

# MaineHealth

## Learning Community

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A Partnership of MaineHealth and the Maine Physician Hospital Organization

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### **Highlighting Heart Failure Research for Primary Care Providers**

As the prevalence of heart failure continues to rise (and among younger populations) and readmissions become more costly for hospitals, the transitions between different care settings and the communications between specialists, home care agencies and primary care clinicians will be all the more vital for successful patient care.

In an attempt to increase dialogue about management of heart failure across disciplines, the MaineHealth Heart Failure Program will highlight heart failure research studies of interest to the primary care community.

### **Adiposity and Incidence of Heart Failure: Exploring the Link for Primary Care**

The link between obesity and heart disease is well-established and often discussed in the primary care setting. Perhaps less discussed, although equally well-known, is the link between obesity and a higher incidence of heart failure. Although heart failure is most prevalent in elderly populations, “little attention has been paid to whether the strength of the associations with anthropometric measures varies by age”<sup>1</sup> and gender.

Researchers therefore examined the association between hospitalization or mortality due to heart failure and the anthropometric measures of BMI, waist circumference (WC), waist-hip ratio (WHR) and waist-height ratio (WHtR) in a population of middle-aged to elderly Swedish women and men. As was expected, all anthropometric measures mentioned above were associated with heart failure hospitalization or mortality.

Interestingly, **WC was predictive of heart failure events regardless of BMI**; however, there was a suggestion of association with BMI only at high WC among women. According to the researchers, this observation “is consistent with studies suggesting that both BMI and WC were risk factors for coronary heart disease in men, but that central adiposity was more important in women.”<sup>2</sup> In men, the magnitude of the associations between all of the anthropometric measures and HF was slightly greater than in women. Also, both abdominal (WC) and overall adiposity (BMI) appeared to be associated with heart failure in men. Perhaps most importantly, the researchers found that the strength of association between BMI and heart failure events declined with age. This can be explained by the fact that “older adults tend to have more fat mass for a given BMI than younger adults.”<sup>3</sup>

With increasing numbers of heart failure patients, particularly younger and middle-aged people, it is important that primary care practices be aware of how WC and BMI can impact patients’ risk of re-hospitalization and mortality and discuss those risks with their patients.

Yet again, research delivers the powerful message that supporting a healthy lifestyle for all patients, including appropriate levels of physical activity, good nutrition and weight management, is at the foundation of good patient care!

To link to a full text version of the article, click on the title [“Adiposity and Incidence of Heart Failure Hospitalization and Mortality: A Population-based Prospective Study”](#)

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<sup>1</sup> Levitan, Yang, Wolk, and Mittleman. (2009). Adiposity and Incidence of Heart Failure Hospitalization and Mortality: A Population-based Prospective Study. *Circulation: Heart Failure*, published online April 7, 2009 by the American Heart Association.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.