



# Quality Indicators and the Nursing Facility Survey: Implications for the Consultant Pharmacist

Thomas R. Clark, RPh, MHS

Director of Professional Affairs, American Society of Consultant Pharmacists

The following ASCP analysis, adapted by PharMerica, was originally intended for the Consultant Pharmacist profession but is equally useful to nursing home administrators, medical directors, nurses and others responsible for quality of care in long-term care settings. Further information is available on the web site of the American Society of Consultant Pharmacists, <http://www.ascp.com>.

On July 1, 1999, the Health Care Financing Administration plans to incorporate the use of quality indicators into the process for the nursing facility survey. Some of these quality indicators are designed to evaluate the use of medications in the facility. Others can be impacted by drug therapy. Consultant pharmacists need to be thoroughly familiar with these indicators and able to assist nursing facilities in preparing for this important change to the survey process.

ASCP has been keeping our members informed as these indicators have been developed. See the following articles from ASCP's *The Consultant Pharmacist*:

**Quality Indicators: The Rubber Meets the Road**, Feb 1996, p. 102.

**Quality Indicators: Psychotropic Drug Use**, Feb 1996, p. 111.

**Quality Indicators: Infection Control**, Jun 1996, p. 547.

**Quality Indicators: Skin Care**, Aug 1996, p. 765.

**Quality Indicators: Clinical Management**, Oct 1996, p. 995.

All of these HCFA quality indicators are calculated from data elements that are included on the Minimum Data Set (MDS). Since nursing facilities are now required to submit their residents' MDS data electronically, HCFA has the ability to analyze the MDS data for all the current residents of a specific nursing facility. The quality indicators are calculated by combining data elements from

all the residents in a facility in order to provide information about patterns of care provided by a facility.

The 24 quality indicators that will be incorporated into the survey process are listed and discussed on ASCP's web site (<http://www.ascp.com/public/pr/qi630q.pdf>). This document also describes the specifications for defining and calculating each of the quality indicators.

Note that some of these indicators are risk adjusted, so that high risk and low risk residents are considered separately. There are 32 total calculations overall for these 24 indicators. Five of the 24 indicators (7 of the 32

areas of calculation) are based upon section O of the Minimum Data Set, and are designed to provide specific information about the use of medications in the facility. These five indicators are:

- Prevalence of symptoms of depression without antidepressant therapy
- Prevalence of residents who take 9 or more different medications
- Prevalence of antipsychotic use, in the absence of psychotic or related conditions

1. Total
2. High risk
3. Low risk

- Prevalence of antianxiety/hypnotic use
- Prevalence of hypnotic use more than two times in last week

State surveyors will soon have the ability to access the state MDS database and request quality indicator reports for any nursing facility in the state. However, in many states, nursing facilities will not have the ability to access the database and generate their own reports until later in the year. This means that surveyors could enter the facility to conduct a survey with these QI reports, when facilities have not even seen their own

QI reports! The surveyor may know more about the facility, and patterns of care in the facility, than the facility staff do.

HCFA has developed three quality indicator reports that can be generated from the system:

- Facility Characteristics - This report provides a demographic description of the facility, showing the age distribution of residents, payment characteristics and other data.

- Facility Quality Indicator Profile - This report provides an overview of the facility's quality indicators. For each QI, the report shows the number of residents in the numerator and denominator, facility percent, state average percent (for comparison purposes), and percentile rank. The percentile rank shows where that facility ranks on the quality indicator in relationship to all other facilities in the state. The higher the percentile rank, the worse the facility scores on that indicator in relationship to other facilities in the state. A sample Facility Quality Indicator Profile report is available on ASCP's web site ([http://www.ascp.com/public/pr/qi\\_list.pdf](http://www.ascp.com/public/pr/qi_list.pdf)).

- Resident Level Summary Report - This report lists every resident in the database for a specific nursing facility, and shows a checkmark under each quality indicator where this resident appears. This report will be used by surveyors to select a sample of residents for Phase I of the survey process. By knowing which QIs are problems for a specific facility, surveyors can choose individual residents for the sample who trigger on those indicators.

Three of the QIs on the Facility QI Profile report are considered to be "sentinel event" quality indicators and will be flagged if there is at least one resident who triggers it:

- prevalence of fecal impaction
- prevalence of dehydration
- prevalence of pressure ulcers, low risk

**Consultant pharmacists are specifically trained to provide cutting-edge solutions**

Continued on next page

In addition, quality indicators will be flagged if the facility appears above the 90th percentile in comparison to other facilities in the state. These quality indicators are to be used by the surveyor for selection of residents for inclusion in the Phase I sample. If a facility scores above the 75th percentile on a QI, the surveyor should take note of this indicator for possible further exploration, especially if it is related to another QI that has already been flagged.

Consultant pharmacists should ensure that facilities have accurate and current knowledge about quality indicators that relate to drug therapy. If the facility has a very high proportion of residents receiving antianxiety and hypnotic drugs, for example, it is much more desirable for the facility administrator to find this out from the consultant pharmacist than the surveyor. And the consultant pharmacist should have a justification for this high use, or else be working diligently to ensure that these classes of medications are prescribed appropriately in the facility. A standard part of pharmacy consulting should be to provide quality indicator reports to the facility staff, along with explanations for any significant deviations from average values.

In order to provide quality indicator reports to facilities, consultant pharmacists must have a thorough understanding of how these quality indicators are calculated, and how the surveyors intend to use these reports in the survey process. Since five of the quality indicators are based upon section O of the Minimum Data Set, instructions for completion of section O should be reviewed. Section O information excerpted from the HCFA manual (with questions and answers) is available on ASCP's web site ([http://www.ascp.com/public/pr/mds\\_o.shtml](http://www.ascp.com/public/pr/mds_o.shtml)).

Consultant pharmacists should ensure that facility staff, and especially the MDS coordinator, are familiar with instructions for completion of section O. In addition, the staff must know how to accurately assign medications to each of the five categories listed in item O4: antianxiety, antidepressant, antipsychotic, diuretic and hypnotic. Nurses (and surveyors) often confuse psychotropic medications and place them in the wrong therapeutic class. ASCP has developed the MDS Class Index laminated sheet specifically to assist in completing this portion of the MDS. The information from this laminated sheet is also found in the pocket size publication: Medication Guide for the Long-Term Care

Nurse, published by ASCP.

As part of the drug regimen review process, consultant pharmacists should spot check the accuracy of completion of the MDS, especially section O. If this information is not accurate, the quality indicators based on section O will also be inaccurate. Surveyors will find this out when they arrive to conduct the survey and facilities could be cited for a deficiency for not having accurately completed the MDS. Consultant pharmacists should inform facility staff of significant errors or shortcomings related to accuracy of the MDS. See also ASCP's Statement on the Role of the Consultant Pharmacist in Resident Assessment and Care Planning (<http://www.ascp.com/public/pr/policy/resident.shtml>).

### **OVERVIEW OF QUALITY INDICATORS FOR THE CONSULTANT PHARMACIST**

#### **Indicators 1 and 2: Incidence of new fractures and prevalence of falls**

These indicators are related, since a common cause of fractures in facility residents is falls. If the facility has a high prevalence of falls, the consultant pharmacist should work with the facility to ensure that a comprehensive program or strategy is put in place to address this issue.

A number of medications can increase the risk of falling. If falls are a significant problem in the facility, the consultant pharmacist should conduct a focused review of residents who have experienced a fall. The medication regimens of these residents should be evaluated specifically for medications that might be contributing to falls. An excellent resource to assist the consultant pharmacist in this review is the MDS MedGuide, currently under development by the ASCP Research and Education Foundation. This pocket size book contains tables that relate specific medications to elements on the Minimum Data Set and to the Resident Assessment Protocols (RAPs), including the one on falls. This book would help identify medications that increase the risk of falls. The book will be available in the near future.

#### **Indicator 3: Prevalence of behavioral symptoms affecting others**

A high prevalence of residents with behavioral problems, such as verbal or physical abusiveness or disruptive and socially inappropriate behaviors could indicate that the

facility staff need additional training or assistance in effective management of behavioral symptoms. The consultant pharmacist could recommend that a behavioral management team be established to develop and monitor a program to address this issue. The consultant pharmacist should participate on this team to ensure that psychotropic medications, when indicated, are used appropriately for these residents. In addition, the consultant pharmacist may need to provide an inservice to facility staff on non-pharmacologic management of behavioral symptoms.

#### **Indicators 4 and 5: Prevalence of symptoms of depression and residents with symptoms of depression who are not receiving antidepressant therapy**

When a resident has symptoms of depression, as shown in the MDS elements used for this indicator, it is important that the resident be assessed for presence of clinical depression. A screening tool, such as the Geriatric Depression Scale, may be useful for this purpose. If the facility has a number of residents with symptoms of depression, and the residents have not been evaluated for depression, this could indicate a deficiency in quality of care.

Indicator 5 shows residents with symptoms of depression who are not receiving antidepressant therapy. A high percentile ranking on this indicator could indicate that the facility is not detecting or treating depression in the facility. It should not be assumed that every resident with symptoms of depression should be taking an antidepressant, but each resident should be evaluated and treated as appropriate.

#### **Indicator 6: Use of 9 or more different medications**

This indicator is based upon section O of the MDS, and relates specifically to use of medications in the facility. A high percentile ranking on this indicator could indicate that medications are being overused, with inadequate oversight by the consultant pharmacist and/or medical director. On the other hand, it could indicate that clinicians in the facility are appropriately and aggressively managing conditions with medications. Reports in the literature show that depression, pain, osteoporosis and congestive heart failure, among others, are often undertreated. So a facility that is doing a good job of

**Continued on next page**

## Quality Indicators Continued

managing these conditions could be using more than the average number of medications.

It is important to note that these quality indicators were developed by researchers over five years ago. The nursing facility environment has changed considerably in that time. Payment for medications now is often under a capitation arrangement, where economic incentives could result in underuse of medications. A facility with a low percentile ranking on this indicator could be significantly underusing medications.

Quality indicators are used by surveyors to select residents for the Phase I sample in the survey process. When a facility scores high on this indicator, it is likely that the survey team will select some residents who trigger this indicator in order to explore whether medications are being overused. As a result, the consultant pharmacist should pay particular attention to residents receiving 9 or more medications. In each of these residents, the consultant pharmacist should note in the chart the rationale for why the resident needs the medications.

### **Indicator 7: Incidence of cognitive impairment**

This indicator focuses on residents who were newly cognitively impaired on the most recent assessment. A decline in cognitive impairment could be due to a stroke or worsening of multiinfarct dementia. However, a number of medications can cause a decline in cognitive function. Refer to the ASCP MDS MedGuide for a list of medications that could result in cognitive decline. If the facility scores high in this area, the consultant pharmacist should conduct a focused review on these residents to explore the possible role of medications on cognitive decline.

### **Indicators 8 - 11:**

- **Prevalence of bladder or bowel incontinence**
- **Prevalence of occasional or frequent bladder or bowel incontinence with out a toileting plan**
- **Prevalence of indwelling catheters**
- **Prevalence of fecal impaction**

Problems with incontinence in the facility could indicate that the issue is not being adequately addressed. The consultant pharmacist should conduct a focused review on residents receiving medications for incontinence to ensure they are indicated, dosed appropriately, etc. In addition, many medications can

contribute to urinary incontinence or constipation. Refer to the ASCP MDS MedGuide for a list of these medications, and review residents to determine if medication side effects may be contributing to incontinence or impaction.

Fecal impaction is considered a “sentinel event” indicator. The consultant pharmacist should assist the facility in investigating each episode of fecal impaction in a resident to determine if medications might be a contributing factor. For example, are bulk laxatives being administered without adequate fluids? Is the resident dehydrated?

### **Indicator 12: Prevalence of urinary tract infections**

All infections in the facility, including urinary tract infections, should be tracked and reviewed by the facility infection control committee or quality assessment and assurance committee. As a member of this committee, the consultant pharmacist should assist in this review. Factors that may contribute to an excessive number of UTIs should be identified and assessed. See ACAP’s Statment on the Role of the Consultant Pharmacist in Infection Control (<http://www.ascp.com/public/pr/policy/infection.shtml>).

### **Indicator 13: Prevalence of weight loss**

A number of medications can cause or exacerbate weight loss. See the MDS MedGuide for a listing of medications that can contribute to weight loss. The consultant pharmacist should be alert to the presence of these medications in residents who are losing weight. The physician or facility staff should be notified, as appropriate, when it appears that medications might be contributing to undesired weight loss in a particular resident.

### **Indicator 15: Prevalence of dehydration**

Diuretics and laxatives are the medications that come to mind readily in assessing the impact of medications on dehydration. Other medications can be implicated as well. See the MDS MedGuide for a more comprehensive listing of medications that can contribute to dehydration.

Dehydration is considered a “sentinel event” indicator. The consultant pharmacist should assist the facility in investigating each episode of dehydration in a resident to determine if medications might be a contributing factor.

### **Indicator 19: Prevalence of antipsychotic use, in the absence of psychotic or related conditions**

The numerator of this indicator is all residents receiving antipsychotics, except those who have psychotic or related conditions. The denominator is all residents in the facility, except those with psychotic or related conditions. The exclusion criteria include residents with hallucinations, Tourette syndrome, Huntington’s or other psychotic disorders.

High risk residents are those with cognitive impairment AND behavioral symptoms at the most recent assessment. Low risk residents are those without these conditions.

Because HCFA will be tracking this indicator, consultant pharmacists should begin reporting this information to their facilities using the same definition used by HCFA. In the near future, many facilities will not have the capability to track this information using their MDS software, or by downloading their facility reports from the state server. Therefore, the consultant pharmacist will be needed to assist facilities in accurately tracking this information. In addition, because this is one of the indicators based upon section O of the MDS, consultant pharmacists should spot check accuracy of the data on the MDS to assure that nurses are correctly filling out the medication information.

A facility that scores high on this indicator could be depending on medications as their primary strategy for managing behavioral symptoms, rather than individualizing strategies based upon the needs of each resident. This could indicate that the facility staff need additional training or assistance in effective management of behavioral symptoms. The consultant pharmacist could recommend that a behavioral management team be established to develop and monitor a program to address this issue. The consultant pharmacist should participate on this team to ensure that psychotropic medications, when indicated, are used appropriately for these residents. In addition, the consultant pharmacist may need to provide an inservice to facility staff on non-pharmacologic management of behavioral symptoms.

### **Indicator 20: Prevalence of antianxiety/hypnotic use**

The numerator in this indicator includes all residents receiving either an antianxiety

**Continued on next page**

## Quality Indicators Continued

agent or a hypnotic agent. Consultant pharmacists often report the use of these medications separately. Because HCFA will be tracking this indicator, consultant pharmacists should begin reporting this information to their facilities using the same definition used by HCFA. This should supplement any reports currently provided.

### **Indicator 21: Prevalence of hypnotic use more than two times in the past week**

This indicator specifically explores the use of hypnotic drugs in the facility. Facilities with a high prevalence of hypnotic drug use may be using these medications inappropriately.

### **Indicator 24: Prevalence of stage 1-4 pressure ulcers**

If the facility scores high on this indicator, it could mean that they are admitting a lot of residents with pressure ulcers, or that a lot of residents are developing pressure ulcers in the facility, or that residents who develop pressure ulcers are healing very slowly. The AHCPR guidelines may be useful for facilities that are having a problem in this area. If the facility scores high on this indicator, the consultant pharmacist should work with facility staff to explore possible causes and to ensure that pressure ulcer treatment is consistent with recommended approaches.

## CONCLUSION

The addition of quality indicators to the survey process will have major implications for consultant pharmacists, and will increase the need for facility support from the consultant pharmacist. Consultant pharmacists should be thoroughly familiar with the new quality indicators and be prepared to assist facilities with tracking the QI data. When potential problem areas are identified, the expertise of the consultant pharmacist can be extremely useful in helping facilities address these quality issues.



**PHARMERICA**

*The Preferred Source for Pharmacy Solutions*

[www.pharmerica.com](http://www.pharmerica.com)

[solutions@pharmerica.com](mailto:solutions@pharmerica.com)