

# Left Ventricular Assist Device Driveline Infection and the Frequency of Dressing Change in Hospitalized Patients

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## Background

- Heart failure affects > 5 million people in the United States<sup>1</sup>
- > 250,000 suffer from end stage disease<sup>2</sup>
- Left ventricular assist devices provide a valuable option for patients
- Driveline infections significant source of morbidity and mortality<sup>3,4</sup>
- Variability in infection control practices<sup>5</sup>
- No national guidelines and limited evidence

## Purpose

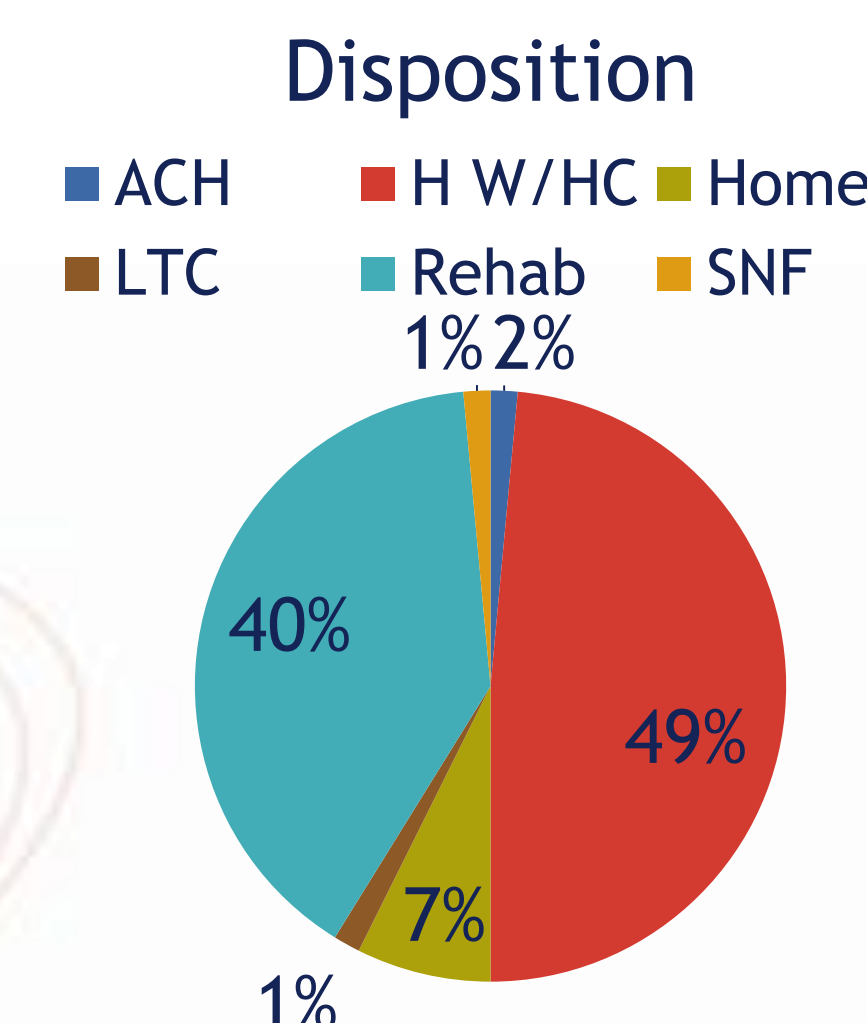
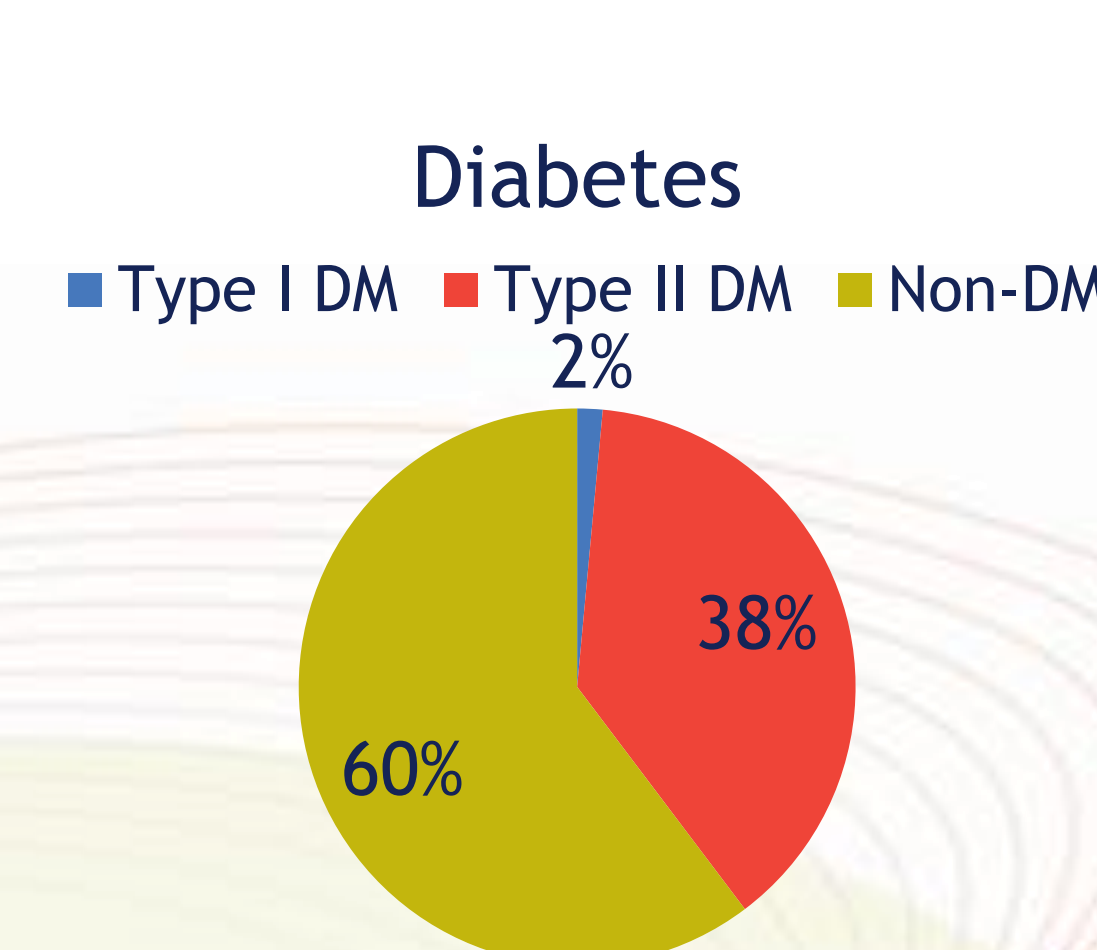
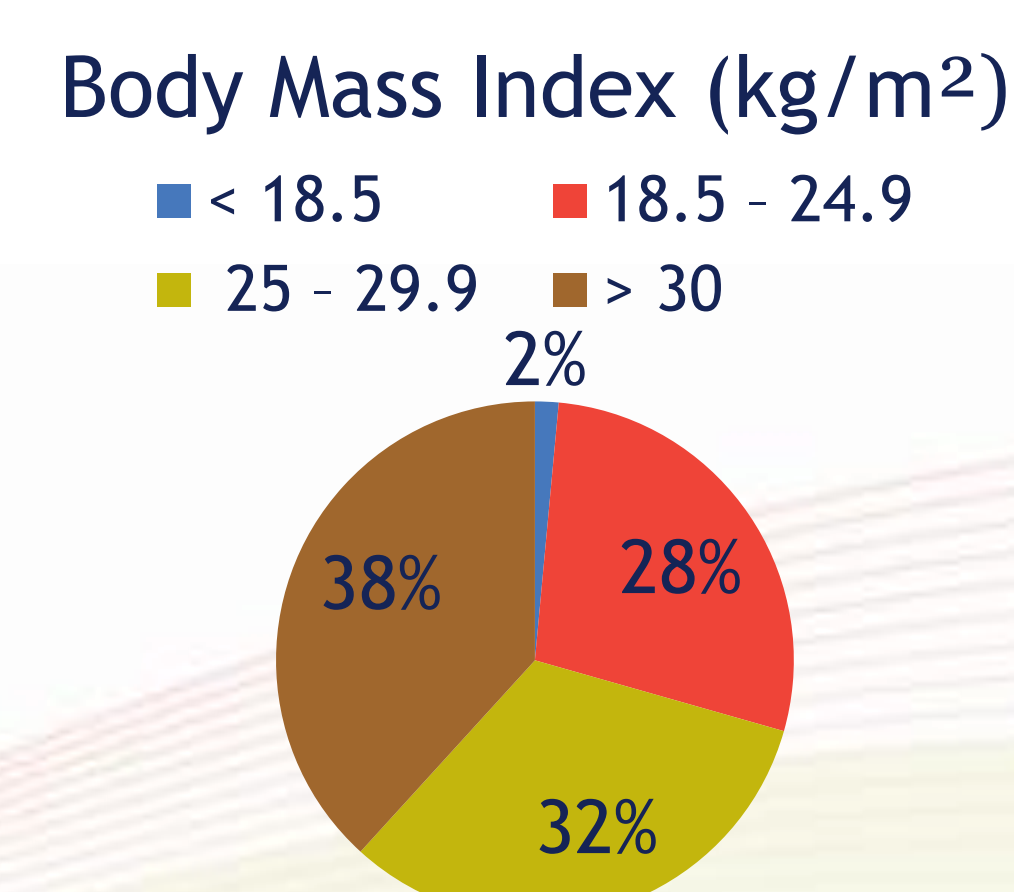
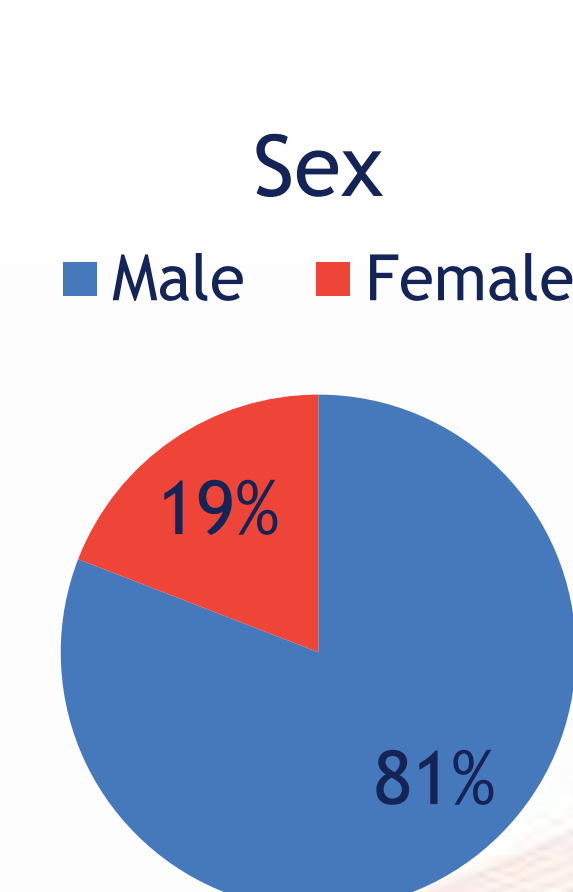
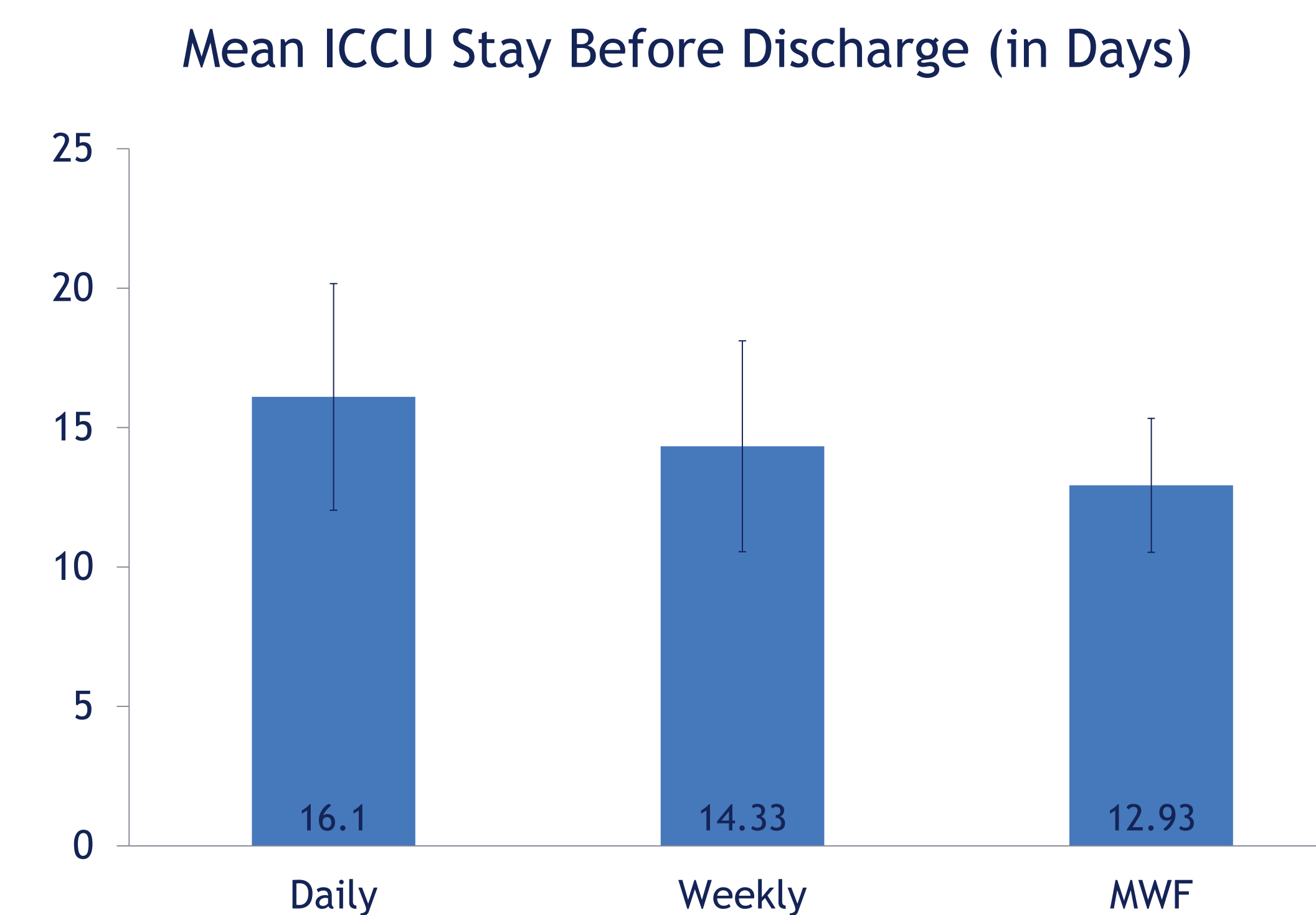
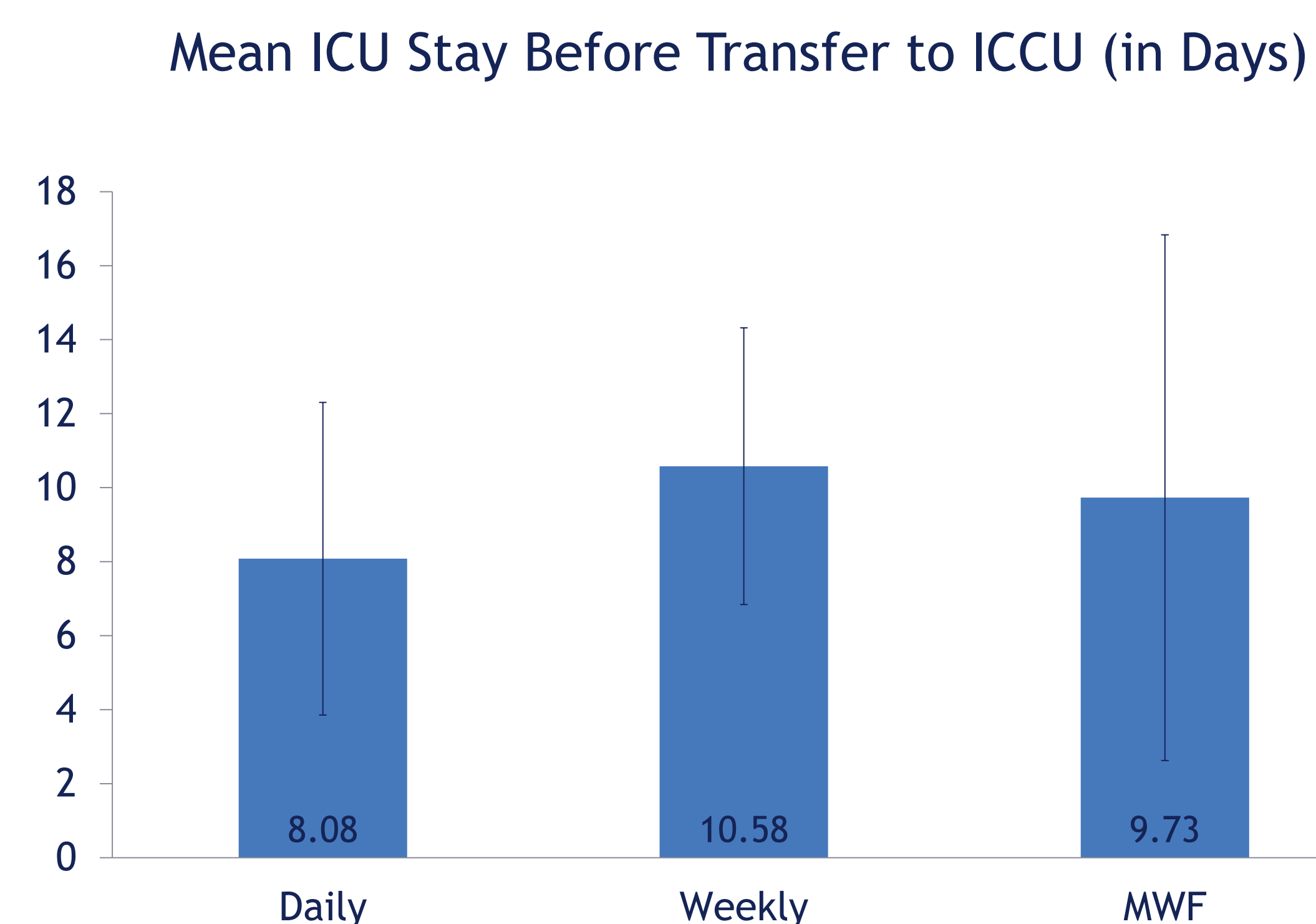
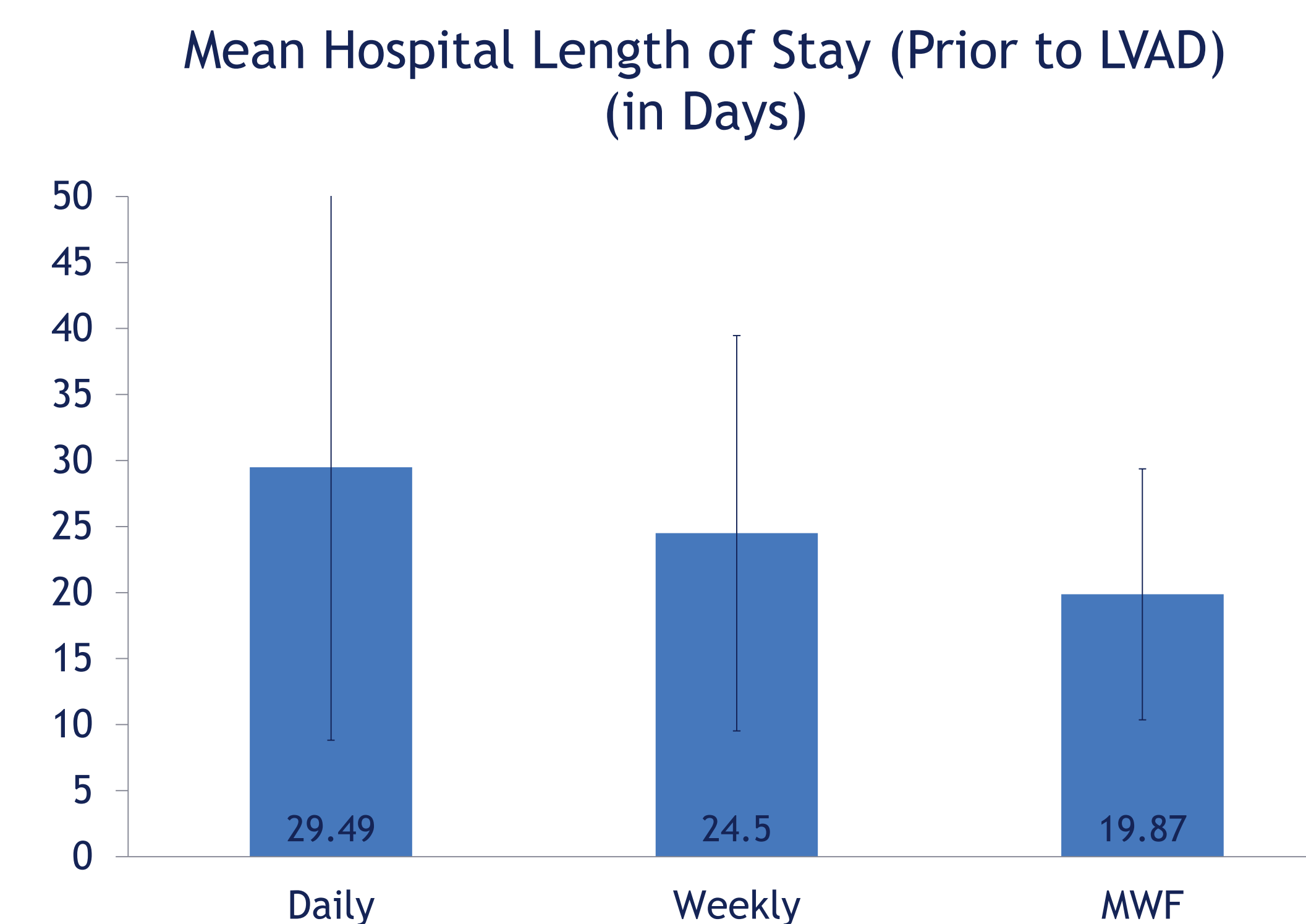
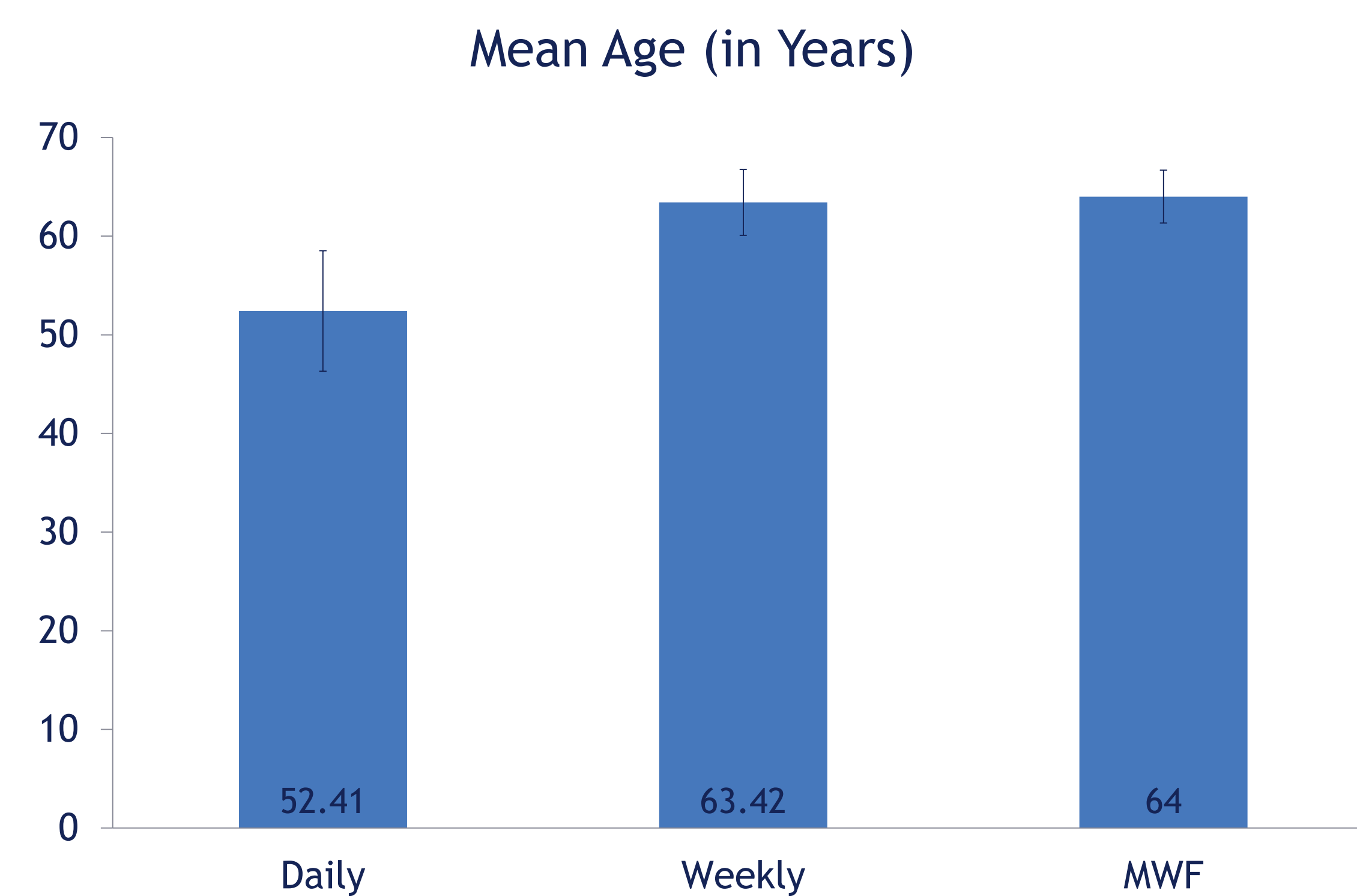
To determine if the frequency of exit site dressing changes is related to the incidence of driveline infection in hospitalized, adult patients.

## Methods

- Retrospective medical record review at an urban medical center
- Between August 2008 and September 2013, 86 patients implanted with a HeartMate II® (HM II®) LVAD
- Sixty-eight met study eligibility
- INTERMACS criteria for driveline infection were used to define infection
- Sample was divided into 3 dressing change frequency groups
- Statistical analysis done for total sample population and frequency groups

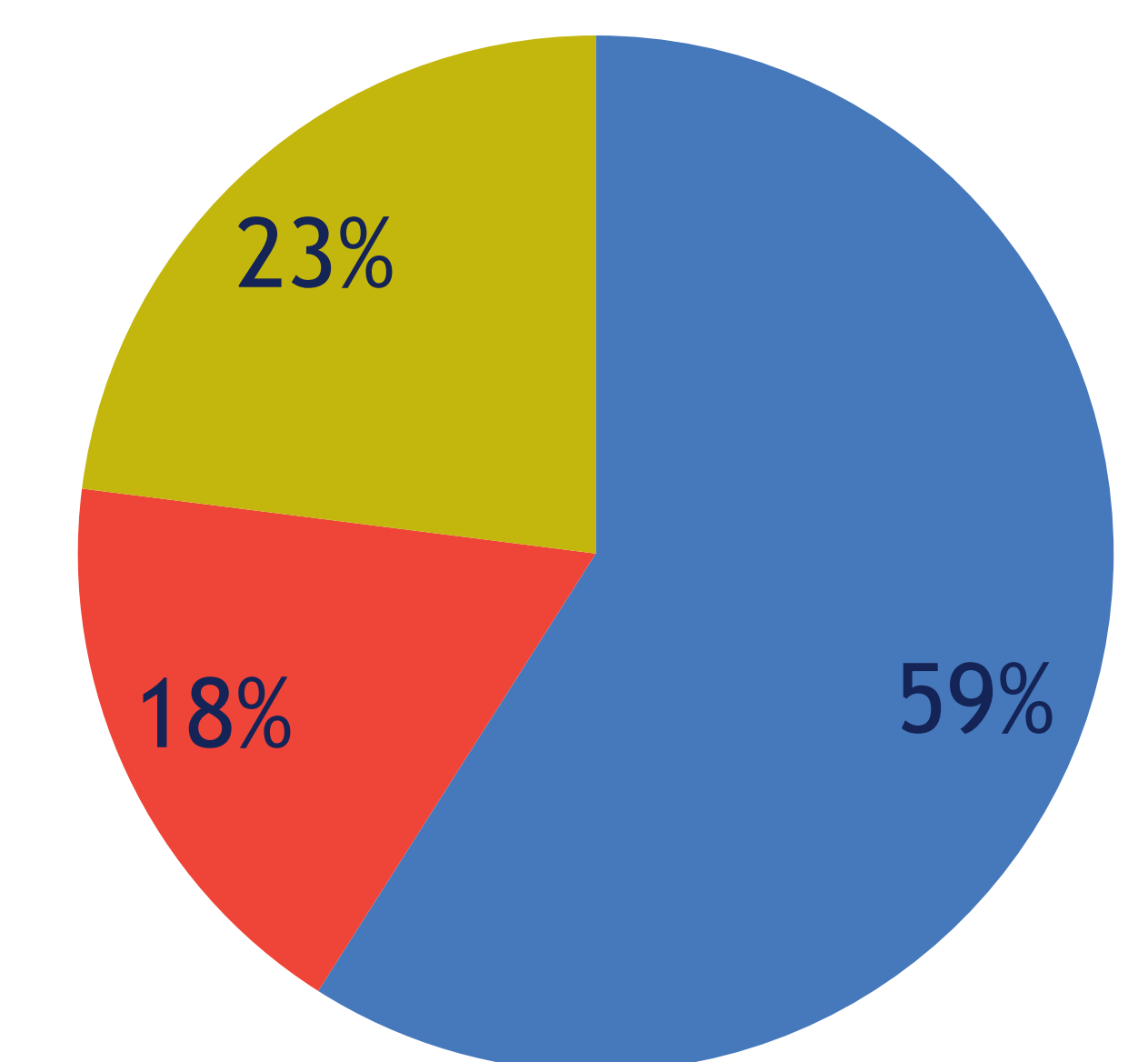
## Results

- No evidence of driveline infection was found
- Daily dressing change group was younger in age compared to the weekly group ( $p=0.005$ ) and three times a week group ( $p=0.001$ )



Driveline Dressing Change Frequency

■ Daily ■ Weekly ■ MWF



## Discussion

- Age difference among the daily group: FDA approval of the HM II® for destination therapy in 2010
- Driveline infections do not appear to be related to the frequency of dressing change in adult patients with a newly implanted LVAD
- Less than daily dressing changes reasonable
- At the study organization, weekly dressing changes a reasonable option
- More research on driveline dressing change frequency and driveline infection needed

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