review method has been determined, the investigation team will move to the selection of specific patients and care episodes for the review. It is here that the Patient Tally Reports (first introduced in Chapter 2) will be used. Two separate patient tally reports are available, each of which provides descriptive information for each individual case (and care episode) included in the Outcome Report analysis. (A portion of each Patient Tally Report is found in Figure 5.1. Guidelines on how to read the reports are found in Appendix A.)

In the Outcome Tally Report, for each case, the report identifies if the patient was included in an outcome measure and, if so, whether that outcome was achieved (corresponding to the Outcome Report). In addition, the Agency-Patient Related Characteristics Tally Report identifies which variables (corresponding to the Agency-Patient Related Characteristics Report) characterized each patient at start or resumption of care (e.g., if he/she was disabled in bathing or had an acute cardiac condition). Finally, it is possible to see how all the (raw) OASIS items were answered for each patient at start or resumption of care.

The primary use of the Patient Tally Report is to select patients for the process of care investigation. For example, if an agency chooses to investigate Improvement in Bathing, the staff can identify which patients improved in bathing and which did not improve. As agency staff conduct their investigation, comparing processes of care that were provided for the patients who improved (or for those who did not) to the list of desired important care processes, they will be able to identify the specific clinical actions that should be remedied or reinforced.

Because of the large volume of data contained in the Patient Tally Reports, most agencies may wish to review them on screen rather than printing them out. It is also possible to download the patient tally data to a spreadsheet file, although it may be quite time consuming if the number of cases is large.

To facilitate drawing correct conclusions in the process of care investigation, it is important to include an adequate number of cases. Modifying care delivery for the entire agency when reviewing only two or three patient situations is likely to be basing this decision on an inadequate sample size. Whenever possible, include approximately 30 cases in the review, whether conducting a focused record review, interviewing agency staff, or utilizing another investigative method. In addition to selecting records of patients who did not improve, consider reviewing at least 10 cases of patients who did improve in the outcome. This may be helpful for identification of best practices that should be reinforced in the plan of action.

FIGURE 5.1: Excerpt – Faircare Home Health Services Agency Patient-Related Characteristics and Outcome Tally Reports.

Agency Name: FAIRCARE HOME HEALTH SERVICES
Agency ID: HHA01
Location: ANYTOWN, USA

CCN: 007001
Medicaid Number: 999888001
Date Reported: 03/21/2012

Agency Patient-Specific Characteristics (Case Mix) Tally Report*

Report Period: 01/2010-12/2010		Demographics					Payment Sources					Episode Start				Patient Discharge						Sensory Status			
Legend: y = Attribute present n = Attribute not present Number = Patient's actual score on item with scale — = No data collected for this item Patient Name	SOC/ROC Date	Age	Gender: Female	Race: Black	Race: White	Race: Other	Any Medicare	Any Medicaid	Any HMO	Medicare HMO	Private third party	Episode timing-early	Episode timing=Late	Physician date vs. SOC/ROC	Referral date vs. SOC/ROC	Nursing facility	Skilled nursing facility	Short-stay acute hospi8tal	Long-term care hospital	Inpatient rehab hospital/unit	Psychiatric hospital/unit	Vision Impairment	Hearing Impairment	Verbal content understanding	Speech/language
Anderson, ----------	06/12/10	74	y	n	y	n	y	n	n	n	n	y	n	0	1	N	n	n	y	n	n	0	1	1	1
Brown, ----------	06/12/10	66	y	n	y	n	y	y	n	n	n	y	n	0	1	n	y	n	n	n	n	0	1	1	1
Byrnne, ----------	08/24/10	81	y	n	y	n	y	n	n	n	n	n	y	0	1	y	n	n	n	n	n	1	1	3	4

*This sample report for illustrative purposes only. Data on actual Tally Reports that agencies will receive will be presented in a different order.

Agency Name: FAIRCARE HOME HEALTH SERVICES
Agency ID: HHA01
Location: ANYTOWN, USA

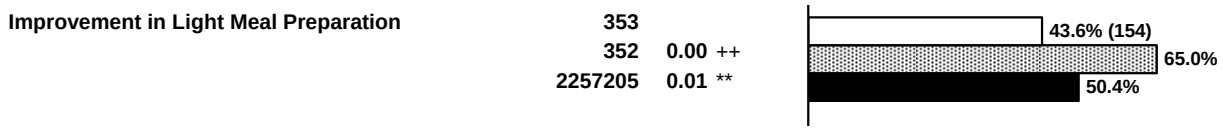
CCN: 007001
Medicaid Number: 999888001
Date Reported: 03/21/2012

Outcome Tally Report

Report Period: 01/2010-12/2010		End Result Outcomes																				Utilization Outcomes			
Legend: x = Patient achieved outcome o = Patient did not achieve outcome – = Outcome not computed for patient y = Yes n = No Patient Name	SOC/ROC Date	Improv in Light Meal Preparation	Stabilization in Light Meal Preparation	Improvement in Phone Use	Stabilization in Phone Use	Improvement in Mgmt of Oral Meds	Stabilization in Mgmt of Oral Meds	Improvement in Dyspnea	Improv in Pain Interfering w/Activity	Improv in Speech and Language	Stabil in Speech and Language	Improv in Status of Surgical Wounds	Improv in Urinary Tract Infection	Improvement in Urinary Incontinence	Improvement in Bowel Incontinence	Improvement in Confusion Frequency	Stabilization in Cognitive Functioning	Improvement in Anxiety Level	Stabilization in Anxiety Level	Improv in Behavioral Problem Freq.	Emergency Dept w/Hospitalization	Emergency Dept w/o Hospitalization	Discharged to Community	Acute Care Hospitalization
Anderson, ----------	06/12/10	–	x	o	o	o	o	o	o	o	o	o	o	o	o	o	x	–	x	x	n	n	y	n
Brown, ----------	06/12/10	–	x	–	–	x	–	–	–	–	–	x	–	–	–	x	x	–	–	–	y	n	n	y
Byrnne, ----------	08/24/10	o	o	x	x	x	x	x	–	–	–	–	x	x	x	x	–	–	x	x	n	n	y	n

Review of the Outcome Report indicates how many cases are available for investigation. Refer to the excerpt from the sample Outcome Report for Faircare Home Health Services found in Figure 5.2. For the outcome measure of Improvement in Light Meal Preparation, 353 cases were eligible to improve in light meal preparation. Of these cases, 43.6% actually did improve. The number of cases where improvement in light meal preparation occurred is found in parentheses after this percentage on the Outcome Report. In the Faircare sample, this number is 154, meaning that 154 cases actually improved in light meal preparation. By subtracting this number from 353, it is determined that 199 cases did not improve in light meal preparation during the episode of care (353 - 154 = 199). Selecting 30 cases from among these 199 is easily accomplished and by distributing the responsibility for record review across several individuals, the record review is more easily managed.

FIGURE 5.2: Excerpt – Faircare Home Health Services All Patients' Risk-Adjusted Outcome Report.



I. DRAWING CONCLUSIONS

Once the team has completed its analysis of actual care being provided for the population of focus (i.e., those patients who contributed to the Outcome Report), the goal is to identify a specific pattern in the care delivered by the agency staff that demonstrates inadequate care (or superior care). For example, if assessment of the patient's cognitive functioning is done inconsistently when it is expected that such assessment should occur regularly, inadequate care is demonstrated. If the analysis shows that all cardiac patients are consistently weighed every visit, thus meeting the expectations of the list of important clinical actions that should be done, superior care is shown.

With the assistance of information from clinical records (or interviews), analytically and objectively think through the results of the care review based on the important care processes. Methods to assist agency staff in summarizing the results of the investigation to establish priorities for process improvement can include the use of a **checklist** or **Pareto chart** to answer the question, "How often are certain events happening?" **Flow charting** processes can help to clearly identify redundant, inefficient, or insufficient steps in a problem process. These techniques are explained in more detail in Attachment B to this section.

Cause and effect diagrams can assist in identifying relationships between a problem (an effect) and the causative factors. They can be beneficial in summarizing possible causes for specific outcomes that were identified through brainstorming, record review, or other methods. It is best to construct these diagrams in a meeting of the investigative team, since a certain amount of brainstorming is often needed to build the diagrams. More detailed instructions on cause and effect diagrams also are contained in Attachment B to this section.

At the end of the summarization process, the team should be able to clearly identify at least one (and limited to two or three) clinical action(s) that it desires to change (or to reinforce, in the case of a superior outcome). The aspects of care that are inadequate will be developed as a statement of **problem** in care delivery, while those aspects that are superior will be developed as a statement of **strength** in care delivery. These statements of problem or strength will form the basis for the plan of action development, which is the next step in outcome enhancement.

J. TIMELINE FOR COMPLETING THE PROCESS OF CARE INVESTIGATION

Although there has been some emphasis thus far on efficient completion of the process of care investigation, no specific time frame has been noted. It is important to understand the components of the investigation before discussing recommended timing. Agencies who have been successful in enhancing outcomes have demonstrated their ability to conduct the process of care investigation and to implement (at least some steps of) a plan of action within approximately one month of the agency obtaining the report. While this can seem like a short time interval, the importance of conducting these activities in this time frame must be emphasized.

Remember that staff will not be modifying their care delivery until after necessary changes have been identified (from the process of care investigation) and these changes are put in place (with implementation of the plan of action). Until this occurs, patient care episodes and outcomes of care are likely to continue as they have been. Only patients who have complete care episodes (start/resumption of care to discharge/transfer) after the plan of action is implemented are likely to show any difference in outcomes resulting from changes in care processes. The longer it takes to implement the plan of action, the less likely there is to be a change in the outcomes that will be included in the next Outcome Report.

This timeline provides evidence of the need for an agency to be prepared to obtain its outcome and Agency-Patient Related Characteristics Reports. When agency staff is ready to receive the report, and the appropriate group has been identified to select the target outcomes, the entire outcome enhancement process can begin quickly. Agencies that begin the process of care investigation within two weeks of obtaining the Outcome Report have the best opportunity to move on to implementing the plan of action within one month.

Being prepared to receive the Outcome Report is related to the training that occurs in the agency. Chapter 9 of this manual discusses the types of training that are recommended. This preparation will assist you in moving the process of care investigation forward in a timely manner.

FREQUENTLY ASKED QUESTIONS

1. You caution us not to draw immediate conclusions before we do the investigation, but sometimes you just know what the problem is and how it needs to be addressed. Our agency is a small rural agency that has been trying to hire an OT for part-time work for two years, and we simply can't find one who will relocate for only part-time work. That affects our ability to be successful with many functional outcomes. What other approach could we take?

Even if you determine that your target outcome is one that would be influenced by OT care, you will still need to investigate the care provided to patients who improved and to patients who did not improve. In looking very closely at the various clinical actions that "should be done," you may find things that other care providers can address with at least some success, or you may find issues that have nothing to do with the lack of an OT. Many agencies have had to address similar issues, and it sometimes requires creative thinking rather than focusing on the one thing the agency has not been able to accomplish. Once you have identified the primary problem areas in care delivery, you will be able to proceed as described in the next chapters. When you prematurely decide that the "only" problem has "only" an impossible solution, you are preventing your agency from using the creativity of its staff to improve care to your patients.

2. If you are reasonably sure that most of your clinicians are consistently misinterpreting an OASIS item relevant to the target outcome, don't you need to address it?

Knowledge of OASIS items and assessment of patients are issues that must be addressed by training, education, and discussion on an ongoing basis. However, none of the training and data quality maintenance efforts take the place of investigating the care processes related to a target outcome. Without a thorough investigation of the care provided, you have no knowledge of what produced the specific outcome. Misinterpretation of a relevant OASIS item may be a contributing factor, but it is quite possible that there are significant problematic care issues needing to be addressed, and those can only be identified by investigation.

3. I understand that it is important for agencies to involve clinical staff in the investigation process. Our limited staff is so stressed right now that we just cannot ask them to do one more thing! How can we possibly manage all this?

Many creative agencies have found ways to involve clinicians without using a great deal of their time. These agencies felt that the benefits to the agency outweighed the time investment. It sometimes meant that a few clinicians' schedules had to be lightened some days to allow them time to review two or three clinical records (perhaps by having a supervisor see one or two patients for them). Or it may have been as simple as asking all nurses to list the top five things they always do when assessing a patient with urinary incontinence and respond by voice mail, note, or e-mail (or asking home health aides to list the three top things they consider when helping patients with bathing). This does not have to consume a lot of clinician time. Getting input from the staff who do the work of patient care will convey that you respect and value their expertise. This, in turn, allows them to help implement the changes in their own care practices that are eventually determined to be necessary. Staff members place a high value on issues that are supported by peer leaders and are more likely to comply than when "management" is telling them to do things differently.

FREQUENTLY ASKED QUESTIONS

4. We've been tracking hospitalization for several years and we know that most of our hospitalizations happen because the patient was sent home too soon or because the physician didn't respond when we called to report a problem. Those things are beyond our control.

While agencies frequently make similar statements prior to investigating the outcome of acute hospitalization, many find problems with the quality of care delivered or with agency processes related to the care issues. Agencies have shown that they can be successful in lowering their rate of hospitalization. Areas to consider during the investigation include visit frequency, timeliness of care, and selected process quality measures, among others. Don't underestimate the creative thinking that can find solutions when real problems are identified, particularly when staff level personnel are involved.

5. I don't have a clear picture of how we collect the results of our investigation to show us what the problems are. When we have done UR or quality reviews in the past, everyone just reports on what they saw in the records they reviewed, and unless someone saw something significant, nothing much ever comes of it. How do we make this different?

Begin by following the instructions and exercises in the attachment to this chapter to develop an audit/interview tool from your list of "should be done" care practices. When you meet to compile the results from each team member, you can use a blank audit tool to record the number of times each care practice was completed or lacking. Many agencies have reported that simply by doing this, the answer sometimes "just jumps out at us." Other agencies have found that they may have several issues that need to be addressed, so they use some of the other tools in the attachment to help them focus on the practices they believe they can address with the most success.

ATTACHMENT A TO CHAPTER 5

STEPS IN CONDUCTING A FOCUSED RECORD REVIEW

1. Develop the most important clinical actions to utilize in the documentation review. Review and revise as necessary using brainstorming, review of known standards, and other QI techniques with which you are comfortable.

2. Identify patients in the target population. Examples:

   a. Patients who, at admission, demonstrate the potential to achieve the selected outcome.

   b. Patients who, at discharge, had not achieved the selected outcome. (For a reinforcement investigation, include primarily patients who did achieve the outcome.)

3. Select time intervals to be utilized in the review, dealing with questions such as:

   a. Does SOC encompass the first visit only, the first visit by each discipline involved, or a specified number of days?

   b. Should the entire episode be examined for the appearance of certain clinical actions, or only a selected time frame?

   c. Should the time interval of interest vary by type of clinical action being examined?

4. Select the reviewers.

5. Prepare (or adapt) a review form (audit tool) that includes the set of clearly specified clinical actions, a scoring column, and a (total) tally area.

6. Pilot test the audit tool and scoring form to validate the decisions made; review and revise as indicated.

7. Choose the record review sample from the target population.

8. Conduct the focused documentation review.

9. Interpret the results in one of two ways:

   a. Tallying/scoring percentage of clinical actions present for each patient; discussing general impressions.

   b. Tallying/scoring percentage documented for each clinical action (across all patients); discussing general impressions.

10. Summarize conclusions from the review in terms of inadequate care (in the case of review for remediation), or of identified strength in terms of exemplary care (in the case of review for reinforcement).

ATTACHMENT B TO CHAPTER 5

TOOLS TO IMPLEMENT QUALITY IMPROVEMENT

A variety of techniques can be employed to facilitate the quality improvement process. This attachment presents several such techniques for you to consider.

> *"If you only have a hammer, you think every problem is a nail."*

BRAINSTORMING

Definition: A group process technique to generate creative thinking.

Purpose: Uses the thinking capacity of a group of people to elicit ideas from all members equally.

Rules and Guidelines for Brainstorming:

- State the purpose clearly.
- Don't have a gripe session.
- Offer one thought at a time.
- Encourage everyone to participate.
- Generate a large number of ideas.
- Record all ideas, as stated.
- Let ideas incubate.
- Freewheeling is encouraged.

Following Brainstorming:

1. Prioritize by ranking. Multivoting (explained later in this Attachment) can be used.

2. Reach consensus.

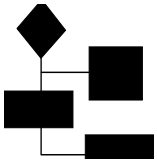
X MULTIVOTING

Definition: A technique to conduct a straw poll to select the most important or popular items from a list with limited discussion and difficulty.

Purpose: Usually follows a brainstorming session to identify the few items warranting immediate attention.

Guidelines for Multivoting:

- Generate a list of items and number each.
- Combine two or more items that seem very similar if the group agrees they are the same. Renumber if necessary.
- Have all members choose several items they would like to address by writing on a sheet of paper or placing a dot beside the item. Each member should select at least one-third of the total items (33-item list = 11 choices).
- Eliminate those items with the fewest votes. A rule of thumb is with a small group (five or fewer members), cross off items with only one or two votes. For a medium group (6-15 members), eliminate anything with three or fewer votes.
- Repeat preceding process until only a few items remain.
- If no clear top item emerges by this point, have the group discuss which item should receive top priority or take one last vote.



FLOW CHART DIAGRAMS

Definition: A detailed chart that shows a picture of the flow of all steps in the targeted process.

Purpose: To define existing processes as clearly as possible to assist in defining the problem and making a diagnosis.

Guidelines for Constructing a Flow Diagram:

- Clearly define and narrow the process.
  - Choose a particular time interval to work on.
  - Specify a particular type of clinical care.

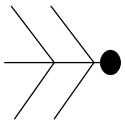
- List all steps in the process in the order they occur.
- In creating, use the following:
  Oval to indicate the beginning and ending steps
  Rectangle to describe the process step or activity
  Diamond to indicate a decision point.

- Analyze the existing process for flaws (redundancy, inefficiency).
- Brainstorm for causes of flow disruption at each step.
- View process from several different perspectives—patient vs. nurse vs. physician, management vs. staff.

Ideas for Diagramming

- Use a flip chart or dry erase board and markers to draw the process.
- Use sticky notes to detail each step and arrange in sequence on large sheets of paper.
- Tape up big sheets of paper and get staff to keep adding to the drawing.

Evaluate the Flow Diagram Process: Does the diagram accurately capture what really happens? How you think things should happen? How was the process originally designed?



CAUSE AND EFFECT DIAGRAM
(Also known as a Fishbone or Ishikawa Diagram)

Definition: A tool for capturing, displaying, and classifying the various theories about the causes of a problem.

Purpose: To illustrate the cause and effect mechanisms of a process by organizing all potential causes that may contribute to the effect.

Guidelines for Cause and Effect Diagramming:

- Define the problem narrowly and clearly in the Effect Box
- Be as specific as possible about causes.
- Ask who, what, when, why, and how.
- Bones - To stimulate thinking, it may be helpful to organize the causes into major categories (e.g., People, Procedures, Materials, Equipment, and Environment).
- Brainstorm ideas for causes related to each category.
- Category headings can be generic or specific.

Ideas for Use:

- Use sticky notes to categorize causes.
- Focus on causes over which the team has control.
- Fix causes with simple remedies.

PARETO CHARTS

Definition: A bar graph to arrange information in such a way that priorities for process improvement can be established.

Purpose: To clearly sort the vital few from the trivial others in order to determine where the biggest improvement opportunity exists (i.e., Pareto diagrams are to quality improvement what triage is to emergency medical care).

Pareto Principle: Whenever a number of individual factors contribute to some overall effect, relatively few of those factors account for the bulk of the effect.

Guidelines for Constructing Pareto Chart:

- Gather data on contributing factors.
- Display data in a meaningful way.
  - Bar chart ordered from most frequent to least.
  - Frequency is recorded on the vertical axis and classifications on the horizontal axis.
  - Determine the classifications of items to be included. (This step can be obvious if it comes from a checklist.)
- Decide on the period of time to be included on the graph.

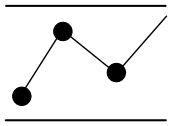
CHECKLIST

Definition: A data collection form used to answer the question, "How often are certain events happening?"

Purpose: To assist in selecting and defining a problem, testing a theory about causes, or checking the effectiveness of a solution.

Guidelines for Checklist Preparation:

- Use cause and effect diagramming and brainstorming to identify categories to be included on the collection form.
- Construct an operational definition of each category.
- Determine where in the process the data are available.
- Decide who will record data and how often.
- Construct form with categories as rows, and time intervals as columns.



RUN CHART

Definition: A line graph used to display trends in data, typically over time.

Purpose: To report stability of a process. To study variation to discover its sources. To determine whether process changes have had an effect, providing an early warning of problem recurrence after the solution has been implemented.

The guide below, created by Leebov and Erosoz (1991), identifies techniques that might help at various stages of your process of care investigation.

GUIDE TO USE OF TOOLS

	Describe Current Process	Measure and Analyze	Identify Root Causes	Generate and Choose Solutions	Draw Conclusions
Focus Groups	X			X	X
Surveys		X	O		
Interviews	X		O		O
Check Sheets		X			
Pareto Charts			X		
Flow Charts	X				
Brainstorming			X	X	
Cause and Effect Diagrams			X		
Multivoting			X		X

X - Often used
O - Used less

Adapted from: Leebov W and Erosoz C (1991). *The Healthcare Manager's Guide to Continuous Quality Improvement*. Chicago: American Hospital Publishing, Inc.

REFERENCES AND RELEVANT LITERATURE

Berwick DM, AB Godfrey, and J Roessner (1991). *Curing health care: New strategies for quality improvement*. San Francisco: Jossey-Bass.

Brassard M (1989). *The memory jogger plus: Featuring the seven management and planning tools*. Methuen, MA: GOAL/QPC.

Leebov W (1991). *The quality quest: A briefing for health care professionals*. Chicago: American Hospital Publishing, Inc.

Leebov W and C Erosoz. (1991). *The healthcare manager's guide to continuous quality improvement*. Chicago: American Hospital Publishing, Inc.

Lutheran Medical Center (1992). Process Information Tools - Interhealth Training Session.

Romfh P (1993). *QI Tools and Techniques*.

Scholtes PS, BL Joiner, and BJ Streibel (1996). *The Team Handbook* (2nd edition). Madison, WI: Joiner Associates.

RESOURCES

Home Health Best Practice Intervention Packages (QIO)

http://www.homehealthquality.org/hh/hha/interventionpackages/default.aspx

Evidence-Based Practice Guidelines, University of Iowa, College of Nursing

http://www.ahrq.gov/clinic/cpgonline.htm

National Guideline Clearinghouse™ (NGC):
http://www.guideline.gov/browse/guideline_index.aspx

VNSNY Geriatric Home Care Excellence http://www.champ-program.org/

Agency for Healthcare Research and Quality http://www.ahrq.gov/

AHRQ's Health Care Innovations Exchange Web site http://www.innovations.ahrq.gov/

(Innovations and QualityTools classified by disease or clinical category, patient population, stage of care, setting of care, and more.)

AHRQ's Quality Measures Database - National Quality Measures Clearinghouse (NQMC).
http://www.qualitymeasures.ahrq.gov/

Commonwealth Fund Commission on a High Performance Health System:

http://www.commonwealthfund.org/

Diversity: The Provider's Guide to Quality and Culture

http://erc.msh.org/mainpage.cfm?file=1.0.htm&module=provider&language=English

Institute for Clinical Systems Improvement

http://www.icsi.org/

http://www.icsi.org/guidelines_and_more/patient_education_resources/

Institute for Healthcare Improvement

http://www.ihi.org/

http://www.ihi.org/ihi/workspace/

Institute of Medicine

http://www.iom.edu/CMS/28312/RT-EBM.aspx

http://www.iom.edu/CMS/3718.aspx

http://books.nap.edu/openbook.php?isbn=0309072808&page=1

MedQIC
http://www.qualitynet.org/dcs/ContentServer?pagename=Medqic/MQPage/Homepage

National Transitions of Care Coalition (NTOCC) http://www.ntocc.org/

ATTACHMENT C TO CHAPTER 5

EXERCISES IN INVESTIGATING IMPORTANT CLINICAL PROCESSES

EXERCISE 1: Brainstorming Important Clinical Actions

Directions: Refer to the list of Outcome Measures below and choose one. Make a list of five important clinical actions/care processes that you consider essential to the care of patients associated with this outcome. Then identify the source(s) of the information you used in developing your list.

Outcomes Listed on the All Patients' Outcome Report

Utilization Outcomes	Acute Care Hospitalization Discharged to Community Emergency Department Use – All
Clinical Status Improvement	Improvement in Anxiety Level Improvement in Behavior Problem Frequency Improvement in Bowel Incontinence Improvement in Confusion Frequency Improvement in Dyspnea Improvement in Pain Interfering with Activity Improvement in Speech and Language Improvement in Status of Surgical Wounds Improvement in Urinary Incontinence Improvement in Urinary Tract Infection
Clinical Status Stabilization	Stabilization in Anxiety Level Stabilization in Cognitive Functioning Stabilization in Speech and Language
Functional Status Improvement	Improvement in Ambulation/Locomotion Improvement in Bathing Improvement in Bed Transferring Improvement in Dressing – Lower Body Improvement in Dressing – Upper Body Improvement in Eating Improvement in Grooming Improvement in Management of Oral Medications Improvement in Light Meal Preparation Improvement in Phone Use Improvement in Toileting Hygiene Improvement in Toilet Transferring
Functional Status Stabilization	Stabilization in Bathing Stabilization in Bed Transferring Stabilization in Grooming Stabilization in Light Meal Preparation Stabilization in Management of Oral Medications Stabilization in Phone Use Stabilization in Toileting Hygiene Stabilization in Toilet Transferring

Outcome Measure ***(write in)*** _____

I consider the following clinical actions important to this outcome:

1.

2.

3.

4.

5.

The sources I considered for these are: **(Circle all that apply.)**

a) personal, discipline-specific knowledge base
b) agency or standardized care plan or clinical pathway
c) agency policy/procedure
d) clinical practice guideline
e) colleague or peer with expertise relative to the measure
f) clinical/medical textbook, article, or research study
g) film, lecture, in-service, course, or class
h) other

Review the list of important clinical actions you wrote above.

Did you list important clinical actions related to assessment?

Did you list important clinical actions related to care planning?

Did you list important clinical actions related to patient/family teaching?

Did you list important clinical actions related to clinical interventions/treatments?

Did you list important clinical actions related to evaluation of teaching or interventions?

Use this exercise as a warm-up activity for individual members of the Care Process Action Team.

EXERCISE 2: Developing a Chart Audit Tool

Directions: This exercise builds on Exercise 1. For that reason, it is advisable to combine these exercises into a learning activity for members of the Care Process Action Team.

1. Write in the outcome measure chosen in Exercise 1.

   Outcome measure (write in) _____

2. List the important clinical actions associated with this outcome.
   Refer to list developed in Exercise 1.

   1)

   2)

   3)

   4)

   5)

3. Using the sample chart audit tool on the next page, construct a chart audit tool specific to the important clinical actions listed above.

Sample Chart Audit Tool*

(one form per chart)

Date of Audit: _____

Reviewer: _____

Chart ID #: *(use for complying with agency-specific standards for confidentiality)*

Documents to be reviewed: _____
(Example: Review all patient visit notes for all disciplines)

Period of time: _____
(Example: Review all designated documents from start of care date through discharge date)

Clinical Actions

1. _____ Y ☐ N ☐

   (Example: For patients with dyspnea at SOC, a complete respiratory assessment is performed at every visit.)

2. _____ Y ☐ N ☐

3. _____ Y ☐ N ☐

4. _____ Y ☐ N ☐

5. _____ Y ☐ N ☐

Comments: _____

_____

_____

* This form is for illustrative purposes. Other forms may be available such as clinical record review forms available on www.qualitynet.org, or electronic spreadsheets that allow greater efficiencies in aggregating data.

EXERCISE 3: Using the Chart Audit Tool

Directions: This exercise builds on Exercise 2 and uses the chart audit tool developed for that exercise. Its purpose is to practice the investigational steps of outcome enhancement.

Before You Begin: Obtain clinical records for five patients who have been discharged from your agency or transferred to an inpatient facility. You will need five copies of the chart audit tool, one for each clinical record.

1. Carefully review each clinical record using your chart audit tool. For each of the clinical actions listed, check the appropriate **Yes** or **No** response.

2. Evaluate your designated important clinical actions and your chart audit tool.

   Was it clear which documents to review in the clinical record?

   _____

   Did you know which visits or time period to review?

   _____

   Were the clinical actions stated in specific terms? Were you able to determine easily whether the clinical action had been performed or not, or did you find yourself making interpretations and applying subjective criteria to form an answer? _____

   Were the listed clinical actions the <u>most important</u> ones for the outcome (or did you find more relevant clinical actions in the records)?

   _____

   Would you revise your list of important clinical actions? If so, how would you change it?

   _____

   Would you modify your chart audit tool? If so, how would you change it?

   _____

3. If you decided to interview clinicians rather than to conduct a record review, could you adapt your chart audit tool to become a structured interview guide? If not, how would it need to be modified?

   _____

Use this exercise to test the specificity of your list of important clinical actions and the ease of use of your chart audit tool. The Care Process Action Team will benefit from this practice.

EXERCISE 4: Developing Chart Audit Summary Statements

Directions: This exercise continues to build on the previous ones that focus on the process of care investigation. Collect the chart audit tools that you used in Exercise 3.

1. Write your designated target outcome and designated clinical actions in the appropriate places on the tally sheet (p. 5.32).

2. For each clinical action, record the presence of a **Yes** answer in the appropriate box. (Example: Clinical action #1 had a **Yes** response checked on the chart audit tools for Patients 1, 2, and 5. Check marks are placed in those boxes on the tally sheet.)

3. Total the number of **Yes** responses for each clinical action.

4. Review and summarize your results. It is expected that when you investigate a target outcome for remediation (to improve), you will find that some important clinical actions are not occurring. These should be identified in your summary.

   Conversely, when you investigate a target outcome for reinforcement, it is expected that you will find your important clinical actions <u>are</u> occurring. These should be noted in your summary.

5. Note that such a tally form can be used for multiple reviewers, each of whom reviews more than one clinical record. In this situation, the columns would be titled "Reviewer #1," "Reviewer #2," etc. Each box would then include the number of records with a **Yes** response/the total number of records reviewed. (Example: Reviewer #1 found clinical action #1 in three of five records reviewed; Reviewer #2 found the same clinical action in one of four records; etc. These results would be recorded as 3/5 and 1/4, respectively. If these were the only reviewers, the Grand Total would be 4/9.)

6. Such a tally sheet can also be adapted to summarize interview results.

SAMPLE FOCUSED CLINICAL RECORD REVIEW TALLY SHEET

Target Outcome: _____

Important Clinical Actions	Patient #1	Patient #2	Patient #3	Patient #4	Patient #5	Grand Total (# checked)
1.						
2.						
3.						
4.						
5.						

Conclusion: Aspect(s) of Care Delivery Needing Modification

1. _____

_____

2. _____

_____

With your summary statement(s), you have completed the process of care investigation. You are ready to begin writing the plan of action.

ATTACHMENT D TO CHAPTER 5

AGENCY STRATEGIES TO FACILITATE INVESTIGATING CARE PROCESSES

1. Clinical staff members from all disciplines at all levels (including home health aides and PT/OT aides when appropriate to the outcome) must be involved in this process for any subsequent change in clinical actions to be successful.

2. It is critical to involve clinical staff in the development of the "should be done" list for evaluating care provision. They are the key individuals providing care on a daily basis. They know what to do and what is being done for specific patient types. They are the ones who will need to change their care provision activities when identified problems are to be remedied; therefore, they MUST understand why such changes are indicated. When unconvinced of a need to change care delivery, clinicians are not likely to implement new approaches to care provision, particularly clinicians who practice as autonomously as they do in providing home health care.

3. Consider all aspects of care provision when developing the "should be done" list. Assessment, care planning, interventions, patient/caregiver teaching, evaluation of interventions and teaching, and coordination of care are categories of care delivery that could be relevant. A "should be done" list that addresses only assessment criteria is too narrowly focused to be truly useful.

4. Use existing available resources to assist in developing the "should be done" list. Such resources include published articles on caring for certain conditions such as incontinence or pain, etc.; standardized care plans or care paths; text books; expert opinion on specific conditions, e.g., an enterostomal therapist regarding wounds; and care and treatment guidelines available on the www.qualitynet.org web site.

5. Developing the "should be done" list can occur without meetings by describing a patient situation (e.g., a patient who is not independent in transferring at SOC) and requesting clinicians to provide lists of essential aspects of care provision. The information can be exchanged by voicemail, e-mail, notes, or by posting a list in a central place where staff obtain supplies, turn in paperwork, etc. All suggestions can then be compiled and re-presented to staff for prioritizing (using multi-voting, for example). This approach has been used effectively to obtain input from contract staff or home health aides who may have limited time to participate in meetings.

6. If the agency determines that meeting time is necessary to develop or add to the "should be done" list, append this to a regular meeting time. Ask each staff member to bring to the meeting a short list of the most important aspects of care provision needed to achieve the selected target outcome. The comprehensive list can then be compiled during the regular meeting time and presented for discussion and prioritizing at the end of the regular meeting.

7. Focused clinical record reviews are often used in the investigation but should not be considered the only possible method. Agencies have successfully used alternative approaches to investigate patient care provided relevant to a target outcome. Determine what method(s) are most appropriate for your agency to proceed in an efficient manner

with the best use of staff time. Where relevant, use the Process Quality Measure Report to evaluate use of specific evidence-based care processes for patients with achieving or not achieving the target outcome.

8. Record reviews need not occur in a group setting; they can be done individually with the group re-convening to tally the results when the reviews are complete. Some agencies have found it desirable to conduct one group session to begin so that questions and procedures can be addressed with all participants. Decide what would work best for your agency.

9. Agencies that are new to quality improvement (QI) activities are likely to find the emphasis on care process review to be unique. Because of this, their first effort at this type of investigation may proceed more slowly than future reviews. (Past record review activities are likely to have been focused on verifying that reimbursement requirements were met or that service utilization was appropriate, rather than on specific aspects of care provision.) Such agencies may find it most useful to conduct record review activities in a group setting, allowing all participants to "keep on track" with the new emphasis.

10. Individuals who currently review records in an agency are often skilled at locating the documentation of various aspects of care in the clinical records. If your agency selects record review for the process of care investigation, you might utilize these individuals' expertise. Prior to beginning the focused record review, explain the differences between this record review and the more typical reviews currently done in many home care agencies (e.g., utilization review).

11. Thoroughly investigating care provision requires individuals to apply critical thinking skills to the review of clinical records or to staff interviews to avoid drawing conclusions from assumptions without evidence. For example, for a patient who was admitted with a new medication, the reviewer should not assume that medication teaching was understood by the patient when the record lacks documentation of the results of the teaching (or is missing in the interview).

12. Lack of specificity in the "should be done" list will result in clinical record reviewers (or interviewers) making their own interpretations and assumptions about what the criteria mean. During the early period of the review process, questions from reviewers requesting interpretation of review criteria often indicate that specificity of the criteria needs to be increased.

13. Advance preparation of participating staff members for the process of care investigation will allow the activity to be conducted more efficiently and conserve staff time. This will enable the agency to move forward with developing and implementing the plan of action (addressed in the following chapters).

14. Specific record review (or interview) audit forms that include the review or interview criteria should be distributed to all participating reviewers/interviewers. Adding a "Comments" section to each audit form allows the reviewer to note relevant observations.

15. An adequate number of cases/care episodes from which to draw conclusions should be included in the process of care investigation. Thirty specific care episodes (cases) are suggested. Investigating too small a number of episodes can lead to conclusions that cannot be generalized across the agency. If your agency uses clinical record review, 30

records should be reviewed. If your agency interviews clinicians about care practices, a similar number of unique patient situations should be addressed in the interviews.

16. Give careful consideration to the selection of specific patients to include in the process of care investigation. Sometimes agencies are too restrictive in selecting patients for the review of care, e.g., focusing exclusively on patients with a specific cardiac diagnosis when the target outcome is Improvement in Dyspnea or focusing exclusively on orthopedic patients when the target outcome is Improvement in Ambulation/Locomotion. Use of successive queries to the Patient Tally Report and review of the characteristics for patients selected by these queries will assist in selecting an optimal group of cases for review of care provision.

17. Bring reviewers/interviewers together to discuss and summarize their findings once the audits/interviews are completed. This activity is particularly effective in determining the conclusions of the investigation. A form to tally the results of individual audits/interviews (as developed in Exercise 4) will facilitate summarization. It is helpful to emphasize with investigators that when tallying their individual results they should focus only on whether or not each criterion was met. An investigator should not share his/her own "conclusions" or "gut feelings" about the overall results based only on his/her reviews or interviews. When each investigator has reported the results obtained and all individual results have been tallied, then the group will be able to more clearly and objectively determine the true problematic behaviors relevant to the target outcome.

CHAPTER 6 – DEVELOPING THE PLAN OF ACTION

A. INTRODUCTION

Once the process of care investigation has been completed and the findings summarized, the agency is ready to focus on writing the plan of action. The plan of action is developed to improve (or reinforce) specific attributes of care currently being delivered by the agency. The activities incorporated in the plan of action are necessary to actually enhance patient outcomes. This chapter presents the components of the plan of action that relate to the target outcome and to the clinical actions or care processes that are perceived as impacting it. Findings from the process of care investigation will be further developed in the plan of action as specific best practices to be implemented by clinical staff. A plan of action format is presented here, and characteristics of successful plans of action are described.

B. WHAT IS THE PLAN OF ACTION?

Each plan of action is written to correspond to a specific target outcome. The plan becomes a guide for the outcome enhancement activities that should occur in the agency following the process of care investigation. (A sample completed plan of action is contained in Figure 6.1.) Following a standard format for the plan is strongly encouraged to be sure that all key elements are incorporated. The standard format clearly delineates both the findings of the process of care investigation and the clinical practices that the agency desires to put into place (or to reinforce). This format also incorporates implementation plans into a single document. The plan of action can be considered a road map for staff members to use to enhance the target outcome.

A blank plan of action form is included in Attachment A to this chapter. It can be copied and used when writing the plan of action (or otherwise reproduced in the same format). Experience has shown that agencies attempting to use their own format often overlook key components of the plan, which impedes their ability to impact their target outcome.

Note the key sections of the plan of action:

- Designation as Outcome-Based Quality Improvement or Process Quality Measure Improvement Activity
- Target Outcome
- Statement of Identified Problem or Strength
- Best Practices
- Action Strategies and Monitoring Approaches
- Evaluation

FIGURE 6.1: Sample Plan of Action for the Target Outcome of Improvement in Toilet Transferring.

FAIRCARE HOME HEALTH AGENCY **(AGENCY NAME)**

Plan of Action for Quality Improvement

QUALITY IMPROVEMENT TEAM MEMBERS (Interdisciplinary)

1. Ben Sorrell, RN
2. Madeline Arnold, RN
3. Alexa Kolerma, PT
4. Sara Hanley, LPN
5. Sam Richard, OTR
6. Heidi Thomas, RN

Plan of Action Date 10/10/10

Type of Quality Improvement Activity (select one):

☒ Outcome Based Quality Improvement (OBQI/OBQM) Report Date 10/01/10 Agency Target _____

☒ Remediation ☐ Reinforcement

☐ Process Quality Measure Report Date _____ Agency Target _____

Title of Target Outcome - OBQI/OBQM OR Process Quality Measure(s):

Improvement in toilet transferring

Problem/Strength Statement(s):

1. When patients are only mildly impaired in toilet transferring (e.g., M01840=1 - When reminded, assisted or supervised by another person, able to get to and from the toilet and transfer), care planning and interventions consistently do not adequately address the need for assistance or reminders.
2.

Identified Barriers:

1. Lack of staff knowledge that mild toilet transferring impairments should be addressed during the care episode.
2.

HHA Expectations for Best Practices:

1) For patients mildly impaired in toileting, the case manager will address the problem in the care plan:
   a. For patients needing assistance to go to the bathroom, the case manager will consider the appropriateness of a PT or OT evaluation for the need for an assistive device.
   b. For patients needing reminders to go to the bathroom, the nurse will consider using the following interventions: (1) setting up a regular toileting schedule for the patient; (2) having the patient use a timer to remind him/herself to use the toilet.
2) Every two weeks after the care plan is implemented, the patient's response to interventions and status of toileting impairment will be re-evaluated. Findings will be documented in the visit note.
3) During case conferences, the case manager will identify toileting impairments and the care team will discuss interventions and patient's response to interventions. Case conferences will be documented.

Action Strategies:

Action	Time Frame		Responsible Person(s)	Details and Monitoring Approaches (and Frequency)
	Start	Finish		
a. Develop a standardized care plan for patients mildly impaired in toileting. Incorporate potential need for PT/OT evaluation.	10/10/10	10/19/10	Heidi Thomas Alexa Kolerma	Care plan will be reviewed by Management Team before presented to staff.
b. Case conference form will be updated to include a section on toileting impairments and distributed to all clinicians in the 10/29 staff meeting.	10/10/10	10/19/10	Ben Sorrell Sam Richard	QI team to review revised form.
c. During staff meeting, present the results of the investigation and the action plan to clinicians. Present the standardized care plan for patients mildly impaired in toileting.	10/29/10	10/29/10	Madeline Arnold Sara Hanley	Document staff meeting attendance in meeting minutes. Follow up with any clinicians not present (to be done by supervisors).
d.				

Evaluation:

a. Review of Plan:

Date: 10/2010

Responsible person(s): Ben Sorrell

Results:

b. Next Outcome Report - OBQI/OBQM OR Process Quality Measure Report:

Date: 10/2011

Results:

Next Step(s):

c. Monitoring Activities:

(1) Activity: Quarterly clinical review to monitor staff use of standardized care plan, use of interventions listed on plan, and evidence of re-evaluation two weeks after implementing the care plan.

Date Completed:

Finding:

Response:

(2) Activity: Quarterly clinical record review to assess consistent use of case conference notes and for evidence of discussion of toileting impairment, interventions, and patient response to interventions.

Date Completed:

Finding:

Response:

(3) Activity: Every other staff meeting, have clinicians present case studies for patients for whom the care plan was followed vs. patients for whom the care plan was not implemented.

Date Completed:

Finding:

Response:

(4) Activity:

Date Completed:

Finding:

Response:

The first four components of the plan are discussed in this chapter. The remaining sections are presented in Chapter 7.

The plans of action from agencies successful in enhancing patient outcomes tend to display similar characteristics. First and foremost, they focus on patient care delivery - not on unrelated processes or agency structural components. The plans also incorporate specifically stated aspects of care, not simply global observations. In these ways, they can be seen to truly guide clinical staff in care provision.

Outcome enhancement activities began with identification of a **target outcome** and determination of whether it needed to be improved or reinforced. The plan of action is for **remediation** if the goal is to improve the target outcome by changing the clinical actions of staff. A plan for **reinforcement** indicates that the goal is to maintain a superior outcome by reinforcing exemplary clinical actions currently being practiced by the clinical staff. At the completion of the process of care investigation, findings were summarized and determined to demonstrate either inadequate or exemplary care provision. These conclusions now will be developed into **statements of problems or strengths** in care delivery. All these elements are part of the plan of action and can be included in the plan as determined by the responsible staff.

C. WHO DEVELOPS THE PLAN OF ACTION?

Since the plan of action is a natural extension of the process of care investigation, the same individuals (or group) who are responsible for the investigation efforts are the logical choices for developing the plan. If the agency has an established quality improvement group, it is likely to be involved in these steps of the outcome enhancement process. This group may be expanded to include clinical staff directly involved in the care processes central to the target outcome. The experiences gained during the process of care investigation - namely the development of the "should be done" list and the review of current care provision - are extremely valuable in the action plan development steps of specifying best practices and identifying appropriate intervention and monitoring approaches. The plan will be developed most efficiently when group members can move directly from the investigation step, building on the learning achieved in that part of the process.

D. STATEMENTS OF PROBLEM/STRENGTH IN CARE PROVISION

The conclusions from the process of care investigation form the basis for statements of problem (or strength) in care provision, along with identification of actual or perceived barriers. Carefully develop the problem or strength statement since it will direct the remainder of the plan of action. The statement should describe the care provided to agency's patients in terms of the target outcome. It will either indicate what is being done in care provision that is causing unfavorable outcome results (a problem for the plan developed for remediation/improvement), or the statement will illustrate what care provision produced favorable outcome results (a strength for the plan developed for reinforcement). Following the problem or strength statement, the actual or perceived barriers should be identified. For example, if patients with CHF are not being weighed at each visit, what are the barriers for staff? Are weight scales available?

Successful plans of action are found to include specific, clearly worded problem or strength statements, which the reader can see as being the focus of the entire plan. They also display a clear relationship or link to the target outcome. The problem/strength statement is very important because it indicates the target clinical action (care process). This will be the emphasis as the agency begins to change (or reinforce) the care being delivered by clinical staff.

Good problem (or strength) statements should have the following attributes:

- Describe specific aspects of care provision or care issues that demonstrate either inadequate or superior care (relative to problematic or exemplary outcomes, respectively).

- Use tangible and specific wording with concrete terms to which your clinical staff can relate, rather than general or vague concepts.

- Address issues that are within the agency's control.

- Focus on more than a change in agency documentation processes. If your problem statement centers on documentation, ask yourself "What is the clinical action that you expect to occur before it is documented?"

- Require boundaries to narrow the emphasis to a manageable size. Agencies sometimes must control their desires to change everything all at one time.

The problem/strength statement will guide the development of **best practices,** which in turn guide the development of the agency-level interventions to improve performance. It is critical that the problem/strength statement be specific, clearly worded, and directly related to the target outcome. Agencies have found that when the problem is stated very broadly (e.g., "For patients with dyspnea the assessment is not documented adequately"), vague best practice statements are developed, which result in nonspecific, unfocused actions being implemented by the clinical staff. Seldom do these unfocused activities have an impact on the target outcome.

In writing the problem/strength statement, ensure that all clinicians, all disciplines, or all affected agency staff members visualize the problem (or strength) in a similar way. This clarity is critical to direct staff members to necessary changes in their clinical practice. Note how important an issue this is when the problem statement is written as being "inadequacy of documentation." What should the clinicians in the agency do to correct this problem? Should they write more legible or more detailed visit notes? Should their assessments be improved in some way - and thus documented more adequately? Should their care plans or their interventions be modified? When the agency staff is not aware of what the precise problem (or strength) is in providing care, it is less likely that changes in clinical actions or changes in patient outcomes will be seen. Thus, the problem statement should address the care that should be provided, and the identified barriers may include environmental, educational, or other impediments to implementing optimal care practices. These impediments can be addressed in the next section of the Plan of Action.

Examples of good problem statements are:

1. Problem: In patients who have difficulty transferring due to pain, evaluating knowledge of nonpharmacologic approaches to pain management is infrequently included in the care plan.

2. Problem: For patients with shortness of breath at start (or resumption) of care, there is inadequate assessment of change in respiratory rate in response to activity.

Examples of well-specified statements of strength are:

1. Strength: Dyspneic patients are clearly taught and comply with programs of graded exercise.

2. Strength: For patients who have difficulty transferring, a thorough environmental assessment of all transferring locations (bathroom/bedroom/living/dining areas) is done.

Barrier statements should be written precisely also, so that subsequent agency activities can be directed toward overcoming them. For example: Not all RNs have access to scales to weigh CHF patients.

All these statements clearly focus on specific aspects of patient care. All can be further developed as specific best practices expected of the clinical staff. A new clinician in the agency would know precisely what aspects of care should be emphasized for which type of patient.

After the statement of problem or strength is written, have another person in the agency review it. Ask them to think of themselves as a new agency employee as they read the statement. As a (hypothetical) new employee, would they understand what the agency has been doing well (or not so well)? Or does the statement simply restate the target outcome or present a vague picture of what has been happening in care provision (e.g., patients do not improve in managing their oral medications; bathing ability is inadequately addressed in providing care; etc.)? Do the barrier statements reflect related impediments to providing optimal care?

E. STATEMENTS OF BEST PRACTICES

Once the problem/strength statement is clearly developed and added to the plan of action, focus on specifying best practices. These clinical actions identify exactly what the clinician should do and when and how it should be done. They further define the clinical actions that are expected to occur in the agency.

Similar to the writing of problem/strength statements, successful plans of action also include specific, precisely worded activities desired of an agency's clinical staff. The best practices need to focus on patient care and reflect activities that are within agency control. Their relationship to the problem/strength statement also should be readily apparent. They should address specific assessments, treatments and service interventions, and care planning and coordination within the agency. They may include documentation but must go beyond documentation to include the assessments and patient care provided.

Examples of good statements of best practices (for varying problem/strength statements) are:

1. Assessment: Nutritional risk factor assessment at SOC and monthly intervals will follow the Braden Scale guidelines.

2. Care planning: All postoperative orthopedic patients' care plans will include teaching of pain management during activity.

3. Coordination: When nursing and therapy are involved in providing care to a patient with dyspnea, both disciplines will utilize the same graded exercise teaching plan.

Remember that the statements of best practices will be used by clinical staff to modify current care provision (in the case of an inferior outcome) or to reinforce care provision (in the case of a superior outcome). OASIS items for process quality measurement specify several evidence-based practices. It is very important for these practices to be stated clearly and specifically. Test best practice statements using the following questions: If a new staff member reviewed the best practice statements, would he/she be able to identify exactly what to do in providing patient care in specific situations? Are the statements that clear and specific? This is the level of specificity that is being desired.

In many instances, the list of important clinical actions (compiled in the beginning stage of the process of care investigation) will be the starting place to develop best practices. Remember that this list was overly broad and inclusive at first. The list was developed to conduct the record review or staff interviews for investigation, but now the agency will want to prioritize the most important clinical actions to develop as best practices. Return to this inclusive list and prioritize those activities presumed to most directly impact the problem/strength statement and thus the target outcome. This again is an area where brainstorming and multivoting can be useful techniques. (Both techniques are discussed in Attachment B to Chapter 5.) For ease in implementation, approximately three or four best practice statements are optimal to include in the plan of action. Too many best practices can be difficult for the clinical staff to remember to implement regularly, thus reducing the potential impact on the target outcome. Best practice statements also should address a range of clinical activities—not simply assessments to be performed or documentation to be completed. Care planning, coordination, clinical interventions, and teaching also can be addressed by best practices.

The statements of best practices can now be added to the plan of action. This step concludes focus on the target outcome and the clinical actions that are perceived as impacting it. Focus now shifts to the actions involved in implementing the plan within the agency. These portions of the plan of action are presented in the next chapter.

F. TIMELINE FOR DEVELOPING THE PLAN OF ACTION

As noted in Chapter 5, agencies that have successfully enhanced patient outcomes have proceeded through the process of care investigation to the plan of action implementation within approximately one month after receiving their Outcome Report. This aspect of outcome enhancement also needs to proceed quickly to maximize the impact on patient care delivery (and thus on outcomes).

As the designated agency staff members move through the process of care investigation, they can begin work on the plan of action. When the care investigation is conducted efficiently, completing the best practices of the plan of action can be completed by approximately three weeks after receipt of the Outcome Report. This timeline allows approximately one additional week to develop and begin implementing the intervention activities designed to spread the best practices across the agency.

Again, the importance of the agency being prepared to receive the Outcome and Agency Patient-Related Characteristics Reports and to put these activities into motion is emphasized. Chapter 9 will address how staff can be prepared in advance for the necessary steps to follow in developing the plan of action in a timely manner.

FREQUENTLY ASKED QUESTIONS

1. Our agency is part of a hospital-based health system and all the facilities in the system are required to use the same format for all their QI projects. How do we mesh that requirement with this OBQI process?

Several of the agencies in the national demonstration dealt with that issue successfully by educating a few key people at the corporate QI level about OBQI. Once the corporate QI team members understood the rationale and availability of existing data for the OBQI processes, they approved of and supported the agencies' use of the alternative format. If that transition takes time for your organization, you may have to do the best you can to incorporate the parts of the OBQI process into your required format, making every effort not to eliminate any portion. Most agencies have found that OBQI makes their previous quality improvement structure more efficient, because they do not have to spend several weeks or months collecting data to identify the problem. Agencies have sometimes found that the terminology in OBQI is slightly different than the terms they have been using, but that they are usually equitable.

2. Can you give some examples of "patient care delivery" issues that we should include in a plan of action and some "structural" components that we should not include?

*The **focus** of your plan of action is on patient care delivery rather than agency structural components, but that does not mean that agency structural components must never be mentioned in the plan. In the first example on page 6.5, "In patients who have difficulty transferring due to pain, evaluating knowledge of nonpharmacologic approaches to pain management is infrequently included in the care plan," the focus is on a patient care delivery issue. The care delivery issue is that of care planning and specific issues to address in the care plan. In developing actions to address this problem, an agency may need to implement some "system" or procedural changes, but those changes are not the focus of the best practices in the plan of action.*

On the other hand, if the problem statement addressed the need for the agency to hire only therapists whose basic professional education includes course content on nonpharmacologic pain management, the focus is on the structural components of quality. Structural issues are often more difficult to change rapidly, thus are less likely to have a quick impact on patient outcomes.

3. How do we know when our statements of problems, strengths, or best practices are specific enough or if they are too specific?

The problem/strength statement has reached the desired level of specificity if a new employee can read it and understand what the agency has not been doing well (or has been doing very well). The best practice statements are specific enough if any member of the clinical staff can read them and understand what care practices are to occur in the situation referenced, including who should do what, when, and with what frequency. It is difficult to imagine a statement that is too specific, as this does not tend to be an issue, but it would not be useful if the statement defined only a very narrow portion of the total problem/strength area.

FREQUENTLY ASKED QUESTIONS

4. We've always been instructed to make a "mission statement" at the beginning of our QI plan stating what our percentage of success has been and what we expect to achieve in the next time period (quarter or year, depending on the project). An example would be "Improvement in Bathing will increase from 36% to 54% within the next year." Could we use that for a problem statement?

Refer back to Section D in this Chapter about problem statements, where we emphasize that a problem statement should identify patient care issues that the agency desires to remedy. Your example does not indicate what care delivery problem has been identified or how the agency will move forward to improve the outcome. We caution agencies not to try to predict the following year's outcome, because the agency has no factual basis to make such a prediction. If you feel you must have such a mission statement, perhaps this would work, "This agency has had fewer patients than desired who have improved in their ability to bathe. While the causes of this may be many and varied, we have identified the following problems with patient care delivery that this plan of action will address: 1) Patients are not regularly referred for PT or OT when the SOC assessment reveals an inability to bathe independently. 2) Care plans for patients unable to bathe independently do not include interventions to assist the patient to progress toward independence."

5. If we write a best practice statement that addresses how clinicians do an assessment, would we also write a best practice about changing our assessment forms?

No, changing the forms would be part of the implementation (the things the agency needs to do to make the best practices happen). That part of developing the plan of action is addressed in the next chapter.

6. The time frame seems very short. I don't know how we can possibly follow the schedule.

*Don't be defeated by your fears and anxiety. The next chapter will complete the task of introducing you to the development of the plan of action and its implementation, then we will discuss building an appropriate team and training staff members to participate in the process. Most of the team building and training can be done **before** the agency accesses the Outcome Report. It does require planning ahead and allotting the time needed to complete the tasks, but the process can be successfully done in just a few weeks.*

ATTACHMENT A TO CHAPTER 6

PLAN OF ACTION FOR QUALITY IMPROVEMENT FORM

_____ **(AGENCY NAME)**

Plan of Action for Quality Improvement

QUALITY IMPROVEMENT TEAM MEMBERS (Interdisciplinary)

1. _____ 3. _____ 5. _____

2. _____ 4. _____ 6. _____

Plan of Action Date _____

Type of Quality Improvement Activity (select one):

☐ Outcome Based Quality Improvement (OBQI/OBQM) Report Date _____ Agency Target _____

☐ Remediation ☐ Reinforcement

☐ Process Quality Measure Report Date _____ Agency Target _____

Title of Target Outcome - OBQI/OBQM OR Process Quality Measure(s):
Problem/Strength Statement(s): Identified Barriers: HHA Expectations for Best Practices:

Action Strategies:

Action	Time Frame		Responsible Person(s)	Details and Monitoring Approaches (and Frequency)
	Start	Finish		
a. b. c.				

Evaluation:

a. Review of Plan:

Date: _____

Responsible person(s): _____

Results:

b. Next Outcome Report - OBQI/OBQM OR Process Quality Measure Report:

Date: _____

Results:

Next Step(s):

c. Monitoring Activities:

(1) Activity:

Date Completed: _____

Finding: _____

Response: _____

(2) Activity:

Date Completed: _____

Finding: _____

Response: _____

(3) Activity:

Date Completed: _____

Finding: _____

Response:

(4) Activity:

Date Completed: _____

Finding: _____

Response:

ATTACHMENT B TO CHAPTER 6

EXERCISES IN EVALUATING PROBLEM STATEMENTS AND BEST PRACTICES

The first two exercises in this attachment focus on evaluating and writing problem statements. The remaining exercises focus on best practice statement evaluation and development.

EXERCISE 1: Evaluating Problem Statements

Directions: Below are three target outcomes with their corresponding problem statements. Review each and answer the questions that follow.

Target Outcome A: Improvement in Dyspnea

Identified Problem: For patients with dyspnea or noticeable shortness of breath, there is inadequate assessment of changes in respiratory rate and blood pressure in response to activity. Inadequate assessment of factors that may precipitate dyspnea is also evident.

Evaluation Criteria

1. Is the problem statement clear? _____
2. Is the statement directly related to the target outcome? _____
3. Would each care provider or staff member understand this? _____
4. Is the statement so broad that it will be difficult to develop a set of prioritized best practices to improve the target outcome? _____
5. Does the statement reflect a problem within control of the agency? _____
6. Does the statement focus on more than documentation? _____
7. If you were to modify the problem statement, how would you change it?

   _____

   _____

Target Outcome B: Improvement in Transferring

Identified Problem: Caregivers use inconsistent descriptions of transferring ability, so similar assessment data are not consistently interpreted. When difficulty in transferring is present, no specific interventions occur. Lack of continuity of staff adds to inconsistent patient teaching.

Evaluation Criteria

1. Is the problem statement clear? _____
2. Is the statement related to the target outcome? _____
3. Would each care provider or staff member understand this? _____

EXERCISE 1: Evaluating Problem Statements (Cont'd)

4. Is the statement so broad that it will be difficult to develop a set of prioritized best practices to improve the target outcome? _____

5. Does the statement reflect a problem within control of the agency? _____

6. Does the statement focus on more than documentation? _____

7. If you were to modify the problem statement, how would you change it? _____

_____

Target Outcome C: Acute Care Hospitalization

Identified Problem: For patients with a cardiac diagnosis, appropriate interventions were not initiated in most cases.

Evaluation Criteria

1. Is the problem statement clear? _____

2. Is the statement related to the target outcome? _____

3. Would each care provider or staff member understand this? _____

4. Is the statement so broad that it will be difficult to develop a set of prioritized best practices to improve the target outcome? _____

5. Does the statement reflect a problem within control of the agency? _____

6. Does the statement focus on more than documentation? _____

7. If you were to modify the problem statement, how would you change it? _____

_____

EXERCISE 1: Evaluating Problem Statements *(Responses)*

Target Outcome A: Improvement in Dyspnea

Identified Problem: For patients with dyspnea or noticeable shortness of breath, there is inadequate assessment of changes in respiratory rate and blood pressure in response to activity. Inadequate assessment of factors that may precipitate dyspnea is also evident.

Evaluation Criteria

1.	Is statement clear?	*Yes*
2.	Is statement directly related to the target outcome	*Yes*
3.	Understandable to each care provider/staff member?	*Yes*
4.	Too broad to develop set of prioritized best practices?	*Generally no. Two potential modifications would improve the statement: (1) specify the type(s) of "activity" that should initiate the assessment of changes in respiratory rate and blood pressure, and (2) clarify whether any interventions are expected to occur in response to the assessments noted.*
5.	Identify a problem within the agency's control?	*Yes*
6.	Focus on more than documentation?	*Yes*
7.	Modification needed?	*Note the potential modifications suggested in 4 above. To achieve an improved outcome rate, the agency is likely to desire that some clinical interventions occur in response to the assessment factors noted in the problem statement. These specific interventions would be very appropriately included in the best practices, which is why some mention of "interventions" is also needed in the problem statement.*

EXERCISE 1: Evaluating Problem Statements *(Responses) (Cont'd)*

Target Outcome B: Improvement in Bed Transferring

Identified Problem: Caregivers use inconsistent descriptions of transferring ability, so similar assessment data are not consistently interpreted. When difficulty in transferring is present, no specific interventions occur. Lack of continuity of staff adds to inconsistent patient teaching.

Evaluation Criteria

1.	Is statement clear?	*Multiple problems are included in the statements, addressing interpretation of assessment data, lack of clinical interventions, staffing issues, and inconsistent patient teaching. It would be better to more specifically focus the problem statement.*
2.	Is statement directly related to the target outcome	*Yes*
3.	Understandable to each care provider/staff member?	*Staff members are likely to understand that there is a problem with assessing transferring and intervening appropriately. Aside from this issue, care providers are not likely to understand what they should be doing differently.*
4.	Too broad to develop set of prioritized best practices?	*Yes -- the set of best practices that would result from these statements appears quite lengthy and varied. The range of best practices might be difficult for clinicians to remember to implement. This again points out that focusing the problem statement is extremely desirable.*
5.	Identify a problem within the agency's control?	*Yes*
6.	Focus on more than documentation?	*Yes*
7.	Modification needed?	*Yes, to more clearly identify the exact nature of the problem in care provision that was identified in the process of care investigation.*

EXERCISE 1: Evaluating Problem Statements *(Responses) (Cont'd)*

Target Outcome C: Acute Care Hospitalization

Identified Problem: For patients with a cardiac diagnosis, appropriate interventions were not initiated in most cases.

Evaluation Criteria

1.	Is statement clear?	*No, it is very broad and general.*
2.	Is statement directly related to the target outcome	*No, the relationship between "patients with a cardiac diagnosis" and the hospitalization outcome is not identified.*
3.	Understandable to each care provider/staff member?	*Only that somehow the interventions being implemented for patients with cardiac diagnoses are not adequate.*
4.	Too broad to develop set of prioritized best practices?	*Yes. The range of interventions to be implemented for patients with cardiac diagnoses is very broad. Which of these interventions appear to be most relevant to decreasing hospitalizations?*
5.	Identify a problem within the agency's control?	*Lack of clarity in the problem statement leads to uncertainty as to whether this is within the agency's control or not.*
6.	Focus on more than documentation?	*Apparently yes.*
7.	Modification needed?	*Yes, greater specificity is needed -- possibly narrowing the type of cardiac diagnoses, specifying the interventions that are anticipated to decrease hospitalization, linking the problem statement to the outcome, etc.*

This small group activity can be used by the Care Process Action Team to discuss and evaluate problem statements prior to writing its own problem statement(s). If team members find it difficult, refer back to Chapter 6 before proceeding.

EXERCISE 2: Writing and Evaluating Your Own Problem Statement

Directions: Once your agency has selected its target outcome(s) and conducted its process of care investigation, use this form to write, review, and evaluate your problem statement(s).

Target Outcome: _____

Problem Statement: _____

_____

1. Is the problem statement clear? _____
2. Is the statement directly related to the target outcome? _____
3. Would each care provider or staff member understand this? _____
4. Is the statement so broad that it will be difficult to develop a set of prioritized best practices to improve the target outcome? _____
5. Does the statement reflect a problem within control of the agency? _____
6. Does the statement focus on more than documentation? _____
7. If you were to modify the problem statement, how would you change it?
   _____

Target Outcome: _____

Problem Statement: _____

_____

1. Is the problem statement clear? _____
2. Is the statement related to the target outcome? _____
3. Would each care provider or staff member understand this? _____
4. Is the statement so broad that it will be difficult to develop a set of prioritized best practices to improve the target outcome? _____
5. Does the statement reflect a problem within control of the agency? _____
6. Does the statement focus on more than documentation? _____
7. If you were to modify the problem statement, how would you change it?
   _____

EXERCISE 2: Writing and Evaluating Your Own Problem Statement (Cont'd)

Target Outcome: _____

Problem Statement: _____

_____

1. Is the problem statement clear? _____
2. Is the statement related to the target outcome? _____
3. Would each care provider or staff member understand this? _____
4. Is the statement so broad that it will be difficult to develop a set of prioritized best practices to improve the target outcome? _____
5. Does the statement reflect a problem within control of the agency? _____
6. Does the statement focus on more than documentation? _____
7. If you were to modify the problem statement, how would you change it?
   _____

This small group activity can be used by the Care Process Action Team to review and evaluate its own problem statement(s).

EXERCISE 3a: Evaluating Best Practice Statements

Directions: For the following four target outcomes, review the problem statements and the identified best practices. Focus on the best practices; answer the questions for each set of best practices.

Target Outcome: Improvement in Bed Transferring

Problem Statement: Care plans for postoperative orthopedic patients do not include adequate teaching for pain management during transfers.

Best Practices:

A. Include teaching for pain management during transfers in all care planning for postoperative orthopedic patients.

B. Teaching content should include medication scheduling and positioning.

		Circle the appropriate response			
Evaluation Criteria		Best Practice A		Best Practice B	
1.	Does the best practice statement focus on specific clinical action(s)?	Yes	No	Yes	No
2.	Does the best practice statement relate directly to the target outcome?	Yes	No	Yes	No
3.	Does the best practice statement specify what the clinician will do, when, and how?	Yes	No	Yes	No
4.	Does the best practice statement focus on documentation only?	Yes	No	Yes	No
5.	Is the best practice within the agency's control?	Yes	No	Yes	No
6.	Overall evaluation: Do you find the best practice adequate to address the identified problem? If not, what statement might you substitute?	Yes	No	Yes	No

_____

_____

EXERCISE 3b: Evaluating Best Practice Statements

Target Outcome: Improvement in Dyspnea

Problem Statement: There is inconsistent definition of dyspnea, so similar assessment data are not consistently interpreted. When dyspnea is present, no specific interventions occur.

Best Practices:

A. Staff will use a consistent definition of dyspnea in analyzing assessment data.

B. When dyspnea is detected, staff will intervene.

		Circle the appropriate response			
Evaluation Criteria		Best Practice A		Best Practice B	
1.	Does the best practice statement focus on specific clinical action(s)?	Yes	No	Yes	No
2.	Does the best practice statement relate directly to the target outcome?	Yes	No	Yes	No
3.	Does the best practice statement specify what the clinician will do, when, and how?	Yes	No	Yes	No
4.	Does the best practice statement focus on documentation only?	Yes	No	Yes	No
5.	Is the best practice within the agency's control?	Yes	No	Yes	No
6.	Overall evaluation: Do you find the best practice adequate to address the identified problem? If not, what statement might you substitute?	Yes	No	Yes	No

_____

_____

EXERCISE 3c: Evaluating Best Practice Statements

Target Outcome: Acute Care Hospitalization

Problem Statement: Inadequate evaluation of changes in condition for patients with neurologic diagnoses.

Best Practices:

A. At SOC, request prn orders to address changes in condition for patients with neurologic dysfunction.

B. Thorough evaluation for patients with long standing diagnoses (e.g., MS, Parkinsons, old CVA, etc.).

		Circle the appropriate response			
	Evaluation Criteria	Best Practice A		Best Practice B	
1.	Does the best practice statement focus on specific clinical action(s)?	Yes	No	Yes	No
2.	Does the best practice statement relate directly to the target outcome?	Yes	No	Yes	No
3.	Does the best practice statement specify what the clinician will do, when, and how?	Yes	No	Yes	No
4.	Does the best practice statement focus on documentation only?	Yes	No	Yes	No
5.	Is the best practice within the agency's control?	Yes	No	Yes	No
6.	Overall evaluation: Do you find the best practice adequate to address the identified problem? If not, what statement might you substitute?	Yes	No	Yes	No

_____

_____

EXERCISE 3d: Evaluating Best Practice Statements

Target Outcome: Improvement in Light Meal Preparation

Problem Statement: Inadequate utilization of aide services or referral to other disciplines when patients have difficulty with light meal preparation.

Best Practices:

A. At SOC, if patient unable to prepare light meals, assess need for aide services.

B. At SOC, if patient unable to prepare light meals, assess need for MSW referral or OT evaluation.

		Circle the appropriate response			
Evaluation Criteria		Best Practice A		Best Practice B	
1.	Does the best practice statement focus on specific clinical action(s)?	Yes	No	Yes	No
2.	Does the best practice statement relate directly to the target outcome?	Yes	No	Yes	No
3.	Does the best practice statement specify what the clinician will do, when, and how?	Yes	No	Yes	No
4.	Does the best practice statement focus on documentation only?	Yes	No	Yes	No
5.	Is the best practice within the agency's control?	Yes	No	Yes	No
6.	Overall evaluation: Do you find the best practice adequate to address the identified problem? If not, what statement might you substitute?	Yes	No	Yes	No

_____

_____

EXERCISE 3a: Evaluating Best Practice Statements *(Responses)*

Target Outcome: Improvement in Bed Transferring

Best Practice A: Include teaching for pain management during bed transfers in all care planning for postoperative orthopedic patients.

Evaluation Criteria

1.	Focuses on specific clinical action(s)?	*Yes*
2.	Relates directly to the target outcome?	*Yes*
3.	Specifies what the clinician will do, when, and how?	*Partially - the "what" is included; "how" is assumed; "when" most likely assumed to be at SOC, but could be stated directly.*
4.	Focuses on documentation only?	*An issue here, since a care plan that is documented but not implemented is a possibility.*
5.	Lies within the agency's control?	*Yes*
6.	Adequately addresses the identified problem?	*Questionable - is the real problem in care provision only a missing line in a care plan?*

Best Practice B: Teaching content should include medication scheduling and positioning.

Evaluation Criteria

1.	Focuses on specific clinical action(s)?	*Yes*
2.	Relates directly to the target outcome?	*No - the statement lacks any connection to transferring*
3.	Specifies what the clinician will do, when, and how?	*Partially - "what" (content of teaching) is addressed in general terms; "when" and "how" are not included.*
4.	Focuses on documentation only?	*No*
5.	Lies within the agency's control?	*Yes*
6.	Adequately addresses the identified problem?	*Questionable, due to concerns about the adequacy of the problem statement.*

EXERCISE 3b: Evaluating Best Practice Statements *(Responses)*

Target Outcome: Improvement in Dyspnea

Best Practice A: Staff will use a consistent definition of dyspnea in analyzing assessment data.

Evaluation Criteria

1.	Focuses on specific clinical action(s)?	*No - while data interpretation is what the clinician does with assessment data, more specific clinical actions would include precise assessment to be done.*
2.	Relates directly to the target outcome?	*Yes*
3.	Specifies what the clinician will do, when, and how?	*No*
4.	Focuses on documentation only?	*No*
5.	Lies within the agency's control?	*Yes*
6.	Adequately addresses the identified problem?	*Questionable - the lack of specificity in the problem statement (see page 6.5) contributes to a similarly non-specific best practice.*

Best Practice B: When dyspnea is detected, staff will intervene.

Evaluation Criteria

1.	Focuses on specific clinical action(s)?	*No - while intervention is a clinical action, specificity is lacking.*
2.	Relates directly to the target outcome?	*Yes*
3.	Specifies what the clinician will do, when, and how?	*No*
4.	Focuses on documentation only?	*No*
5.	Lies within the agency's control?	*Yes*
6.	Adequately addresses the identified problem?	*Questionable - the lack of specificity in the problem statement (see page 6.5) contributes to a similarly non-specific best practice.*

EXERCISE 3c: Evaluating Best Practice Statements *(Responses)*

Target Outcome: Acute Care Hospitalization

Best Practice A: At SOC, request prn orders to address changes in condition for patients with neurologic dysfunction.

Evaluation Criteria

1.	Focuses on specific clinical action(s)?	*No - very broad actions represented.*
2.	Relates directly to the target outcome?	*No - appears to correspond to problem statement (see page 6.7), but doesn't truly address inadequate evaluation of condition changes.*
3.	Specifies what the clinician will do, when, and how?	*Partially - "when" (at SOC) is included; the "what" and "how" are not adequate.*
4.	Focuses on documentation only?	*No*
5.	Lies within the agency's control?	*Yes*
6.	Adequately addresses the identified problem?	*No - obtaining orders for what to do when changes in condition occur doesn't address inadequate evaluation of such changes.*

Best Practice B: Thorough evaluation for patients with long standing diagnoses (e.g., MS, Parkinsons, old CVA, etc.).

Evaluation Criteria

1.	Focuses on specific clinical action(s)?	*No - "thorough evaluation" is a very broad statement, as is "long-standing diagnoses."*
2.	Relates directly to the target outcome?	*No*
3.	Specifies what the clinician will do, when, and how?	*No - few clinicians would know what is expected of them in providing care.*
4.	Focuses on documentation only?	*No*
5.	Lies within the agency's control?	*Yes*
6.	Adequately addresses the identified problem?	*No - focuses on patients with "older" diagnoses (in contrast to those with more recent diagnoses), but doesn't address the components of an adequate evaluation of change in condition.*

EXERCISE 3d: Evaluating Best Practice Statements *(Responses)*

Target Outcome: Improvement in Light Meal Preparation

Best Practice A: At SOC, if patient unable to prepare light meals, assess need for aide services.

Evaluation Criteria

1.	Focuses on specific clinical action(s)?	*Yes - a specific assessment.*
2.	Relates directly to the target outcome?	*Yes*
3.	Specifies what the clinician will do, when, and how?	*Partially - "what" (assess) and "when" (at SOC if patient is unable to prepare light meals) are included; "how" is not addressed; thus, considerable room for variation is present.*
4.	Focuses on documentation only?	*No*
5.	Lies within the agency's control?	*Yes*
6.	Adequately addresses the identified problem?	*Marginally - adding both assessment criteria and the goals for aide services would strengthen the statement.*

Best Practice B: At SOC, if patient unable to prepare light meals, assess need for MSW referral or OT evaluation.

Evaluation Criteria

1.	Focuses on specific clinical action(s)?	*Yes - a specific assessment.*
2.	Relates directly to the target outcome?	*Yes*
3.	Specifies what the clinician will do, when, and how?	*Partially - "what" (assess) and "when" (at SOC if patient is unable to prepare light meals) are included; "how" is not addressed.*
4.	Focuses on documentation only?	*No*
5.	Lies within the agency's control?	*Yes*
6.	Adequately addresses the identified problem?	*Marginally - adding assessment criteria and the goals for MSW referral/OT evaluation would strengthen the statement.*

This exercise can be used by the Care Process Action Team to evaluate and discuss best practice statements. This should be done as preparation for developing the agency's own best practice statements.

EXERCISE 4: Writing and Evaluating Your Own Best Practices

Directions: For your agency's target outcome(s) and problem statements, develop specific best practices. Then evaluate your best practices against the criteria.

Target Outcome:

Problem Statement:

Best Practices:

A.

B.

C.
(add others as needed)

For each best practice, answer the following questions.

Evaluation Criteria		Best Practice A		Best Practice B		Best Practice C	
1.	Does the best practice statement focus on specific clinical action(s)?	Yes	No	Yes	No	Yes	No
2.	Does the best practice statement relate directly to the target outcome?	Yes	No	Yes	No	Yes	No
3.	Does the best practice statement specify what the clinician will do, when, and how?	Yes	No	Yes	No	Yes	No
4.	Does the best practice statement focus on documentation only?	Yes	No	Yes	No	Yes	No
5.	Is the best practice within the agency's control?	Yes	No	Yes	No	Yes	No
6.	Overall evaluation: Do you find the best practice adequate to address the identified problem? If not, what statement might you substitute?	Yes	No	Yes	No	Yes	No

_____

_____

Use this exercise to evaluate your agency's own best practice statement(s). If revisions are necessary, make them and use the criteria again to review the new statements.

ATTACHMENT C TO CHAPTER 6

AGENCY STRATEGIES FOR DEVELOPING STATEMENTS OF PROBLEM OR STRENGTH IN CARE PROVISION

1. The findings of the process of care investigation are summarized in the problem/strength statements, i.e., the root causes of the inferior or superior target outcome are identified.

2. Problem/strength statements should contain tangible, clear wording using concrete terms to which clinical staff can relate. Specifically worded statements will assist in presenting the plan to staff, thus increasing the likelihood of impacting outcomes.

3. A logical, consistent link between the target outcome and the problem/strength statement should be evident. Problem/strength statements should focus the reader on the direction of the remainder of the plan of action.

4. Problem/strength statements guide the development of "Best Practices," which in turn guide the development of agency-level interventions in the plan of action.

5. Problem/strength statements:

   - Describe specific aspects of care provision or care issues.
   - Focus on patient care delivery and have a clear link to the target outcome.
   - Address patient care issues that are within the agency's control.
   - Focus on the CARE provided, not just on documentation of that care.
   - Have a somewhat narrow focus to emphasize a manageable area of change.

6. An example of an acceptable problem statement for the target outcome, Improvement in Dyspnea, is: "For patients with noticeable shortness of breath at start of care, there are inadequate assessments of respiratory rate changes in response to activity." This statement focuses on patient care, addresses issues within the agency's control, includes more than documentation, uses specific wording, and can guide the development of best practices.

7. An example of an unacceptable problem statement for the target outcome, Improvement in Dyspnea, is: "For patients with dyspnea, assessment is inadequate." This statement is focused on patient care; however, it is not specific, and would not guide the development of a reasonable (do-able) list of best practices.

8. An example of an acceptable strength statement for the target outcome, Acute Care Hospitalization, is: "At the start of care, patients and caregivers are taught the changes in a patient's signs and symptoms that would warrant a call to the agency." The statement addresses a patient care issue beyond documentation and guides the development of best practices.

9. An example of an unacceptable strength statement for the target outcome, Acute Care Hospitalization, is: "Patients are properly assessed and physicians are notified." The timing of the activities listed and whether they are related to hospitalization is not clear. There is simply not enough information on which to base specific best practices without addressing all assessments and all of the occasions that necessitate physician notification.

ATTACHMENT D TO CHAPTER 6

AGENCY STRATEGIES FOR DEVELOPING STATEMENTS OF BEST PRACTICES

1. Best practices are clinical actions for a specific target outcome that identify exactly what the clinician should do and when and how it should be done.

2. Best practices should have an obvious link to the problem/strength statement. This will ensure that the best practices are also clearly and consistently linked to the target outcome.

3. Best practices must be patient care centered and reflect activities that are within an agency's control.

4. Best practices address specific assessments, patient care interventions, care planning, and care coordination within the agency that are directly linked to the problem/strength statement. Consider the use of the evidence-based care practices included in OASIS, when relevant.

5. Best practices may include documentation, but only as needed to accompany specified patient care activities (i.e., must not be limited to documentation).

6. State best practices clearly and specifically so that staff can identify exactly what to do when providing patient care in specific situations.

7. To expedite implementation, three or four best practice statements are optimal to include in your plan of action. Including too many can make it difficult for clinicians to consistently remember, thus reducing the potential impact on your target outcome.

8. As with developing the list of care practices that "should be done" before doing the investigation of the target outcome, the staff is the best resource for identifying best practices. They can contribute by writing suggestions on a conspicuously located poster board or by "voting" for their favorite care practices by ballot. This approach is particularly effective if the staff has received training about how this activity fits into OBQI, the importance of their input, and the request to do so has been provided in advance (by written message, voice mail, or e-mail).

9. An example of an acceptable best practice statement for the target outcome, Improvement in Dyspnea, is: "For all patients with dyspnea, an inclusive cardiopulmonary assessment per the (specified) guidelines will be performed and documented at all assessments." This statement clarifies for any reader that a specific clinical activity will occur at a specified frequency. The statement assumes that the staff in the example agency has knowledge of and easy access to the specified manual.

10. An example of an unacceptable best practice statement for the target outcome, Improvement in Dyspnea, is: "For patients with dyspnea, a complete respiratory assessment will be done." This statement does not reference any guidelines for the "complete respiratory assessment" or clarify the frequency with which the assessments should be performed. A new staff member in the agency would not know precisely what to do when he/she encounters a patient with dyspnea.

CHAPTER 7 – IMPLEMENTING AND MONITORING THE PLAN OF ACTION

A. INTRODUCTION

Once the agency has developed the best practices that clinical staff should utilize in providing care, the next step in outcome enhancement is to implement these practices. The activities of implementation are critical to move the plan from its written form to the point of actually having an impact on patient care. Sometimes the group focusing on quality improvement in the agency spends considerable time conducting the process of care investigation, writing the problem/strength statement, and identifying best practices, but then neglects the implementation of the necessary changes in clinical practice. This step of the outcome enhancement process is crucial to inform staff of expected changes in care provision and to see that such changes actually occur. This chapter addresses the steps to follow in implementing the plan of action.

B. FOSTERING BEHAVIORAL CHANGE IN CARE DELIVERY

A key element in implementing the plan of action is to recognize exactly what the agency goals are. Simply "tweaking" a few agency processes to gain some perceived efficiency is not sufficient. Instead, the focus should be on instituting specific modifications in clinical care delivery for the purpose of overcoming barriers to optimal patient care to enhance outcomes. Bringing clinical staff members' care activities into line with the identified best practices (whether these are for improvement or reinforcement) usually means that behavioral change must occur. Modifying clinician behavior (clinical practice) can be a challenge in any clinical setting, but this challenge is accentuated in home care where staff members function so independently. At this point in outcome enhancement, the importance of staff being well informed about OBQI, the content of the agency's Outcome Report, and the goals of the total outcome enhancement process is clear. Such information assists staff to understand the rationale for any necessary change(s) in care provision.

Focusing on the long-range goal of enhancing patient outcomes assists an agency to plan the implementation of the plan of action. The steps of this part of the process (i.e., action strategies and monitoring activities) will be directed toward this patient-centered purpose when this long-range emphasis is maintained.

C. PLANNING THE IMPLEMENTATION OF THE ACTION PLAN

As a plan for implementation is developed, focus on those activities that must occur within the agency for clinical staff to implement the specified best practices. In the plan of action these activities are referred to as **action strategies**. These are the activities an agency will undertake to ensure that all appropriate clinicians are performing the specific best practices the team has identified as necessary to enhance the target outcome.

In the plan of action, action strategies will specify:

- What is to be done to implement the best practices
- When it is to be done
- Who is responsible for carrying out the specific action, and
- How the action is to be monitored to ensure that implementation occurs as planned (and persists).

Notice the difference between the best practices and the action strategies. The best practices are precise aspects of care delivery that clinical staff are expected to perform with patients. In the context of the action plan, action strategies indicate how to make clinicians aware of and responsible for these best practices.

Successful plans of action demonstrate similar approaches to development of action strategies. The number of actions does not need to be excessively large - tending to be approximately four or five in number for a single plan of action. Each action tends to have a single focus so that it can be easily understood and implemented. Taken as a whole, the action strategies lay out a "map" for implementing the best practices agreed on by the quality improvement team (or task force). Refer to the sample completed plan of action that was included in Chapter 6. Notice that there are three action strategies, each of which has specific "start" and "finish" dates and responsible persons identified who were part of the quality improvement team.

Another key feature of successful action plans is the scheduled timing of the actions. In the sample plan, the action strategies begin (and are nearing substantial completion) within one month after the Outcome Report arrives at the agency. Since the best practices can only impact those patients who have complete care episodes after the actions occur, this timing allows maximum opportunity to impact the outcomes that will be included in the agency's next Outcome Report.

Understanding this timing is so critical that we emphasize its importance by repeating the rationale. Staff are unlikely to change their care processes (thus changing patient outcomes) until they know what care process changes are expected of them. Only those patients who have a complete outcome episode (i.e., start or resumption of care to discharge/transfer) after the new care processes are implemented are likely to show different outcome results. If the agency does not implement change in care processes until many months have passed, the patients are unlikely to reap the benefits of these new care processes, and the Outcome Report is unlikely to show any positive change from the previous one.

Each action should be divided into as many steps as necessary with specific "start" and "finish" dates for each step. These will assist assessing the progress of the plan and will increase the plan's clarity for any reader, such as agency administrators, staff needing to modify care delivery, or surveyors. For example, instead of listing only "Revise SOC assessment," the following steps might be included: 1) Revise SOC assessment to include observation of ambulation and distance walked by 10/20; 2) Pilot test revised form by five nurses on one patient each on 10/22; 3) Review comments from pilot nurses by 10/24; 4) Present form to staff at outcomes education meetings on 10/27 and 10/29. Specific persons responsible for

overseeing the completion of each step should also be identified on the plan, to visibly assign responsibility and to ensure that responsibilities are equitably divided among available staff members.

As action strategies are developed and reviewed, focus on whether they are:

- Related to the best practices. For example, if a best practice concerns patient assessment, is there an action strategy that addresses clinician assessment skills or the content of the assessment?

- Practical and achievable. It is very possible to design action strategies that clearly would require expenditure of large sums of money, require the replacement of the entire clinical staff, etc., which are unlikely to occur in a timely manner. Are the specified actions practical for the agency to achieve in a reasonably short time frame? (More actions can be added at intervals throughout the next several months if desired.)

- Adequate to change care. Remember that the purpose of the actions is to foster behavioral change in the clinical staff providing care. Do the selected actions appear adequate to do this?

- Scheduled to begin immediately. The longer it takes to put the best practices into place, the shorter the time period until the next Outcome Report - thus the shorter the time for the agency to demonstrate a change in patient outcomes. For many agencies, this delay is the downfall in being able to impact their target outcome(s). The "bolus" of activity involved in immediate implementation increases the clinical staff's awareness of the specified best practices and the likelihood of change in care provision.

D. APPROACHES TO CHANGE CLINICAL PRACTICE

Methods of changing and improving processes of patient care are receiving increasing emphasis in professional literature today, especially since clinical practice guidelines have been developed and disseminated for implementation across multiple care settings. Various interventions to change provider behavior have been studied, though most commonly with physicians in ambulatory care settings. While these studies have not focused on providers in home care, their conclusions nonetheless have implications for changing home care clinician behavior. One consistent finding from reports of these studies is that education (i.e., providing information) usually is not sufficient to change behavior. Because provider behavior is complex, a range of strategies is often required.

Which approaches appear to be most successful in changing clinician behavior? Those that are specifically targeted to address identified problems have the best chance of success (van Achterberg, Schoonhoven & Grol, 2008; Grol & Grimshaw, 2003). For example, if the problem was related to inconsistent assessments across care providers, then changing a form is not likely to change behavior. In this case, other strategies to improve assessment skills may be more appropriate. Several studies have discovered that approaches used in combination have the strongest and longest-lasting impact on provider behavior (Davis et al., 1995). Reminders of effective care processes (best practices) and record audit with feedback to specific clinicians are reported as effective. It is also important to identify and remove system barriers to change.

Consider involving knowledgeable clinicians in one-on-one discussions of care (as might occur with a clinical specialist). "Patient-mediated approaches" are also described as effective. (A patient-mediated approach might involve providing the patient with a list of expected clinical actions, thus allowing the patient to reinforce the appropriate actions of the provider. When the patient expects to receive teaching at every visit, he/she can request such teaching if it is omitted from the encounter.)

Because changing care processes is complex, agencies are strongly encouraged to move beyond traditional in-service approaches when designing the interventions to spread designated "best practices" across the agency. Some additional approaches are noted below. (Attachment C to this chapter presents other approaches that can be used.)

- Develop and disseminate new (or revised) clinical policies or procedures
- Write (or revise) and implement clinical pathways or practice guidelines
- Develop clinical "competencies" required of staff
- Establish a within-agency mentoring process
- Develop a video presentation of how to implement and use the best practices
- Design new or revise current patient screening tools or other documentation.
- Identify and implement technology for communication and decision support.
- Reinforce the new best practices in numerous ways as reminders to staff to develop changed behavior

Whatever intervention approaches are chosen, formally standardizing the best practices among clinicians in the agency is assumed to facilitate changes in care behaviors and to result in improved patient outcomes.

Changes in clinician behavior can be described as "learning to do the right thing in the right way at the right time to achieve the right outcome." Some aspects of OBQI can facilitate such change. Modifying clinician behavior requires:

- Recognizing the need for behavior change in clinicians. The Outcome Report and the findings of the process of care investigation are excellent means to establish the need for behavioral change. This is particularly true if staff have been kept continuously informed about the Outcome Report findings and the process of care investigation.

- Identifying a specific change needed to provide additional impetus. The results of the process of care investigation, with the specification of a problem (or strength) in care provision and clear best practices, lead to the identification of this specific change.

- Recognizing that clinical behavior does not change unless there also is organizational support for the change to occur. This is one reason why strong administrative support and an organizational climate that wants to continuously improve are so very important to enhancing outcomes.

- Integrating fully into clinical care processes. For change to persist, it must move beyond the novelty stage to such full integration into care delivery. This factor contributes to the importance of monitoring the plan of action, which will be addressed soon.

In evaluating the ability of action strategies to produce change in care delivery, ask the following questions.

- Do the strategies clearly address any identified barriers?

- Do staff know what the clinical practice change is? Do intervention actions clearly communicate the necessary change to staff? While this is not the only step necessary to change clinical practice, it is an essential beginning.

- Has the staff had the opportunity to learn how to perform the new skill or use their new information? It is important for staff to be allowed to test their new knowledge and to practice what they have learned. This will add to their comfort and skill level when providing patient care.

- Is administration open to making any necessary changes to the organizational process that will support the necessary change? Do staff have the supplies, equipment, or support system required to deliver the best practices? If staff members are expected to assess patient weight on a weekly basis, they will need access to well maintained scales. If patients are instructed to call the agency when their condition changes, determine if there is a support system available to answer and communicate those calls to the appropriate clinical staff.

E. MONITORING THE PLAN OF ACTION

Once the action strategies are determined, the agency should shift focus to **monitoring activities** within the plan of action. The purpose for monitoring is to assure that implementation occurs as it has been scheduled and planned. Monitoring allows assessment of the success of the implementation process, staff compliance with the proposed changes, and the possible need for alterations to the plan. It is not altogether unusual for intensity and focus to decrease somewhat once the plan of action is written. The act of monitoring keeps emphasis on whether the best practices are truly becoming a routine part of care delivery in the agency.

Sample monitoring approaches include quarterly record review activities, peer reviews or supervisory visits for periodic evaluations, or staff meetings and case conferences to provide information about staff utilization of best practices. These approaches are easily incorporated into normal operations of the agency, which will assist in making certain that the monitoring steps actually occur.

Several key elements of monitoring activities have been identified through experience with agencies successful in enhancing outcomes. The plan of action should clearly identify those specific individuals (or groups) responsible for the monitoring activities. Beginning the monitoring approaches at a high frequency, followed by tapering to less-frequent intervals is often cited as important. The monitoring might begin within two weeks after action strategies are completed, be conducted at weekly intervals for a few weeks, then taper to monthly, then to

quarterly intervals. When monitoring activities are planned, determine how feedback will be provided to clinical staff members and to their supervisors. Like other aspects of quality improvement, an agency is more likely to actually complete these activities if they are integrated into other routine agency activities, such as record reviews or case conferences, as much as possible.

Successful plans of action tend to have effective monitoring approaches. Characteristics of these effective approaches include:

- Results are reviewed promptly and responded to quickly. The results of the monitoring do not "languish" on someone's desk for weeks before being reviewed. Staff also receives very prompt feedback on whether the desired changes in clinical care practices are occurring.

- Monitoring occurs as a routine activity with the agency. Few agencies have time to institute entire new monitoring processes. However, adding on a few minutes to a current process seems eminently "do-able." Appending the new monitoring activities to a current routine increases the likelihood that the monitoring will actually occur. Adding a new aspect to an already-scheduled record review is not as cumbersome as scheduling an entirely new record review activity.

- The implementation of the monitoring activities occurs as planned. By the time the action plan is implemented, the team may feel that its work is concluded. It is very easy for the monitoring activities to be overlooked as the team simply assumes the staff will follow the identified best practices. This has proven to be a faulty assumption in most agencies. To avoid this occurrence, the team might delegate the oversight of monitoring to someone not so directly involved in developing the plan of action. Alternatively, one person from the team might be jointly responsible with a nonteam member for the oversight. Both these approaches bring new energy and enthusiasm into the monitoring function.

Concerted attention to monitoring has been one of the little-recognized but very effective aspects of enhancing outcomes. It is important to wait no longer than a month after implementation to begin initial monitoring activities, so that any needed revisions to the plan of action can be made quickly. This time frame allows several months of patient status data collection to occur to impact the target outcome(s).

F. EVALUATING THE PLAN OF ACTION

Evaluation extends beyond the monitoring of action strategies to a critical review of whether the overall plan is working. The findings from the monitoring activities will allow the team to determine whether the plan is "on course" and if the best practices are being consistently used in care delivery. If this is not occurring, additional intervention actions may be needed. The last section of the plan of action form (introduced in Chapter 6) provides a place to record findings from the evaluation activities and any responses that were necessary as a result.

The first evaluation of the plan of action should occur by the end of the third month after receiving the Outcome Report and continue at least quarterly thereafter until the next Outcome

Report is received. The evaluation should be performed more frequently if specific problems are noted in the early evaluation process.

In addition to the evaluation activities specified on the plan of action, agencies may want to examine process quality measures that are related to the target outcome or spot check other ways of assessing whether staff are following through with recommended changes.

When the next Outcome Report is reviewed, the previous year's plan of action is also evaluated. It is recommended that the next OBQI report be accessed no sooner than three months after the plan of action was implemented to allow adequate time for new data to be collected that may reflect the changes that were implemented.

When reviewing your Outcome Reports for this comparison, you should keep two specific points of information in mind:

- whether your target outcome was selected for remediation (i.e., to improve your outcome rate) or for reinforcement (i.e., to maintain your outcome rate relative to the reference rate), and

- the date you implemented your prior period's plan of action (which should be available from the plan of action form).

If your target outcome was selected for **remediation**, you will be looking for positive change in the outcome rate for the current period compared to the adjusted prior rate on the risk-adjusted report (or prior rate on the descriptive report). Positive change will be a longer bar for the end-result outcomes or the utilization outcome of Discharged to the Community. A shorter bar for the two utilization outcomes of Acute Care Hospitalization or Emergency Department Use also is a positive change.

Alternatively, if your target outcome was selected for **reinforcement**, you will be looking to see whether you maintained your agency's performance relative to the reference rate. Notice that the primary comparison group for these two enhancement variations is different -- in the case of the outcome for remediation, your primary comparison is with your own performance last year; in the case of the outcome for reinforcement, your primary comparison remains with the reference rate.

The **date of plan of action implementation** is important in understanding whether you are likely to see successful outcome enhancement in the time period reflected in your report. Remember that the OBQI reports contain patient care episodes that are included within a 12-month period and that these care episodes include patients with both a start and end to the episode (i.e., each patient included has a SOC/ROC and a transfer/discharge). Only those patients who have a SOC/ROC after your plan of action implementation date have the opportunity to show a change in outcome rate that results from the new/modified clinical actions you implemented with your staff. If your new Outcome Report has a very short interval from the plan of action implementation to the end of the report period, only a small percentage of the eligible cases included in the report have the possibility to show the impacts of the new/modified clinical actions. If this is true, your agency might be better served by waiting for several months before requesting the next report. A longer period would allow a larger sample of patients to show outcome change resulting from new or changed clinical actions.

Based on the new outcome findings, the agency must determine whether they should continue monitoring the existing plan of action, make significant revisions to the existing plan after performing a new process of care investigation, or discontinue all efforts related to the previous plan of action. The first two options are likely responses when there are minimal (or no) changes to the target outcome; the third option can be appropriate when there are significant changes (in the desired direction). The evaluation activity (of each target outcome selected the previous year) should occur as part of the selection process for new target outcomes from the current Outcome Report.

G. DOCUMENTING THE QUALITY IMPROVEMENT JOURNEY

Examining processes of care identified by specific, measurable OASIS-derived outcomes and then revising or reinforcing those processes as necessary to improve patient outcomes is a new endeavor for home care agencies. It may be beneficial for agencies to maintain an informal log or journal throughout the outcome enhancement activities. Keeping such a journal is useful to record, reflect, and learn from this unique journey into a new system of measuring and improving outcomes for home care patients.

A journal also may facilitate recall and reflection in the future. It can document how team members were selected to participate, how outcomes were prioritized, how best practices were selected, etc. This may prove to be useful in determining steps to take and techniques to use when conducting future process of care investigations after the agency receives subsequent Outcome Reports.

H. SUMMARY

Developing and implementing the plan of action concludes the outcome enhancement phase of OBQI. If done correctly, clinical staff will be extremely aware of the importance of their care provision to the agency. They will focus on care practices that reach effective outcomes in an efficient manner. And most important of all, agency patients will be the beneficiaries of efforts in continuously improving outcomes.

FREQUENTLY ASKED QUESTIONS

1. Our agency stopped doing continuing education programs three years ago. We don't have the staff or the space to do any kind of large-scale educational programs. How could we educate clinicians about any big changes?

This answer refers back to the advice to make your action strategies "practical and achievable." Most agencies have not tried to initiate massive agency-wide changes due to time and financial limitations. Some agencies have instituted "small group learning sessions" lasting less than an hour and have reported that by doing so they see more staff interaction, discussion, and retention of information. Some agencies have set up self-learning modules (i.e., e-learning modules) for clinicians to complete on their own within a specified time frame. Such an activity could be followed by a discussion in a staff or team meeting. Agency clinicians from many auspices and locations have published accounts about the many varied and creative approaches they have used to inform staff about quality improvement efforts.

2. We could never afford to have a video made just for our staff. How do agencies afford such things?

Most agencies do not have access to resources to make professional grade videos, but many have used home video cameras to record such things as a skilled, experienced clinician performing a specific clinical activity. They have later used the tape as a teaching tool, asking the viewers to record their findings while watching the tape, then comparing and discussing their responses. Some agencies have been able to purchase professionally made teaching video or e-learning modules, or make use of resources that are available online.

3. We provide educational programs to our clinicians regularly, but some of them still don't do the new skill the way they've been instructed. What are we doing wrong?

You're probably not doing anything wrong, but you may not be providing the information in the best way for all staff to learn. Education is usually most effective when presented in more than one way. Any evaluation of learning is most valuable if prompt feedback is given to the staff members who participated. The large majority of agencies in the OBQI demonstration learned that they could not present information to staff only once, but that periodic reminders are a must to minimize the "erosion" of the knowledge gained through the educational program. Chapter 9 contains additional resources for training staff.

FREQUENTLY ASKED QUESTIONS

4. If we decide to change the way clinicians assess incontinence (or ambulation or dyspnea), we would probably need to change our assessment forms. Our forms do NOT get changed quickly or easily. The work first must be budgeted, then it takes months to work out how the proposed changes can be incorporated into the forms. We pilot the forms with a few staff members, make more changes if needed, and finally the Forms Committee must approve. After approval, the entire form is formatted and sent to the printer, and we get it back 1-4 weeks later. I don't see how we could possibly make these changes in less than six months at best, let alone one month!

These kinds of issues are critical to consider when the team is planning the action strategies. To successfully impact the target outcome, the best practices need to be implemented by clinicians within 4-8 weeks after the Outcome Report is received by the agency. That means the team must find a way to move forward with the implementation within the agency structure. The process you describe is not rare or unusual among agencies. Some agencies have implemented the addition of a single page that the agency staff was able to produce and copy on its own, as one way to expedite the process on a temporary basis. In some agencies, such an action could require administrative approval, meaning the team would need to move quickly to obtain that approval. Depending on the problem statement, the team might anticipate that changing care practices would entail some degree of revision of clinical forms and seek approval within specified limits prior to developing the plan of action. Addressing these organizational issues when developing the team(s) is addressed in Chapter 8 of this manual. The presence of such organizational issues emphasizes the importance of agency-wide education regarding OBQI and of organizational support in preparing for outcome enhancement.

5. Haven't the Quality Improvement Organizations (QIOs) provided some helpful intervention activities?

Yes, in 2008 QIOs developed several packets for interventions to help decrease unnecessary hospitalizations as part of the CMS Home Health Quality Improvement National Campaign. Best practice suggestions to reduce hospitalizations may be found on the MedQIC website: http://qualitynet.org – select "MedQIC," and then select "Home Health."

FREQUENTLY ASKED QUESTIONS

6. I am not clear about exactly what is included in "monitoring approaches and evaluation." It sounds like this is more than one activity.

Part of planning the action strategies to implement the best practices includes determining how the team will ensure that each action is put into place on schedule. The team also must plan how to evaluate the effectiveness of the implementation by evaluating whether or not the best practices are being put into use by all applicable staff members. This review of timing and effectiveness is included in the ***monitoring*** *function. Monitoring must be started very shortly after the action steps are completed (within one to two weeks) and continued with decreasing frequency (but not less frequently than quarterly) when the evidence shows that implementation has been successful. If the results of monitoring show that compliance is faulty, the team must determine if it is necessary to address issues with individual staff members, offer more education, or revise the plan.*

Evaluation *of the plan of action entails reviewing the various steps involved in developing the plan to identify both which things should be repeated the same way with the next Outcome Report and which new approaches the team would like to try next time. The results of the monitoring activities also can be incorporated into evaluating the effectiveness of the plan.*

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ATTACHMENT A TO CHAPTER 7

SAMPLE ACTION STRATEGIES

Action strategies for four target outcomes are presented below. Note the overall variety of actions represented.

Target Outcome: Improvement in Ambulation

1 Develop screening tool for case managers to determine impaired ambulation.
2. In-service staff on tool.
3. Incorporate screening tool into all SOC packets.
4. Develop care map for ambulation.

Target Outcome: Improvement in Toilet Transferring

1. Develop a standardized care plan for patients mildly impaired in toileting that includes parameters for therapy evaluation.
2. Update case conference form to include section on toileting impairments.
3. Distribute standardized care plan and updated case conference form to all clinicians at next month's staff meeting.
4. Staff present case studies quarterly at a staff meeting on a patient with impairments in toilet transferring for whom appropriate care was given.

Target Outcome: Improvement in Urinary Incontinence

1. Develop a self-study module for urinary incontinence assessment.
2. Develop stickers (or electronic notation) for patient charts delineating criteria for incontinence assessment (clinical parameters).
3. Renew emphasis on interdisciplinary communication with appropriate documentation.

Target Outcome: Acute Care Hospitalization

1. Develop criteria sheets for staff to assist in identification of patients needing follow-up.
2. Clinical team leaders immediately relay the plan to staff.
3. Clinical educators present the protocol to new staff during orientation.
4. Present the action plan at staff meetings, in an article in the agency newsletter, post on electronic bulletin boards or staff web site or agency bulletin boards.

ATTACHMENT B TO CHAPTER 7

EXERCISES IN EVALUATING ACTION STRATEGIES

EXERCISE 1a: Evaluating Action Strategies

Directions: Review the two sets of sample best practices and actions for the target outcome *Improvement in Dyspnea*. For each, answer the questions on the following page.

A. Target Outcome: Improvement in Dyspnea

Best Practices:

a. For all patients with dyspnea, a thorough, specific, and inclusive cardiopulmonary assessment will be performed and documented as part of the admission process.

b. If patient demonstrates increased dyspnea in response to exercise, a therapy (PT or OT) referral will be made.

Action Strategies:

Action	Time Frame	Responsible Person
a. QA committee will prepare self-teaching tool for presence of dyspnea.	March	DBN
b. Develop new clinical care plans including parameters for referral to PT or OT if difficulties with ADLs contributing to dyspnea.	March, April	DBN, MS, RB
c. Develop clinical competency statement for nursing re: assessment of respiratory status.	March, April	DBN, MS, RB
d. Include competency statement in nursing personnel records as part of yearly clinical competency evaluation. New staff required to demonstrate competency within one month of date of hire.	April, May	MS, DBN, RB

EXERCISE 1a: Evaluating Action Strategies *(Cont'd)*

1. Do the action strategies have a clear link to the best practice statements?
   If not, suggest an action or actions that more clearly reflect the best practice statements.

   _____

   _____

2. Are the action strategies appropriate for quickly implementing the best practices? If not, provide another possible action or actions.

   _____

   _____

3. Is a time frame specified for each action strategy? _____

   _____

4. Do the action strategies begin in a timely manner? _____

   _____

5. Are responsible individuals named for each action strategy? _____

6. If you were a staff member in this example agency, which actions would likely affect you? _____

   _____

7. What would be your response to these action strategies? _____

   _____

EXERCISE 1b: Evaluating Action Strategies

Directions: Review this second set of sample best practices and action strategies for the target outcome *Improvement of Dyspnea* then answer the questions on the following page.

B. Target Outcome: Improvement in Dyspnea

Best Practices:

a. Staff will use a consistent definition of dyspnea in analyzing assessment data.

b. When dyspnea is detected, staff will intervene.

Action Strategies:

Action	Time Frame		Responsible Person
	Start	Finish	
a. Staff inservice by nursing supervisor to address definition of dyspnea, signs and symptoms, and interventions.	11/05	11/30	SN
b. Find/develop teaching materials for cardiac patients regarding dyspnea and specific subjects that can produce dyspnea for cardiac patients.	11/01	12/20	PW, WS, SN
c. Produce or purchase education materials, distribute to staff with written suggestions for use.	10/30	1/15	PW, WS

EXERCISE 1b: Evaluating Action Strategies *(Cont'd)*

1. Do the action strategies have a clear link to the best practice statements?
   If not, suggest an action or actions that more clearly reflect the best practice statements.

   _____

   _____

2. Are the action strategies appropriate for quickly implementing the best practices? If not, provide another possible action or actions.

   _____

   _____

3. Is a time frame specified for each action? _____

   _____

4. Do the action strategies begin in a timely manner? _____

   _____

5. Are responsible individuals named for each action? _____

6. If you were a staff member in this example agency, which actions would likely affect you? _____

   _____

7. What would be your response to these actions? _____

   _____

ATTACHMENT C TO CHAPTER 7

BROADEN YOUR OPTIONS: TECHNIQUES TO FOSTER CLINICAL BEHAVIOR CHANGE

When confronted with the need to change or modify clinician behavior, the technique of staff education is the approach most commonly used. This technique alone, however, is usually not sufficient. The list below presents other options to foster such behavioral change.

- Develop and disseminate new (or revised) clinical policies or procedures.
- Write (or revise) and implement clinical pathways or practice guidelines.
- Acquire and distribute new learning (or patient teaching) materials.
- Develop clinical competencies required of staff.
- Establish a within-agency mentoring process.
- Set up a peer review program.
- Develop opportunities for demonstration-return demonstration experiences.
- Use consultation from clinical specialists.
- Develop a video presentation of how to implement and use the best practices.
- Write memos/electronic notifications on how to implement the best practices-describe the manner in which follow-up and monitoring will occur.
- Post visual reminders in the agency or include them in newsletters or paychecks.
- Send voicemail or e-mail messages to staff.
- Provide reminders directly to the clinical staff or from the patients to the clinical staff.
- Try a patient-mediated approach. Provide patients with a list of care activities that should be performed and request that they remind the clinician if he or she neglects to implement a care activity.
- Establish interdisciplinary work groups or committees to implement the best practices
- Consider adopting technology to address specific problems (i.e., telehealth equipment, wound cameras).
- If using electronic health records, use clinical decision support tools; request that vendor develop additional tools or reports if indicated.
- Utilize reward and recognition to promote positive behavior change and to raise up OBQI champions.

ATTACHMENT D TO CHAPTER 7

SAMPLE MONITORING APPROACHES

Post-tests

1. Project Team members review and summarize results of post-tests by meeting scheduled next month. Determine whether further education or other follow-up is needed.
2. Post-test at end of in-service, reviewed by QI committee within one week with additional inservices or one-on-one sessions for those demonstrating need.
3. Project Team and in-service presenter review post-test results within one week after each inservice.

Clinical Record Audits

1. Project Team will audit 15 SOC records by (three weeks from plan of action date), an additional 15 records by (five weeks from plan of action date), and another 15 by (seven weeks from plan of action date), using review form developed in process of care investigation with addition of new teaching materials. Compile results of record review before subsequent Project Team meeting, when team will determine if additional training, follow-up, or plan revisions are needed.
2. If progress is satisfactory, review 20 records one month after previous review and compile results.
3. If progress continues to be acceptable, audit 20 records each quarter.

Interviews

1. Project Team members each interview at least two clinicians within two weeks of plan of action development using structured interview approach. Interview should focus on patient assessment and use of teaching tools. Compile findings for next Project Team meeting.
2. Interview 12 clinicians of multiple disciplines within one month of plan of action development using the interview variation of the chart audit tool developed for the process of care investigation. Compile results.
3. Interview randomly-selected staff members four weeks after new screening tool is implemented to determine staff response and to elicit suggestions for any modifications.

Additional Approaches

1. Project Team members bring up discussion of urinary incontinence assessment and interventions in team or IDT meetings.
2. Monitor use of patient educational materials and forward recommendations to Clinical Education Committee.
3. Ninety percent of staff will be expected to meet highest competency level within three months after competency statement is final.
4. Intake supervisor reviews all internal requests for referrals to determine rationale.

ATTACHMENT E TO CHAPTER 7

CHECKLISTS FOR YOUR AGENCY'S PLAN OF ACTION

Use this checklist to evaluate that your agency's plan of action is appropriately developed.

_____ Action plan was developed in an appropriate time interval (e.g., within two weeks) after receipt of the Outcome Report.

_____ Each team member is identified by name, title, and discipline.

_____ Target Outcome is stated in specific terms (as it is stated in the Outcome Report).

_____ Plan is correctly specified for remediation or reinforcement.

_____ Problem or strength statement is specifically related to the target outcome.

_____ Problem or strength statement is clearly written to avoid misinterpretation and to provide a strong guide for developing best practices.

_____ Best practices, care behaviors, or processes are specific to the stated problem or strength.

_____ Best practices are stated specifically enough to guide clinician behavior.

_____ Action strategies are appropriate for quickly implementing best practices.

_____ Time frames are specified for implementing action strategies (start date and finish date).

_____ Action strategies begin within one month after the Outcome Report was obtained.

_____ Responsible individuals are named for each action strategy.

_____ Monitoring approaches are appropriate to the action strategies and list planned frequency of activities.

_____ A date for review of the plan has been set.

_____ Responsible persons have been identified for evaluation of the plan.

Use this checklist to evaluate that your agency's plan of action, as developed, is being consistently implemented and followed.

_____ Specific persons are appointed to oversee the monitoring activities for each time point.

_____ Monitoring activities have begun and information has been collected.

_____ Responsible persons assigned to review the plan have met as scheduled.

_____ Each monitoring activity has been completed and a finding reported by the planned date.

_____ Any monitoring activity specified has been accomplished.

ATTACHMENT F TO CHAPTER 7

STRATEGIES TO FACILITATE WRITING ACTION STRATEGIES

1. Action strategies in the plan of action are those activities that must occur within the agency to implement (or to reinforce) the specified best practices. The term does not refer to clinical interventions.

2. The focus of the action strategies is to foster behavioral change in the agency-to modify (or to reinforce) specific aspects of care provision, which have been noted as best practices.

3. Selected action strategies should be practical in the agency and achievable by staff.

4. Changing clinician behavior requires clinical staff to recognize the need for change, to be aware of the specific change desired, and to have organizational support for the change to occur.

5. Often educational/instructional activities are selected as action strategies. While these are useful, they are seldom sufficient. A balance between educational activities and structural or process modification (e.g., development/revision of forms or procedures) is often more successful. Other reminder mechanisms also serve to keep the chosen best practices continually in front of the staff.

6. A timeline is needed for the action strategies to begin soon after the plan of action is completed and to end within six to eight weeks.

7. Be sure to determine who is responsible for carrying out each specific action. State this individual (or group) in the plan of action.

8. A reasonable number of action strategies (approximately four or five) are more likely to be implemented successfully in an agency.

9. Activities to periodically remind clinicians of the selected best practices throughout the year are necessary and helpful. These mechanisms seem to be even more important when agencies choose to reinforce strengths in care provision.

10. An example of an action strategy is: Develop and implement a mentoring program for clinicians with weak skills in assessing dyspnea.

ATTACHMENT G TO CHAPTER 7

EVALUATING THE PLAN OF ACTION

1. Because change in clinical behavior is necessary for change in patient outcomes to occur, it cannot be assumed that such change will simply happen and will persist into the future. Regular monitoring of compliance with the best practices is necessary.

2. Successful monitoring activities occur as routine activities within the agency, incorporated into quality improvement activities that are already in place, such as quarterly clinical record reviews. This increases the likelihood that these activities will occur and will not be overlooked in the press of daily routine.

3. The most successful monitoring activities are practical and achievable.

4. Begin the monitoring approaches at a high frequency, then taper to less-frequent intervals.

5. A designated person or group should review the results of the monitoring as soon as possible after activities are completed. This allows modification of the plan to occur as necessary if the best practices are not consistently being done.

6. Provide staff prompt feedback on whether the desired changes in clinical care practices are occurring. Provide reward and recognition to individuals, teams, and/or offices.

7. Ongoing evaluation of the plan of action (particularly if the evaluation is documented and shared with staff) will assist in outcome enhancement during the current year and in responding to subsequent Outcome Reports.

8. When the plan is written, be sure to designate the individual(s) who will be responsible for its evaluation. Involving some of the individuals who participated in plan development is an effective strategy.

9. When evaluating the plan, determine "what worked" and "what didn't work" in the plan development and implementation. Note suggestions for which activities the agency should include in next year's outcome enhancement process and which activities should be revised, including specific suggestions for the revisions. It is easier to do this during the first few months after the plan is developed (while it is fresh in your minds) than to attempt to re-create it months later.

10. Carry out the first evaluation of the plan by the end of the third month after receiving the Outcome Report. If the evaluation is updated quarterly, the monitoring results can be incorporated into the evaluation. This should continue until the next plan of action is developed.

11. Communicate the results of the evaluation findings to staff. Re-communicate, re-educate, and revise areas that are not working as planned.

12. **CELEBRATE your successes all along the way!**

CHAPTER 8 – TEAMWORK

A. INTRODUCTION

Involving an agency's clinical staff in outcome enhancement activities has been mentioned at several points in this manual. One way to incorporate staff is by including them on OBQI teams. Some agencies already incorporate teams in their quality improvement processes—these agencies will find their current activities relatively easy to transfer to OBQI. For other agencies, the use of teams will be a new concept. Agencies that have successfully improved their patient outcomes most often have involved teams in this effort. For teams to be effective, they must have the support of administration. Savvy administrators understand the inevitable ties between quality and reimbursement in a quality-based purchasing model, and will encourage staff-level efforts to improve care quality.

B. WHY TEAMS?

Today's health care market challenges home care agencies to strive to provide better care faster and in a more cost-efficient manner. An agency needs to garner all the available expertise to effectively address opportunities to improve. Each agency has that expertise, without hiring any highly paid consultants: ITS OWN STAFF! They are regularly entrusted with the responsibility of providing care for life-threatening illnesses, meeting clinical record standards, and correctly submitting claims to payers. They KNOW the processes (and variations), and are positioned well to help identify and solve problems.

The presentation of outcome findings will naturally result in certain questions and emotional reactions in the agency. The challenge presented is to encourage staff to think introspectively and analytically. With appropriate training, teams of employees can maintain the necessary objectivity to investigate selected outcomes and lead other staff members to acceptance. Employees who pool their resources and skills to form teams can tackle much larger issues than an individual working alone. A team of enthusiastic and committed employees is visible throughout the agency. These individuals often become “quality champions” who can mentor new and existing staff. The agency will learn with and from the team as new leaders and internal experts emerge. Existing leaders are able to improve their skills in leading groups.

The more people that are involved in every stage of an improvement effort, the greater the likelihood of success. Involve a variety of staff in identifying the need for change, planning and implementing the change, evaluating the results of the change, and acting on those results. In this way, staff "own" the change and will work to make it succeed. Changing clinical care delivery (and thus patient outcomes) requires that agencies must use as many techniques as possible. Leverage the power of using teams.

The remainder of this chapter discusses the use of two teams for the outcome enhancement activities. An agency may choose to follow the two-team approach, or may decide to use a different approach in organizing agency's processes. This will depend on the experience of staff, how well individuals within the agency work together, the level of experience staff has with CQI processes, and the size of the agency. Because of limited resources, agencies may find it necessary to use only one team. In the "lean and mean" home health industry of today, large

agencies should consider the overall benefits of committing staff time to work intensively in these teams for a brief period of time (e.g., two to five meetings over one month) compared to committing several hours each month over a year. Agencies should also look at currently existing teams that might be appropriate to take on this intensive task for a short time. In small agencies, it often happens that there is only one team and that team does everything (i.e., management, supervision, QI, office management, billing, etc.). In that case, consider including one or two clinical field staff members on this team and go forth! It is important for the agency to select the structure that will work most efficiently and cost effectively for the individual situation.

C. EXAMPLES OF A TWO-TEAM APPROACH

The two-team approach is an example of one way to approach outcome enhancement activities. The two teams used in this approach are:

- Target Outcome Selection Team (or Steering Committee): This is the first team to be selected. The team's tasks are to analyze and interpret the Outcome Report and to provide overall guidance to the Care Process Action Team.

- Care Process Action Team (or Task Force): This work team will conduct the process of care investigation and planning activities (with leadership provided by the Target Outcome Selection Team).

Target Outcome Selection Team

The **Target Outcome Selection Team** analyzes the Outcome Reports and selects the specific outcomes to be investigated. In some agencies, the Target Outcome Selection Team may be selected from among management and quality improvement staff. Since it can be unwieldy to assign this analytic and interpretation process to an entire management team, it is best to select a group of five to six key people for this team. Groups this size can review and analyze the Outcome Reports and make recommendations to the entire management team regarding which outcomes to investigate further. A smaller agency may elect to have the entire management team serve as the Target Outcome Selection Team. In some agencies, the Target Outcome Selection Team may select the members of the Care Process Action Team (possibly after asking for volunteers). Some of the membership from the Target Outcome Selection Team may overlap with the Care Process Action Team. For example, the leader and the coach for the Care Process Action Team may come from the Target Outcome Selection Team. (These roles are discussed shortly.)

Two examples (based on agency size) of the structure of a Target Outcome Selection Team follow:

In a *large agency*, the Target Outcome Selection Team includes the Quality Improvement Manager (a nurse), the Vice President of Patient Services, the Information Services (IS) Manager, the Public Relations Officer, a Nurse Supervisor, and the Rehab Services Supervisor. This group selects the VP of Patient Services to be their leader. The Target Outcome Selection Team analyzes the Outcome Report and recommends to the entire management team that they investigate the outcomes for Improvement in Ambulation/Locomotion and Improvement in Dyspnea. They select the Nursing Supervisor from the Target Outcome Selection Team to be

the leader of the Care Process Action Team for Improvement in Dyspnea, and the Rehab Services Supervisor to head the investigation for Improvement in Ambulation/Locomotion. The Quality Improvement Manager is selected to be the coach (facilitator) for both Care Process Action Teams, since he/she is most experienced in teaching CQI methods to staff.

In a *small agency*, the Target Outcome Selection Team is made up of the entire management team: Administrator, Business Office Manager, Nursing Supervisor, and Aide Supervisor. The Administrator leads the team as it analyzes its Outcome Report and selects the target outcomes of Improvement in Bathing and Improvement in Bed Transferring. The team selects the Nursing Supervisor to head the investigation for the outcome of Improvement in Bed Transferring and selects the Aide Supervisor to lead the investigation into Improvement in Bathing. This small agency has had very limited exposure to Continuous Quality Improvement (CQI) and determines that, since they are all learning, there will not be one person appointed as "coach" or "facilitator."

Care Process Action Team

The **Care Process Action Team** should include staff who are regularly involved in or affected by the work processes related to the outcome being investigated (i.e., the people who "own" the process). Keep the number of members relatively small to remain workable, probably no more than five to seven people. Select members from across disciplines and functions as appropriate. Include both staff who are enthusiastic about quality/performance efforts as well as the “naysayers” and critics, who can be challenged to contribute to overall team efforts. Later, during the planning phase, the Care Process Action Team may decide to call on other staff for consultation, as the team identifies other work processes and systems that may be affected by changes.

Using the Target Outcome Selection Team examples above, examples of the selection and tasks of a Care Process Action Team follow:

In the *large agency*, one selected target outcome is Improvement in Ambulation/Locomotion. The Target Outcome Selection Team chooses patient care staff for the Care Process Action Team: one staff nurse, one physical therapist, one occupational therapist, one home health aide, and one certified physical therapy assistant. The leader is the Rehab Services Supervisor and the coach is the Quality Improvement Manager, both of whom participate on the Target Outcome Selection Team. After investigating the outcome, the Care Process Action Team decides that one of the action strategies needed is to modify the agency documentation forms. To help in this effort, the team invites a representative from medical records to consult with the team.

The *small agency* referred to above has selected Improvement in Bathing as one target outcome to investigate, and the Aide Supervisor will lead this investigation. The Target Outcome Selection Team determines that the appropriate members of this team are a staff RN, a staff LPN, and a home care aide. As their investigation concludes, they determine that the clinical staff members are not effectively intervening to increase patient's strength and endurance when decreased ability to bathe is present. They decide to include an additional home care aide who has worked in a rehab setting to the team. Her experience broadens their identification of best practices to implement in the agency.

D. TEAM DEVELOPMENT

Characteristics of Effective Teams

Members of the most effective teams share commitment to a vision and agree on common goals and tasks. They develop an informal, comfortable atmosphere where everyone is encouraged to participate. They learn to listen to one another effectively: to ask questions, paraphrase, and summarize to clarify what they hear. The team becomes comfortable with disagreement, recognizing the benefits of diversity, and understands how to resolve conflicts objectively. The members learn how to make consensus decisions and openly express their ideas on the tasks and on the team's functioning (i.e., there are few "hidden agendas"). They accept and complete tasks on time. The team's members exhibit various interaction styles, including those who focus the team's attention on tasks and goals, those who focus on team processes, and those who frequently question how the team is functioning. The effective team periodically examines how well it is meeting goals. The leader and coach accept their responsibilities, model appropriate behavior, and assist team members to learn appropriate behaviors and processes for optimal team functioning.

Team Developmental Stages

As teams form and members become acquainted, initial politeness and reservations give way to less inhibited expressions of members' different needs at different times. As agency staff members review clinical actions and learn to work closely and interdependently, strong emotions will be expressed: anticipation, anger, acceptance, self-confidence. Nearly every team goes through similar stages, although the stages are experienced somewhat differently in each team. Tuckman identified four stages of team development: Forming, Storming, Norming, and Performing (Tuckman 1965). The leader's goal will be to strengthen mutual trust throughout every stage.

When the team is "forming," the members will be enthusiastic, excited, and somewhat anxious to find out what is expected of them. They may feel insecure, and may be reluctant at this stage to voice conflicting opinions openly. The leader will need to explain the purpose of the team, help set team goals, and guide the team in setting "ground rules" (guidelines for team members' interactions).

As the team members begin to learn to work together, enthusiasm sometimes gives way to frustration and anger, signaling the arrival of the "storming" stage. This is a high-energy time and can be very creative and productive. Team members will need to work to resolve conflicts, observe ground rules, and establish trust among the members and between the leader and the members. The cardinal rule for the leader at this stage is to be trustworthy and model appropriate behavior and responses.

As they move into the "norming" stage, the members of the team demonstrate conscious efforts to accommodate each other and work together productively. The danger at this stage is that in their efforts to avoid conflict, team members may not offer their good ideas. The leader can help the team members strengthen their trust in one another by increasing their responsibilities and providing new challenges.

The "performing" team functions productively and has learned to resolve conflicts constructively. This is a time for the leader to step back and let the team demonstrate its capabilities. The

leader will be somewhat less visible, but remain available if needed. The leader should be alert to the possibility of the team losing momentum if members become complacent, and help them identify new challenges.

At any stage, the team may return to a previous phase if members are added or lost. When this occurs, the leader needs to be able to identify the changes and return to a more active role in guiding the team through the transition.

By identifying the stages of team development, and becoming aware of the normalcy of these various team stages, an agency can better prepare for the team's work. Although it may appear that progressing through these various stages happens over a long period of time, in fact the progression can occur quite rapidly, particularly in an agency where staff members know each other well and have worked closely together to solve problems in the past.

E. TEAM LEADERSHIP

To select a leader for the Care Process Action Team, the agency should choose the person who is most closely related to the processes to be investigated, and who is genuinely interested in investigating the outcome identified. This leader may be identified by the Target Outcome Selection Team or by the Care Process Action Team itself. The leader should be effective in working with individuals and groups and be someone who can assume the responsibility to create and maintain a productive team. This person needs to focus on the team's tasks and goals, while remaining cognizant of how the team's work fits into the agency's overall mission, vision, values, and plans.

The team leader is the manager of the team and thus is responsible for calling meetings, handling or assigning administrative details, orchestrating team activities, overseeing report presentations, and facilitating discussions. With an individual designated as a coach (described later in this section), the leader helps the team members learn new skills and tools to facilitate group problem solving. In agencies where a coach is not available, the leader may need to do more preparation, including learning about various group decision-making techniques that can be useful. The team leader may be a supervisor or a staff member with leadership skills.

Role and Responsibilities of the Team Leader

The leader of the Care Process Action Team is the contact point for communication between the team and the rest of the agency. The leader is also an active team member and as such must attend meetings, complete assignments, and share in the team's work. The leader may want to restrain his or her participation in discussions, so members will be more likely to participate actively. The leader and the coach may ask the Target Outcome Selection Team to meet with the Care Process Action Team when deemed appropriate.

The leader, with help from the coach, facilitates and supports team decisions by developing the team's decision-making skills and structuring early decision-making processes to guide the team members through any processes that are new to them (e.g., arriving at consensus). The leader clarifies the boundaries for the team's decision-making authority (e.g., scope, budget, time) and helps the team implement its decisions. The leader helps the team members understand that they are accountable for the results of their decisions, including the mistakes they will make and from which they will learn. As the team's confidence grows, its members' creativity and potential

for problem solving expand also. At every step the leader can help to focus the team members on what they are learning from their experiences. As the team progresses, the team identity will continue to grow and evolve.

The leader will help the team members understand that team differences are an advantage and that different perspectives can lead to better solutions. The leader will guide them in building respect for diverse points of view and validating the various values and opinions that exist among team members. When all viewpoints are given equal consideration and attention, members feel their opinions are valued.

The leader shares information with the team about agency concerns and decisions and about improvement projects occurring in other areas of the agency. The leader learns new ways of facilitating group discussions, of handling disruptive behaviors, and gains a new appreciation of the talent and creativity of the members of the team. Some agencies will elect to have few team meetings and to accomplish many tasks outside of meeting time. In these situations, the leader will guide the team in establishing a communication structure to keep all team members informed and up to date.

Coach (a.k.a. Quality Advisor, Facilitator)

The coach provides consultation to the team about team processes and helps team members discover the answers for themselves. As he or she facilitates and observes the team work together, the coach instructs the team in the use of tools and methods to improve team processes. The coach, with the team leader, meets with the Target Outcome Selection Team as needed. For agencies with little experience with CQI processes and techniques, additional resources might be sought. Such resources might include a trade organization to which the agency belongs, a local business that has established an effective QI program, or the corporate office for agencies that are part of a larger organization.

The coach may be selected by the Target Outcome Selection Team or elected by the Care Process Action Team. The coach should be someone who has had extra training and experience in leading group processes and also has the ability to teach group processes to teams. The coach does not need to be someone who is closely tied to the work processes being investigated. In fact, it may be easier for the coach to maintain neutrality if he or she is not well acquainted with the care processes in question. It is advantageous, at least when an agency is new to using CQI processes, for the coach to be a person with management experience, who understands CQI concepts, and who has knowledge of and experience using the tools of CQI, including running effective meetings.

Role and Responsibilities of the Coach

The coach focuses on the team's processes more than its products. The coach is considered an "outsider" who can objectively observe and evaluate the team's processes. The coach teaches the team members how to identify the kinds of decisions they should make and develop criteria for making decisions. With the guidance of the coach, the team learns various methods for selecting potential solutions to questions or problems. The coach will rarely, if ever, run meetings, handle administrative details, or carry out team assignments.

The coach helps team members become more comfortable with thinking critically about care provision. The coach guides the team to focus on reasonable conclusions that can be drawn

from collected data and to display the data in a way that is clear to all (e.g., in a graph). The coach restrains the team from developing solutions before causes of the problem have been identified.

The coach continually develops and improves his or her personal skills in facilitating group processes and planning. Skills will expand as the coach demonstrates coping with difficult or dominating participants, encouraging reluctant participants, resolving conflicts among team members, and teaching these skills to the leader and the team members. The coach can also help the team design and rehearse presentations to management or other agency groups. The coach can be helpful to the leader endeavoring to limit the number and length of meetings by developing approaches that take advantage of in-office mail, voice mail, or e-mail.

F. TEAM MEMBERS

The members of the team carry out the bulk of the assignments and work most closely with the processes being investigated. They investigate the process, plan and implement improvements, evaluate the effect of implemented changes, and make necessary revisions. The team members' greatest challenge may be learning to become creative business partners, rather than more passive employees.

The Target Outcome Selection Team usually selects the members of the Care Process Action Team. Depending on agency structure and processes, the Target Outcome Selection Team may select from a list of volunteers or ask managers to submit suggestions. Most effective team members regularly perform steps in the process being investigated, or their work is directly affected by how steps in the process are performed. The various members may represent different steps and different disciplines in the process. In agencies with small teams, members should have the broadest understanding of the processes in question.

To select effective team members, look for staff who demonstrate that they can be open about their ideas and feelings and can help others do the same. You want members who are thoughtful, demonstrate their individuality, are concerned with the issue to be addressed, and can demonstrate their internal commitment. Team members can learn effective team processes while completing basic team tasks, so previous CQI team experience is not necessarily a requirement.

Roles and Responsibilities of Team Members

Team members should recognize that by selecting them for this team, management has indicated interest in addressing the identified problem and has expressed confidence in the individuals selected for the team. Team participation is a priority responsibility equal to the responsibilities of the team members' regular positions.

Members of the Care Process Action Team are responsible for contributing as fully as possible by sharing their knowledge and expertise related to the process being investigated. They are responsible for participating in all meetings and discussions at meetings. Members are encouraged to ask questions if they lack understanding about something that is said.

Assignments to be completed between meetings will be selected and planned at meetings. Members have input into how assignments are made, the tasks to be accomplished, and the

date assignments are to be completed. Many agencies have held an initial orientation/planning meeting at which tasks were assigned to be completed in a specific time frame, then reconvening the team to pool information.

Team members are likely to learn a great deal from this experience, building on past experiences and adding new skills. They will learn active listening skills, how to resolve conflicts within a group, and how to make sound group decisions using a variety of techniques and methods. They will understand the benefit of using the CQI processes to solve agency problems in ways that benefit the providers as well as the customers. They will recognize that they are truly making contributions to improve the care the agency provides. As they educate other staff not participating on the team, the team members' new understanding of the importance of their roles as data collectors and effectors of improvements will spread throughout the agency.

G. PROGRESSING THROUGH THE INVESTIGATION AND PLANNING

Establishing Ground Rules

Ground rules are a set of guidelines, established by the team, which govern how meetings are run and how members interact with each other. These rules help the group define the limits of acceptable or unacceptable behavior and are important to establish, even for small teams. All members of the team agree to observe the rules, which helps to prevent misunderstandings and disagreements as the team progresses. Each team identifies particular areas to address. Teams may decide to add to the list of ground rules as new issues arise. It is a good idea, at least initially, to write the ground rules on a flip chart and have them posted at each meeting. You may also want to make sure each team member has a copy. See Attachment A to this chapter for a sample list of ground rules.

Home health agencies sometimes assume that staff members do not need such guidelines, that simply being employees of the same agency means that team members will function in similar ways. What is being forgotten in this assumption is the autonomy of home health agency staff members. They may seldom have had opportunities to work as part of a team before. Therefore, the ground rules should not be ignored.

Important issues that teams commonly address in ground rules are:

- Attendance: Accepted reasons for absences and the procedure to follow for expected absence. **EXAMPLE:** "Members are excused by leader only if absent from work."

- Promptness: Whether the team is determined to start and end on time and how promptness will be encouraged or enforced.

- Meetings: Location and time, member notification, breaks, acceptance of interruptions (e.g., phone calls, pagers).

- Participation: Expectations about everyone's participation, speaking freely, listening to each other, basic conversational courtesy (e.g., not interrupting, one speaker at a time). **EXAMPLES:** "We allow disagreements." "No interrupting a speaker." "We pitch in and help each other."

- Assignments: Expectation for timely completion of any tasks to be completed outside of meeting time.

- Housekeeping: Responsibility for meeting room setup, etc.

- Use of humor. **EXAMPLE:** "Humor is allowed."

- Personal respect: Tolerance for personal insults. **EXAMPLES:** "No sniping." "No personal attacks."

Keeping on Track

Conduct a progress check at the end of each team meeting to assess how well the team is following its road map. Discuss progress and obstacles, recognize successes, and revise schedules as appropriate. Keep the team focused on the tasks and moving forward.

Identify and Learn New Tools

Train team members in activities and use of new tools as needed, (allowing a little extra time in the agenda for explanations); this is known as "Just in Time" (JIT) training. Several of the most commonly used tools can be found in many continuous quality improvement references.

Learning to Work Together (Teambuilding)

- **Learn from mistakes.** Discuss why the problem happened, how to avoid it in the future, and what was learned. Stay objective; do not lay blame.

- **Celebrate!** Recognize when the team is working especially well together, when a conflict is resolved, when someone makes a significant contribution, or when a milestone on the road map is reached.

- **Recognize what is going well.** It is a very good idea to build this in as a regular part of evaluating every meeting, especially when there is conflict, or energy is lagging.

- **Make the most of team differences.** Treat members with respect while acknowledging their different motivations, values, work styles, and traditions. Focus on members' strengths, not weaknesses. Encourage constructive ideas. Show respect for individual points of view; demonstrate understanding of every comment and respect for the person who cared enough to offer it to the team.

- **Help the team get unstuck when differences lead to conflict.** Observe team members' behavior and provide feedback (about behaviors, not people). Ask the team to help develop solutions; do not allow blaming. Summarize and clarify each point by

paraphrasing when all have spoken, then wait for the owner of each point to verify the summarization. The leader needs to stay neutral, withhold judgement, and should not solve the problem. Ask the team members to identify points of agreement and disagreement, then ask them to suggest ways to proceed. Clarify how ideas might be implemented.

H. CLOSURE

It is important to reach a sense of closure when the team achieves its goal. The sense of satisfaction this brings will be carried forward to the next team or project. It provides the opportunity to tie up any loose ends and highlight any necessary follow-up.

At the meeting, ask the team to determine whether they believe the job is completed. Did the team achieve its goals? Be sure someone is recording comments as you encourage the members to participate in identifying:

- What they each learned from the experience.
- What advice they would give to others pursuing the same process.
- What the team accomplished.
- What problems the team encountered.
- What follow-up is needed and who will do it. Communicate key information from team to appropriate people. Inform anyone who needs to know.
- What presentations might be made about the work to management, other agency groups, or outside groups.

CELEBRATE SUCCESSES!!!

FREQUENTLY ASKED QUESTIONS

1. When would we do the selection of teams? It seems like it would be wise to do that in advance so we can really go to work on things when we get the Outcome Report. If we do this and then change our minds about who we want on the work team after the target outcomes are selected, what do we do?

It would be very wise to select at least the Target Outcome Selection Team prior to obtaining the Outcome Report. This allows you to provide training and opportunities for practice that will greatly expedite the subsequent review of the Outcome Report and selection of target outcomes. Many agencies have considered at least a few potential members of the Care Process Action Team ahead of time. It will be important for members of that team to understand the Outcome Report and the target outcome selection process to appropriately proceed with the investigation and development of the plan of action. The Care Process Action Team members will most likely be involved in presenting information to other staff (not on the teams), and they must be able to answer staff's questions. For example, if you identified four "core" members of the team in advance that would allow them to learn about outcome enhancement and be prepared to help the newer members of team when they are selected. The additional members of the team could be selected from staff most closely related to the target outcome selected. Many agencies have trained the Care Process Action Team members in the process of care investigation prior to receiving the report. This is most helpful if they have an opportunity to practice investigation processes ahead of time. (This is discussed in more detail in Chapter 9.)

2. Will we need a separate Care Process Action Team for each target outcome? If we select three or four target outcomes, that would really take a lot of staff time!

As stated in earlier chapters, we recommend that agencies select only one or two outcomes to work on at a time. Most agencies have used separate teams, because the personnel on the team most often are selected specifically because of their relationship to the target outcome. However, some agencies have used the same team to address each of two target outcomes. The teams do not have to hold a lot of lengthy meetings if they are well-prepared ahead of time and are creative about finding ways to accomplish many of their tasks on schedule but without assembling for a meeting.

3. Should the Care Process Action Team members do all the training and monitoring involved in the implementation of the plan of action?

They should certainly be involved in planning and coordinating the various action strategies and monitoring activities. Most agencies have called on people outside the team as needed for particular activities. For example, a nurse or therapist not on the team may be the best person to teach home health aides new activities, or a clinical specialist from a cooperative hospital may be needed to educate nurses in particular assessment skills. Each agency must make these kinds of decisions based on their needs and available resources.

Monitoring and evaluation activities should be coordinated by a team member, because team members have a great deal of investment in helping the plan of action succeed. Many agencies have found it quite beneficial to involve a variety of staff members in these processes (perhaps on a rotating basis) because it seems to heighten their awareness of and commitment to complying with the best practices.

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ATTACHMENT A TO CHAPTER 8

GROUND RULES FOR GROUP DISCUSSION

- ✓ The group activity will start and end on time.
- ✓ Everyone is encouraged to participate.
- ✓ Only one person may speak at any one time.
- ✓ All input is equal in importance.
- ✓ All input will be recorded as stated and in clear view of participants.
- ✓ Any pending questions will be placed "on hold" in the "parking lot" to be addressed at a later time.

ATTACHMENT B TO CHAPTER 8

HOW TO RECOGNIZE A GOOD TEAM

Effective Teams:

- Develop an informal, conformable atmosphere where everyone is encouraged to participate, diversity is recognized, and different points of view are accepted
- Listen to one another and openly express ideas
- Exhibit various interaction styles
- Make decisions by consensus
- Accept and complete tasks on time
- Examine the effectiveness of meetings on a regular basis
- Evaluate the purpose and goals of each meeting
- Have team leaders who model appropriate behaviors and who assist team members with constructive participation

ATTACHMENT C TO CHAPTER 8

SELECTING THE OUTCOME ENHANCEMENT TEAMS

EXERCISE: Selecting the Outcome Enhancement Teams

Directions: Use this worksheet to prepare for the Outcome Reports. Answer each question as it pertains to your agency.

List those people in your agency who are the most critical to include in team(s).

_____ _____ _____ _____

_____ _____ _____ _____

Of the above, who would be important to include on the Target Outcome Selection Team?

_____ _____ _____

_____ _____ _____

Of the above and depending on the target outcome selection, who would be important to include on the Care Process Action Team?

_____ _____ _____

_____ _____ _____

What are the agency protocols for teams and team meetings? Are there established guidelines and ground rules?

What teams currently exist for quality improvement and what is the possible overlap?

How and when will the members of the teams be recruited and educated on their responsibilities?

When must the Target Outcome Selection Team meet?

ATTACHMENT D TO CHAPTER 8

AGENCY STRATEGIES TO UTILIZE TEAMS FOR OUTCOME ENHANCEMENT

1. Early involvement of staff at all levels of the organization in outcome enhancement activities facilitates acceptance of the need for change in care delivery and the implementation of this change. Clinicians know agency procedures and how the use of them varies among individual clinicians of various disciplines. Clerical and business office staff members know what works and what does not work in the agency's paper flow processes. Information systems staff may be especially helpful in agencies using electronic health records.

2. Staff members are often the best resources for creative solutions to identified problems.

3. Institute creative approaches to communication that limit meetings to an absolute minimum. For example, many activities of the process of care investigation can be done by individuals working separately, and then meeting to discuss findings and formulate conclusions. Brainstorming can occur outside a meeting and multi-voting can take place without all individuals being in the room simultaneously by using voicemail, e-mail, or memos.

4. Utilize staff with training (or past experience) in quality/performance improvement tools or activities. They can often serve as "coach" or "facilitator" for teams or meetings and can assist meetings to proceed more efficiently.

5. Involved and knowledgeable staff can do much to help educate other staff and gain the "buy-in" needed to effectively change care practices.

6. Request volunteers to participate in various activities. Clinicians often are extremely interested in providing input to clinical care delivery issues, and they may not have been asked for such input in the past. The number of volunteers interested in improving patient care may surprise you. Additional volunteers might include students (e.g., those receiving clinical experience at the agency or staff pursuing advanced degrees) or administrative staff members.

7. Honor the input of your staff members. When agency management requests staff participation, but then ignores the input received, staff do not feel their input is valued.

8. Look for ways to include the clinical records staff. They can be involved with using the Patient Tally Report, marking episodes of care for review, or participating in the review.

9. When the team has identified the best practices and is ready to plan the action strategies, consider involving some key people (not on the team) who can facilitate the implementation of those activities.

10. Consider using only one or two team members to coordinate monitoring and evaluation activities (possibly with regular QI staff available in some agencies), then rotate regular clinical staff through these activities to help reinforce the importance of implementing the best practices.

CHAPTER 9 – OBQI EDUCATION FOR AGENCY STAFF

A. INTRODUCTION

A key factor to successfully implementing the outcome enhancement phase of OBQI is the education that occurs for agency staff. Agencies are encouraged to designate one or two staff representatives as trainers to facilitate staff education. These individuals should acquire as much knowledge as possible about OBQI and outcome enhancement activities well in advance of the Outcome Reports being available. In addition, the designated trainer(s) must plan for the particular needs of the agency as well as for the general acceptance and assimilation of OBQI by the staff. They may want to include some OBQI introductory content into new staff orientation (when OASIS is introduced), both formally and as reinforced by new staff preceptors. Some agencies will find that their staff members need training to shift from the current quality monitoring activities toward an outcome focus. Other agencies will find it necessary to conduct more extensive training to move from quality assurance to a quality improvement approach. Addressing the training needs in a coordinated and effective manner requires both advance planning and post-training follow-up.

Some aspects of OBQI are most relevant for specific agency staff members, while other (more general) training is necessary for different staff types. The designated trainers, with the support of the agency's management staff, need to determine which part of the training is to be emphasized for which group in the agency. This will ensure that all staff will have an understanding of outcome enhancement and be prepared to participate in a specific way in the activities. This chapter provides information and materials for agency trainers to utilize as they conduct these educational activities.

B. ESTABLISHING THE ATMOSPHERE FOR TRAINING: WHY CHANGE IS NECESSARY

Well before the actual training is initiated, the agency's OBQI trainers and agency leadership set the stage for successful (or problematic) implementation of OBQI. An agency with a strong focus on and commitment to providing high quality care and to continually improving that care will already have laid the groundwork for providing a mechanism (outcome enhancement) to further develop quality improvement processes. An agency with a supportive administration that understands the value of outcome enhancement will continue its efforts in continually improving the care provided to its patients.

An agency without a strong prior focus on performance improvement will benefit from the introduction of these concepts. This foundation will assist agency staff to understand why the need for change exists, why this change is important, and how it ultimately will be used to improve patient care. This big-picture emphasis on patient care assists in establishing the atmosphere to support these changes.

C. WHO NEEDS TRAINING? WHAT TRAINING DO THEY NEED?

As the plan for training unfolds, it is clear that different agency staff members have unique training needs. The agency management group needs to be prepared for the range of activities that must be conducted within the agency once the Outcome Reports are available.

Management also must understand any time and resource requirements, so that appropriate planning can occur. Quality improvement groups in the agency need to understand how their experience and expertise may be required in outcome enhancement activities. Clinical supervisors and the staff they oversee are likely to be involved in the process of care investigation and in developing and implementing the plan of action. Clinical records staff may be involved in the process of care investigation and in plan monitoring so they need to understand the importance of this activity and how they can facilitate its completion. All staff should become knowledgeable of the basic concepts of outcome enhancement and of their responsibilities in the process. As care processes are changed within the organization to improve or reinforce target outcomes, communication with all staff is important for their understanding and investment in whatever changes are to occur.

Clarifying the unique training needs of different agency staff groups becomes the basis for the total training plan. Attachment A to this chapter summarizes the unique training needs of specific agency staff members and when the training is needed.

D. OVERALL TRAINING GOAL

The agency staff responsible for conducting training must have a clear picture of the overall training purpose. It is very possible to become enmeshed in the details of outcome enhancement while losing sight of the reasons why training is important. There are four primary reasons for training agency staff, each of which can be translated into a specific goal. Alternately, the four reasons can be combined into one overall goal.

The reasons for conducting agency staff training are to:

1. Facilitate early implementation of the outcome enhancement activities in the agency (i.e., soon after the Outcome Report is obtained);

2. Enhance staff understanding and involvement (and therefore investment) in the outcome enhancement activities;

3. Identify specific staff member responsibilities; and

4. Generalize the focus on patient care improvement or reinforcement throughout the agency.

A sample (single) training goal is:

> To provide an overview of the outcome enhancement process, including the responsibilities of each member of the staff.

E. PLANNING AND SCHEDULING THE TRAINING

Attachment B to this chapter contains an overview of five types of training sessions—one for the management group, one for quality improvement and clinical supervisor groups, one for clinical records staff, one for clinical staff, and one for all staff. Each of these training types is described in more detail in this section. Agencies should determine how much of this content should be included in annual agency training requirements.

Management Group: In planning the training (once the designated trainers have acquired the necessary information on outcome enhancement activities), the first step is to meet with agency management. The purpose of this meeting is to provide the management group with information on the overall focus of outcome enhancement, the anticipated impact on the organization and patient care, and the resources needed. This group should be prepared for the content and the appearance of the outcome and Agency Patient-Related Characteristics Reports, including the meaning of the various report components. They need to know the importance of selecting target outcomes in a timely manner soon after the receipt of the reports. The training will allow the management group to begin planning for the target outcome selection process in the agency. This group also needs some knowledge of the procedures and timing involved in the outcome enhancement activities, including the process of care investigation and the development, implementation, monitoring, and evaluation of the plan of action. This will assist in their understanding that appropriate staff members need to be involved in activities during the month-long period following the receipt of the Outcome Report. It is critical that the management group "buy into" the concept of outcome enhancement. Through their support and communication, the staff will comprehend that the agency is incorporating outcome enhancement into its routine activities.

QI Groups/Clinical Supervisors: The QI group and clinical supervisors in the agency need similar training. They need preparation for the appearance and content of the outcome and Agency Patient-Related Characteristics Reports and to be informed of the management group's plan for selecting the agency's target outcome(s)—both for their understanding and with the expectation that at least some of them will be involved in this activity. They should be aware of the process of care investigation and any plans of the management group on how this will occur. They also need to be informed of the processes of developing, implementing, monitoring, and evaluating the plan of action. Their leadership will be important as “quality champions” and in assisting the clinical staff to improve or reinforce current practice.

The QI group and clinical supervisors should be encouraged to practice reading and interpreting outcome and Agency Patient-Related Characteristics Reports, as well as selecting target outcomes. Due to the clinical aspects of the process of care investigation, the supervisors should be familiar with the steps of this process prior to the receipt of the reports so that they can be involved in the investigation, as well as the development and implementation of the plan of action.

Clinical Staff: Since the reports and subsequent outcome enhancement activities will directly impact them, the clinical staff also needs training. Clinical preceptors may be engaged as “quality champions” and role models. Staff should be familiar with the format of the OBQI reports and who will be selecting target outcomes (and the criteria they will be following). Once the reports have been printed, staff should have access to them, be notified which target outcomes have been selected, and understand the reasons for the selection. They should be aware of the plan for the process of care investigation and be encouraged to become involved in some manner. Involvement does not necessarily mean attendance at a meeting. Through e-mail, voice mail messages, or posters throughout the agency, staff input and suggestions about care processes can be obtained. From the beginning, the clinical staff must be aware of the plan to change care processes. This understanding should include the why as well as the how. The preparatory training of the clinical staff should occur at a routine staff meeting. More extensive training should occur once the target outcomes are selected. The focus of this training should be on the process of care investigation and how the findings may impact their care delivery.

Clinical Records Staff: The agency's clinical records staff (and staff overseeing electronic health records) may become involved in the process of care investigation and plan of action monitoring by locating patient records for the investigation team. Due to their familiarity with the patient records, it also may be possible for these individuals to be involved in the focused record reviews. Therefore, the clinical record staff should have an overall understanding of the outcome enhancement activities and, in particular, the process of care investigation, monitoring, and evaluation activities.

General Training Considerations: Whenever training occurs, sufficient time should be scheduled to allow for presentation of the content and for questions. Discussion of concerns should be encouraged in any training session—this discussion provides an opportunity to review the "big picture" of the reasons for changes that are occurring. While acknowledging that space is often a limited commodity in a home care agency, try to select an area for training that is comfortable and conducive to learning. Ideally, the space will be located out of main traffic areas and will have a sufficiently large table surface to spread materials and reports. Ensure that any equipment (i.e., overhead projector, flip chart, white board, microphone, podium, etc.) can be accommodated. Check the availability of electrical outlets and extension cords.

Will attendance at the training be mandatory or voluntary? Will "make-up sessions" be offered? Will interruptions of the session for telephone calls be allowed? These decisions should be made in advance so staff can be informed. It is advisable to audiotape or videotape any training sessions that are mandatory, since absences can occur due to illness, unanticipated visit demands, etc. (Be sure to test the audio/video taping equipment prior to the session to assure that it is functioning well.) It is also possible to utilize taped or e-learning sessions as substitutes for longer sessions in the office. Specific staff trainers might be designated to follow up on any questions.

F. WHO SHOULD CONDUCT TRAINING?

The "just-in-time" training approach has the potential to require multiple training sessions for different agency audiences. The agency staff designated as primary OBQI trainers obviously will have the major role in conducting these sessions. In addition, there may be other individuals in your agency who could participate. Other training staff might include (after being trained by the primary trainers):

- an informal leader (whom the staff respect), who will appeal to the staff's professionalism and rational side; and

- a "quality champion," who motivates through appeals to staff idealism and emotion.

One member of the training group should be especially proficient in answering and dealing with questions.

G. TRAINING APPROACHES

A blend of formal and informal training methods is suggested for maximum effectiveness. The content for various formal training sessions is described in Attachment B.

Formal training is likely to occur in an organized group setting or an e-learning module, while informal training can be conducted in many different ways (both structured and unstructured). Because the majority of the formal content focuses on the new quality improvement activities, which can be relatively “dry” and abstract content, adding a bit of humor to the formal training is often appreciated by the learners. Utilizing creative means to maintain the participants' attention is always helpful.

If a packet of instructional materials is provided during formal training, the materials can reinforce the training at later points. Such a packet should be prepared in advance and distributed at the beginning of the training session. Extra packets should be kept in the agency. Trainers are encouraged to make use of the materials found in this manual as attachments and exercises. Other useful references are descriptions of various QI tools/techniques or team-building aids. Additional training principles are listed in Attachment C.

Reinforcement of content (or retraining) often occurs in more informal ways including discussions at staff meetings. Attachment D to this chapter provides a listing of informal training approaches.

Those individuals responsible for training should monitor the questions that arise most commonly among agency staff. These questions can indicate the need for a more formal retraining for all staff. Many of the suggestions for reinforcement and informal training found in Attachment D are appropriate for groups as small as one or two staff members or as large as the entire agency staff.

H. LEARNING CURVE EXPECTATIONS

Three points must be considered in the learning curve expectations. First is that internal agency processes that undergo considerable change could impact the learning curve. The result of multiple changes occurring simultaneously is often to lengthen the learning curve. If the agency's current approach to quality monitoring does not include continuous quality improvement concepts, staff will need time to understand the changes that will occur with the shift to quality improvement.

Second, if staff members are kept up to date on what outcome enhancement is, why the agency is now using it, and how it is going to impact their work, resistance to change should be diminished. Such resistance is often the source of a very long learning curve.

Finally, as the realization that the focus of outcome enhancement is on improving or reinforcing patient outcomes, staff members will be more ready to accept the new activities. They will become aware that individual staff members are not the focus of the quality activities and will be more amenable to becoming actively involved in the outcome enhancement activities. This, in turn, will decrease the length of the learning curve.

I. ASSESSING STAFF LEARNING

The agency trainer(s) will want to evaluate the staff’s ability to conduct the outcome enhancement processes as the training moves forward. If a lack of understanding is detected, a training "refresher" can be scheduled immediately. The agency's plans of action, once they are developed, should be reviewed thoroughly to assess for any lack of clarity or weaknesses that

could indicate additional training needs. Some agencies have found that keeping a log (or journal) of the early outcome enhancement activities is extremely useful in evaluating the learning that has occurred and the agency's ability to implement new processes.

The agency trainer(s) should expect that retraining will be necessary. Staff turnover will increase the amount of training/retraining that must be done. When the agency has been through the process once, the evaluation results (of the previous training and of the plan of action) will help to modify training for the next round of reports. The log (or journal) will help to repeat those training approaches that were successful and to modify those that didn't quite succeed—and to remember after several months exactly what those were! The trainer will hope for some carry-over from the training that occurs for this year's outcome enhancement activities to next year. This carry-over can be increased by continuing to involve staff members in the monitoring and evaluation of the plan of action. This activity helps to keep staff interest in the Outcome Report high throughout the subsequent months. Some key members of this year's teams can be enlisted to begin planning the training well in advance of next year's Outcome Reports.

J. AN EFFECTIVE TIMELINE FOR OUTCOME ENHANCEMENT

In preparation for training, the agency OBQI trainer(s) should be aware of the recommended timeline for outcome enhancement. Once the reports have been obtained, the following should be planned:

- Within a few days of obtaining the reports, the target outcome selection group should receive copies of the outcome and Agency Patient-Related Characteristics Reports and should hold their first meeting to discuss these reports.

- Within two weeks of obtaining the reports, the target outcomes should be selected. The care process action group should have started investigating care provided to the agency's patients.

- Within one month of obtaining the reports, the agency should have completed developing the plan of action and should have scheduled the start of implementation actions.

- Within three months of obtaining the reports, the monitoring activities should provide information on whether care process changes are occurring or whether some supplementary intervention approaches are necessary.

K. RECAP: WHAT CAN BE DONE EARLY?

Taking the effective outcome enhancement timeline into consideration, the agency trainer is encouraged to develop a very specific timeline for the OBQI activities and distribute this timeline to others in the agency. Quite a bit of activity will occur in a relatively short period of time, so planning ahead is essential.

Soon after the designated agency staff person has studied this manual or received initial training:

- Provide an orientation to the management group and quality improvement staff. This orientation will include the general concepts, activities, and timing of the full process of care investigation. The Professional Advisory Committee (PAC) or Board of Directors also may be apprised of agency OBQI activities.

- In a large agency, the trainer may want to give a general briefing to the entire management group, then select the target outcome selection group and educate them more fully. In a small agency, this in-depth orientation might be done with the entire management group, because they also will select the target outcome(s).

- This group can then lay the groundwork for the care process action group, including specific resources and suggestions for how the activities can be conducted.

- Schedule any agency-wide learning activities or approaches that the trainer may want to occur before the agency receives its reports.

L. THE MOST IMPORTANT FACTOR IN TRAINING

A well-designed training plan is important for staff learning, but the most important factor for staff learning is a trainer who conveys the value of the activities for the agency both in the short term and for long-range objectives. Remember that the overall goal of these activities is to enhance the outcomes of the patients to whom the agency provides care. The trainer's overall attitude toward OBQI, in the new processes that are being taught, in the training and reinforcement activities planned, and in the overall support provided to those who are learning, is important. The individual(s) conducting agency training should remember a key axiom:

YOUR ATTITUDE IS CONTAGIOUS!

FREQUENTLY ASKED QUESTIONS

1. We haven't conducted a process of care investigation before. Should we try to practice that before we review the Outcome Report?

Practicing prior to reviewing the report will certainly expedite the investigation. Agencies have found that training even a few people who will be on the team facilitates the team's ability to move forward. Use the exercises included in Chapter 5 as practice for your team. Approach the exercises as though you are conducting a real investigation of your agency's target outcome. Once clinicians understand this approach to record review (or interviewing care providers), they are often enthusiastic about using a method that looks at the care provided (which they consider important) rather than the paperwork. If this small group of clinicians understands this key aspect of outcome enhancement, it can do much to spread enthusiasm throughout the agency!

2. How do we determine the type of training best suited for the various categories of staff members?

The agency's management group, quality/performance improvement groups, clinical supervisors, clinical staff, and clinical records staff all are likely to require at least some training in the outcome enhancement activities of OBQI. The type of training should be appropriate to the expected involvement in the OBQI activities. Using the information provided in Section E of this chapter and the attachments, determine which part(s) of the OBQI training content should be emphasized for which group in the agency. Remember your overall goals are for all staff to understand outcome enhancement and to be prepared to participate in specific activities.

3. How do we motivate staff to participate?

Many staff are enthusiastic about providing the highest quality of care to patients. These "quality" champions can encourage per participation. By ongoing discussion of OBQI activities (including discussion of how staff are incorporating specified best practices on a routine basis) at staff meetings, in newsletters, etc., staff awareness of the agency's commitment to quality improvement activities can be raised. Some agencies have found that participation in OBQI activities can be tied to staff job descriptions and/or performance appraisals.

ATTACHMENT A TO CHAPTER 9

IDENTIFYING TRAINING NEEDS OF STAFF

Agency Staff/Group	Training Needed	When to Occur
Management Group	• Preparation for reports • Selecting target outcomes • Advance planning for outcome enhancement activities	• Soon after the trainer has acquired the essential content • Prior to reviewing reports
QI Groups/Clinical Supervisors	• Preparation for reports • Planning for selecting target outcomes • Conducting process of care investigation • Plan of action development, implementation, monitoring	For QI Groups: • Soon after the trainer has acquired the essential content • Prior to reviewing reports • Once target outcomes are selected For Clinical Supervisors: • Prior to reviewing reports • Once target outcomes are selected
Clinical Staff	• Preparation for reports • Plans for process of care investigation • Request for volunteers • Changes in care delivery/ processes	• Prior to reviewing reports • Once target outcomes are selected
Clinical Records Staff / IS Staff overseeing electronic health records	• Involvement in process of care investigation • Steps in outcome enhancement	• Prior to receipt of agency reports
Agency Staff	• Understanding of purpose and overall activities of outcome enhancement • The impact of OBQI on their work	• Soon after the management team has been trained and throughout the process

ATTACHMENT B TO CHAPTER 9

TRAINING PLAN FOR STAFF

TRAINING FOR THE AGENCY'S MANAGEMENT GROUP

Objectives

At the conclusion of the training, the management group will be able to:

1. Explain the components of outcome enhancement.
2. Understand and plan for the resources needed for the outcome enhancement activities.
3. Interpret Outcome Reports for the selection of appropriate target outcomes.
4. Understand the need for the management group's support of the outcome enhancement activities.

Key Content Areas

1. The OBQI process.
2. Major steps of the outcome enhancement phase.
3. Purpose, format, and interpretation of the Outcome Reports.
4. Process and criteria for selecting target outcomes.

Estimated Program Length

120 minutes

TRAINING FOR THE QI AND CLINICAL SUPERVISOR GROUPS

Objectives

At the conclusion of the training, the QI and clinical supervisor groups will be able to:

1. Explain the components and steps of the outcome enhancement phase of the OBQI process.

2. Interpret Outcome Reports for the selection of appropriate target outcomes.

3. Understand the steps of the process of care investigation and of the development, implementation, and monitoring of the plan of action.

4. Understand their role in the outcome enhancement phase.

Key Content Areas

1. The OBQI process.

2. Steps of the outcome enhancement phase.

3. Purpose, components, and interpretation of the outcome and Agency Patient-Related Characteristics Reports.

4. Process for selecting target outcomes.

5. Developing and applying clinical practice criteria.

6. Identifying areas for improving clinical care provision.

7. Techniques for changing clinical home care provision.

8. The management group's plan for incorporating outcome enhancement into the organization.

Estimated Program Length

120 minutes

TRAINING FOR THE CLINICAL STAFF

Objectives

At the conclusion of the training, the clinical staff will be able to:

1. Understand the components and steps of the outcome enhancement phase of the OBQI process.

2. Explain the components of outcome and Agency Patient-Related Characteristics Reports and the criteria for selecting target outcomes.

3. Understand their role in the outcome enhancement phase.

Key Content Areas

1. The OBQI process.

2. The steps of the outcome enhancement phase.

3. Purpose and components of the Outcome Report.

4. Criteria for selecting the target outcomes.

5. The management group's plan for incorporating outcome enhancement into the organization.

6. Purpose and components of the process of care investigation, development, implementation, and monitoring of the plan of action.

Estimated Program Length

60 minutes

TRAINING FOR THE CLINICAL RECORDS STAFF

Objectives

At the conclusion of the training, the clinical records staff will be able to:

1. Explain the components and steps of the outcome enhancement phase of the OBQI process.
2. Explain the process of care investigation process.
3. Explain the importance of monitoring the plan of action.
4. Understand their role in the outcome enhancement phase.

Key Content Areas

1. The OBQI process.
2. Steps of the outcome enhancement phase.
3. The process of care investigation and monitoring processes.
4. The management group's plan for incorporating outcome enhancement into the organization.

Estimated Program Length

45 minutes

TRAINING FOR ENTIRE STAFF

Objectives

At the conclusion of the agency training, the staff will be able to:

1. Discuss the purpose for outcome enhancement.
2. Understand their role in the outcome enhancement phase.

Key Content Areas

1. The OBQI process.
2. Steps of the outcome enhancement phase.
3. The management group's plan for incorporating outcome enhancement into the organization.

Estimated Program Length

30 minutes

ATTACHMENT C TO CHAPTER 9

TRAINING TIPS

TIPS TO CONSIDER AS YOU TRAIN YOUR STAFF:

- ✓ Staff members are usually more receptive to learning if they understand the context of new material—if they have some sense of the **"big picture."** Presenting the context thus serves to increase motivation.

- ✓ In a group setting, some people are primarily visual learners, while others are primarily auditory learners. Therefore, it's good practice to **include visual aids in addition to spoken presentation**.

- ✓ **Starting with the "known" and moving to the "unknown"** is an effective teaching approach. As an example, identification of how OBQI relates to the agency's current quality monitoring approaches is important.

- ✓ Regardless of how good a teacher you are, not every learner will retain every piece of information you convey. Thus, **reminders of key points** are good to include on posters, bulletin boards, or in other communication modes.

- ✓ Learners respond more positively to new ideas (or approaches) if they perceive **the presenter as an advocate for the ideas/approaches**. Outcome enhancement represents a unique opportunity for the agency to improve its own care.

- ✓ Clinical staff must be aware that **administrative support** for any necessary change is present. Be sure to share this support with them -- or, even better, have administrative staff present this to the clinical staff in person.

- ✓ The single most important factor in training is the trainer's ability to convey the value of the outcome enhancement process. Remember a key axiom: **Your attitude is contagious!** (Or its corollary: Attitudes are contagious. Is yours worth catching?)

ATTACHMENT D TO CHAPTER 9

SUGGESTIONS TO ADDRESS ONGOING TRAINING NEEDS

INFORMAL TRAINING APPROACHES

- Include announcements and updates in newsletters, paycheck flyers, voicemail, and e-mail reminders, etc.
- Put an OBQI question box in a prominent location. Empty it frequently; widely distribute the questions and their answers.
- Post frequently asked questions and answers on bulletin boards or in agency bathrooms.
- Designate key people to be “question answerers.” Have them clearly identified and accessible to clinical staff.
- Devote a few minutes of each staff (or team) meeting to OBQI announcements.
- Videotape staff meetings and trainings. These can be made accessible for those unable to attend or who need "refreshers."
- Repetition is essential!
- Reward positive performance; don’t overlook the “stars.”
- Look for opportunities to have FUN!

ATTACHMENT E TO CHAPTER 9

AGENCY STRATEGIES TO FACILITATE TRAINING

1. Outcome enhancement requires training for a variety of agency staff members. Addressing these needs in a coordinated and effective manner requires advance planning and post-training follow-up.

2. It is critical to maximize the use of available staff time. Agencies in the OBQI demonstrations have shared many ideas that other agencies have found useful:

   - Use existing regular meeting times (of staff, teams, or other groups) to provide the portions of training necessary for each group or to obtain staff input.

   - Videotape or audiotape the training session or webinar to allow absent staff to participate in the training at another time. If possible, have the trainer available for questions or discussion after staff has viewed the video.

   - Consider developing or using existing e-learning modules.

   - Make the visual aids and handouts from the training session available to all participants.

   - Use posters, bulletin boards, newsletters, e-mail, or voice mail to impart and reinforce important OBQI concepts for staff. Begin these communications immediately after training is first conducted and continue throughout the initial processes. When implementation of the plan(s) of action begins, refocus these reminders to reinforce the changes in care practices.

3. Use informal training approaches to reinforce more formal presentations. (Refer to the list of such approaches in Attachment D of this chapter.)

4. Serving food and incorporating fun into the training sessions stimulates learners' involvement and active participation. Agencies have used silly crossword puzzles, scavenger hunts, and other games as alternative ways to present information and have fun at the same time.

ATTACHMENT F TO CHAPTER 9

COMPARISON OVERVIEW OF OASIS-DERIVED REPORTS

This table compares and contrasts the reports derived from OASIS data. All reports described here are useful for an agency's quality enhancement efforts. For more specific recommendations on using the Potentially Avoidable Event Report and the Process Quality Measures Report for quality improvement, see the OBQM and the PBQI Manuals available on the CMS website.

	Potentially Avoidable Event Report	OBQI Outcome Report	Process Quality Measures Report
Report Purpose	Outcome-Based Quality Monitoring (OBQM)	Outcome-Based Quality Improvement (OBQI)	Process Based Quality Improvement (PBQI)
Frequency of Report	Agency-determined; first report recommended to be an annual report; subsequent reports recommended no more frequently than quarterly	Agency-determined; suggested annually to allow care process change to have an impact on outcomes	Agency-determined; suggested quarterly to monitor trends in use of best practices
Method of Obtaining Report	Downloads from state OASIS server	Downloads from state OASIS server	Downloads from state OASIS server
Accompanying Report(s)	Agency Patient-Related Characteristics Report -- for same cases and time period as the Potentially Avoidable Event Report	Agency Patient-Related Characteristics Report -- for the same cases and time period as the Outcome Report; Patient Tally Report	Patient Tally Report
Outcomes to Investigate	All adverse event outcomes	1-3 target outcomes for each annual report	1-3 target process measures and those related to target outcomes
Selecting Outcomes for Review	Prioritize: (a) Those with most clinical relevance to the agency and (b) those with highest incidence compared to reference group should be investigated first. Statistical significance not a requirement, since all outcomes will need to be investigated over time	Follow criteria for selecting target outcomes. Statistical significance is the first criterion in the list, followed by magnitude of outcome differences, adequate number of cases, significance level of differences, relevance to agency, and clinical significance	Select process quality measures that are required under agency policies, related to target outcomes, or relevant to agency goals. Other considerations are statistical significance and adequate number of cases
Time Interval to Review Care Provided	Investigation of the 13 adverse event outcomes can proceed in a phased manner over several months	Process of care investigation completed within one month of obtaining Outcome Report	Process of care investigation completed within one month of obtaining Outcome Report
Result of Care Review	Improvement plan if areas for improvement are discovered; sharing of appropriate care examples with staff	Plan of action developed and implemented to spread best practices across the agency	Plan of action developed and implemented to use of best practices across the agency
Instructional Material	Available from OASIS web site	Available from OASIS Web site	Available from OASIS Web site
Goal of Quality Monitoring/ Improvement Activity	To reduce incidence of adverse events (recognizing that they may never get to 0)	To improve those target outcomes selected for remediation (improvement) or to maintain excellent care (if target outcome selected for reinforcement)	Increase use of evidence-based best practices in care delivery

CHAPTER 10 – ESTABLISHING AN EFFECTIVE OBQI SYSTEM

A. INTRODUCTION

In this manual, the key steps of OBQI have been introduced—with particular emphasis on the activities of outcome enhancement. Agencies have learned how to interpret the Outcome Reports, and prioritize target outcome(s) for further investigation. They have learned how to conduct a process of care investigation, and the essential steps of developing and implementing a plan of action designed to improve (or reinforce) the care processes that led to outcome results. Key aspects of involving staff of the entire agency in the outcome enhancement activities and of essential training content have also been presented. These are the "tools" to fully implement OBQI in the agency. An agency's commitment to focusing on and continuously improving the quality of care provided will, in large part, determine the degree of success that can be achieved in this implementation.

B. AGENCY COMMITMENT TO QUALITY IMPROVEMENT

The outcome enhancement process of OBQI described in this manual is based on the key principles of continuous quality improvement (CQI). Agencies already using these principles strive to continuously and accurately measure the effectiveness of the care that clinicians provide and to focus on problematic processes, rather than individuals, when improvement is indicated. They use systematic methods to investigate opportunities for improvement and to implement activities designed to enhance quality. OBQI combines these core principles with sophisticated information gathering and analysis methods, while maintaining the focus on patient care.

Outcome enhancement processes can readily be integrated into quality improvement (QI)/ performance improvement (PI) programs already in place. Agencies have reported this is an easy step to accomplish and often provides a high degree of focus to their QI/PI program.

The agency's commitment to providing high quality care and willingness to truly examine the care provided will assist in establishing the patient-centered culture necessary to support OBQI. Implementing OBQI requires an agency-wide commitment to regularly evaluating performance (in terms of patient outcomes) and to improving patient care on an ongoing basis. For some agencies, this requires a shift from a culture based on administrative needs to a culture with a focus on patient needs. In OBQI, the focus is on the patient, not on agency staff.

C. EFFECTS OF FOCUS ON OUTCOMES

The fundamental purpose of OBQI is to improve patient outcomes by modifying and reinforcing specific aspects of patient care. Emphasizing precise and objective data collection, clarity in understanding outcomes, and objectivity in interpreting Outcome Reports are each important in their own right. However, the primary purpose of home care is to help patients achieve outcomes that would not be achieved if natural progression of disease and disability alone had taken place (or, at times, to help patients achieve selected outcomes at a more accelerated pace than would have been the case under natural progression). Decision making within the

agency should, therefore, focus on how best to provide care as a result of collecting information on and monitoring outcomes. Care investigations and decisions on how to change and improve care should be triggered by outcome and process quality findings.

Quality improvement based on outcomes requires a number of new activities and a new way of thinking. Implementing OBQI requires a systematic evaluation of current work processes and identification of processes that need to change. Even agencies that always use QI principles may find that they need to re-engineer some of their current processes to implement OBQI. As with any new approach, some time is likely needed to get used to this. Once the agency has gained experience with OBQI, a number of activities and thought processes will become more routine. Techniques will be identified to streamline and improve approaches to conducting process of care investigations and to the writing and implementation of action plans.

When the outcome philosophy takes hold in an agency, staff, supervisors, and administrators begin to think differently about the work they do. Clinical staff assess the impacts of their care practices on patients and search for evidence- and research-based best practices that reach effective outcomes in an efficient manner. As providers of care begin to consciously think about the linkages between aspects of care delivery and outcomes, new training and educational needs are likely to emerge. Inservices, continuing education, and staff meetings are likely to focus on outcomes, patient care, and process of care analysis in both formal and informal ways.

Enormous opportunities exist for agencies that utilize outcome and process quality information in their QI programs and for management decisions. The agency's focus on outcomes begins to pervade a variety of administrative decisions. When clinical outcome data are evaluated in conjunction with process and financial data, for example, the result is powerful information for management decisions about cost-effective care. A continuing focus on how interventions and specific personnel allocation affect outcomes also becomes of particular interest. Agency decisions thus become more and more patient-centered.

D. EXPECT EVOLUTION IN YOUR OBQI SYSTEM

Agencies must build flexibility into the system as they implement and maintain an OBQI approach. OBQI will not work by itself. Providing home care is a dynamic process. Consequently, attaining optimal patient outcomes is dynamic, and OBQI must be regarded as a process that itself requires monitoring and continual improvement. The way information is used and the manner in which patients will benefit and also use outcome findings will continue to change over time. OBQI processes should be evaluated regularly, and refinements made as needed. Agencies must acknowledge and build flexibility in this system as they implement and maintain an OBQI approach.

Networking with colleagues and maintaining awareness of industry publications is necessary to keep abreast of new developments and to share ideas about successfully maintaining and adapting OBQI. By enhancing their own internal processes and sharing their experiences, agencies have an opportunity to contribute to the ongoing development and national evolution of OBQI. Agencies who choose to take advantage of the opportunities presented to them through OBQI will have powerful information for many decisions concerning cost-effective, high quality patient care. This information will in turn serve the future recipients of care in an ongoing application of continuous quality improvement.

APPENDIX A

GUIDELINES FOR REVIEWING OBQI REPORTS

Outcome Reports,
Agency Patient-Related Characteristics Reports,
Patient Tally Reports

Basic Information Regarding the Outcome, Agency Patient-Related Characteristics, and Patient Tally Reports

The Outcome, Agency Patient-Related Characteristics, and Patient Tally Reports are included in the report series produced by CMS for home health agency use in Outcome-Based Quality Improvement (OBQI). In these guidelines, the reports are described, key terms are defined, and "How to Read" instructions are presented for each report.

The Outcome Report contains 37 risk-adjusted outcome measures -- 33 end-result (reflecting changes in health status) and 4 utilization outcomes. For each outcome measure, a bar graph is presented. The first of the three bars reflects the actual percentage of your patients that attained the outcome in your "current" reporting period. The second bar reflects the percentage of your patients that attained the outcome in your “prior” reporting period adjusted for case-mix differences between “current” and “prior” patients. . The third bar represents a reference value against which your outcome rate is compared. This bar reflects what your expected outcome rate would be given your agency patient-related characteristics or risk factor distribution for that outcome. In short, the white bars in the Outcome Report represent your actual outcome rates, the gray bars represent your prior outcome rates, and the darkened bars represent your expected outcome rates, calculated using a statistical prediction model.

Utilization outcomes pertaining to discharge to the community, hospitalization, and emergency room care (with and without hospitalization), were computed for all patients in your agency sample. Results for these measures appear on the final pages of the report. The results for improvement and stabilization measures (end result outcomes), appearing at the beginning of the report, were computed only for those patients not discharged to an inpatient facility. Therefore, the results for these end result outcome measures are based on fewer patient episodes than the results for the utilization outcome measures.

Within the reports, significance levels are presented for each measure when the sample size corresponding to the measure is at least 10. If you had nine or fewer patients on whom the outcome measure could be computed validly, statistical significance is not provided.

The Agency Patient-Related Characteristics Report shows patient attributes or circumstances present at start of care (or resumption of care) that are likely to impact health status (such as a patient's environmental or living conditions, demographics, and baseline health status). Information about home health length of stay, collected at discharge, also is included. For the report, individual (patient-level) characteristics information is aggregated to the agency level to describe the health status of all the agency's patients at admission/resumption of care. Average values or percentages for Agency Patient-Related Characteristics measures then are compared to the reference sample so that differences between the agency's patients and the reference sample of patients are identified. The report also includes a comparison to the same agency's patients during an earlier (prior) time period.

In view of the large number of factors included in the Agency Patient-Related Characteristics Reports, as well as the large size of the reference sample, it is natural that a number of statistically significant differences will appear between a single agency's patient characteristics and the average patient characteristics of the total reference sample. In comparing "current" to "reference" data in the Agency Patient-Related Characteristics Reports, a single asterisk [*] corresponds to the 0.01 level of significance (i.e., a 1% probability that the observed difference

is due to chance) and the double asterisk [**] corresponds to the 0.001 level. For prior comparison, a single plus sign (+) corresponds to a 0.01 level of significance and a double plus sign (++) corresponds to the 0.001 level. Even relatively small differences are sometimes statistically significant because of the large reference sample size. Agencies, particularly those with a large number of patient episodes in a year, are cautioned not to "overinfer" about relatively small differences simply because of statistical significance.

The Agency Patient-Related Characteristics Report can serve multiple purposes independent of other reports produced for OBQI, such as providing a descriptive overview of the types of patients admitted to an agency, monitoring the extent of changes in the population served over the course of time, and aiding public relations or marketing to payers and consumers. Agencies will also find it useful for staffing or clinical programmatic needs to monitor changes in agency patient characteristics over time.

The Patient Tally Report provides descriptive information for each individual case included in your Outcome Report analysis. For each case, you can identify if the patient contributed to an outcome measure and, if so, whether that outcome was achieved (for all outcomes in your Outcome Report). In addition, you can identify the values for each patient characteristics variable -- found in your Agency Patient-Related Characteristics Report -- for every patient at start or resumption of care (e.g., his/her value on the bathing scale or whether he/she had an acute cardiac condition).

The primary use of the Patient Tally Report is to select patients for your process of care investigation. For example, if you choose to investigate the outcome Improvement in Bathing as a target outcome, you can identify which patients improved in bathing and which did not improve, and select patients from each group. By conducting a process of care investigation, you should be able to identify specific care processes that can be remedied or reinforced. These specific clinical actions (and corresponding best practices) will be the basis for a plan of action to improve care.

Key Terms

The following definitions of several key terms may help you to better understand the reports.

- **Improvement and Stabilization**: In the Outcome Reports, a patient *improves* if he/she is less severely ill, disabled, or dependent at discharge than at start (or resumption) of care. A patient has *stabilized* if he/she is no more disabled/dependent (that is, has not worsened) at discharge than at start of care. For example, a patient who was disabled in bathing at start of care and became less disabled at discharge has improved in bathing. If the patient did not worsen (but either improved or remained at the same level), then he/she stabilized. Thus, the opposite of stabilization is decline or worsening.

  The actual measures that correspond to improvement or stabilization quantify the above concepts. Consider again the improvement measure for bathing. The bathing scale used for data collection takes on values between 0 and 5, with higher values indicating progressively higher disability or dependence. A patient whose ability on this scale at start of care is 4, and whose value at discharge is 2, has improved in bathing, and therefore the improvement measure is 1 (if the patient had not improved, the improvement measure would be 0). Note that this outcome measure does not apply to patients who are initially independent in bathing (i.e., at a level 0 on the scale), because they cannot improve. Such patients are excluded from the calculation of the improvement measure.

  A patient has stabilized in bathing if, from start of care to discharge, the value on the bathing scale decreases or moves toward 0 (reflecting improvement) or remains the same. When stabilization occurs, the stabilization measure is 1 (when it does not occur, the stabilization measure is 0). Patients are excluded from the calculation of the measure if they cannot worsen because they are already at the most dependent level at start of care (i.e., at a level 5 on the scale for bathing).

  The number of patients excluded from the outcome calculations varies depending on the specific measure. For this reason, the number of patients included in the calculations also varies. The precise number of patients used in a calculation for any measure is presented in the column labeled "Elig. Cases" in the Outcome Report.

  Taking the average of the values for an improvement measure (or stabilization measure) for a group of patients yields the improvement rate (or stabilization rate) for that group. These rates are presented as percentages in the Outcome Reports.

  It should be noted that stabilization rates are typically substantially higher than improvement rates. This is due to the fact that stabilization rates reflect both patients who improve and patients who stay the same on a specific outcome. Care providers should not think in terms of a "grading system" for improvement rates; e.g., one must be above 90% to receive an 'A' or above 80% to receive a 'B.' Improvement rates are often below 50% and usually range from 25% to 60%, depending on the health status attribute of interest. On the other hand, stabilization measures typically tend to be above 75%, and some are even above 90% (Shaughnessy and Crisler, 1995, p. 6-8).

- **Significance***:* Statistical significance is relevant when comparing the "current" values to "reference" values and “current” values to “prior” values in the Agency Patient-Related Characteristics Report. It can be understood as the probability that a difference between two rates or averages is due to chance rather than due to a "real" difference between the

two populations compared. If the statistical significance value is numerically high, then we consider it likely that any difference observed is due to chance. Statistical significance is related to the magnitude of the observed difference and the number of cases. A relatively large difference may be non-significant (have a high probability) when sample size is low, while a large sample size will produce significant (low probability) results with a smaller observed difference.

- **Criteria for Acute Conditions**: On the last page of the Agency Patient-Related Characteristics Report, prevalence values are given for patients categorized with acute conditions. The inclusion of patients in these groups is based on the following criteria. The categories are not mutually exclusive.

  Orthopedic Conditions

  Patients who were discharged from a hospital, rehabilitation facility, or nursing home within 14 days of start or resumption of care (SOC/ROC), or who experienced a medical or treatment regimen change within 14 days of SOC/ROC are included in this group if any medical diagnosis pertaining to those events is related to the musculoskeletal system, including disorders of cartilage or other connective and soft tissues.

  Neurologic Conditions

  Patients who were discharged from a hospital, rehabilitation facility, or nursing home within 14 days of SOC/ROC, or who experienced a medical or treatment regimen change within 14 days of SOC/ROC are included in this group if any medical diagnosis pertaining to those events relates to the nervous system.

  Open Wounds / Lesions

  Patients are included in this group if they have an open wound or skin lesion. Also, patients who were discharged from a hospital, rehabilitation facility, or nursing home within 14 days of SOC/ROC, or who experienced a medical or treatment regimen change within 14 days of SOC/ROC are included in this group if any medical diagnosis pertaining to those events relates to an open wound or skin lesion.

  Cardiac/Peripheral Vascular Conditions

  Patients who were discharged from a hospital, rehabilitation facility, or nursing home within 14 days of SOC/ROC or who experienced a medical or treatment regimen change within 14 days of SOC/ROC are included in this group if any medical diagnosis pertaining to those events relates to the circulatory system.

  Pulmonary Conditions

  Patients who were discharged from a hospital, rehabilitation facility, or nursing home within 14 days of SOC/ROC, or who experienced a medical or treatment regimen change within 14 days of SOC/ROC are included in this group if any medical diagnosis pertaining to those events relates to respiratory function.

  Diabetes Mellitus

  Patients who were discharged from a hospital, rehabilitation facility, or nursing home within 14 days of SOC/ROC, or who experienced a medical or treatment regimen change within 14 days of SOC/ROC are included in this group if any medical diagnosis pertaining to those events is diabetes mellitus.

Gastrointestinal Disorders

Patients who were discharged from a hospital, rehabilitation facility, or nursing home within 14 days of SOC/ROC, or who experienced a medical or treatment regimen change within 14 days of SOC/ROC are included in this group if any medical diagnosis pertaining to those events is related to the digestive system.

Contagious/Communicable Conditions

Patients who were discharged from a hospital, rehabilitation facility, or nursing home within 14 days of SOC/ROC, or who experienced a medical or treatment regimen change within 14 days of SOC/ROC are included in this group if any medical diagnosis pertaining to those events is related to infections or parasitic diseases.

Urinary Incontinence/Catheter

Patients who were discharged from a hospital, rehabilitation facility, or nursing home within 14 days of SOC/ROC, or who experienced a medical or treatment regimen change within 14 days of SOC/ROC are included in this group if the patient is incontinent of urine or if the patient has a new indwelling catheter.

Mental/Emotional Conditions

Patients receiving psychiatric nursing services at home are included in this group.

Oxygen Therapy

Patients receiving either intermittent or continuous oxygen therapy at home are included in this group.

IV/Infusion Therapy

Patients receiving intravenous or infusion therapy at home, such as hydration, or intravenous, subcutaneous, or intrathecal therapy for pain control, are included in this group.

Enteral/Parenteral Nutrition

Patients receiving enteral or parenteral nutrition at home, such as gastrostomy tube feedings or hyperalimentation, are included in this group.

Ventilator Therapy

Patients receiving continuous or intermittent ventilation therapy at home are included in this group.

- **Criteria for Chronic Conditions**: Patients who were not discharged from an inpatient facility (hospital, rehabilitation facility, or nursing home) within 14 days of SOC/ROC, and who did not experience a change in medical or treatment regimen within 14 days of SOC/ROC are assigned to a chronic group if they meet specified levels of dependency (or conditions for membership) for that group. Patients who were discharged from an inpatient facility within 14 days of SOC/ROC or who did experience a change in medical or treatment regimen within 14 days of SOC/ROC are assigned to a chronic group if and only if they met the specified levels of dependency/conditions for membership for that condition prior to the inpatient stay/medical regimen change.

  The inclusion of patients in these groups is based on the following criteria. These categories are not mutually exclusive.

Dependence in Living Skills

Patients who meet the criteria for inclusion in chronic conditions are assigned to this group if they are unable to prepare main meals on a regular basis and require the assistance of another person for one or more of the following: laundry, housekeeping, shopping, finances, or ability to use the telephone. The assistance required is necessary for routine or normal performance of the activity.

Dependence in Personal Care

Patients who meet the criteria for inclusion in chronic conditions are assigned to this group if they require the assistance of another person for one or more of the following: bathing; grooming (combing or brushing hair, shaving or applying makeup, cleaning teeth or dentures, or trimming fingernails); or dressing of upper or lower body.

Impaired Ambulation/Mobility

Patients who meet the criteria for inclusion in chronic conditions are assigned to this group if they require the routine assistance of another person for toilet transferring, toileting hygiene, transferring, or ambulation/locomotion.

Urinary Incontinence/Catheter

Patients who meet the criteria for inclusion in chronic conditions are assigned to this group if they are incontinent of urine or have an indwelling/suprapubic catheter.

Dependence in Medication Administration

Patients who meet the criteria for inclusion in chronic conditions are assigned to this group if they require the assistance of another person for taking oral medications or injectable medications.

Chronic Pain

Patients who meet the criteria for inclusion in chronic conditions are assigned to this group if they have been or are currently experiencing intractable or severe pain.

Cognitive/Mental/Behavioral

Patients who meet the criteria for inclusion in chronic conditions are assigned to this group if they require assistance because they demonstrate one or more of the following behaviors at least once a week:

1) memory deficit,
2) impaired decision making,
3) verbal disruption,
4) physical aggression,
5) disruptive, infantile, or socially inappropriate behavior (excludes verbal actions), or
6) delusions, hallucinations, or paranoid ideations.

Chronic Patient with Caregiver

Patients are included in this group if they have been assigned to one or more chronic conditions and an assisting person (caregiver) resides in the home.

- **Diagnoses for Which Patients Are Receiving Home Care**: Patients are assigned to each of these diagnostic categories if they are receiving home care for a diagnosis belonging to that category (excluding diagnoses that are currently asymptomatic). A patient may have several home care diagnoses and may, therefore, belong to more than one diagnosis category.

How to Read the Outcome Report

The most important features of the All Patients' Outcome Report are listed below. Each feature is numbered and corresponds to a pointer in the sample report on the next page.

① **Key to shades used in the bar chart**: "Current" values are actual agency outcome rates calculated from data collected in the requested data collection period. "Prior" values are actual agency outcome rates calculated from data collected in the actual prior period noted above. "Reference" values reflect your agency's expected outcome rate given your specific agency patient-related characteristics or risk factor distribution for that outcome (for the risk-adjusted outcomes).

② **Outcome Headers**: Describes the type of outcome measures listed immediately below the heading. The Outcome Report contains 37 risk-adjusted outcome measures -- 33 end-result (reflecting changes in health status) and 4 utilization outcomes).

③ **Bar Graphs**: Indicate the percentage of patient cases who achieved the outcome for the given measure. For each measure, three bars are presented, corresponding to the "current," "prior," and "reference" groups.

Example: *For the measure "Stabilization in Grooming," the first bar shows that 89.8% of the "current" patients stabilized, the second bar shows that 92.7% of patients from the "prior" period stabilized, and 92.8% of the "reference" patients stabilized.*

④ **Eligible Cases**: The number of patient cases included in the group for which the outcome was computed.

Example: *For the measure "Stabilization in Grooming," there were 353 cases from "current" data, 89.8% of which stabilized in grooming. From the "prior" period there were 352 cases, of which 92.7% stabilized, and there were 2,179,331 cases from the "reference" data, 92.8% of which stabilized.*

⑤ **Significance**: This is relevant when outcomes are compared between sets of patient cases (for example, "current" vs. "reference") and indicates the level of statistical significance for the comparison. This value will always be between 0.00 and 1.00 and can be readily translated to percentage. The percentage is the probability that the result occurred by chance.

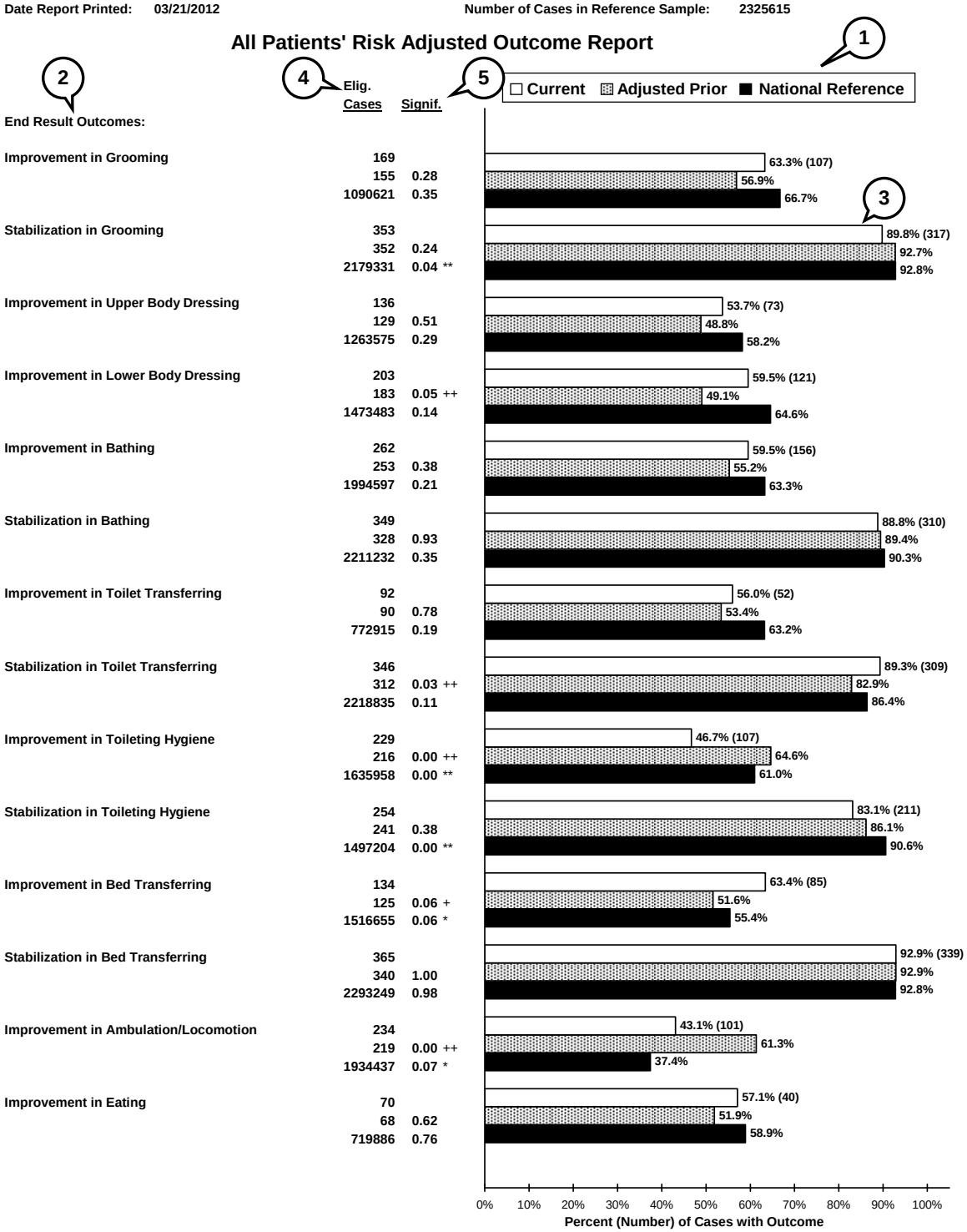
Example: *For the measure "Stabilization in Grooming," 89.8% of "current" patient cases stabilized, compared with 92.8% of "reference" cases who stabilized. The "0.04" value in the significance column means that there is a 4% probability that this difference (between 89.8% and 92.8%) is due to chance. Consequently, there is a 96% probability that the difference is not due to chance, but is a real phenomenon.*

When a significance value is high (for example, .90), any difference should be disregarded or interpreted conservatively because there is a greater likelihood that the difference is due to chance (a 90% likelihood, in this case). When a significance value is low (for example, 0.01), the result should be considered important because there is a very small likelihood (1%) that the difference is due to chance. We suggest that you concentrate on differences where the significance value is 10% or less, as indicated by the single or double asterisks (or plus signs).

Agency Name: FAIRCARE HOME HEALTH SERVICES
Agency ID: HHA01
Location: ANYTOWN, USA
CCN: 007001 Branch: All
Medicaid Number: 999888001
Date Report Printed: 03/21/2012

Requested Current Period: 01/2011 - 12/2011
Requested Prior Period: 01/2010 - 12/2010
Actual Current Period: 01/2011 - 12/2011
Actual Prior Period: 01/2010 - 12/2010
Cases: Curr 402 Prior 374
Number of Cases in Reference Sample: 2325615

All Patients' Risk Adjusted Outcome Report



* The probability is 10% or less that this difference is due to chance, and 90% or more that the difference is real.
** The probability is 5% or less that this difference is due to chance, and 95% or more that the difference is real.
\+ The probability is 10% or less that this difference is due to chance, and 90% or more that the difference is real.
++ The probability is 5% or less that this difference is due to chance, and 95% or more that the difference is real.

How to Read the Agency Patient-Related Characteristics Report

The key features of the Agency Patient-Related Characteristics Report are listed below. In view of the large number of factors in the report, it is natural to expect that some differences should appear between a single agency's patient-related characteristics and the average patient-related characteristics of the reference sample. Each report feature is numbered and corresponds to a pointer in the sample report on the next page. This is a hypothetical Agency Patient-Related Characteristics Report for "Faircare Home Health Services." Note: both the agency data and reference values are hypothetical.

① **Current Mean:** Values in this column reflect agency patient-related characteristics averages (means) based on data collected during the actual current period indicated in the upper right corner (in this example, this is 01/2011 to 12/2011). These values correspond to means or averages at start (or resumption) of care (SOC/ROC) for all patients during the report period.

② **Prior Mean:** Values in this column reflect agency patient-related characteristics averages (means) based on data collected during the prior period indicated in the upper right corner (in this example, this is 01/2010 to 12/2010). These values correspond to means or averages at start (or resumption) of care (SOC/ROC) for all patients during the report period.

③ **Reference Mean:** Values in this column reflect agency patient-related characteristics averages based on a nationally representative sample of patients from all agencies submitting OASIS data. Episodes of care data ending between the beginning of January 2011 to the end of December 2011 (the same time period as that represented by Faircare's data) are included in the reference sample.

④ **Significance:** Indicates whether or not a statistically significant difference exists between the "current" and "reference" means or the “current” and “prior” means. Significance levels of .01 or lower are marked with a single asterisk (*) and levels of .001 or lower are marked with a double asterisk [**]. For the current and prior comparison, plus signs (+, ++) are used to indicate significance values. When a significance value is low (for example, .01), the results may be important because there is only a small likelihood (in this case, 1%) that the difference is due to chance. We suggest you examine only differences where the significance value is 1% or less, as indicated by the asterisks.

In fact, primarily because of the large reference sample, Agency Patient-Related Characteristics Reports may contain a substantial number of significant differences. When this occurs (as it frequently does, particularly for agencies with large numbers of patients), you should be attentive only to large differences between the means within the total group of asterisked (or plus sign) differences.

⑤ **Agency Patient-Related Characteristics Attributes Measured Using Scales:** Results for attributes measured using a health status scale (for example, a scale that takes on values between 0 and 5 as indicated by "0-5" after the attribute name) are expressed in terms of the average scale value for the attribute. **The scale values are determined by the answer options provided for the specific data item in the OASIS.** In general, higher scale values represent more impairment or a more severe condition than lower numeric values for the same measure.

Example: Under the section on Types of Assistance Provided, IADLs, the sample report shows that for Frequency of ADL / IADL, which is measured on a 1-5 scale, the average scale value for the current cases of Faircare Home Health Services is 2.89, compared with a mean of 2.68 for the prior period, and 2.68 for the reference sample. This indicates slightly more disability on this measure for Faircare's patients (a non-significant difference) compared to the prior period and compared to the reference average.

⑥ **Agency Patient-Related Characteristics Attributes Measured as Prevalences:** Results for attributes that are measured not by scales, but by simply presence or absence, have a "%" next to them. The values in the "Current Mean," “Prior Mean,” and "Reference Mean" columns provide the percentage of patients with a given attribute.

Example: Under Therapies, the percentage of patients with IV/infusion therapy at start of care for Faircare Home Health Services is 7.2% in the current sample compared with 7.0% for the prior time period and 6.4% in the reference sample (nonsignificant differences).

Agency Patient-Related Characteristics Report

Agency Name: Faircare Home Health Services
Agency I D: H H A 01
Location: Anytown, U S A
C C N: 0 0 9 0 0 1 **Branch:** All
Medicaid Number: 9 9 9 8 8 8 0 0 1
Date Report Printed: 03/21/2012

Requested Current Period: 01 / 2011 – 12 / 2011
Requested Prior Period: 01 / 2010 – 12 / 2010
Actual Current Period: 01 / 2011 – 12 / 2011
Actual Prior Period: 01 / 2010 – 12 / 2010
 # Cases: Current 601 Prior 551
Number of Cases in Reference Sample: 3289067

	Current Mean	Prior Mean	Ref. Mean
PATIENT HISTORY			
Demographics			
Age (years)	70.75	70.96	72.78*
Gender: Female (%)	69.4%	66.6%	62.9%**
Race: Black (%)	1.7%	1.6%	10.7%**
Race: White (%)	97.5%	97.8%	85.5%**
Race: Other (%)	0.8%	0.7%	3.8%**
Payment Source			
Any Medicare (%)	80.4%	81.5%	82.6%
Any Medicaid (%)	12.9%	14.4%	14.3%
Any HMO (%)	3.0%	2.9%	5.8%**
Medicare HMO (%)	1.3%	1.2%	2.2%
Other (%)	19.9%	23.5%+	21.9%
Episode Start			
Episode timing: Early (%)	74.7%	73.1%	78.7%*
Episode timing: Later (%)	20.5%	21.1%	14.1%**
Episode timing: Unknown (%)	4.8%	5.8%	7.2%
Inpatient Discharge / Medical Regimen Change			
Long-term nursing facility (%)	1.3%	1.2%	2.2%
Skilled nursing facility (%)	2.1%	1.9%	2.1%
Short-stay acute hospital (%)	27.3%	30.0%	27.2%
Long-term care hospital (%)	64.6%	60.9%	62.2%
Inpatient rehab hospital/unit (%)	2.3%	2.0%	3.3%
Psychiatric hospital/unit (%)	1.3%	1.3%	1.6%
Medical regimen change (%)	99.2%	98.5%	86.5%*
Prior Conditions			
Urinary incontinence (%)	3.7%	2.8%	6.1%*
Indwelling/suprapubic catheter (%)	4.4%	5.1%	5.3%**
Intractable pain (%)	9.3%	9.6%	14.1%**
Impaired decision-making (%)	3.3%	2.8%	2.6%
Disruptive / Inapprop. behav. (%)	2.2%	2.2%	2.0%
Memory loss (%)	3.1%	3.0%	3.4%
None listed (%)	57.0%	62.1%++	55.9%
No inpat. dc/No med. Reg. chg (%)	33.0%	28.0%++	26.4%**
Therapies			
IV/infusion therapy (%)	7.2%	7.0%	6.4%
Parenteral nutrition (%)	1.8%	1.6%	3.3%
Enteral nutrition (%)	4.1%	4.1%	4.1%
GENERAL HEALTH STATUS			
Hospitalization Risks			
Recent decline mental/emot/behav (%)	7.2%	7.0%	6.4%
Multiple hospitalizations (%)	1.8%	1.6%	3.3%
History of falls (%)	62.9%	58.7%	56.8%
5 or more medications (%)	67.7%	74.6%	81.2%**
Frailty factors (%)	4.3%	4.2%	3.7%
Other (%)	0.5%	0.5%	0.3%
None (%)	8.7%	8.9%	11.6%
Overall Status			
Overall status (0-3)	1.06	1.15	1.89**
Unknown / Unclear (%)	5.6%	5.0%	5.9%
Other Risk Factors			
Smoking (%)	33.3%	32.8%	32.4%
Obesity (%)	62.9%	58.7%	56.8%
Alcohol dependency (%)	0.5%	0.5%	0.3%
Drug dependency (%)	2.2%	2.2%	1.8%
None (%)	18.9%	21.3%	19.8%

	Current Mean	Prior Mean	Ref. Mean
LIVING ARRANGEMENT / ASSISTANCE			
Current Situation			
Lives alone (%)	33.3%	32.8%	32.4%
Lives with others (%)	34.7%	32.4% +	34.9%
Lives in congregate situation (%)	32.0%	34.8%	32.7%
Availability			
Around the clock (%)	39.0%	40.2%	38.2%
Regular daytime (%)	0.9%	0.7%	3.9%
Regular nighttime (%)	0.5%	0.3%	2.0%
Occasional (%)	22.0%	21.6%	21.3%
None (%)	37.7%	37.2%	34.5%**
CARE MANAGEMENT			
ADLs			
None needed (%)	63.4%	60.3%	71.9%**
Caregiver currently provides (%)	21.9%	23.8%	16.9%
Caregiver training needed (%)	10.0%	10.8%	7.4%
Uncertain/Unlikely to be provided (%)	3.7%	4.0%	2.0%
Needed, but not available (%)	1.0%	1.1%	1.8%
IADLs			
None needed (%)	77.1%	80.9%	67.5%**
Caregiver currently provides (%)	13.1%	10.8%	18.9%*
Caregiver training needed (%)	6.6%	5.4%	9.4%
Uncertain/Unlikely to be provided (%)	2.2%	1.8%	3.1%
Needed, but not available (%)	1.0%	1.1%	1.1%
Frequency of ADL / IADL (1-5)	2.89	2.68	2.68
Medication Administration			
None needed (%)	48.6%	51.0%	58.9%**
Caregiver currently provides (%)	30.9%	29.4%	24.6%
Caregiver training needed (%)	15.4%	14.7%	12.3%
Uncertain/Unlikely to be provided (%)	5.1%	4.9%	4.1%
Needed, but not available (%)	1.0%	1.1%	1.8%
Medical Procedures			
None needed (%)	79.3%	80.6%	77.5%*
Caregiver currently provides (%)	9.8%	8.6%	10.0%
Caregiver training needed (%)	5.9%	4.3%	5.0%
Uncertain/Unlikely to be provided (%)	2.0%	1.4%	1.7%
Needed, but not available (%)	5.0%	5.1%	5.8%
Management of Equipment			
None needed (%)	70.3%	71.6%	71.1%*
Caregiver currently provides (%)	13.7%	13.0%	13.3%
Caregiver training needed (%)	8.9%	8.5%	8.7%
Uncertain/Unlikely to be provided (%)	3.0%	2.7%	2.1%
Needed, but not available (%)	4.0%	4.1%	4.8%
Supervision / Safety			
None needed (%)	85.3%	87.7%	88.1%
Caregiver currently provides (%)	8.8%	7.4%	7.1%
Caregiver training needed (%)	3.3%	2.7%	1.8%
Uncertain/Unlikely to be provided (%)	1.5%	1.2%	1.2%
Needed, but not available (%)	1.1%	1.0%	1.8%
Advocacy			
None needed (%)	69.1%	66.6%	68.4%
Caregiver currently provides (%)	16.6%	18.0%	16.2%
Caregiver training needed (%)	9.3%	10.0%	9.5%
Uncertain/Unlikely to be provided (%)	3.1%	3.3%	3.2%
Needed, but not available (%)	2.0%	2.1%	2.8%

How to Read the Patient Tally Reports

The key features of the Patient Tally Reports are listed below. There are two separate tally reports available, one presenting an individual patient's characteristics data at the start or resumption of a care episode, and the other presenting outcome information for each patient case included in the Outcome Report and the Process Quality Measure Report. Each report feature is numbered and corresponds to a pointer in the sample report portions on the next page.

① **Patient Name:** Each row in a tally report corresponds to a single case (i.e., a patient that has an SOC/ROC assessment and a corresponding discharge or transfer assessment during the report period).

② **SOC/ROC Date:** This is the SOC/ROC date for the episode followed by SOC/ROC agency patient-related characteristics, outcome data, or process data. Patients with multiple SOC/ROC and corresponding discharge or transfer assessments will have a listing for each episode. Using the patient name and SOC/ROC date, it is possible to identify individual episodes of care.

③ **Descriptive Labels:** Descriptive labels are printed at the top of each column for outcome and agency patient related characteristics attributes.

For the Agency Patient-Related Characteristics Tally Report

④ **Attributes Measured by Presence/Absence:** Most agency patient-related characteristics attributes with no scale range listed after the attribute name in the label are dichotomies (attributes that only are present or absent) and are presented as:

"y" if the Agency Patient-Related Characteristics attribute was present,

"n" if the Agency Patient-Related Characteristics attribute was not present, or

"-" if data were not available.

⑤ **Attributes Measured Using Scales:** Some SOC/ROC attributes are measured using integer (or number) scales. The labels (at the top of the column) for such items include the possible range of values in parentheses. The patient's score on an attribute will be shown as:

a number within the range indicated, or

"-" if no data were collected for the attribute.

An exception to this is "Age," which does not have a range in its label but is nonetheless a continuous measure represented by a number.

For the Outcome Tally Report

⑥ **End Result Outcomes** are measured as improvement or stabilization on a specific outcome. Each patient will have either an "x," "o," or "-" for each outcome:

"x" means that a patient achieved the outcome (e.g., stabilized in speech or language).

"o" means that a patient did not achieve the outcome (e.g., did not improve in speech or language).

"-" indicates that the outcome could not be calculated for that patient. This occurs if any patient did not meet the inclusion criteria for the outcome (i.e., an improvement measure does not apply to patients who are initially independent in that measure and a stabilization measure does not apply to patients who are initially at the most dependent level for that measure) or if data were not collected for the underlying attribute.

⑦ **Utilization Outcomes** are indicated as whether they occurred (or not):

"y" means that the outcome occurred (e.g., the episode ended in acute care hospitalization).

"n" means that the utilization outcome did not occur (e.g., the patient did not receive any emergent care).

Agency Name: FAIRCARE HOME HEALTH SERVICES
Agency ID: HHA01
Location: ANYTOWN, USA

CCN: 007001
Medicaid Number: 999888001
Date Reported: 03/21/2012

Agency Patient-Specific Characteristics (Case Mix) Tally Report*

Report Period: 01/2010-12/2010		Demographics					Payment Sources					Episode Start				Patient Discharge						Sensory Status			
Legend: y = Attribute present n = Attribute not present Number = Patient's actual score on item with scale — = No data collected for this item Patient Name	SOC/ROC Date	Age	Gender: Female	Race: Black	Race: White	Race: Other	Any Medicare	Any Medicaid	Any HMO	Medicare HMO	Private third party	Episode timing-early	Episode timing=Late	Physician date vs. SOC/ROC	Referral date vs. SOC/ROC	Nursing facility	Skilled nursing facility	Short-stay acute hospi8tal	Long-term care hospital	Inpatient rehab hospital/unit	Psychiatric hospital/unit	Vision Impairment	Hearing Impairment	Verbal content understanding	Speech/language
Anderson, ----------	06/12/10	74	y	n	y	n	y	n	n	n	n	y	n	0	1	N	n	n	y	n	n	0	1	1	1
Brown, ----------	06/12/10	66	y	n	n	n	y	y	n	n	n	y	n	0	1	n	y	n	n	n	n	0	1	1	1
Byrnne, ----------	08/24/10	81	y	n	n	n	y	n	n	n	n	n	y	0	1	y	n	n	n	n	n	1	1	3	4

*This sample report for illustrative purposes only. Data on actual Tally Reports that agencies will receive will be presented in a different order.

Agency Name: FAIRCARE HOME HEALTH SERVICES
Agency ID: HHA01
Location: ANYTOWN, USA

CCN: 007001
Medicaid Number: 999888001
Date Reported: 03/21/2012

Outcome Tally Report

Report Period: 01/2010-12/2010		End Result Outcomes																				Utilization Outcomes			
Legend: x = Patient achieved outcome o = Patient did not achieve outcome – = Outcome not computed for patient y = Yes n = No Patient Name	SOC/ROC Date	Improv in Light Meal Preparation	Stabilization in Light Meal Preparation	Improvement in Phone Use	Stabilization in Phone Use	Improvement in Mgmt of Oral Meds	Stabilization in Mgmt of Oral Meds	Improvement in Dyspnea	Improv in Pain Interfering w/Activity	Improv in Speech and Language	Stabil in Speech and Language	Improv in Status of Surgical Wounds	Improv in Urinary Tract Infection	Improvement in Urinary Incontinence	Improvement in Bowel Incontinence	Improvement in Confusion Frequency	Stabilization in Cognitive Functioning	Improvement in Anxiety Level	Stabilization in Anxiety Level	Improv in Behavioral Problem Freq.	Emergency Dept w/Hospitalization	Emergency Dept w/o Hospitalization	Discharged to Community	Acute Care Hospitalization
Anderson, ----------	06/12/10	–	x	o	o	o	o	o	o	o	o	o	o	o	o	o	x	–	x	x	n	n	y	n
Brown, ----------	06/12/10	–	x	–	–	x	–	–	–	–	–	x	–	–	–	x	x	–	–	–	y	n	n	y
Byrnne, ----------	08/24/10	o	o	x	x	x	x	x	–	–	–	–	x	x	x	x	–	–	x	x	n	n	y	n

APPENDIX B

DEFINITIONS OF KEY TERMS RELATED TO OBQI

Definitions of Key Terms Related to OBQI

Action Strategies: Activities that the implementation team/agency will take to a) implement the best practices among staff, b) ensure that staff understand the expected changes, and c) ensure staff have the skills and processes in place to facilitate the implementation of those best practices. Included with the action strategies are the start/finish times for each specific action and the person(s) responsible.

Agency Patient-Related Characteristics Report: A tabular document that provides average values for patient attributes at SOC/ROC (and a few for discharge/transfer). Comparative data are provided for either (1) a prior time period, (2) a national reference sample of patients, or (3) both of the above. These agency patient-related characteristics differences are taken into consideration in producing risk-adjusted outcome reports.

Best Practices: Specific statements of clinical actions expected of staff in order to impact the problem or strength identified (problem/strength statement). These statements are patient focused, address specific assessments, treatment or service interventions, care planning, and documentation (but should not be limited to documentation); and indicate to staff the specific actions they are to take in indicated situations.

Case: A matched pair of OASIS assessments consisting of a start of care (SOC) or resumption of care (ROC) assessment and the corresponding discharge or transfer assessment. Also called a quality episode.

End Result Outcome: A change in patient health status, such as physiologic, functional, cognitive, emotional, or behavioral health, between two or more time points. Examples of end-result outcomes are: *Improvement in Ambulation/Locomotion* and *Stabilization in Bathing*.

Evidence-Based Practices: Practices or processes that aim to apply the best available evidence gained from scientific research on risks and benefits to clinical decision-making.

Improvement Outcome: An outcome measure that assesses whether a specific health status attribute (such as transferring or dyspnea) improves between two specified time points, as measured by the specific scale. An improvement measure *cannot be computed* if the patient cannot possibly improve (i.e., the patient's health status is optimal for the attribute of interest at SOC/ROC).

Monitoring Approaches: Identifies how the action team will know that the activity has been implemented and the methods the team will use to determine if the staff learned the presented material or is implementing the changes presented. It is critical that monitoring approaches begin shortly after the intervention activity has been implemented (e.g., within two to four weeks), and plans should include how feedback regarding implementation will be shared with staff.

National Quality Forum (NQF): A nonprofit organization that endorses national consensus standards for measuring and publicly reporting on health care quality and efficiency in the United States.

Outcome: A change in patient health status between two or more time points. Outcomes are changes that are intrinsic to the patient and can be positive, negative, or neutral changes in health status. Changes can be due to the care provided, natural progression of disease and disability, or both.

Outcome Analysis: The first phase of OBQI, consisting of collecting and analyzing OASIS data to produce outcome and Agency Patient-Related Characteristics Reports.

Outcome and Assessment Information Set (OASIS): A set of data items developed largely for purposes of measuring (and risk adjusting) patient outcomes in home health care. OASIS items include sociodemographic, physiologic and mental/behavioral/emotional health status, functional status, and service utilization information. Since the OASIS is used for measuring outcomes, most data items are obtained at start of care and follow-up time points (i.e., every 60 days and discharge). The OASIS is not a comprehensive assessment but is intended to be integrated into agency clinical record forms.

Outcome-Based Quality Improvement (OBQI): A two-stage continuous quality improvement approach, premised on the principle that patient outcomes are central to continuous quality improvement. The first stage, or the outcome analysis phase, begins with collecting and analyzing uniform patient health status data. This stage culminates with an outcome report that reflects agency performance by comparing the agency's outcomes to those of a reference group of patients (which could be patients from a prior period at the same agency). The second stage, or the outcome enhancement stage, consists of interpreting the outcome report and selecting target outcomes for follow up, then conducting an investigation to determine key care processes that influenced these target outcomes, culminating with the development and implementation of a plan of action to remedy substandard care practices or reinforce exemplary care practices. The effects of the plan of action are evaluated in the next outcome report.

Outcome Enhancement: The second phase of OBQI, consisting of selecting target outcome(s), investigating to determine key clinical actions that influenced the target outcome(s), and developing, implementing, monitoring, and evaluating a plan of action to remedy substandard care practices or to reinforce exemplary care practices.

Outcome Measure: A quantification of a change in health status between two or more time points. In OBQI, outcome measures are computed utilizing OASIS data from SOC/ROC and from follow-up time points or discharge. Two common types of outcome measures used in OBQI pertain to improvement in or stabilization of a specific health status attribute.

Outcome Report: A graphical document that compares an agency's patient outcomes for a given time period to either (1) analogous agency-level outcomes for a prior time period, (2) outcomes for a reference sample of patients from other agencies, or (3) both of the above.

Patient Tally Report: A tabular report of patient descriptive information used in conjunction with the Outcome and Agency Patient-Related Characteristics Reports. The Tally Report provides descriptive information for each individual case included in your Outcome Report analysis and can be used to identify if the patient contributed to a specific outcome measure. This report also can be used to select patients for the process of care investigation to identify specific care processes that can be remedied or reinforced.

Plan of Action: A process to develop and implement, for a specific target outcome, a remedy to problems that are identified in the care delivery processes or to reinforce excellent care practices.

Problem or Strength Statement: A specific statement of the problematic (or exemplary) care provision issues to be addressed by the Plan of Action. Specific patient care issues (identified in the process-of-care investigation) are stated without explanation. The issues must be within the agency's control and should not be focused primarily on documentation.

Process-of-Care Investigation: The examination and analysis of care processes that produced the target outcome results.

Process Quality Measure Report: The OASIS-derived Process Quality Measure Reports provide information to HHAs on the rates of compliance with 47 process quality measures of best practice. The measures cover a wide range of best practices for timely care, care coordination, assessment, care planning, care plan implementation, education, and prevention. The Process Quality Measure Report provides home health agency staff with information on how often the indicated processes of care are utilized in providing care to that agency's patients. Process Quality Measure Reports will be first available in the Fall of 2010. More information can be found in the Process-Based Quality Improvement (PBQI) Manual on the CMS website.

Process Quality Measures: Measures of the rate of home health agency use of specific evidence-based processes of care. The OASIS-C process measures focus on high-risk, high-volume, problem-prone areas for home health care. These include measures pertaining to all or most home care patients, such as timeliness of home care admission, immunizations, and use of risk assessment tools for falls, pain, depression, and pressure ulcer development. As well, there are measures for specific diagnoses (e.g., heart failure, diabetes, and pressure ulcers) and measures of care planning and clinical interventions delivered for patients experiencing certain symptoms (pain, heart failure, depression).

Quality Improvement Team Members: All members of the Target Outcome Selection Team and the Care Process Action Team.

Remediation: Used to denote the plan developed in response to an unfavorable outcome result for the agency, compared to the reference group (or, after the first year, to the agency's performance in the prior year).

Reinforcement: Used to denote the plan developed in response to a favorable outcome result for the agency, compared to the reference group (or, after the first year, to the agency's performance in the prior year).

Risk Adjustment: A statistical technique that eliminates or minimizes the effects of risk-factor differences when comparisons are made between two samples of patients. Risk adjustment is necessary when two (or more) patient groups whose outcomes are being compared differ in terms of factors or patient characteristics that influence the outcomes. By controlling for differences between an agency's patient characteristics and that of the reference sample, risk adjustment permits an "apples to apples" comparison of outcome results.

Risk Factor: A patient condition or circumstance that (positively or negatively) influences the likelihood of a patient attaining the outcome.

Stabilization Outcome: An outcome measure that assesses whether a specific health status attribute (such as transferring or grooming) does not worsen between two specified time points, as measured by the specific scale. A stabilization measure *cannot be computed* if the patient's health status is at the most severely impaired level at SOC/ROC (i.e., the patient cannot demonstrate worsening).

Target Outcome Selection Team: A team made up of members from varying disciplines which selects one or two target outcomes for outcome enhancement activities and provides guidance to the care process action team.

Target Outcome: The outcome measure that the home health agency selects to address in the Plan of Action, using specific criteria for selection.

Utilization Outcome: An outcome measure that assesses utilization (or "non-utilization") of health care services. The change in utilization reflects a change in patient health status over time, typically a substantial change. Examples of utilization outcomes are hospital admission, use of emergent care services, and discharge to the community.

APPENDIX C

ALL PATIENTS' RISK ADJUSTED 3-BAR OUTCOME REPORT –

SECTION 5 0 8 COMPLIANT VERSION

This appendix to the OBQI Implementation Manual includes a Section 5 0 8 compliant version of a sample 3-bar All Patients' Risk Adjusted Outcome Report.

Please note, this report has not been approved to meet privacy requirements and can only be used by the home health agency and state agency for defined purposes.

All Patients' Risk Adjusted Outcome Report

Agency Name:	**Faircare Home Health Services**	**Requested Current Period:**	**01 / 2011 – 12 / 2011**
Agency ID:	**HHA01**	**Requested Prior Period:**	**01 / 2010 – 12 / 2010**
Location:	**ANYTOWN, USA**	**Actual Current Period:**	**01 / 2011 – 12 / 2011**
CCN:	**007001**	**Actual Prior Period:**	**01 / 2010 – 12 / 2010**
Medicaid Number:	**999888001**	**# Cases:**	**Curr 402 Prior 374**
Date Report Printed:	**03/21/2012**	**Number of Cases in Reference Sample:**	**2325615**

End Result Outcomes

Improvement in Grooming

Eligible Cases Current	**169**
# Cases with outcome	**107**
% Cases with outcome	**63.3**
Eligible Cases Prior	**155**
% Cases with outcome	**56.9**
Significance	**0.28**
Eligible Cases National Reference	**1090621**
% Cases with outcome	**66.7**
Significance	**0.35**

Stabilization in Grooming

Eligible Cases Current	**353**
# Cases with outcome	**317**
% Cases with outcome	**89.8**
Eligible Cases Prior	**352**
% Cases with outcome	**92.7**
Significance	**0.24**
Eligible Cases National Reference	**2179331**
% Cases with outcome	**92.8**
Significance	**0.04**

Improvement in Upper Body Dressing

Eligible Cases Current	**136**
# Cases with outcome	**73**
% Cases with outcome	**53.7**
Eligible Cases Prior	**129**
% Cases with outcome	**48.8**
Significance	**0.51**
Eligible Cases National Reference	**1263575**
% Cases with outcome	**58.2**
Significance	**0.29**

Improvement in Lower Body Dressing

Eligible Cases Current	**203**
# Cases with outcome	**121**
% Cases with outcome	**59.5**
Eligible Cases Prior	**183**
% Cases with outcome	**49.1**
Significance	**0.05**
Eligible Cases National Reference	**1473483**
% Cases with outcome	**64.6**
Significance	**0.14**

End Result Outcomes

Improvement in Bathing

Eligible Cases Current	262
# Cases with outcome	156
% Cases with outcome	59.5
Eligible Cases Prior	253
% Cases with outcome	55.2
Significance	0.38
Eligible Cases National Reference	1994597
% Cases with outcome	63.3
Significance	0.21

Stabilization in Bathing

Eligible Cases Current	349
# Cases with outcome	310
% Cases with outcome	88.8
Eligible Cases Prior	328
% Cases with outcome	89.4
Significance	0.93
Eligible Cases National Reference	2211232
% Cases with outcome	90.3
Significance	0.35

Improvement in Toilet Transferring

Eligible Cases Current	92
# Cases with outcome	52
% Cases with outcome	56
Eligible Cases Prior	90
% Cases with outcome	53.4
Significance	0.78
Eligible Cases National Reference	772915
% Cases with outcome	63.2
Significance	0.19

Stabilization in Toilet Transferring

Eligible Cases Current	346
# Cases with outcome	309
% Cases with outcome	89.3
Eligible Cases Prior	312
% Cases with outcome	82.9
Significance	0.03
Eligible Cases National Reference	2218835
% Cases with outcome	86.4
Significance	0.11

All Patients' Risk Adjusted Outcome Report -- Section 508 Compliant Version (continued)

End Result Outcomes

Improvement in Toileting Hygiene

Eligible Cases Current	229
# Cases with outcome	107
% Cases with outcome	46.7
Eligible Cases Prior	216
% Cases with outcome	64.6
Significance	0.00
Eligible Cases National Reference	1635958
% Cases with outcome	61
Significance	0.00

Stabilization in Toileting Hygiene

Eligible Cases Current	254
# Cases with outcome	211
% Cases with outcome	83.1
Eligible Cases Prior	241
% Cases with outcome	86.1
Significance	0.38
Eligible Cases National Reference	1497204
% Cases with outcome	90.6
Significance	0.00

Improvement in Bed Transferring

Eligible Cases Current	134
# Cases with outcome	85
% Cases with outcome	63.4
Eligible Cases Prior	125
% Cases with outcome	51.6
Significance	0.06
Eligible Cases National Reference	1516655
% Cases with outcome	55.4
Significance	0.06

Stabilization in Bed Transferring

Eligible Cases Current	365
# Cases with outcome	339
% Cases with outcome	92.9
Eligible Cases Prior	340
% Cases with outcome	92.9
Significance	1.00
Eligible Cases National Reference	2293249
% Cases with outcome	92.8
Significance	0.98

End Result Outcomes

Improvement in Ambulation/Locomotion	
Eligible Cases Current	**234**
# Cases with outcome	**101**
% Cases with outcome	**43.1**
Eligible Cases Prior	**219**
% Cases with outcome	**61.3**
Significance	**0.00**
Eligible Cases National Reference	**1934437**
% Cases with outcome	**37.4**
Significance	**0.07**
Improvement in Eating	
Eligible Cases Current	**70**
# Cases with outcome	**40**
% Cases with outcome	**57.1**
Eligible Cases Prior	**68**
% Cases with outcome	**51.9**
Significance	**0.62**
Eligible Cases National Reference	**719886**
% Cases with outcome	**58.9**
Significance	**0.76**
Improvement in Light Meal Preparation	
Eligible Cases Current	**353**
# Cases with outcome	**154**
% Cases with outcome	**43.6**
Eligible Cases Prior	**352**
% Cases with outcome	**65.0**
Significance	**0.00**
Eligible Cases National Reference	**2257205**
% Cases with outcome	**50.4**
Significance	**0.01**
Stabilization in Light Meal Preparation	
Eligible Cases Current	**182**
# Cases with outcome	**140**
% Cases with outcome	**76.9**
Eligible Cases Prior	**179**
% Cases with outcome	**69.3**
Significance	**0.13**
Eligible Cases National Reference	**1074294**
% Cases with outcome	**81.5**
Significance	**0.12**

All Patients' Risk Adjusted Outcome Report -- Section 508 Compliant Version (continued)

End Result Outcomes

Improvement in Phone Use

Eligible Cases Current	354
# Cases with outcome	167
% Cases with outcome	47.1
Eligible Cases Prior	353
% Cases with outcome	32.4
Significance	0.00
Eligible Cases National Reference	2285564
% Cases with outcome	53.4
Significance	0.02

Stabilization in Phone Use

Eligible Cases Current	360
# Cases with outcome	336
% Cases with outcome	93.4
Eligible Cases Prior	326
% Cases with outcome	91.2
Significance	0.34
Eligible Cases National Reference	2169633
% Cases with outcome	91.7
Significance	0.26

Improvement in Management of Oral Medications

Eligible Cases Current	159
# Cases with outcome	55
% Cases with outcome	34.8
Eligible Cases Prior	151
% Cases with outcome	35.4
Significance	0.92
Eligible Cases National Reference	1800622
% Cases with outcome	34.7
Significance	0.98

Stabilization in Management of Oral Medications

Eligible Cases Current	81
# Cases with outcome	69
% Cases with outcome	85.2
Eligible Cases Prior	74
% Cases with outcome	85.8
Significance	1.00
Eligible Cases National Reference	175717
% Cases with outcome	84.3
Significance	0.85

End Result Outcomes

Improvement in Dyspnea

Eligible Cases Current	208
# Cases with outcome	98
% Cases with outcome	47.1
Eligible Cases Prior	199
% Cases with outcome	67.3
Significance	0.00
Eligible Cases National Reference	1429133
% Cases with outcome	56.7
Significance	0.01

Improvement in Pain Interfering with Activity

Eligible Cases Current	60
# Cases with outcome	36
% Cases with outcome	59.5
Eligible Cases Prior	54
% Cases with outcome	62.8
Significance	0.90
Eligible Cases National Reference	527750
% Cases with outcome	48.3
Significance	0.07

Improvement in Speech and Language

Eligible Cases Current	354
# Cases with outcome	149
% Cases with outcome	42.1
Eligible Cases Prior	353
% Cases with outcome	32.4
Significance	0.01
Eligible Cases National Reference	2285564
% Cases with outcome	50.4
Significance	0.00

Stabilization in Speech and Language

Eligible Cases Current	360
# Cases with outcome	329
% Cases with outcome	91.4
Eligible Cases Prior	326
% Cases with outcome	91.2
Significance	1.00
Eligible Cases National Reference	2169633
% Cases with outcome	91.7
Significance	0.81

End Result Outcomes

Improvement in Status of Surgical Wounds

Eligible Cases Current	124
# Cases with outcome	95
% Cases with outcome	76.6
Eligible Cases Prior	116
% Cases with outcome	83.4
Significance	0.23
Eligible Cases National Reference	619107
% Cases with outcome	86.5
Significance	0.00

Improvement in Urinary Tract Infection

Eligible Cases Current	268
# Cases with outcome	231
% Cases with outcome	86.2
Eligible Cases Prior	241
% Cases with outcome	79.9
Significance	0.07
Eligible Cases National Reference	1512262
% Cases with outcome	86.1
Significance	0.98

Improvement in Urinary Incontinence

Eligible Cases Current	63
# Cases with outcome	32
% Cases with outcome	50.8
Eligible Cases Prior	58
% Cases with outcome	37.0
Significance	0.15
Eligible Cases National Reference	698574
% Cases with outcome	47
Significance	0.55

Improvement in Bowel Incontinence

Eligible Cases Current	23
# Cases with outcome	13
% Cases with outcome	56.5
Eligible Cases Prior	22
% Cases with outcome	43.8
Significance	0.56
Eligible Cases National Reference	222591
% Cases with outcome	57.5
Significance	0.92

All Patients' Risk Adjusted Outcome Report -- Section 508 Compliant Version (continued)

End Result Outcomes

Improvement in Confusion Frequency

Eligible Cases Current	169
# Cases with outcome	107
% Cases with outcome	63.3
Eligible Cases Prior	155
% Cases with outcome	56.9
Significance	0.28
Eligible Cases National Reference	1090621
% Cases with outcome	66.7
Significance	0.35

Stabilization in Cognitive Functioning

Eligible Cases Current	353
# Cases with outcome	317
% Cases with outcome	89.8
Eligible Cases Prior	352
% Cases with outcome	92.7
Significance	0.24
Eligible Cases National Reference	2179331
% Cases with outcome	92.8
Significance	0.04

Improvement in Anxiety Level

Eligible Cases Current	203
# Cases with outcome	121
% Cases with outcome	59.5
Eligible Cases Prior	183
% Cases with outcome	49.1
Significance	0.05
Eligible Cases National Reference	1473483
% Cases with outcome	64.6
Significance	0.14

Stabilization in Anxiety Level

Eligible Cases Current	349
# Cases with outcome	310
% Cases with outcome	88.8
Eligible Cases Prior	328
% Cases with outcome	89.4
Significance	0.93
Eligible Cases National Reference	2211232
% Cases with outcome	90.3
Significance	0.35

All Patients' Risk Adjusted Outcome Report -- Section 508 Compliant Version (continued)

End Result Outcomes

Improvement in Behavior Problem Frequency

Eligible Cases Current	169
# Cases with outcome	73
% Cases with outcome	43.3
Eligible Cases Prior	155
% Cases with outcome	41.2
Significance	0.81
Eligible Cases National Reference	1090621
% Cases with outcome	42.1
Significance	0.77

Utilization Outcomes

Emergency Department with Hospitalization

Eligible Cases Current	598
# Cases with outcome	148
% Cases with outcome	24.8
Eligible Cases Prior	545
% Cases with outcome	26.1
Significance	0.89
Eligible Cases National Reference	3215221
% Cases with outcome	21.5
Significance	0.06

Emergency Department w/o Hospitalization

Eligible Cases Current	598
# Cases with outcome	268
% Cases with outcome	44.8
Eligible Cases Prior	545
% Cases with outcome	46.1
Significance	0.94
Eligible Cases National Reference	3215221
% Cases with outcome	41.5
Significance	0.10

Discharged to Community

Eligible Cases Current	601
# Cases with outcome	358
% Cases with outcome	59.5
Eligible Cases Prior	551
% Cases with outcome	64.9
Significance	0.13
Eligible Cases National Reference	3273660
% Cases with outcome	61.8
Significance	0.00

All Patients' Risk Adjusted Outcome Report -- Section 508 Compliant Version (continued)

Acute Care Hospitalization

Eligible Cases Current	**601**
# Cases with outcome	**188**
% Cases with outcome	**31.2**
Eligible Cases Prior	**551**
% Cases with outcome	**30.4**
Significance	**0.85**
Eligible Cases National Reference	**3289067**
% Cases with outcome	**33.2**
Significance	**0.00**

This report has not been approved to meet privacy requirements and can only be used by the home health agency and state agency for defined purposes.