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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change the outcome*

Model Results CURRENT SYSTEM (FY 2009)

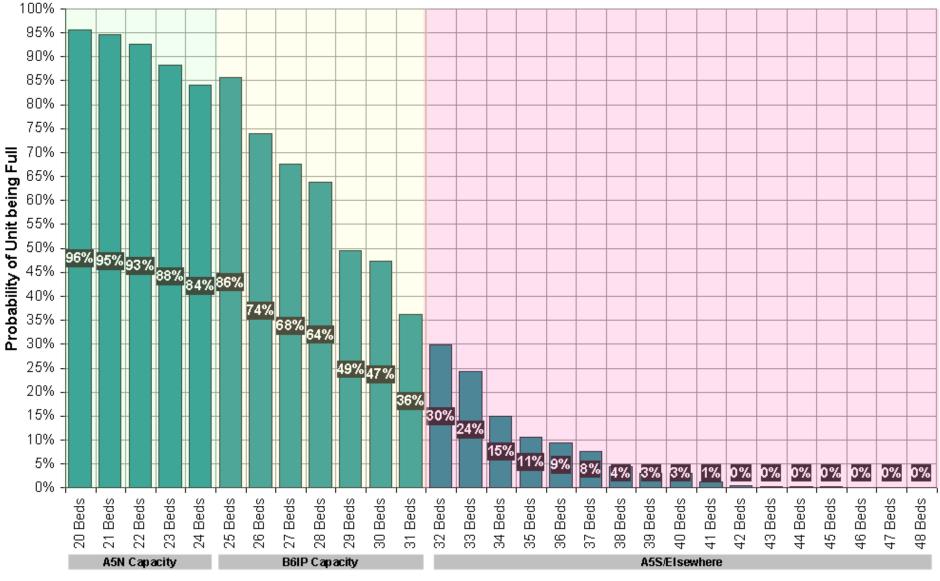
change the outcome



Current System - FY 2009

Bed Needs for BMT Patients - Probability of a Full "BMT Unit"

50 Replications - Mean Probability



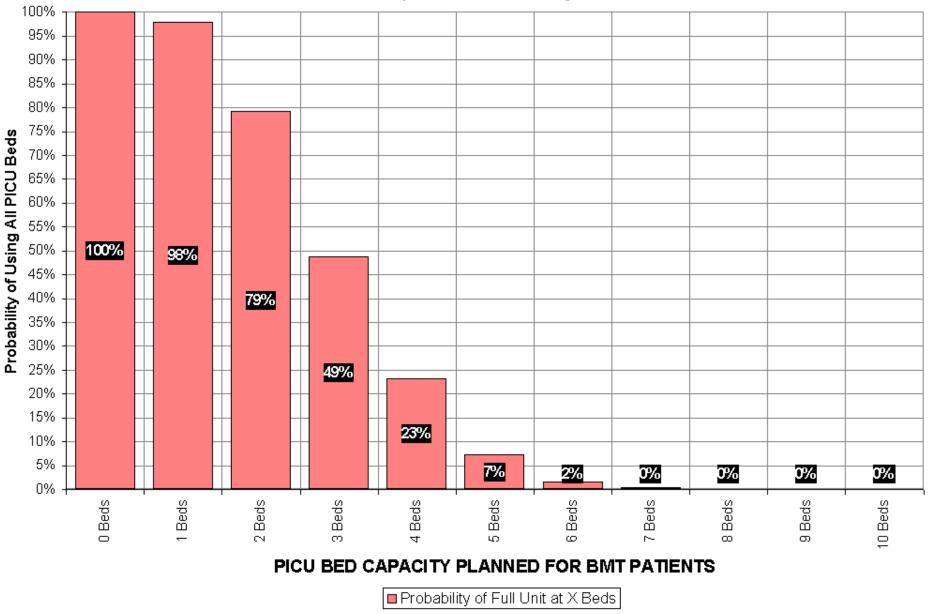
"BMT UNIT" BED CAPACITY

Probability of Full Unit at X Beds

Current System - FY 2009

BMT PICU Bed Needs

50 Replications - Mean Probability



Model Results FORECASTED SYSTEM (Per Dr. Davies-5% Increase from Jan-Jun CY 2009 Volumes)

change the outcome

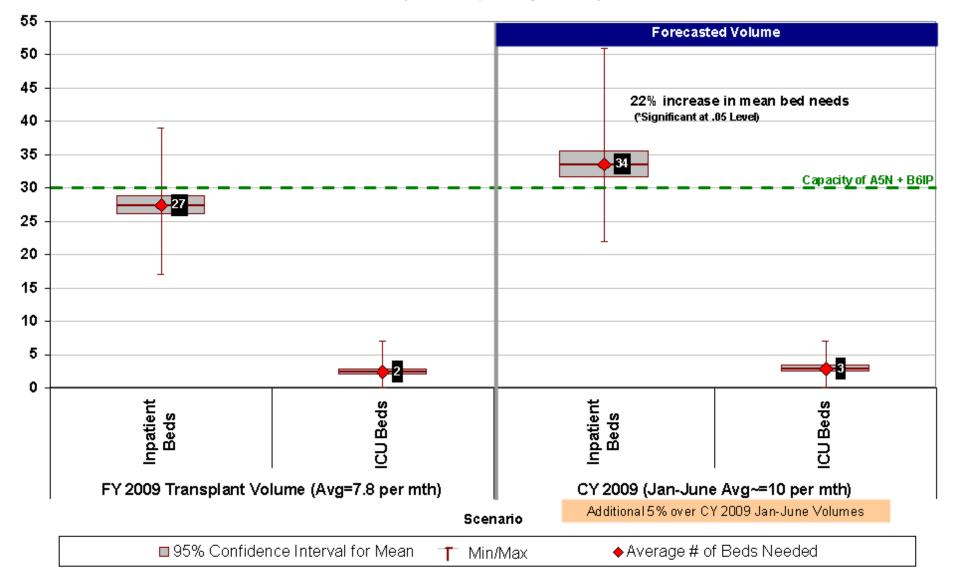




Simulation Results with Forecasts

Number of Beds Occupied with BMT Patients

50 Replications, 60 Day Warmup Period

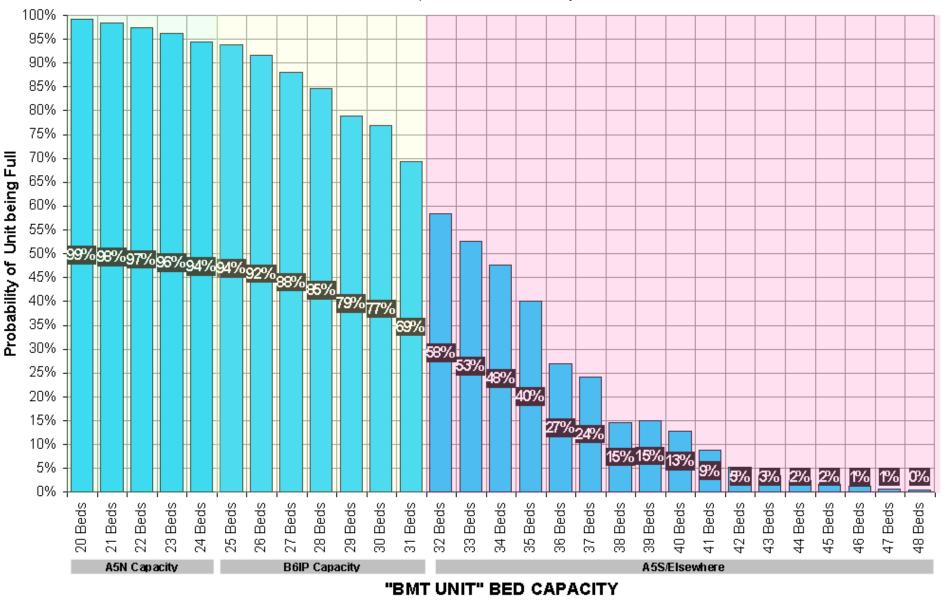


Last Updated 11/17/2009 by A. Anneken, Division of Health Policy & Clinical Effectiveness

Forecasted System - CY 2009+5%

Bed Needs for BMT Patients - Probability of a Full "BMT Unit"

50 Replications - Mean Probability

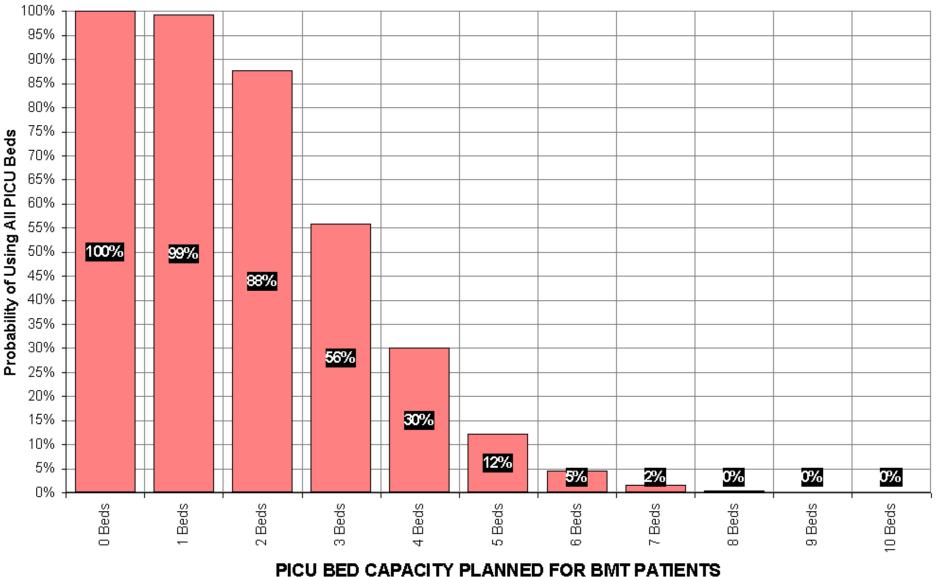


Probability of Full Unit at X Beds

Forecasted System - CY 2009+5%

BMT PICU Bed Needs

50 Replications - Mean Probability



Probability of Full Unit at X Beds