

Building an Interventional Cardiology Education Program

Mike Carlozzi, RN, BSN, Eric Harrington, RN, BSN, Lisa Hird, RN, MSN, Lana Gavin, RN, MS, CCRN

Beth Israel Deaconess Medical Center

Introduction/Problem

Interventional cardiology is a highly specialized subset of intensive care nursing but does not fit the typical intensive care educational model. As a result there is a lack of centralized education that fits the needs of the department. The fast paced, ever evolving nature of this discipline creates many barriers to developing, implementing, and maintaining an educational infrastructure. There was no designated Interventional Cardiology Nurse Specialist or Unit Based Educators (UBE) who had time to devote attention to these initiatives.

Aim/Goal

- ❖ Create and establish a formal plan for a structured educational program
- ❖ Improved quality of nursing care
- ❖ Encourage staff personal growth and development
- ❖ Promote interdisciplinary collaboration

The Team

- Mike Carlozzi, RN, BSN- UBE Electrophysiology Lab
- Eric Harrington, RN, BSN- UBE Cardiac Catheterization Lab
- Lana Gavin, RN, MS, CCRN- Nurse Specialist
- Lisa Hird, RN, MSN- Nurse Director
- Peter Zimetbaum, MD- Associate Chief and Director Clinical Cardiology
- Duane Pinto, MD, MPH- Director Cardiac Catheterization Laboratory

The Interventions

- Acquired a dedicated Nurse Specialist and created dedicated time for UBEs
- Created a multidisciplinary syllabus for a collaborative educational series
- Obtained contact hours for programs provided
- Incentivized program attendance
- Developed a staff driven quarterly Grand Rounds Series
- Created an Annual Competency and Compliance Day program
- Developed and presented a CVI nursing conference for all BIDMC nurses

Progress to Date

2017 Invasive Cardiology Educational Calendar		
Date	Topic	Presenter(s)
January 2017	Sudden Cardiac Death	Al Buxton, MD
February 2017	Anti-Arrhythmic Medication Review	Peter Zimetbaum, MD
March 2017	STAFF GRAND ROUNDS: Basic Hemodynamics Review	Keith Tottenham, RN, BS Lana Gavin, RN, MS
April 2017	Anti-Coagulation Medication Review	Peter Zimetbaum, MD
May 2017	Annual Competency Day	ALL STAFF
June 2017	STAFF GRAND ROUNDS: ECMO in an Hour	John Whitlock, RN, MS Joe Previtera, RT
July 2017	Research and its real world application	Mike Gibson, MD
August 2017	Electrophysiology Mapping Systems	Fernando Contreras, MD
September 2017	STAFF GRAND ROUNDS: Impella Simulation	Edina Bonassin Lana Gavin, RN, MS
October 2017	What the LOA are we looking at?	Eric Harrington, RN, BSN
November 2017	Device Codes and Modes	Mike Carlozzi, RN, BSN
December 2017	STAFF GRAND ROUNDS: Pig Heart Dissections	ALL STAFF

Program Announcement!

Cardiovascular Institute 2018 Nursing Update
The Heart of the Matter:
An Introduction to Interventional Cardiology
Tuesday, February 27, 2018
7:30AM - 4:00PM
(Registration 7:30AM - 8:00AM)
Light Breakfast and Lunch Provided
Sherman Auditorium, East Campus

Topics

- Heart Disease Prevalence and Statistics
Michael Carlozzi, RN, BSN - Unit Based Educator, EP Lab
- Cardiac Anatomy, Physiology, and Conduction
Eric Harrington, RN, BSN - Unit Based Educator, Cath Lab
- Cardiac Catheterization Laboratory basic concepts and procedures
Eric Harrington, RN, BSN - Unit Based Educator, Cath Lab
Chris Mercurio, BS, RT, RCIS- Technical Director
- Electrophysiology Laboratory basic concepts and procedures
Michael Carlozzi, RN, BSN - Unit Based Educator, EP Lab
- Pre- and Post-Procedure Nursing Care
Cheryl Esposito, RN, BSN - Resource Nurse, Holding Area
- Interventional Innovations for the Future
Robert Yeh, MD - Director of Outcomes Research in Cardiology
Elad Anter, MD - Director of Clinical Electrophysiology Laboratory

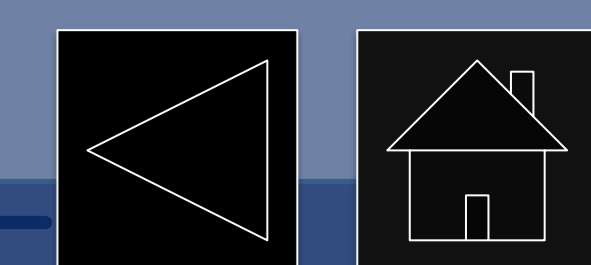
Coordinator: Lana Gavin, RN, MS, CCRN - Nurse Specialist, Invasive Cardiology
7.0 Contact Hours will be awarded

Beth Israel Deaconess Medical Center Nursing Education is an approved provider of continuing nursing education by American Nurses Association Massachusetts, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

Example of 2017 monthly syllabus for structured education
Program announcement for 2018 CVI conference at BIDMC

For more information, contact:

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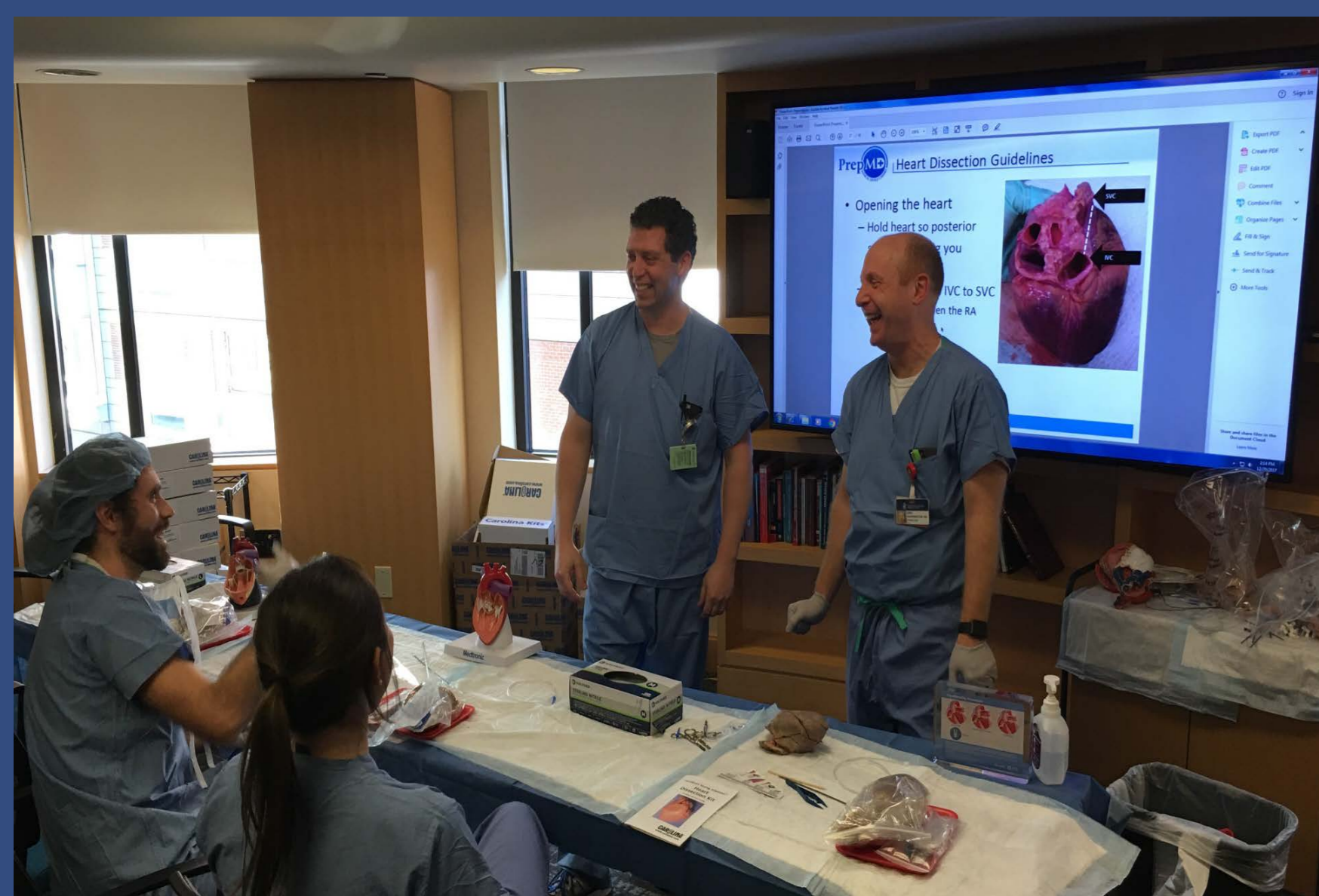


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More Results/Progress to Date



December 2017 Program: Pig Heart Dissections
Mike Carlozzi and Eric Harrington- UBEs



EP Grand Rounds Sudden Cardiac Death Evaluation Comments
II Recommendations For Future Activities
• VF most common response
• HF treatment current trends
• Device options
• Impella/Balloon pump
VI General Feedback
• I am able to identify arrhythmias better
• Great overview of recent/new trends of treating SCD
• Better understanding of SCD
• Strengthens knowledge of topic
• Better understanding of EP
• Able to share more knowledge with patients
• More knowledgeable of warning sign to VF in turn may defib quicker
• Teaching staff about rationale for delayed ICD therapy, have included this but will expand in intermediate EKG course
• Will include in future teaching
• Have a better understanding of the detriments of ICDs and will give better patient education

2017 Nurse Advance Evaluations
21 sessions/1044 respondents
Recommendations for Future Activities
Most requested topics:

1. End of life care
2. Cardiology topics
3. Self-care
4. Management of addictions
5. Challenging patients

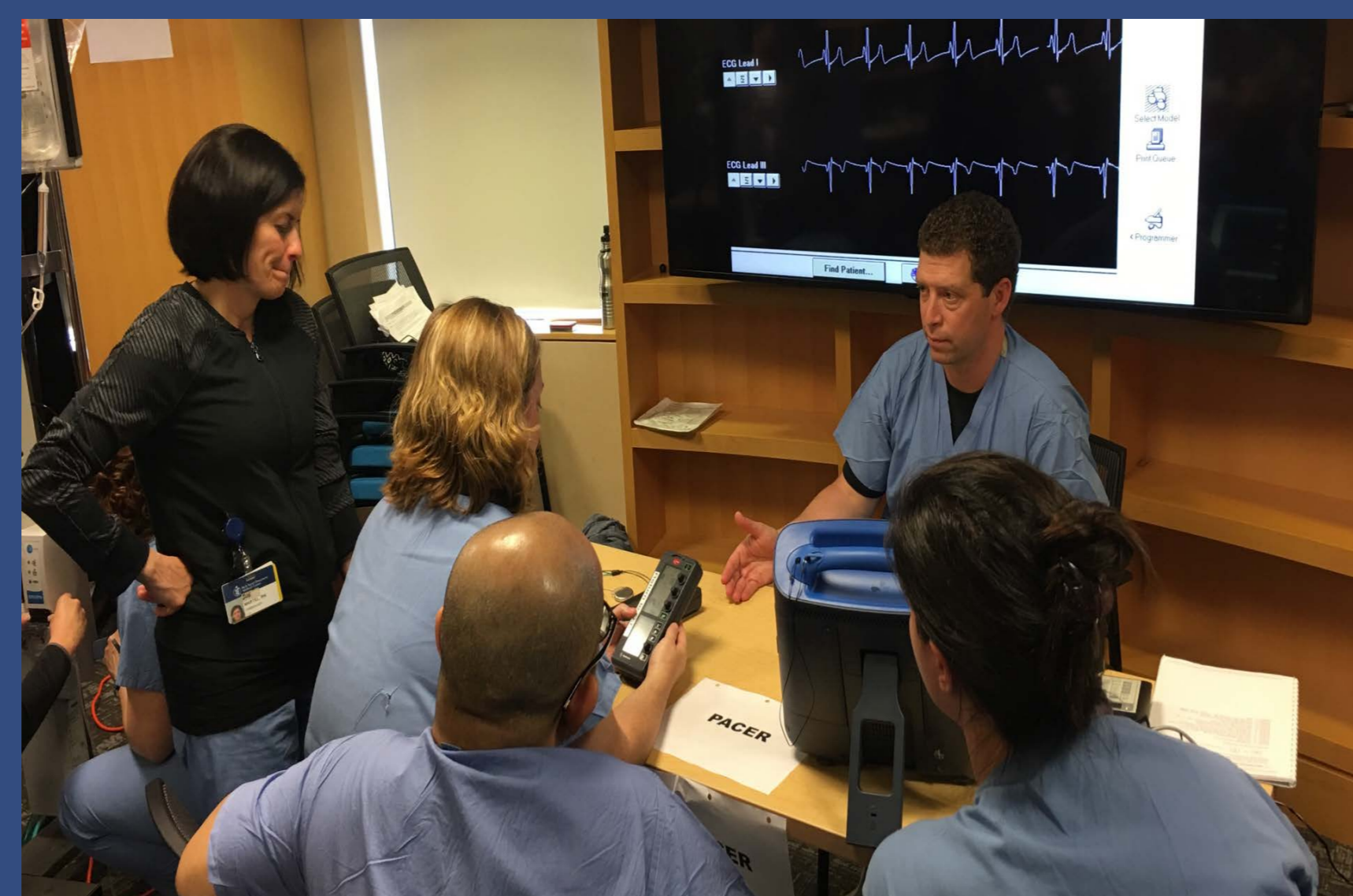
- Example Staff Evaluation response from EP program: "Sudden Cardiac Death"
- 2017 Nurse Advance evaluation results identified cardiology topics as the second most requested topic for future activities. Requests focused primarily on new and innovative interventions but also included: telemetry, EKG, heart failure, LVAD, TAVRs, acute MI, post-cath complications, cardiac drugs, ablations, and general cardiovascular care updates

Lessons Learned

- Buy in from staff and leadership was essential for program implementation and sustainability
- Nursing staff have enthusiastically welcomed the new education program
- Physicians have recognized benefits of designated education time as it relates to best practice and safe patient care

Next Steps

- Quantify nursing staff experience of educational program
- Expand interventional cardiology education within the hospital and surrounding areas
- Consider developing a consortium for new procedural nurses



2017 2nd Annual Interventional Cardiology Competency Day

For more information, contact:
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