

## The Cost of Malnutrition: Study Shows Nutrition Program Could Save Hospitals up to \$3,800 per Patient

- **1 IN 3 PEOPLE ENTER A HOSPITAL MALNOURISHED OR AT-RISK OF MALNUTRITION<sup>1-2</sup>**
- **FOUR CHICAGO AREA HOSPITALS SHOWED EARLY NUTRITION TREATMENT CAN SAVE MILLIONS OF DOLLARS BY DECREASING LENGTH OF HOSPITAL STAY AND READMISSIONS<sup>3</sup>**

ABBOTT PARK, Ill. and DOWNERS GROVE, Ill., Aug. 10, 2017 – Making sure people stay nourished in the hospital has shown to help patients recover, and real-world evidence confirms its cost benefits too. The research, published in *American Health & Drug Benefits* journal and supported by Abbott, found that when Advocate Health Care implemented a nutrition care program at four of its Chicago area hospitals, it showed more than \$4.8 million in cost savings due to shorter hospital stays and lower readmission rates.<sup>3</sup>

Addressing malnutrition is a growing concern, as 1 in 3 people enter the hospital malnourished or at risk of malnutrition.<sup>1-2</sup> Decades of research prove that when patients are poorly nourished, it can impact their recovery, including higher risk of complications (such as pressure ulcers, infections and falls) and more frequent readmissions. Studies also show that poor nutrition can cause increased costs of care and longer hospital stays—with the average hospital stay costing nearly \$2,000 per day.<sup>4</sup> As a result, hospitals and health care systems, such as Advocate Health Care, are looking at the value of nutrition to improve care and help patients get back to living a healthier life.

Starting in 2014, Advocate Health Care implemented two models of a nutrition care program for patients at-risk of malnutrition, and the results from this [study](#) published in December 2016, found that doing so reduced 30-day readmission rates by 27 percent and the average hospital stay by nearly two days.<sup>5</sup> To evaluate the cost-savings of this program, researchers used a novel, web-based budget impact model to assess the potential cost savings from the avoided readmissions and reduced time in hospital. Compared to the hospitals' previous readmission rates and patients' average length of stay, researchers found that optimizing nutrition care in the four hospitals resulted in roughly \$3,800 cost savings per patient treated for malnutrition.

"Value-based care means looking comprehensively at patient care to identify gaps and opportunities for improvement," said Lee Sacks, MD, executive vice president and chief medical officer of Advocate Health Care. "The study's findings demonstrate that modest changes in the

way we care for patients, such as ensuring patients are nourished during their hospital stay, can have a big impact in reducing costs and improving health outcomes."

"This research confirms that implementing nutrition-focused quality improvement programs, like the ones at Advocate Health Care, can help patients recover from their hospitalization faster while also removing some of the burden of financial pressures placed on health systems today," said Suela Sulo, PhD, a health outcomes researcher at Abbott and lead author of the cost impact study. "As providers, administrators, and payers face added pressures from rising healthcare costs, value-based nutrition interventions should be considered in all hospitals across the U.S."

### **About the QIP Study:**

*A Comprehensive Nutrition-focused Quality Improvement Program Reduces 30-day Readmissions and Length of Stay in Hospitalized Patients*, published in *Journal of Parenteral and Enteral Nutrition* in December 2016, was a multi-site, two-group, pre-post study to evaluate two nutrition Quality Improvement Programs (QIP) at four Advocate Health Care hospitals.

The study's primary outcome was 30-day unplanned readmissions, with a secondary outcome of hospital length of stay. A total of 1,269 participants aged 18+ at risk of malnutrition were enrolled between October 13, 2014 and April 2, 2015.

The study was funded by Abbott, which had no role in data collection or analysis.

### **About Advocate Health Care:**

Advocate Health Care is the largest health system in Illinois and one of the largest health care providers in the Midwest. A national leader in population health management, Advocate is one of the largest Accountable Care Organizations in the country. Advocate operates more than 450 sites of care and 12 hospitals, including two of the nation's 100 Top Hospitals, the state's largest integrated children's network, five Level I trauma centers (the state's highest designation in trauma care), three Level II trauma centers, one of the area's largest home health and hospice companies and one of the region's largest medical groups. Advocate Health Care trains more primary care physicians and residents at its four teaching hospitals than any other health system in the state. As a not-for-profit, mission-based health system affiliated with the Evangelical Lutheran Church in America and the United Church of Christ, Advocate contributed \$686 million in charitable care and services to communities across Chicagoland and Central Illinois in 2015.

Connect with us at [www.advocatehealth.com](http://www.advocatehealth.com), on Facebook at [www.facebook.com/AdvocateHealthCare](http://www.facebook.com/AdvocateHealthCare) and on Twitter at @AdvocateHealth.

### **About Abbott:**

At Abbott, we're committed to helping people live their best possible life through the power of health. For more than 125 years, we've brought new products and technologies to the world -- in nutrition, diagnostics, medical devices and branded generic pharmaceuticals -- that create more

possibilities for more people at all stages of life. Today, 94,000 of us are working to help people live not just longer, but better, in the more than 150 countries we serve.

Connect with us at [www.abbott.com](http://www.abbott.com), on Facebook at [www.facebook.com/Abbott](https://www.facebook.com/Abbott) and on Twitter @AbbottNews and @AbbottGlobal.

###

---

**Advocate Media Contact:**

Adam Mesirow, (630) 929-6622

**Abbott Media Contact:**

Molly Cornbleet, (224) 667-7622

---

**References**

1. Coats KG et al. *J Am Diet Assoc.* 1993; 93:27-33.
2. Thomas DR et al. *Am J Clin Nutr.* 2002; 75: 308-313.
3. Sulo S et al. *Am Health Drug Benefits*, 2017 ; 10 (5): 262-270.
4. HCUP Fast Stats. Healthcare Cost and Utilization Project (HCUP). December 2016. Agency for Healthcare Research and Quality, Rockville, MD. [www.hcup-us.ahrq.gov/faststats/national/inpatientrends.jsp](http://www.hcup-us.ahrq.gov/faststats/national/inpatientrends.jsp).
5. Sriram K et al. *JPEN.* 2016; 40(1):1