

## ***Observable Indicators of Nursing Home Care Quality Instrument Nursing Home Version***

With the nursing home population expected to triple in the next few decades, nurses, consumers and researchers need ways to measure the quality of nursing home care. Marilyn Rantz, a MU Sinclair School of Nursing professor, and her team have taken the lead to address this issue by developing the observable indicators instrument.

The *Observable Indicators of Nursing Home Care Quality (OIQ)* instrument is a list of questions and ratings designed to measure the multidimensional concept of quality in nursing homes. The instrument has been tested with three groups of individuals: consumers, ex-regulators, and registered nurses.



### **Use by Nursing Home Staff**

The *OIQ* instrument was field tested in 400 nursing homes in Missouri and Wisconsin by registered nurses. After extensive testing, the *Observable Indicators of Nursing Home Care Quality Instrument* has been reduced to 30 reliable and discriminating items that have a conceptually coherent hierarchical factor structure that describes nursing home care quality. The factors are communication, care delivery, grooming, odor, environment-basic, environment-access and environment-homelike.

The *OIQ* instrument as a whole shows acceptable interrater and test-retest reliabilities, and strong internal consistency. Scale subscales show acceptable reliability. Generalizability Theory analyses revealed that dependability of scores can be improved by including a second site observer, or by revisiting a site. There is little additional benefit from increasing observers or visits beyond two.

Construct validity analyses revealed an association between survey citations and nearly every subscale as well as the total score of the *OIQ* instrument. The nursing home version of the instrument has the ranges of each factor in addition to the total ranges so that the scores can be interpreted. The instrument can be used in quality improvement programs in nursing homes.

An example question from the *OIQ* instrument follows:

1. Did registered nurses (RNs) seem to know the residents so that they are able to direct their care? (May need to ask staff)

1	2	3	4	5
Did not seem to	Occasionally	Sometimes	Often	Very Often

### Use by Regulators

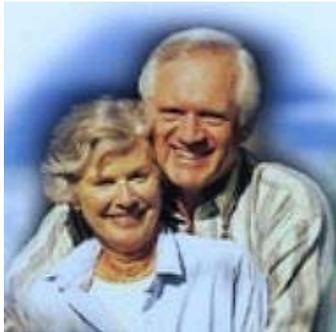
Four ex-regulators toured 29 facilities together and completed the *OIQ*. One week later one of the ex-regulators returned to the facility. Eighty-seven *OIQ* were completed by the ex-regulators. Construct validity analyses revealed an association between survey citations and nearly every subscale as well as the total score of the *Observable Indicators* instrument. Known groups analyses showed expected trends in the *Observable Indicators* scores when facilities were classified into three quality groups based on two methods: their survey citations and their quality indicators (QIs) derived from nursing home Minimum Data Set (MDS) assessment data.

The number of survey citations a home receives after a visit from state regulators are frequently used to judge the quality of care in nursing homes. States governments who are making difficult decisions about limited resources could use the *OIQ* as a proxy for labor-intensive visits.

Another example of an *OIQ* instrument question follows:

15. Were odors of urine or feces noticeable in the facility?

1	2	3	4	5
Pervasive throughout	In most areas	Occasionally	Hardly at all	Not at all



### Use by Consumers

Six consumers visited 30 homes together and completed the same *OIQ*. One week later one consumer returned to the facility. The consumers were oriented to the User Guide and completed 90 *OIQ*. The *OIQ* instrument showed acceptable interrater and test-retest reliabilities, and strong internal consistency.

The *OIQ* instrument gives consumers a list of items to assess when searching for nursing homes for their loved ones. As they tour the general living spaces, hallways and other areas generally available to nursing home visitors, this guide directs them to pay attention to such things as the home's general environment, its noise level, the presence of odors and how well the staff seems to respond to residents who need assistance. The end result is a total score, which the consumers can compare to a range provided on the instrument, indicating levels of quality. The *OIQ* instrument can assist in the selection the right environment for their loved ones in about 20 minutes to 30 minutes.

Another example of an *OIQ* instrument question follows:

1. Were the conversations between staff and residents friendly?

1	2	3	4	5
Most were not	A few were	Some were	Many were	Most were

### User Guide

A four-page user guide is also available for use with the *OIQ* instrument. Individuals planning on using the instrument are encouraged to review the guide before completion of the instrument.