

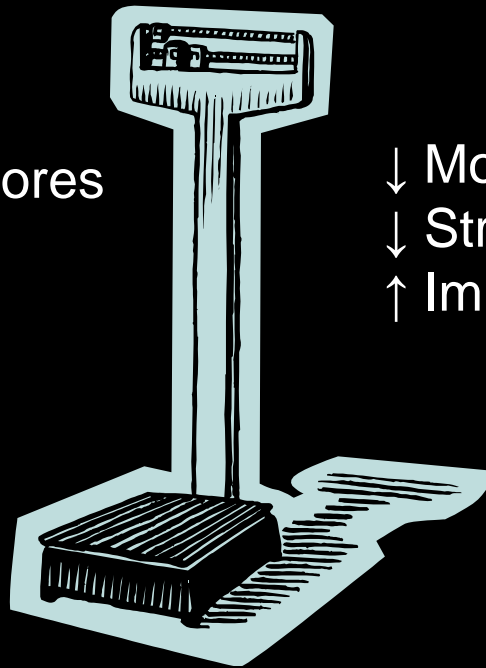
A Few Assumptions to Start

- You have an interest in how a patient's body composition affects their rehab outcome
- You know that BMI does not stand for
Because **M**easures are **I**mportant
- You have at least one belief about how BMI could affect inpatient rehab outcomes after stroke

Body Mass Index: Does it Matter in Rehab?

Literature reports that HIGHER BMI is associated with:

↓ FIM® function scores
↑ LOS
↑ Hospital costs



↓ Mortality rates
↓ Stroke recurrence
↑ Improvements in functional outcomes



Effect of BMI on Select Inpatient Rehabilitation Outcomes after Stroke

<http://goo.gl/Z68McL>



Canadian Institute
for Health Information

Institut canadien
d'information sur la santé

Measures of patient function used in this analysis are based on data collected using the FIM® instrument, property of Uniform Data System for Medical Rehabilitation, a division of UB Foundation Activities, Inc.

Body Mass Index: Does it Matter in Rehab?

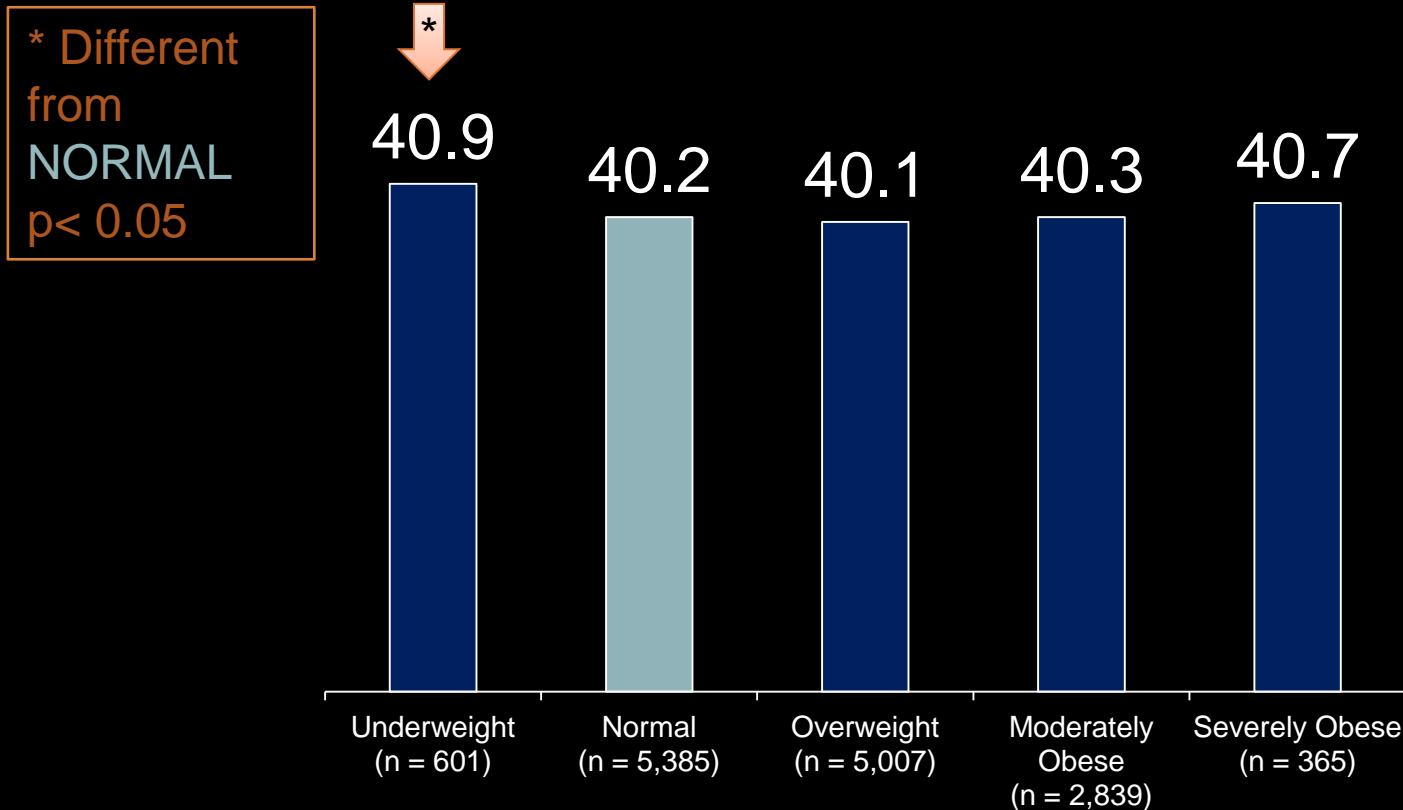
How We Looked for an Answer

- Data Source: CIHI National Rehabilitation Reporting System (NRS)
 - Adult inpatient rehabilitation programs
 - ~100 participating facilities in 9 provinces
 - Comprehensive reporting in Ontario since 2002
 - **Height and weight mandatory since 2010**

Body Mass Index: Does it Matter in Rehab?

What We See

Model-Adjusted LOS (mean, days)

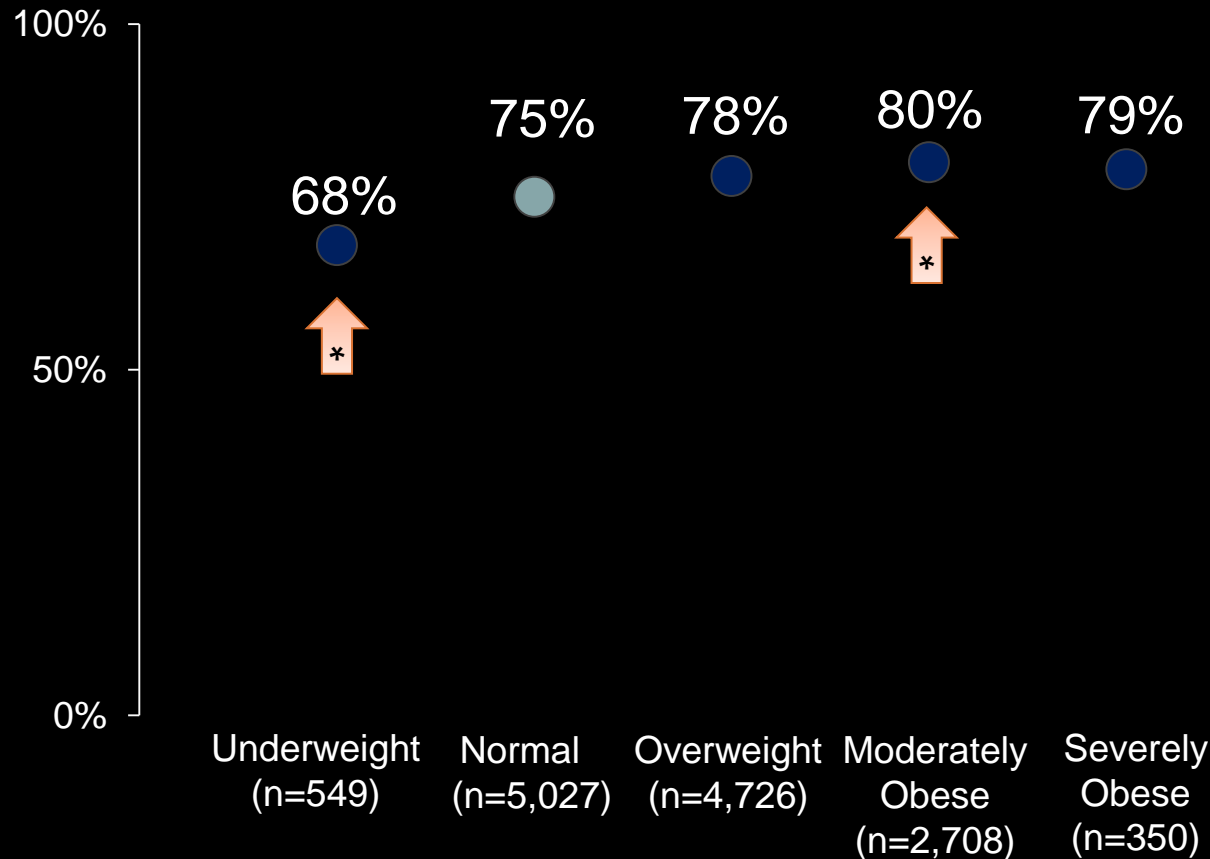


<http://goo.gl/Z68McL>

Body Mass Index: Does it Matter in Rehab?

What We See

Model-Adjusted % of Patients Returning Home



<http://goo.gl/Z68McL>

* Different from NORMAL $p < 0.05$

Body Mass Index: Does it Matter in Rehab?

How We Can Interpret our Answer

- Comparable increases in function regardless of admission BMI group
- **Underweight** patients:
 - Stayed longer to achieve comparable increases in function
 - Less likely to be discharged back home
- Interventions in underweight individuals are needed to optimize inpatient rehabilitation care delivery

Additional Variables Included in the Regression Models

- Age
- Total FIM® Function Score at Admission
- Number of Pre-Admission Comorbidities
- Sex
- Type of Stroke
- Onset Time
- Discharge Destination (for LOS only)
- Comorbidity of Depression
- Comorbidity of Hypothyroidism
- Comorbidity of Congestive Heart Failure
- Comorbidity of Hypertension
- Comorbidity of Diabetes