



# PATHWAY TO SUCCESS!

# IMPLEMENTING A CLINICAL PATHWAY TO IMPROVE SICU CABG OUTCOMES

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### Background

- Prolonged stay in the Intensive Care Unit (ICU) is associated with high mortality, morbidity and costs, with respiratory problems as the leading complication
- The Society of Thoracic Surgeons (STS) is a national reporting database that benchmarks South Miami Hospital (SMH) Critical Care on the following indicators:
  - ICU length of stay (LOS) <48 hours
  - Ventilator Time <6hours.
- ICU CABG Length of stay in 2011 was 75 hours.
- Median Ventilator time was 4.8 Hours.
- This prompted a need to develop a guideline for all disciplines involved in the care which lead to improvements in patient care, utilization of resources and outcomes.

#### Goals

- Develop and implement an evidence-based post cardiac utilization of resources and patient outcomes.
- - CABG Ventilator Time < 6 hours with an internal stretch goal of <4 hours.

### Key Stakeholders

- Critical Care Department
- Respiratory Therapy Department
- Pharmacy Department
- Baptist Health Cardiac & Thoracic Surgical Group
- SMH CT Surgery Taskforce Committee Members
- Physical Therapy Department
- Cardiac Rehabilitation Department
- Dietary Department

#### Methods

**PLAN** OCT. 2012

D0

MAY 2013

CHECK

JUN. 2013 -

**PRESENT** 

**ASSESS** 

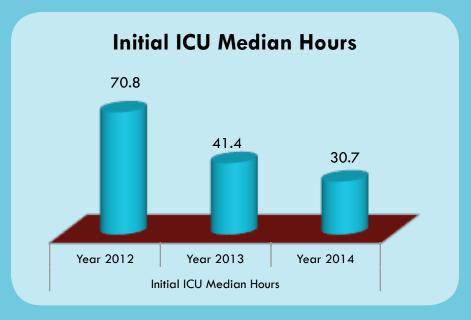
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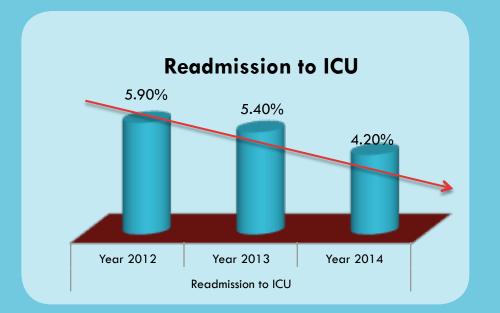
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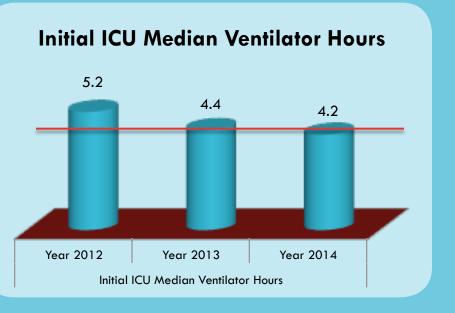
- Establish an interdisciplinary team of surgeons, ARNPs, pharmacists, nurses, rehabilitation specialists and respiratory therapists.
- Set clear daily goals from immediate post-operative time until
- Develop a Cardiac Surgery Clinical Pathways
- Designate a dedicated step-down area for post open heart patients
- Designate CCU as the step-down unit for post open heart patients • Educate the Critical Care Staff on pathways

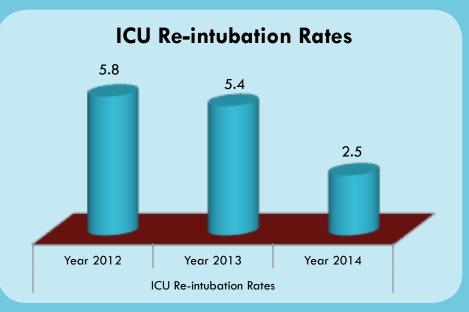
  - Educate the Critical Care Nurses on care of the post open heart patient in the ICU and Step-down unit.
  - Create a clinical dashboard to trend patient data and outcomes.
  - Monitor compliance with utilization of Clinical Pathway via daily chart audits by leadership team.
  - Assess patient tolerance and adherence to the pathway daily with the Critical Care team during Interdisciplinary Rounds.
  - Discuss unit progress and outcomes monthly at the SMH Cardiac Surgery Taskforce meeting
  - Utilizing the SICU Cardiac Surgery Clinical Pathway on CABG patients led to positive patient outcomes by eliminating variations
  - Based on this success, it was decided that other Cardiac Surgery patients would benefit from the pathway and the population was extended to include Valves and Combined CABG/Valve Procedures.

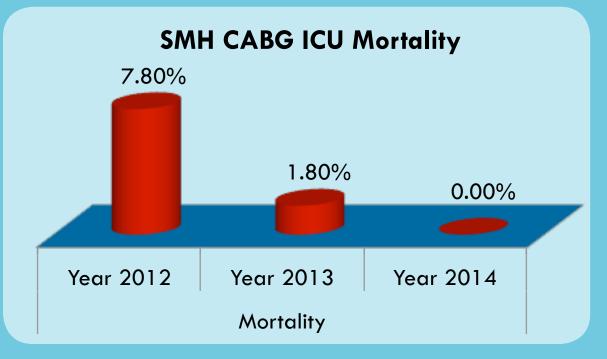
## Society of Thoracic Surgeons (STS) Adult Cardiac Surgery Database Isolated CABG ICU Data











Sout Hear	t Center	SICU Cardiac Surgery Clinica	Place patient label here
Date:	Operative Day Pre-Extubation 0-6 Hours	Date: Operative Day Post-Extubation Time: 6-24 Hours	Date: Post Op Day 1 24-36Hours
	HOB 30 degrees, rs until extubated	☐ Chair position 2 hours after extubation and TID x1hr ☐ OOB and stand at bedside evening	OOB to chair at 0600 or CXR     Antholate in unit with cardiac monitor and CT of surgery     Of surgery     PT/OT eval and treat     Prepare for transfer to Step-down unit
of last intrao □ <u>IV Insulin M</u> SMH 3075	Reconciliation sheduled NOT to exceed 48 hours fron perative OR dose anagement for a minimum of 24 hour il 120-150mg/dL	☐ Keep blood sugars less than or equ	
Use Vent Wear Keep 2 units Hourly VS ar Notify surged Cardiac prof Surgeon if C Epicardial W Normalize te Apply SCD c All abnormal	on is UO <30ml/hr x2hr on if CT output >250ml x 1 hr or >150 m le after 20 minutes in critical care, notify I <2 ires to Temp pacer if applicable	US O: thr x 4 then O.2 hours if stable IS every 1.2 hours while awake Remove all femoral catheters before	☐ Remove PA and A-line in AM if stable
Diet & Eliminatio ☐ NPO	1	□ NPO for 4 hours post extubation □ Diabetic clear liquid then advance w concentrated sweets for first 24 hou	

Time:	Operative Day Pre-Extubation 0-6 Hours	Date:	Date: Post Op Day 1 24-36Hours Time:
☐ Repeat CBC ☐ EKG PRN if	Tests ABG, CBC, BMP,PT,PTT and EKG & K-4 thrs and 8hrs post-op allowed discounted discou	Continue from Pre-Extubation	□ CXR qAM x 2 days □ CBC BMP q AM x2 days □ EKG
☐ If oozing, cle dressing BID	sterile gauze dressings anse with Chlorhexidine and apply dry and PRN	□ Continue from Pre-Extubation	Maintain sternal dressing for 48 hours post op. If cozing, cleanse with Chlorhexidine and apply dry steril   Different of the Chlorhexidine and apply dry steril   Maintain leg dressing for 48 hours post op. If cozing, reapply sterile dry dressing and warp with Kerlix. Do not use tape. Change QAM and PRN   Use of bath beairs not permitted.
☐ Provide pam	on for patient's loved ones phlet Critical Care: Information for Patients. Support Persons"	☐ Instruct patient on incentive spirometry, encourage it's use every 1-2hrs while awake ☐ Instruct patient on use of pillow to splint	Continue from Post-Extubation     Cardiac Rehab, Dietary, PT/OT. Social work services evaluation and education
Discharge Planni ☐ Discuss day ☐ Discharge re	by day pathway	☐ Discuss day by day pathway ☐ Discharge review	☐ Discuss day by day pathway☐ Discharge review
Day RN	DA'	Y RN Day R	N
		ht RNNight I	RN



- surgery clinical pathway to improve coordination of care,
- Successful outcomes are defined as:
  - CABG ICU LOS <48 hours

