Improving Patient Centered Flow

Simulation Model to Study BMT’s Impact to CCHMC Capacity

Transplant Admissions & Non-Transplant Admissions for Established BMT Patients

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Model Results
CURRENT SYSTEM
(FY 2009)
Model Results

FORECASTED SYSTEM

(Per Dr. Davies-5% Increase from Jan-Jun CY 2009 Volumes)
Simulation Results with Forecasts

Number of Beds Occupied with BMT Patients
50 Replications, 60 Day Warmup Period

Forecasted Volume

22% increase in mean bed needs
(*Significant at .05 Level)

Capacity of A5N + B6IP

FY 2009 Transplant Volume (Avg=7.8 per mth)

Inpatient Beds
ICU Beds

CY 2009 (Jan-June Avg=~10 per mth)

Inpatient Beds
ICU Beds

Additional 5% over CY 2009 Jan-June Volumes

Scenario

95% Confidence Interval for Mean
Min/Max
Average # of Beds Needed

Last Updated 11/17/2009 by A. Anneken, Division of Health Policy & Clinical Effectiveness