



Healthcare Quality Reporting Program  
**NURSING HOME CARE OUTCOMES**

Methods

The nursing home quality measures are [reported on the Department of Health's \(HEALTH's\) Web site](#) as part of the public reporting program's nursing home reporting work. The information on this page provides additional details about the measures, including their data source, how they are calculated, and why each measure is important.

**Data Source**

HEALTH's public reports include 19 measures that reflect how well nursing homes care for their patients, or residents. The measure come from Medicare's [Nursing Home Compare](#) and are created using resident data that nursing homes regularly provide to Medicare in the Minimum Data Set, or MDS. For some measures, *higher* scores are better. An example is the percent of residents who were given influenza vaccination during the flu season. For other measures, *lower* scores are better. An example is the percent of residents with pain.

**Quality Measure Calculation**

For each measure, the score is calculated as follows:

$$\text{Percent of residents} = \frac{\text{(residents with indicated outcome)}}{\text{(all residents that meet specific criteria)}}$$

The number of residents who have the indicated outcome (e.g., pain) is the **numerator**. The number of patients who meet specific criteria (are eligible for the measure) is the **denominator**. For pain, that might be all residents who have been at the nursing home for 100 days or more. The percent of residents, or **quality measure score**, is the numerator divided by the denominator. Nursing homes' quality measure scores are compared to each other using diamonds (see below).

**Diamond Scores**

The diamonds help you understand how a nursing home's quality measure score compares to the other Rhode Island nursing homes' performance on the same quality measure:

- ◆ Worse than the Rhode Island average
- ◆◆ About the same as the Rhode Island average
- ◆◆◆ Better than the Rhode Island average

These categories are determined mathematically to ensure that the differences are meaningful. In detailed terms, this means that nursing homes with either one diamond (◆) or three diamonds (◆◆◆) have scores that are "statistically significantly different" from the Rhode Island average.

**Diamond Calculation**

The information in this section is for people who want statistical details about the diamond calculations. The one- and three-diamond cut-points are the 25th and 75th percentile of all Rhode Island scores:

- One diamond (◆): If the score falls below the 25th percentile AND its margin of error, or "95% confidence interval," does not include the Rhode Island average, then the nursing home has one diamond for that quality measure.

- Two diamonds (◆◆): If the 95% confidence interval for the score includes the Rhode Island average, then the nursing home's score is not accurate enough to categorize it as better or worse than other nursing homes. The nursing home has two diamonds for that quality measure.
- Three diamonds (◆◆◆): If the score falls above the 75th percentile AND its margin of error, or "95% confidence interval," does not include the Rhode Island average, then the nursing home has three diamonds for that quality measure. **Note:** The exception is risk-adjusted quality measures for which the risk-adjusted score is 0% (where 0% is the best performance). When this occurs, a nursing home is automatically given three diamonds.

### Measure Information ([adapted from Medicare](#))

Measure	Why is this information important?
<b>Long-Stay Residents (100+ Days at Nursing Home)</b>	
1. % of residents given influenza vaccination during the flu season	<p>The "flu" (also called influenza), is a very contagious respiratory infection. Flu is spread very easily from person to person. People are usually infected when a person coughs or sneezes. The flu shot (influenza vaccination) can prevent you from getting the flu or reduce your risk of becoming seriously ill from the flu. People 65 and older are at higher risk for developing serious life-threatening medical complications from the flu. If you are 65 or older, you should get the flu shot once every year. Residents should be given a flu shot during the flu season (October through March).</p> <p>For this measure, <i>higher</i> scores are better.</p>
2. % of residents who were assessed and given pneumococcal vaccination	<p>The pneumococcal shot (pneumococcal vaccination) may help you prevent or lower the risk of becoming seriously ill from pneumonia caused by bacteria. It may also help you prevent future infections. Residents should be asked if they have been vaccinated for pneumonia, and if not, should be given the pneumococcal shot unless there is a medical reason why they should not receive it.</p> <p>For this measure, <i>higher</i> scores are better.</p>
3. % of residents whose need for help with daily activities has increased	<p>Most residents value being able to take care of themselves. Residents who still do basic daily activities with little help may feel better about themselves and stay more active. This can affect their health in a good way. The resident's ability to perform daily functions is important in maintaining his or her current health status and quality of life. When people stop taking care of themselves, it may mean that their health has gotten worse. It is important that nursing home staff encourage residents to do as much as they can for themselves. In some cases, it may take more staff time to allow residents to do these tasks than to do the tasks for them. However, some residents will lose function in their basic daily activities even though the nursing home provides good care.</p> <p>For this measure, <i>lower</i> scores are better.</p>
4. % of residents who have moderate to severe pain	<p>Residents should be checked regularly by nursing home staff to see if they are having pain, so efforts can be made to find the cause and make the resident more comfortable. If pain is not treated, a resident may not be able to perform daily routines, may become depressed, or have an overall poor quality of life. This measure may include some residents who have pain prescriptions, but who refuse pain medicines or choose to take less. Some residents may choose to accept a certain level of pain so they can stay more alert.</p> <p>For this measure, <i>lower</i> scores are better.</p>

Measure	Why is this information important?
5. % of high-risk residents who have pressure sores	<p>Pressure sores, also called bed sores or pressure ulcers, are skin wounds that can be painful, take a long time to heal, and cause other complications, such as skin and bone infections. There are several things that nursing homes can do that may help to prevent or treat pressure sores, such as frequently changing the resident's position, proper nutrition, and using soft padding to reduce pressure on the skin. However, some residents may get pressure sores even when the nursing home provides good preventive care.</p> <p>For this measure, <i>lower</i> scores are better.</p>
6. % of low-risk residents who have pressure sores	<p>Pressure sores, also called bed sores or pressure ulcers, are skin wounds that can be painful, take a long time to heal, and cause other complications, such as skin and bone infections. There are several things that nursing homes can do that may help to prevent or treat pressure sores, such as frequently changing the resident's position, proper nutrition, and using soft padding to reduce pressure on the skin. However, some residents may get pressure sores even when the nursing home provides good preventive care.</p> <p>For this measure, <i>lower</i> scores are better.</p>
7. % of residents who were physically restrained	<p>Restraints should only be used when they are necessary as part of the treatment of a resident's medical condition. Restraints should never be used to punish a resident or to make things easier for the staff. Nursing homes are not allowed to use restraints based solely on a family's request, unless there is a documented medical need and a doctor's order. Residents who are restrained daily can become weak, losing the ability to go to the bathroom by themselves, and develop pressure sores or other medical complications.</p> <p>For this measure, <i>lower</i> scores are better.</p>
8. % of residents who are more depressed or anxious	<p>Feeling depressed or anxious can lessen your quality of life and lead to other health problems. Nursing home residents are at high risk for developing depression and anxiety for many reasons, such as loss of a spouse, family members or friends, chronic pain and illness, difficulty adjusting to the nursing home, and frustration with memory loss. Identifying depression and anxiety can be difficult in elderly patients because the signs may be confused with the normal aging process, a side effect of medication, or the result of a medical condition. Proper treatment may include medication, therapy, or an increase in social support.</p> <p>For this measure, <i>lower</i> scores are better.</p>
9. % of low-risk residents who lose control of their bowels or bladder	<p>Loss of bowel or bladder control is not a normal sign of aging and can often be successfully treated. Finding the cause, and treating a problem with bowel or bladder control is important for many reasons. Physically, it can help prevent infections and pressure sores. Mentally, it can help the well being of the resident by restoring dignity and social interaction. Fewer residents with bowel and bladder control can give the nursing home staff more time to provide other care.</p> <p>For this measure, <i>lower</i> scores are better.</p>
10. % of residents who have/had a catheter inserted and left in their bladder	<p>A catheter should only be used when it is medically necessary. Residents may need a lot of help to get to the toilet, or they may have to go frequently. A catheter should not be used for the convenience of the nursing home staff. Using a catheter may result in complications, like urinary tract or blood infections, physical injury, skin problems, bladder stones, or blood in the urine. Some studies have shown that long-term use of indwelling catheters (over many years) may increase the</p>

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	<p>rates of bladder cancer in patients with spinal cord injuries.</p> <p>For this measure, <i>lower</i> scores are better.</p>
<p>11. % of residents who spent most of their time in bed or in a chair</p>	<p>A decline in physical activity may come with age due to muscle loss, joint stiffness, fear of injury, worsening illness, or depression. Residents who spend too much time in bed or a chair may lose the ability to perform activities of daily living, like eating, dressing, or getting to the bathroom.</p> <p>Staying in a bed or chair affects the resident in many ways. Unused muscles get weaker. It becomes difficult to participate in physical and social activities. Sleep quality can suffer. The risk of heart disease, stroke, diabetes, or blood clots can increase. Depression and anxiety can worsen. Staying in one position, and constant pressure on the skin can increase the chance of pressure sores. It is important for residents to be as active as possible.</p> <p>Nursing home staff can help residents be more active. For instance, they can encourage residents to take part in physical activities, or take them for regular walks if they need help. Most residents value being able to take care of themselves. It is important that nursing home staff encourage residents to do as much as they can for themselves and stay as active as physically possible. Some residents will choose to remain in bed or in a chair, even though the nursing home staff makes a good effort to keep them more active. It is also important to note that some residents may be counted in this measure if their assessment period occurs when they are temporarily ill and remaining in bed due to a short-term problem.</p> <p>For this measure, <i>lower</i> scores are better.</p>
<p>12. % of residents whose ability to move about in and around their room got worse</p>	<p>A decline in physical activity may come with age due to muscle loss, joint stiffness, worsening illness, fear of injury, or depression. Residents who lose mobility may also lose the ability to perform other activities of daily living, like eating, dressing, or getting to the bathroom. In some cases, however, the decline measured may be temporary and due to a short-term illness the resident is experiencing at the time of the assessment.</p> <p>A lack of movement affects the resident in many ways. It becomes difficult to participate in physical and social activities. Sleep quality can suffer. The risk of heart disease, stroke, diabetes, or blood clots can increase. Depression and anxiety can worsen. Staying in one position, and constant pressure on the skin can increase the chance of pressure sores. It is important for residents to be as active as possible.</p> <p>Nursing home staff can help residents move around more. For instance, they can encourage residents to take part in physical and social activities, or take them for regular walks if they need help. Most residents value being able to move about on their own and take care of themselves. It is important that nursing home staff encourage residents to do as much as they can for themselves and stay as active as physically possible. Some residents will decline in their ability to move about, even though the nursing home staff makes a good effort to keep them more active. For this measure, <i>lower</i> scores are better.</p>
<p>13. % of residents who had a urinary tract infection</p>	<p>Most urinary tract infections can be prevented by keeping the area clean, emptying the bladder regularly, and drinking enough fluid. Nursing home staff should make sure the resident has good hygiene. Finding the cause and getting early treatment of a UTI can prevent the infection from spreading and becoming more serious or causing complications like delirium. It is important to find out whether the UTI is caused by a physical problem, like an enlarged prostate, so proper medical</p>

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	<p>treatment can be given.</p> <p>For this measure, <i>lower</i> scores are better.</p>
14. % of residents who lose too much weight	<p>A loss of 5% or more of body weight in one month is usually considered unhealthy (for example, a 150 pound person should not lose more than 7½ pounds in one month). Too much weight loss can make a person weak, change how medicine works in the body, or cause the skin to break down which can lead to pressure sores. Too much weight loss may mean that the resident is ill, refuses to eat, is depressed, or has a medical problem that makes eating difficult (like weakness caused by a stroke). It could also mean that the resident is not being fed properly, their medical care is not being properly managed, or that the nursing home's nutrition program is poor. To help prevent unhealthy weight loss, it is important that the resident's diet is balanced and nutritious, and that staff spend enough time feeding people who can't feed themselves. Sometimes it may be necessary for a person to lose weight for medical reasons. In these cases, the medical staff may plan in advance for the resident to lose weight on a special weight loss program, but the person should not lose more than 5% of body weight in one month. For this measure, <i>lower</i> scores are better.</p>
<b>Short-Stay Residents (&lt;100 Days at Nursing Home)</b>	
1. % of residents given influenza vaccination during the flu season	<p>The "flu" (also called influenza), is a very contagious respiratory infection. Flu is spread very easily from person to person. People are usually infected when a person coughs or sneezes. The flu shot (influenza vaccination) can prevent you from getting the flu or reduce your risk of becoming seriously ill from the flu. People 65 and older are at higher risk for developing serious life-threatening medical complications from the flu. If you are 65 or older, you should get the flu shot once every year. Residents should be given a flu shot during the flu season (October through March).</p> <p>For this measure, <i>higher</i> scores are better.</p>
2. % of residents who were assessed and given pneumococcal vaccination	<p>The pneumococcal shot (pneumococcal vaccination) may help you prevent or lower the risk of becoming seriously ill from pneumonia caused by bacteria. It may also help you prevent future infections. Residents should be asked if they have been vaccinated for pneumonia, and if not, should be given the pneumococcal shot unless there is a medical reason why they should not receive it.</p> <p>For this measure, <i>higher</i> scores are better.</p>
3. % of residents who have delirium	<p>Delirium is not a normal part of aging. It should not be confused with dementia. Delirium is a serious condition requiring urgent medical attention. Left untreated, the death rate is high. Finding and treating the cause of delirium can ensure proper treatment of a physical or mental problem, and help restore the resident's health and quality of life.</p> <p>For this measure, <i>lower</i> scores are better.</p>
4. % of residents who had moderate to severe pain	<p>Residents should always be checked regularly by nursing home staff to see if they are having pain. Residents (or someone on their behalf) should let staff know if they are in pain so efforts can be made to find the cause and make the resident more comfortable. If pain is not treated, a resident may not be able to perform daily routines, may become depressed, or have an overall poor quality of life. This percentage may include some residents who are getting or have been prescribed treatment for their pain, but who refuse pain medicines or choose to take less.</p>

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	<p>Some residents may choose to accept a certain level of pain so they can stay more alert.</p> <p>For this measure, <i>lower</i> scores are better.</p>
<p>5. % of residents who have pressure sores</p>	<p>Pressure sores, also called bed sores or pressure ulcers, are skin wounds that can be painful, take a long time to heal, and cause other complications, such as skin and bone infections. There are several things that nursing homes can do that may help to prevent or treat pressure sores, such as frequently changing the resident's position, proper nutrition, and using soft padding to reduce pressure on the skin. However, some residents may get pressure sores even when the nursing home provides good preventive care.</p> <p>For this measure, <i>lower</i> scores are better.</p>