A Look at Quality of Care for Hospitalized Medicare Patients at Risk for Pressure Ulcers

To assess the quality of hospital-based pressure ulcer prediction and prevention, a prestigious institution identified 6 quality measures for hospitals to follow for prediction and prevention.

Many hospitalized older adults face serious health issues related to pressure ulcers. These health issues are costly to the patient and to the national health system: conservative estimates of the cost for treating pressure ulcers in 2000 was $1.3 billion annually and rising.

Until the mid 1990s, no state peer review organization had identified processes of care related to pressure ulcer prediction and prevention in US hospitals. Thus, in the late 1990s, the US Health Care Financing Administration (HCFA) set out to assess the quality of hospital-based pressure ulcer prediction and prevention care via performance of quality measures identified by experts.* The table below lists those quality measures.

To determine compliance with these quality measures, HCFA launched a multicenter retrospective cohort study of 2425 patients 65 years or older who were discharged from acute care hospitals after treatment for pneumonia.

**Pressure Ulcer Prevention Quality Indicators (QIs)**

| QI #1 | Assessing skin of at-risk patients every day |
| QI #2 | Using pressure-reducing device |
| QI #3 | Documenting pressure ulcer risk within 48 hours of admission |
| QI #4 | Repositioning at-risk patients every 2 hours |
| QI #5 | Implementing a nutritional consultation with nutritionally compromised patients within 48 hours of admission |
| QI #6 | Staging of ulcers within 48 hours of identification |

cerebrovascular disease, or congestive heart failure. The majority of the patients had at least one risk factor for pressure ulcers. Nearly 67% were bed or chair bound, for instance, and approximately 76% were nutritionally compromised as determined by their serum albumin level, total lymphocyte count, or percent of ideal body weight. The incidence of pressure ulcers stage 1 or higher among the patients during hospitalization was 13%; the incidence of stage 2 or higher ulcers was 6%.

The researchers examined hospital compliance with the quality indicators over a 3-week period for each patient. Compliance ranged from 7.5-94% as follows:

1) daily skin assessment, 94%
2) use of pressure-reducing device, 7.5%
3) documenting risk, 22.6%
4) repositioning, 66.2%
5) nutritional consultation, 34.3%
6) staging of ulcers, 20.2%-30.9%

Interestingly, the study was not able to significantly associate use of the prevention strategies with prevention of pressure ulcers. In fact, patients who received a pressure-reducing device as well as those who were repositioned every 2 hours were significantly more likely to develop a pressure ulcer than those who did not receive these preventive measures.

Implementing a nutritional consultation slightly reduced the incidence of pressure ulcers, although the association was not statistically significant ($P=.32$). The research team did not know whether the consultations resulted in oral nutritional supplementation or whether they simply sensitized the staff to the fact that certain patients were at increased risk for developing pressure ulcers. Whatever the mechanism, the team stated that this finding suggests that nutrition may play a significant role in pressure ulcer prevention.

**Nutrition Conclusion**

A large proportion of patients in this study (76%) were nutritionally compromised; of those, only 34.3% received a nutritional consult within 48 hours. Nutrition consultation did not significantly reduce the incidence of pressure ulcers. Thus, say the researchers, if older adults are identified as being nutritionally compromised and appropriate nutritional supplements are introduced, the incidence of pressure ulcers may decrease.