Year in Review – 2016

Matthew Wanat, PharmD, BCPS, BCCCP
President, Texas Chapter 2017

Michael Sirimaturos, PharmD, BCNSP, BCCCP, FCCM
Immediate Past President, Texas Chapter 2017

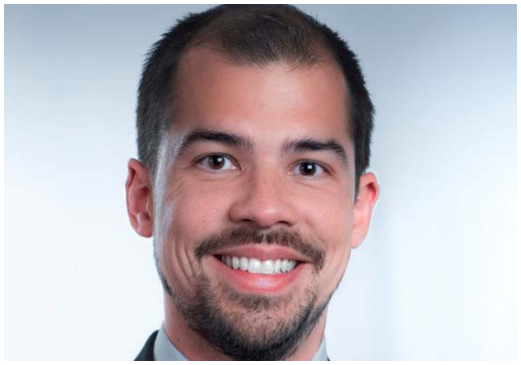
Business Meeting Outline

- SCCM Texas Chapter Overview
  - Committees, Charges, and Accomplishments
  - Financial Status
  - Election Results
- Alan Field Award Winner Presentations and Chapter Awards
- Looking Ahead in 2017

Society of Critical Care Medicine (SCCM) Texas Chapter

- Not for profit
- Sub-chapter of parent organization, SCCM
- Re-founded in 2008
- Mission
  - Provide Texas chapter members with education, professional resources, and networking opportunities to improve the quality of care to critically ill patients across Texas
- Multidisciplinary
- Officials elected by the membership
- Voluntary (no compensation)

2016 SCCM Texas Chapter Executive Council



President
Michael Sirimaturos, PharmD, BCNSP, BCCCP, FCCM

President - Elect
Matthew Wanat, PharmD, BCPS, BCCCP

Secretary
Mary Lou Warren, DNP, RN, CNS-CC, FCCM

Treasurer
Sharla Tajchman, PharmD, BCCCP, BCNSP

Past President
Wendi Jones, MSN, ACNP-BC

2016 SCCM Texas Chapter Board of Directors

BOD Seat	Representative	Credentials	Term End
Physicians (2)	Imrana Malik (Houston)	MD	2017
	Darrell Alley (Houston)	MD, FACS	2018
Nurses (2)	Susan Smith (Dallas)	DNP, APRN, ACNS-BC	2018
	Phyllis McCorstin (Dallas)	MSN, RN, APRN, CNS, CCNS, CCRN	2019
Allied Health (2)	Brian Dee (Houston)	PharmD, BCNSP, BCCCP	2019
	Vi Nguyen (Houston)	OTR, MOT, RRT	2019
At-Large(4)	Andro Herrera-Mendoza (San Antonio)	MBA, RRT-NPS, RPFT	2017
	Patrick Cullinan (San Antonio)	DO, FACOEP, FACOI, FCCM	2018
	Susan McLean (El Paso)	MD, FACS	2019
	Vacant		

SCCM Texas Chapter Committees

- Membership
- Programs
- Communication
- Symposium
- Research
- Awards
- Nominations

SIGN UP FOR A COMMITTEE (OR 2) TODAY!!!

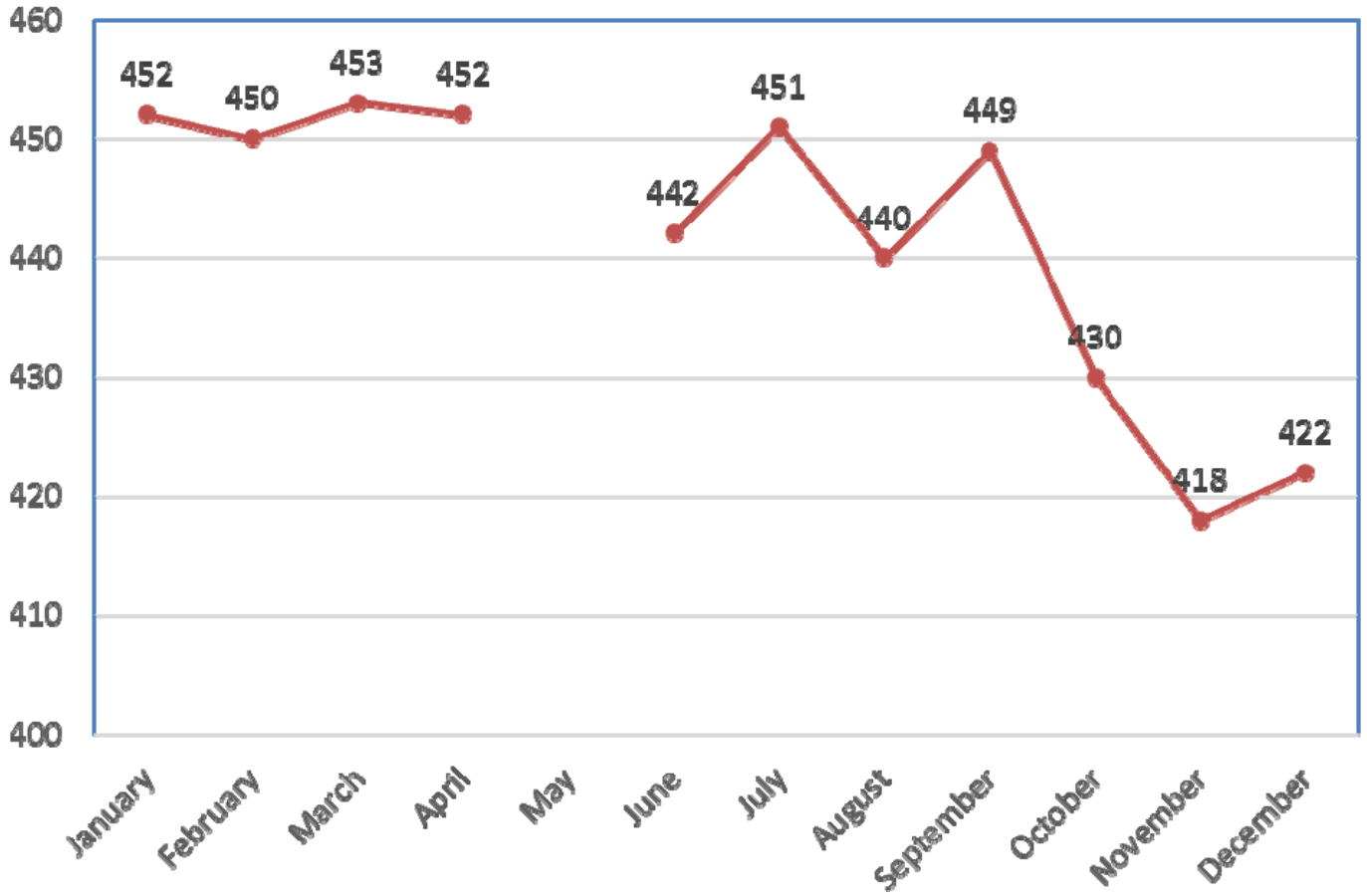
MEMBERSHIP Committee

- Chair: Maggie Ma, PharmD, BCPS
- Vice Chair: April Finnigan, PharmD, BCCCP
  - New Member Manager: Rebeca Halfon, BS, PharmD
  - Trainee Verification: Brittany Pelsue, PharmD, BCPS
  - SCCM Verification: Olakunle Idowu, MD
  - Committee members
    - Evan Brietzke-Gupta, BBA, BS(N), RN, CCRN
    - Katie Morneau, PharmD, BCPS
    - Vy Pham, PharmD, BCPS
    - Jef Sala, RN
    - Ola Adejuwon, PharmD, BCCCP, BCNSP, BCPS

MEMBERSHIP Committee Charges

- Coordinate and promote multidisciplinary membership expansion throughout Texas
- Establish and maintain the SCCM TX Chapter membership database
- Organize annual TX Chapter membership drive
- Identify methods to recruit new membership in addition to ensuring retention of existing TX Chapter members
- Build on and maintain a multidisciplinary critical care training database to target new members

SCCM Texas Chapter Membership 2015



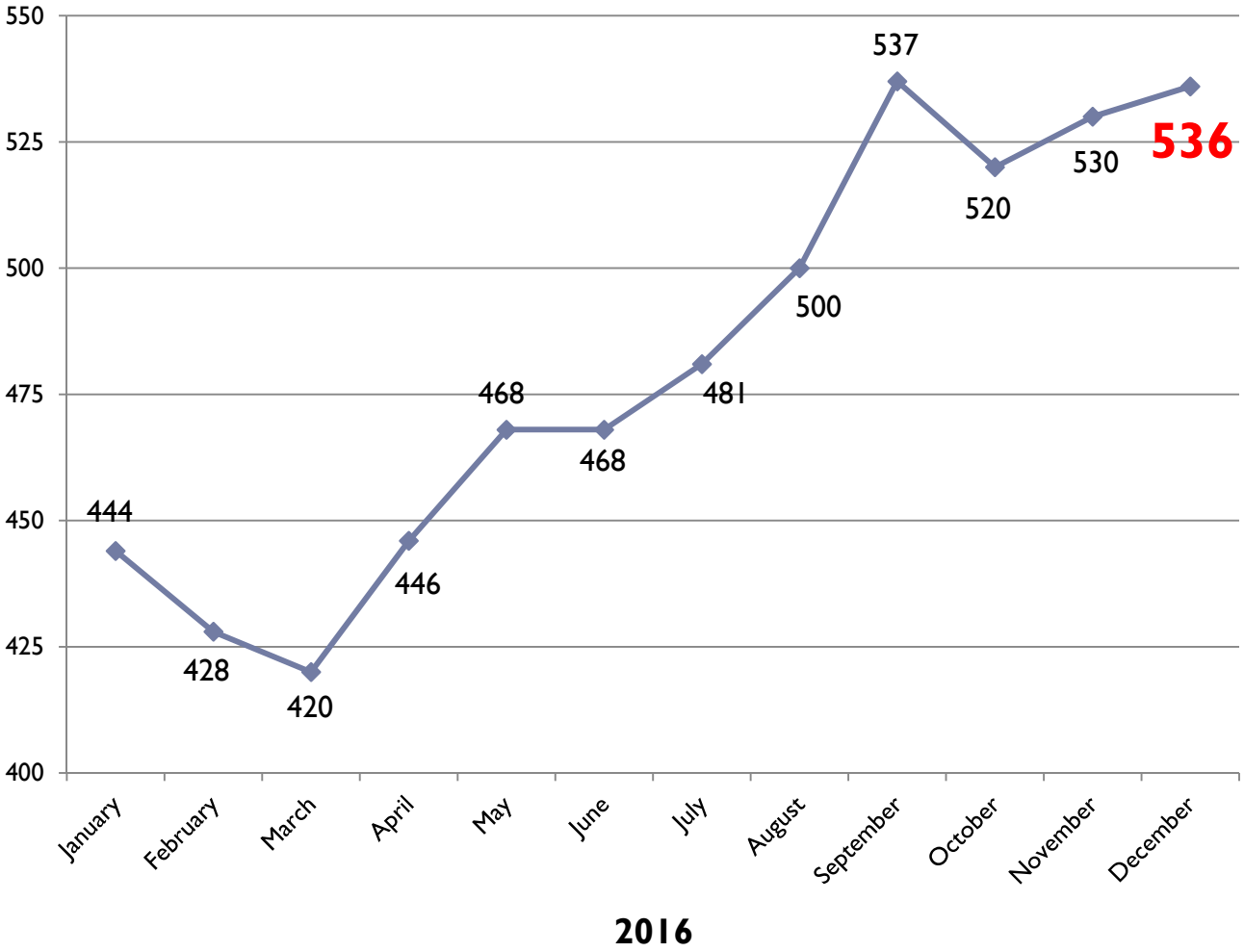
<u>December 31, 2015</u>

SCCM members – 72%

Trainees – 5%

FCCM – 18 total

SCCM Texas Chapter Membership 2016



<u>December 31, 2016</u>

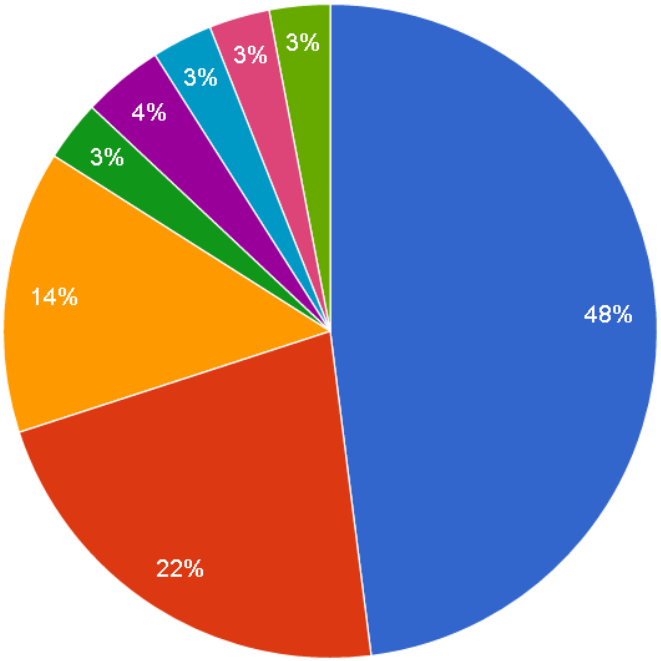
SCCM members – 73%

Trainees – 6%

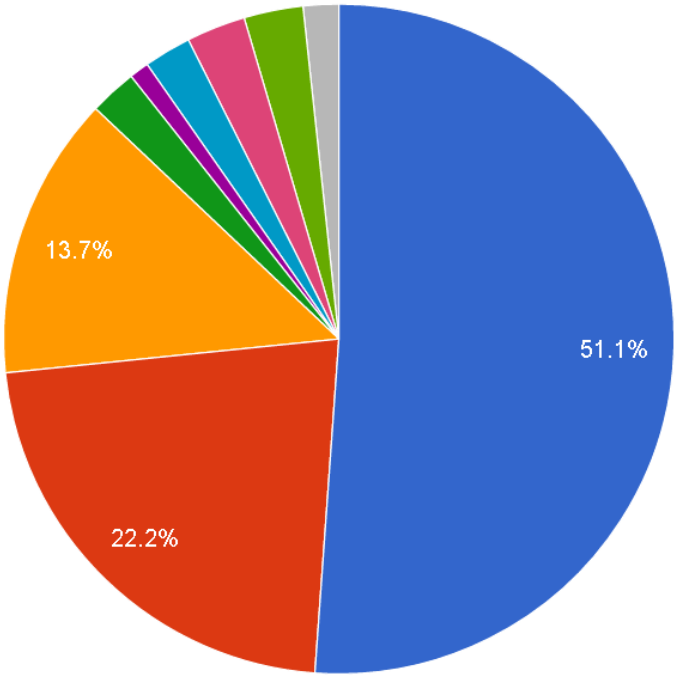
FCCM – 21 total

Regional Representation

January 2016

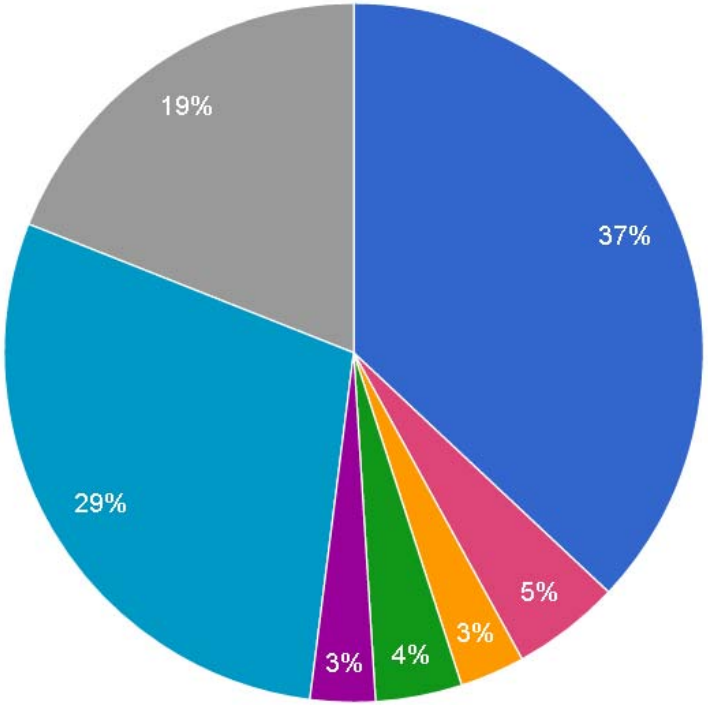


January 2017

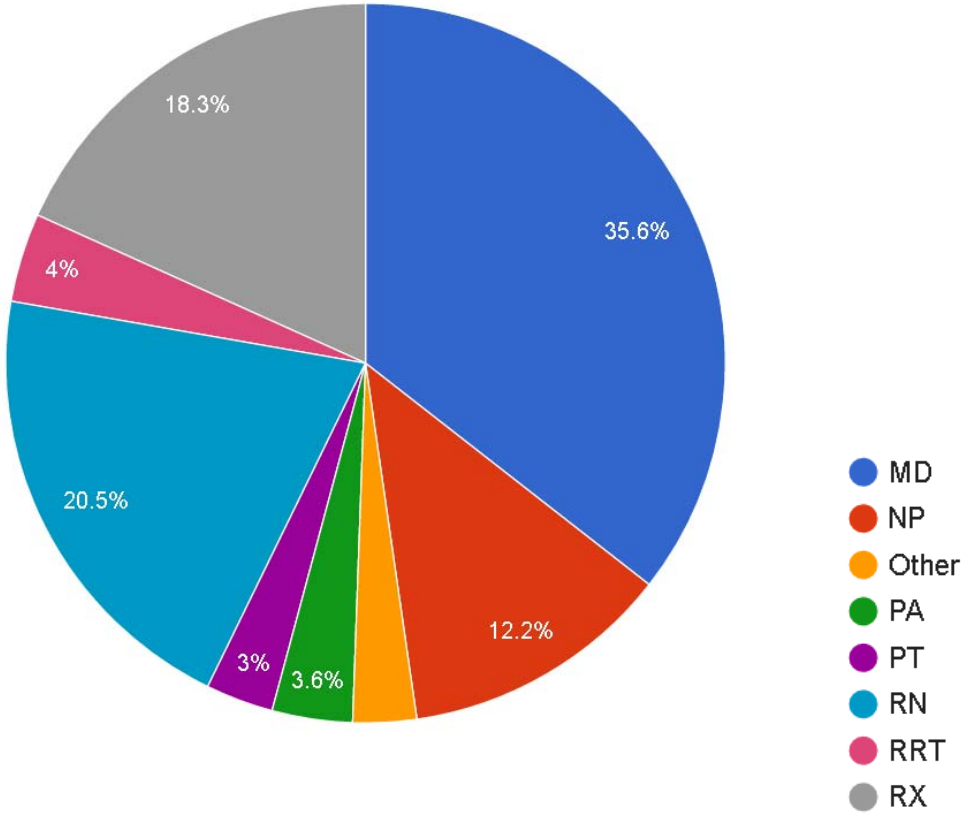


Multidisciplinary Membership

January 2016



January 2017



2016 Membership Drive

Referred 4 New Texas Chapter Members
Christiane Perme, PT, CCS
Houston

Referred 3 New Texas Chapter Members
Andro Herrera-Mendoza, MBA, RRT-NPS, RPFT
San Antonio

Referred 3 New Texas Chapter Members
Omar Enriquez, MD
San Antonio

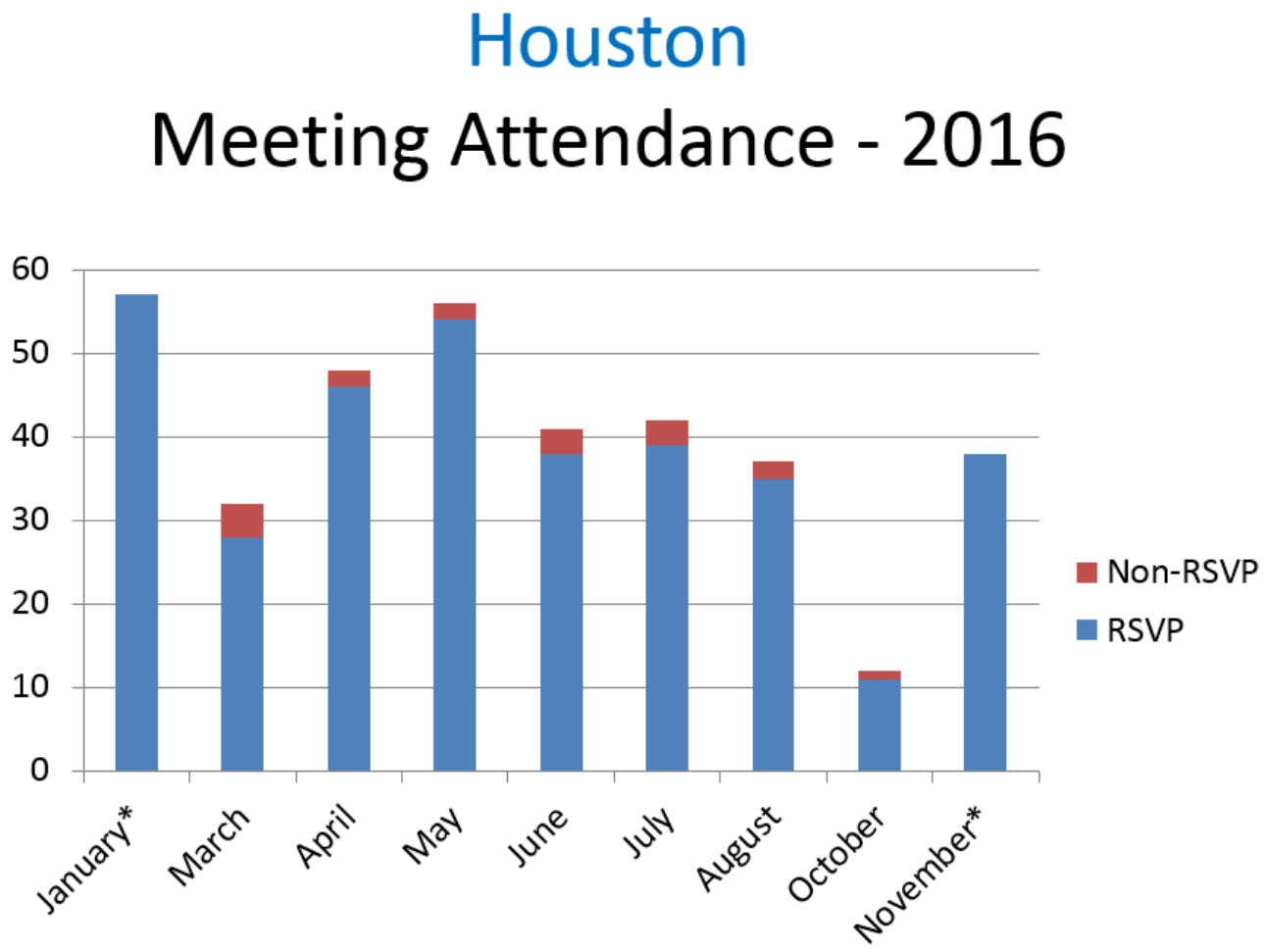
PROGRAM Committee

- Chair: Anne Rain Tanner, PharmD, BCPS
- Regional Coordinators
  - Houston
    - Anne Rain Tanner, PharmD, BCPS
  - Dallas / Fort Worth
    - Lyndsay Shepherd, PharmD, BCPS
    - Jennifer Roth, PharmD, BCPS
  - San Antonio
    - Patrick Cullinan, DO, FCCM, FACOEP, FACOI
    - Andro Herrera-Mendoza, MBA, RRT-NPS, RPFT
  - El Paso
    - Susan McLean, MD, FACS

PROGRAM Committee Charges

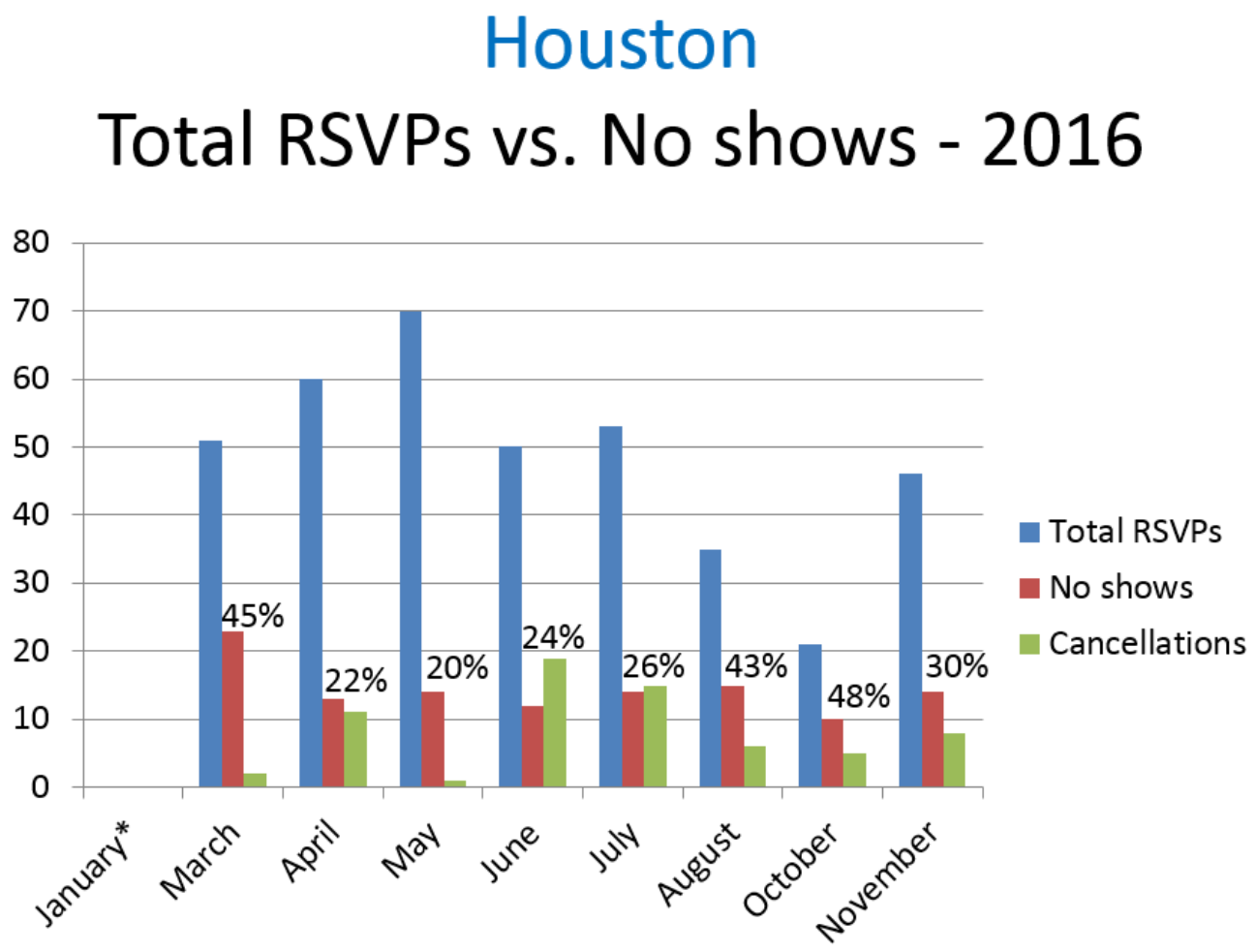
- Organize regularly occurring Chapter educational meetings
  - Total of 31 meetings in 2016 (up from 21 in 2015 with growth in every region!)
    - Houston: 9 (2 non-industry sponsored, plus the Annual Symposium)
    - Dallas / Fort Worth: 7
    - San Antonio: 11
    - El Paso: 4
- Coordinate member reception at SCCM Critical Care Congress
  - 45th Congress – Orlando (February 21, 2016)
  - 46th Congress – Honolulu (January 22, 2017)
    - ~30 Texas Chapter members in attendance
  - 47th Congress – SAN ANTONIO (February 25-28, 2018 – MARK YOUR CALENDARS!!!)
- Assist with TX Chapter expansion as delegated by the Exec and BOD
  - Continue to grown in every region
  - Goal is to increase non-branded programming in each region
- Assist with vendor sponsorship for TX Chapter Symposium
  - Sponsorship helps cover venue, catering, printing, and continuing education costs
  - Assisted in obtaining over $15,000 in sponsorship!

PROGRAM Committee



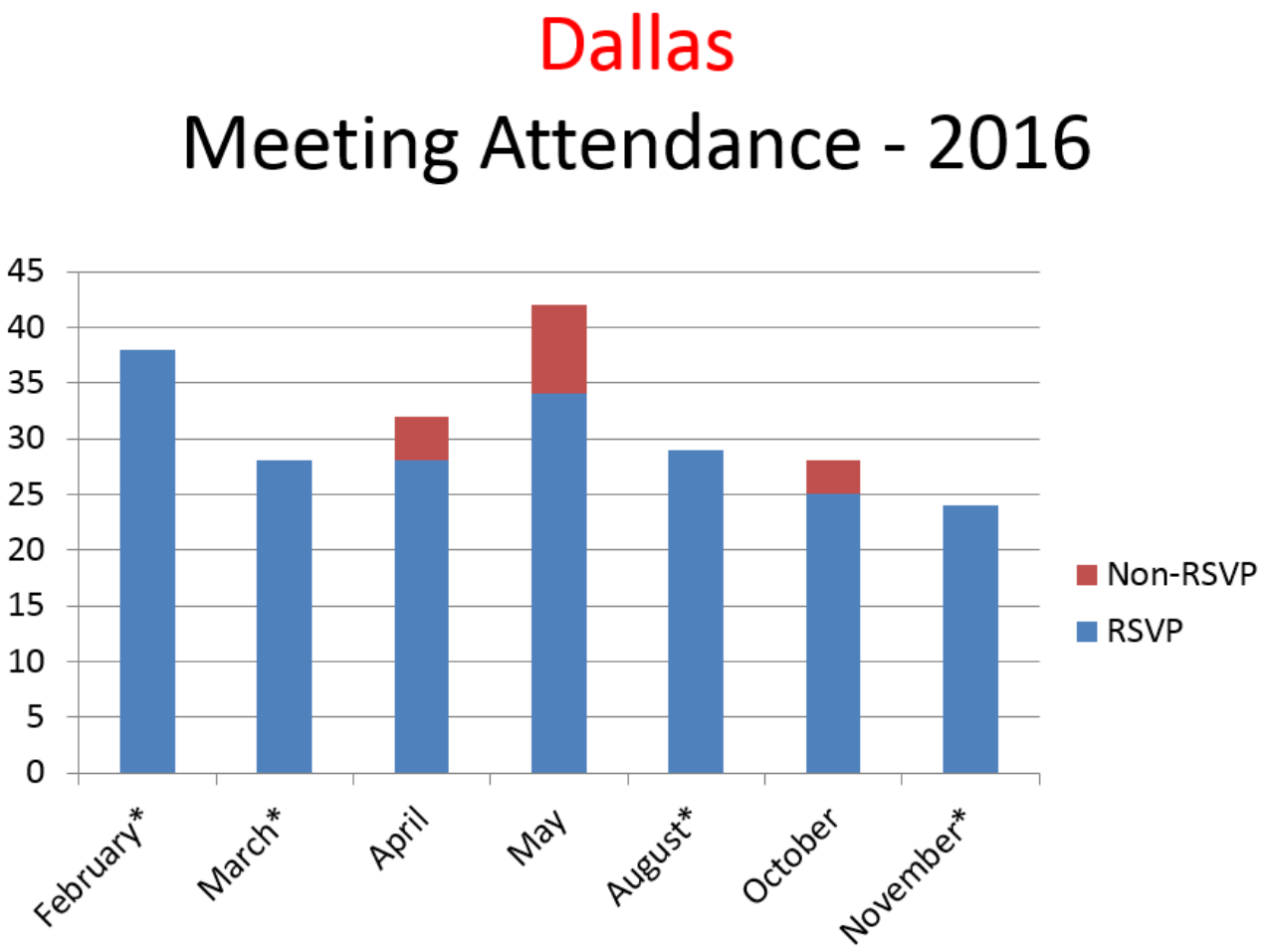
*denotes RSVP collected by sponsor

PROGRAM Committee



*denotes RSVP collected by sponsor

PROGRAM Committee

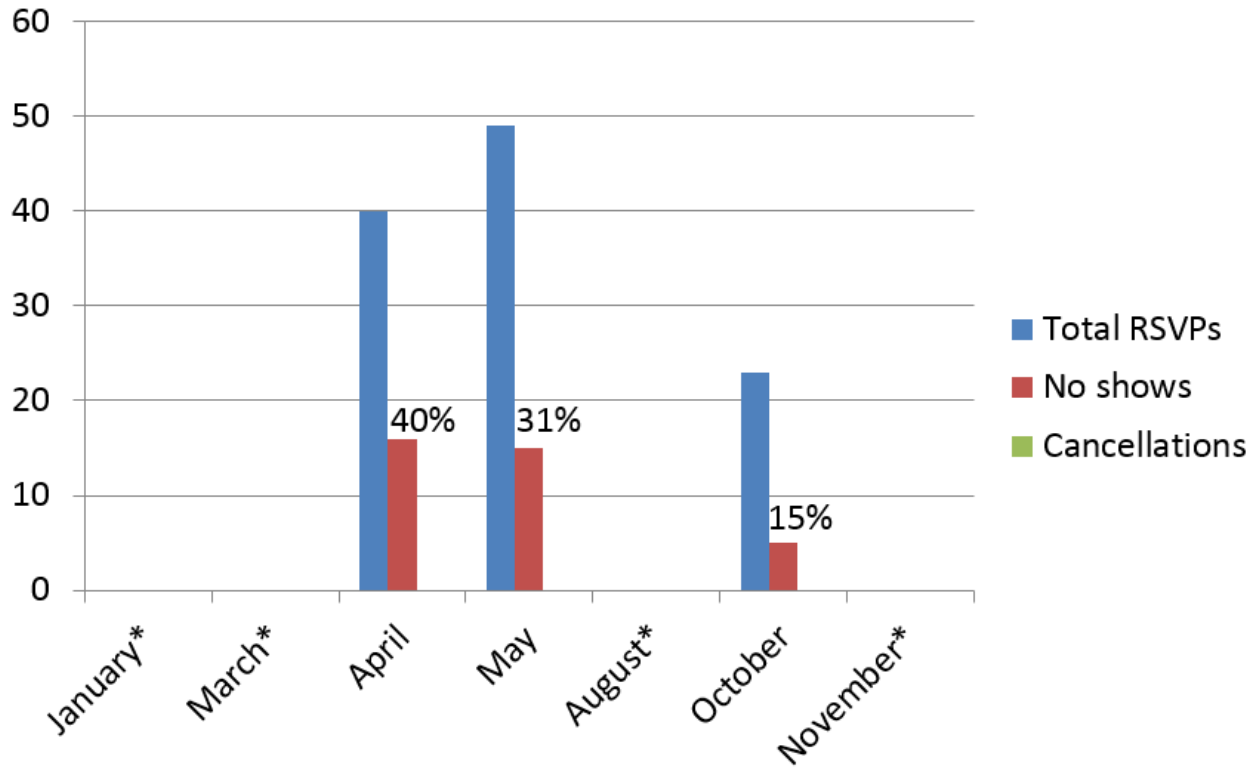


*denotes RSVP collected by sponsor

PROGRAM Committee

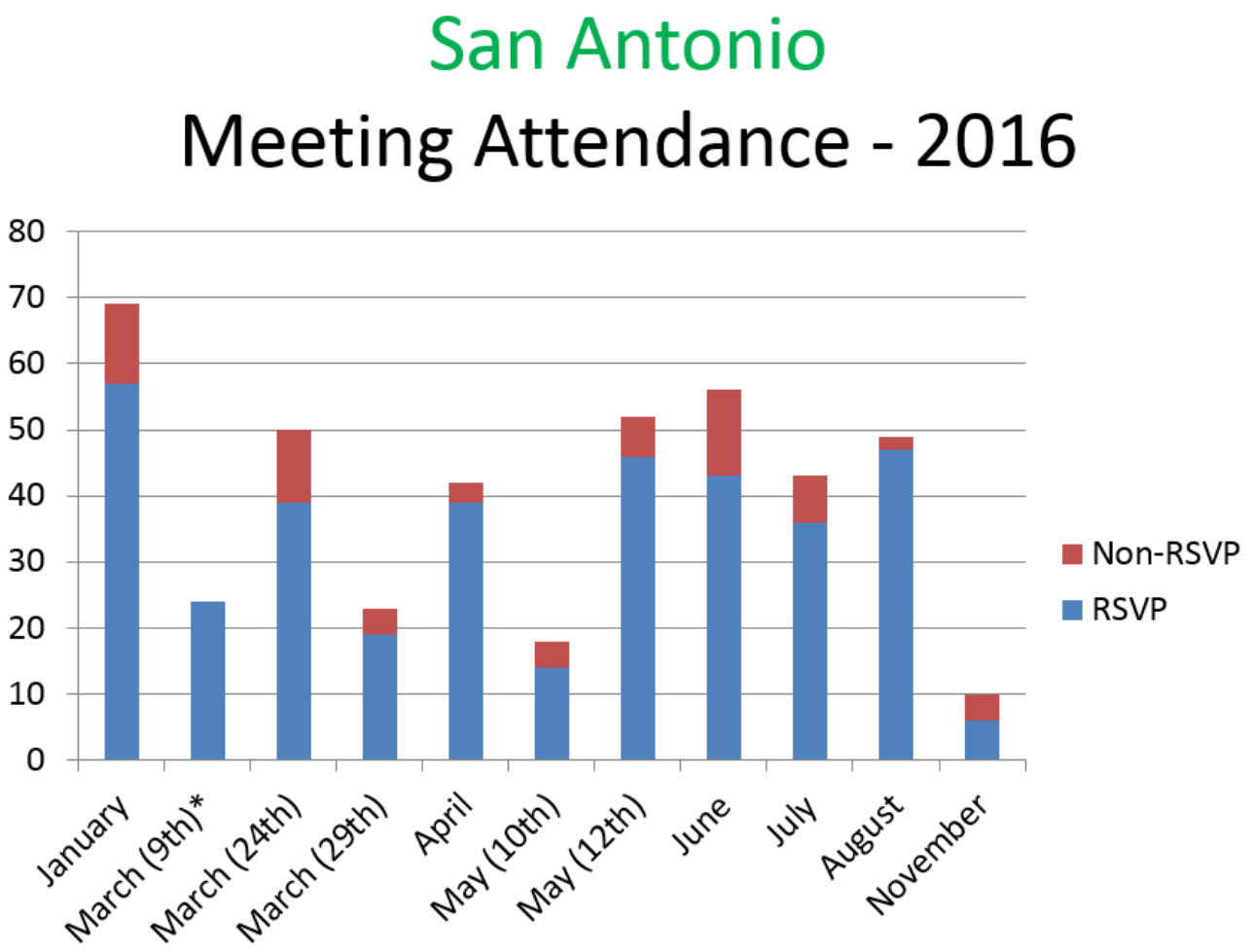
Dallas

Total RSVPs vs. No shows - 2016



*denotes RSVP collected by sponsor

PROGRAM Committee

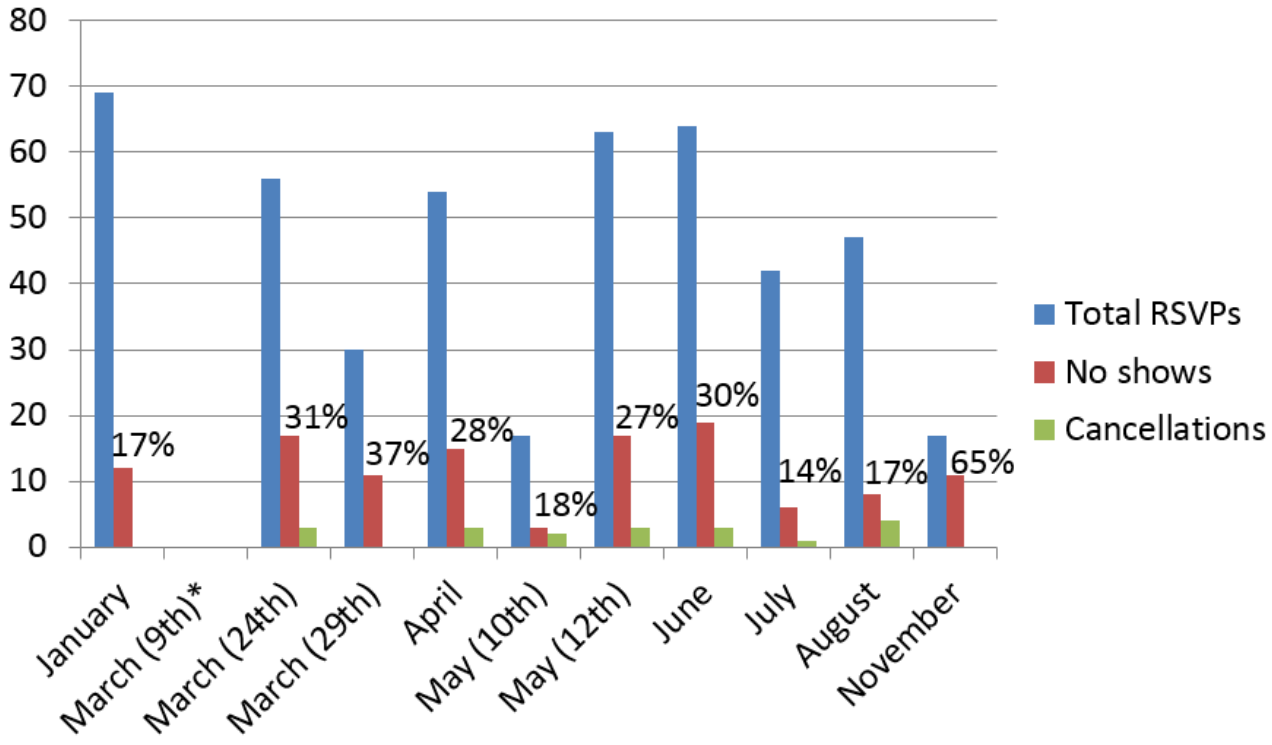


*denotes RSVP collected by sponsor

PROGRAM Committee

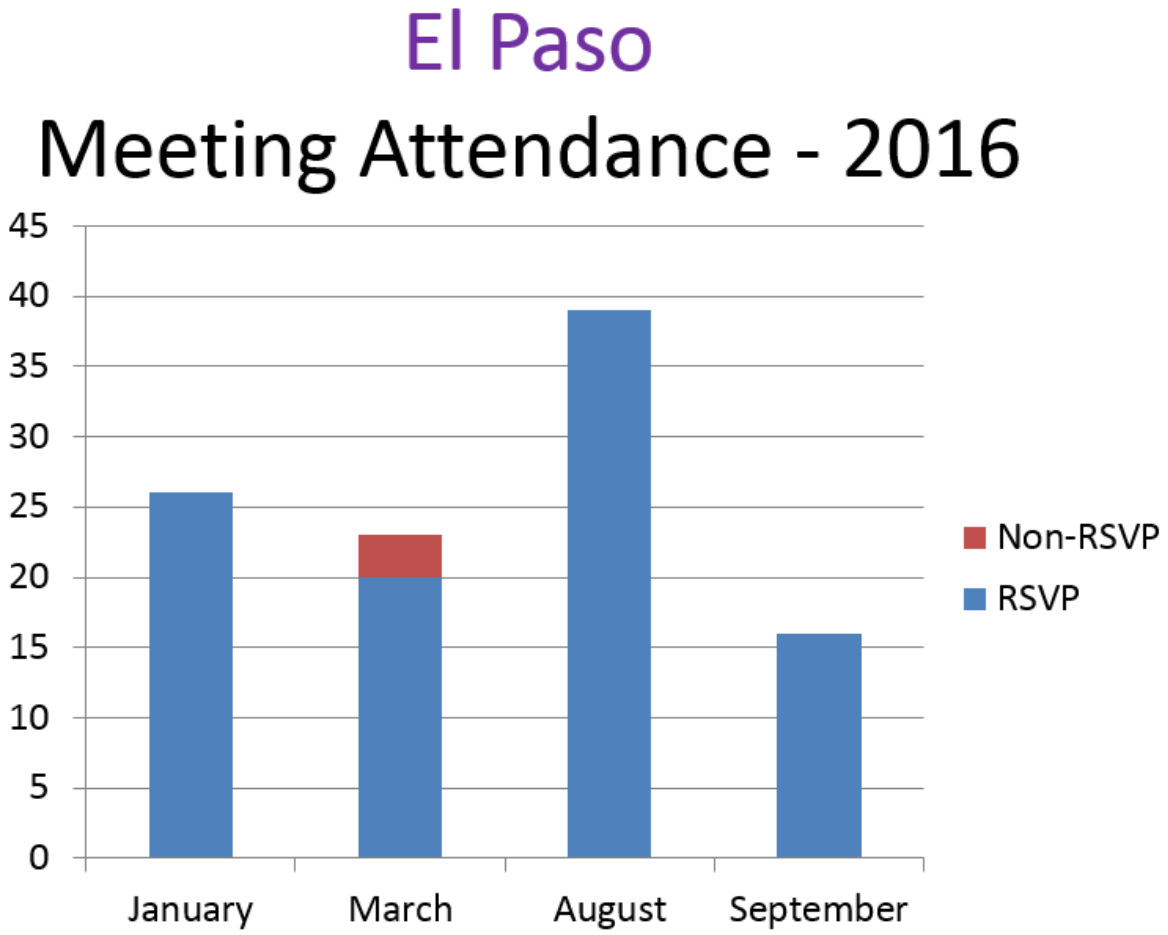
San Antonio

Total RSVPs vs. No shows - 2016



*denotes RSVP collected by sponsor

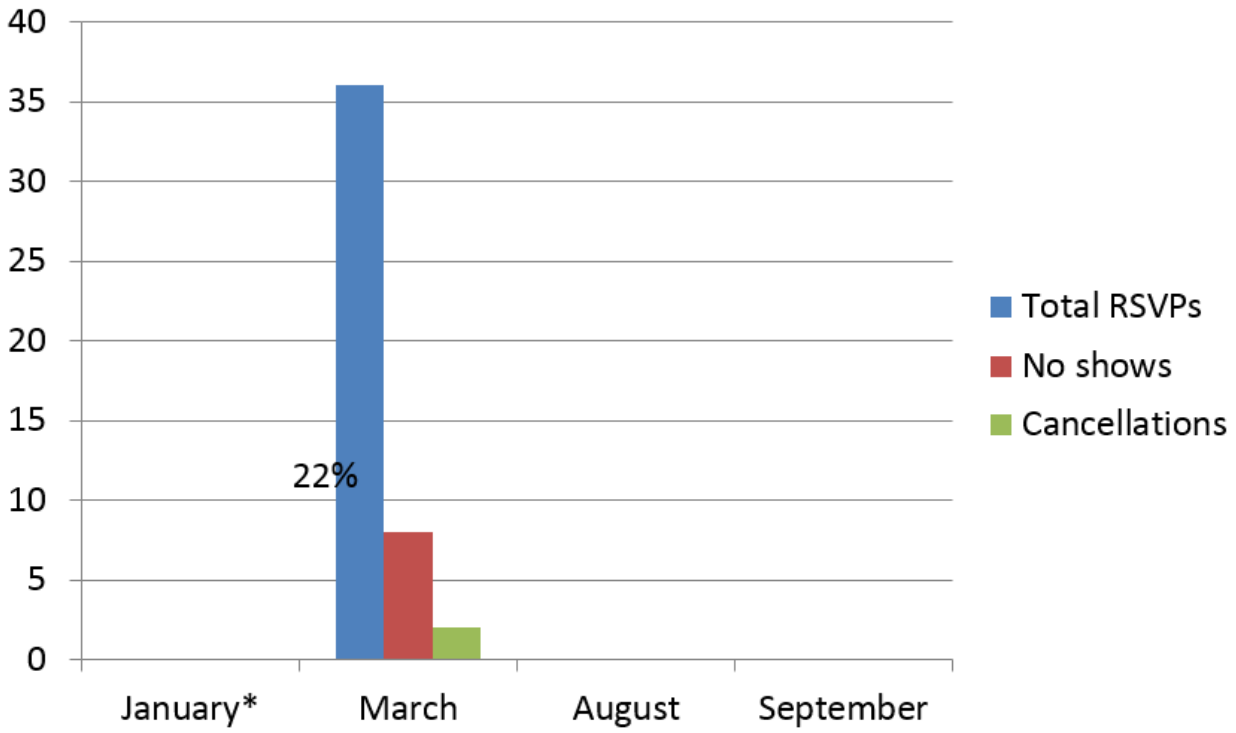
PROGRAM Committee



PROGRAM Committee

El Paso

Total RSVPs vs. No shows - 2016



*denotes RSVP collected by sponsor

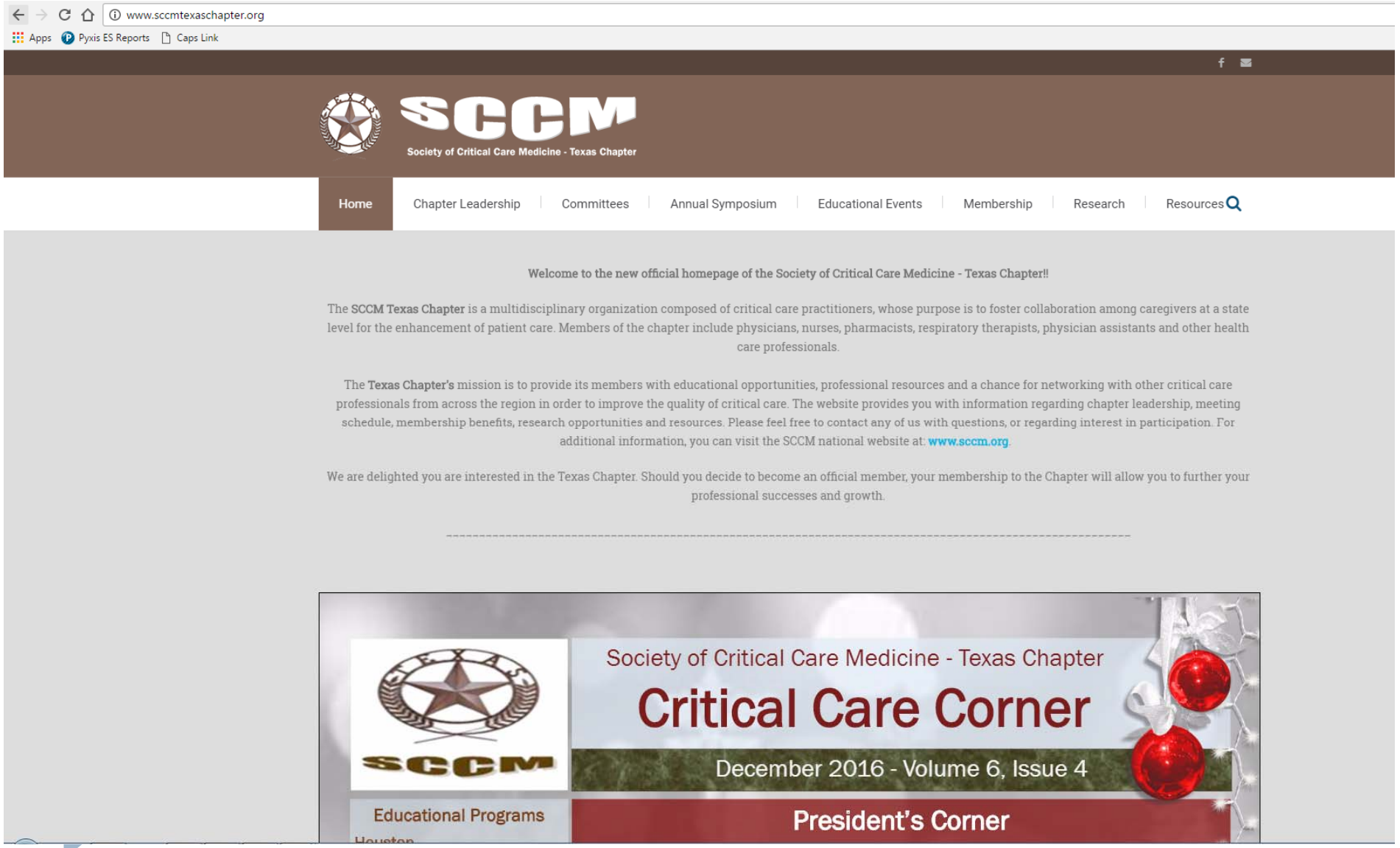
PROGRAM Committee

- Programming
  - Continue pediatric programming initiative state-wide
  - Contact Anne Rain programs@sccmtexaschapter.org with any ideas for future programming or feedback on current programming!

COMMUNICATIONS Committee

- Chair: Brian Burleson, PharmD, BCPS
- Regional Coordinators
  - Houston Communications: Elizabeth Dozier, BSN, RN
  - Dallas Communications: Leanne Current, PharmD, BCPS
  - San Antonio: Molly Curran, PharmD
  - El Paso: vacant – If interested, please notify Brian Burleson
- Website: Brandon Sterling, MS, APRN, AGACNP-BC, CCRN
- Social Media: Don Foronda, RN
- Newsletter: Lan Bui, PharmD, BCPS
- Charges
  - Facilitate communication between leadership and SCCM Texas Chapter members
  - Inform SCCM Texas Chapter members about upcoming events and opportunities

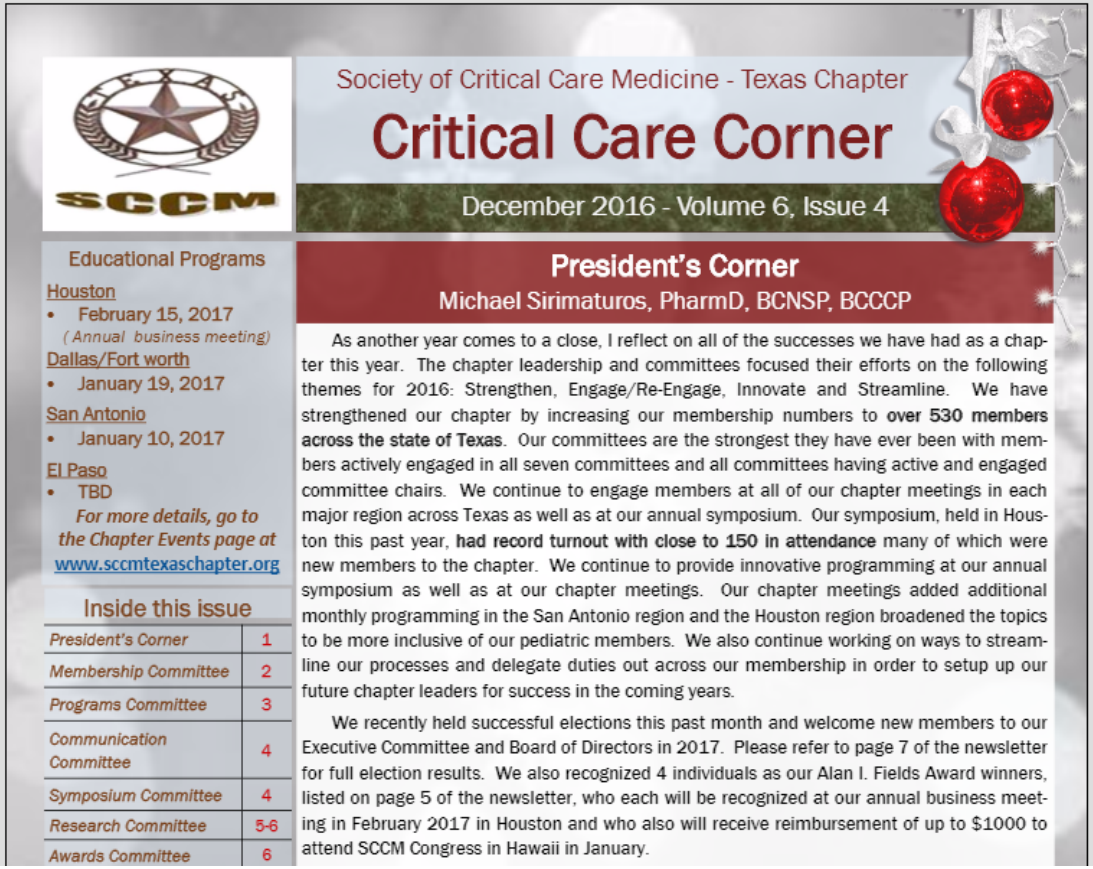
NEW WEBPAGE!
www.sccmtexaschapter.org



SCCM Texas Chapter Newsletter

CRITICAL CARE CORNER NEWSLETTER

Current Newsletter



Society of Critical Care Medicine - Texas Chapter

Critical Care Corner

December 2016 - Volume 6, Issue 4

Educational Programs

Houston
- February 15, 2017

(Annual business meeting)

Dallas/Fort worth
- January 19, 2017

San Antonio
- January 10, 2017

El Paso
- TBD

For more details, go to the Chapter Events page at www.sccmtexaschapter.org

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Communication Committee	4
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Research Committee	5-6
Awards Committee	6

President's Corner

Michael Sirimaturos, PharmD, BCNSP, BCCCP

As another year comes to a close, I reflect on all of the successes we have had as a chapter this year. The chapter leadership and committees focused their efforts on the following themes for 2016: Strengthen, Engage/Re-Engage, Innovate and Streamline. We have strengthened our chapter by increasing our membership numbers to **over 530 members across the state of Texas**. Our committees are the strongest they have ever been with members actively engaged in all seven committees and all committees having active and engaged committee chairs. We continue to engage members at all of our chapter meetings in each major region across Texas as well as at our annual symposium. Our symposium, held in Houston this past year, **had record turnout with close to 150 in attendance** many of which were new members to the chapter. We continue to provide innovative programming at our annual symposium as well as at our chapter meetings. Our chapter meetings added additional monthly programming in the San Antonio region and the Houston region broadened the topics to be more inclusive of our pediatric members. We also continue working on ways to streamline our processes and delegate duties out across our membership in order to setup up our future chapter leaders for success in the coming years.

We recently held successful elections this past month and welcome new members to our Executive Committee and Board of Directors in 2017. Please refer to page 7 of the newsletter for full election results. We also recognized 4 individuals as our Alan I. Fields Award winners, listed on page 5 of the newsletter, who each will be recognized at our annual business meeting in February 2017 in Houston and who also will receive reimbursement of up to $1000 to attend SCCM Congress in Hawaii in January.

NEWSLETTER ARCHIVES

- December 2016(PDF)
- March 2016(PDF)
- December 2015(PDF)
- October 2015(PDF)
- July 2015 (PDF)
- March 2015 (PDF)
- December 2014 (PDF)
- September 2014 (PDF)
- June 2014 (PDF)
- March 2014 (PDF)
- November 2013 (PDF)
- July 2013 (PDF)
- March 2013 (PDF)
- December 2012 (PDF)
- August 2012 (PDF)
- April 2012 (PDF)
- November 2011 (PDF)

LATEST NEWS

COMMUNICATIONS Committee

- Twitter
  - Added September 2016
  - @SCCMTXCHAPTER
  - Follow us!
  - Tweet chapter events!

SYMPOSIUM Committee

- Chair: Jennifer Gass, PharmD, MC, BCPS, BCCCP
- Secretary: Mary Lou Warren, DNP, RN, CNS-CC, FCCM

Symposium Planning Committee

Darrell E. R. Alley, MD, FACS, FCCP
Sugar Land, Texas

Teresa A. Allison, PharmD, BCPS, BCCCP
Houston, Texas

Lisa Beil, RN, APRN, AGACNP-BC, ACNS-BC
Houston, Texas

Utpal Bhalala, MD, FAAP
San Antonio, Texas

Laura Blackburn, PharmD, BCPS, BCCCP
Houston, TX

Brian S. Burleson, PharmD, BCPS
Houston, Texas

Andro R. Herrera-Mendoza, MBA, RRT-NPS, RPFT, RCP
San Antonio, Texas

Monica Lee, PharmD
Houston, Texas

Phyllis McCorstin, MSN, RN, APRN, CNS, CCNS, CCRN
Dallas, Texas

Susan McLean, MD, FACS
El Paso, Texas

Vi Nguyen, OTR, MOT
Houston, Texas

Patrick C. Cullinan, DO, NBPNS, FCCM, FACOEP, FACOI
San Antonio, Texas

Lisa Cushman, MS, RN, NE-BC
Houston, Texas

Maria Dent, PT, DPT
Houston, Texas

Jennifer Gass, PharmD, MS, BCPS, BCCCP
Houston, Texas

Heather Hartman, PharmD, BCPS, BCCCP
Houston, Texas

Joel Reyes, DO
San Antonio, Texas

Reagan Collins, PharmD, BCCCP
Houston, Texas

Michael Sirimaturos PharmD, BCNSP, BCCCP
Houston, Texas

Sania Sultan, PharmD, BCPS
Houston, Texas

Sharla Tajchman PharmD, BCCCP, BCNSP
Houston, Texas

Anne Rain Tanner, PharmD, BCPS
Houston, Texas

Matt Wanat PharmD, BCPS, BCCCP
Houston, Texas

Mary Lou Warren DNP, RN, CNS-CC, FCCM
Houston, Texas

SYMPOSIUM Committee Charges

- Secure date and venue for annual symposium
- Create innovative program for a multidisciplinary critical care audience
- Secure content expert speakers
- Obtain continuing education credits for a variety of TX Chapter member disciplines
- Coordinate vendors in collaboration with the Program Committee and abstracts in collaboration with the Research Committee

SYMPOSIUM Committee

- 5th Annual Symposium: Houston Methodist Research Institute
- September 16-17, 2016
- "Disparities in Critical Care"
  - >140 participants, speakers, vendors and volunteers
  - 22 speakers
  - 17 vendors
  - Topics: disparities at home and abroad, ED, sepsis, cardiothoracic disease and MCS, neuro, discharge planning and end of life, ID, future of critical care
  - Poster session with professor walk rounds; 12 posters

SYMPOSIUM Committee

- 6th Annual Symposium: LATE BREAKING DETAILS
- Hotel Galvez, Galveston, Texas
- September 8-9, 2017
- "Controversies in Critical Care"
- ***Not finalized***

RESEARCH Committee

- Chair: Joshua Swan, PharmD, MPH, BCPS
- Charges
  - Re-invigorate committee and committee members
  - Coordinate and oversee Symposium poster submissions
    - Coordinator: Teresa Allison, PharmD, BCPS, BCCCP
    - Poster submission increased from 4 (2015) to 13 (2016)
  - Coordinate and oversee the Alan I. Fields Awards
    - Coordinator: Michelle Horng, PharmD, BCPS, BCCCP
    - Abstract submission increased from 5 (2015) to 13 (2016)
  - Provide guidance and mentorship for FCCM application
    - Deadline for this year: March 15, 2017

Symposium Research Award

- First year for the award
- $500 stipend to offset SCCM Texas Chapter symposium expenditures
- Award Recipients
  - Two or More Years of Clinical Experience
    - Stephanie Bird, PharmD, Shazia Raheem, PharmD, Brooke Rachelle Herndon, PharmD, Amit Pulickan, MSc, M(ASCP), Charlie Lan, DO, Daniel Musher, MD.
      - *Impact of antibiotic MIC in a VA population with Pseudomonas bacteremia or pneumonia*
  - Less than Two Years of Clinical Experience
    - Lan N. Bui, PharmD, Joshua T. Swan, PharmD, MPH, Beverly A. Shirkey, PhD, Randall J. Olsen, MD, PhD, Scott W. Long, MD, PhD, Edward A. Graviss, PhD, MPH, FIDSA.
      - *Effects of chlorhexidine bathing on Clostridium difficile infection in a surgical intensive care unit*

Alan I. Fields Award

- Recognizes Texas chapter members attending SCCM Congress for their achievements in clinical research
- $1000 stipend to offset SCCM Congress meeting expenditures
- 2 awards annually (4 awards for 2016!)

Alan I. Fields Award

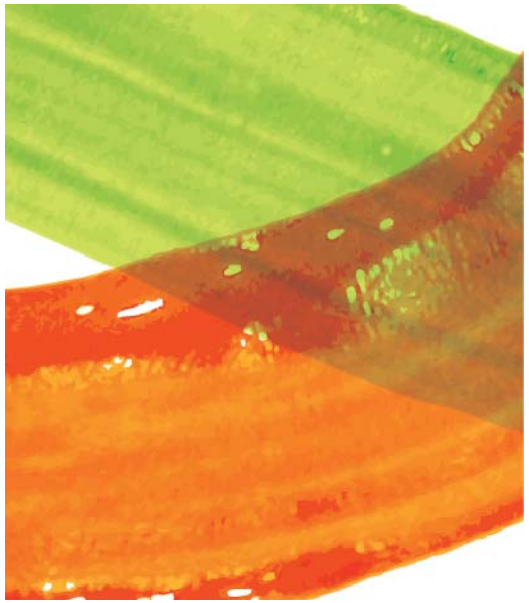
- Award Recipient
  - Two or More Years of Clinical Experience
    - **Utpal Bhalala, MD**, Niveditha Balakumar, MD, Maria Zamora, RN, Elumalai Appachi, MD.
      - *Defibrillation Skills of Pediatric Acute Care Providers: Are They Faster with Paddles or Pads?*

The Children's Hospital of San Antonio
CHRISTUS Health

Defibrillation Skills of Pediatric Acute Care Providers: Are They Faster With Paddles or Pads?

Baylor College of Medicine

Utpal Bhalala, MD, FAAP; Niveditha Balakumar, MD; Maria Zamora, RN; Elumalai Appachi, MD, FAAP



The Children's Hospital of San Antonio
CHRISTUS Health

Baylor College of Medicine

No Disclosure to Report

The Children's Hospital of San Antonio
CHRISTUS Health

Baylor College of Medicine

BACKGROUND

There is insufficient data on defibrillation skills of pediatric providers in VFCA

Timely defibrillation of Ventricular Fibrillation Cardiac Arrest (VFCA) is associated with favorable outcomes

The Children's Hospital of San Antonio
CHRISTUS Health

Baylor College of Medicine

HYPOTHESIS

Time-to-shock by pediatric providers in VFCA is significantly longer with use of paddles as compared to pads

The Children's Hospital of San Antonio
CHRISTUS Health

Baylor College of Medicine

METHODS

Prospective observational study of video evaluation of hands on defibrillation skills of pediatric providers during delivery of 2J/Kg shock to an infant manikin in VFCA using LifePak20e defibrillator.

Each provider was asked to use pads followed by paddles

Videos evaluated by 2 independent reviewers and disagreements resolved by a moderator.

Data analyzed using chi square test with significant p value <0.05

The Children's Hospital of San Antonio
CHRISTUS Health

Baylor College of Medicine

METHODS

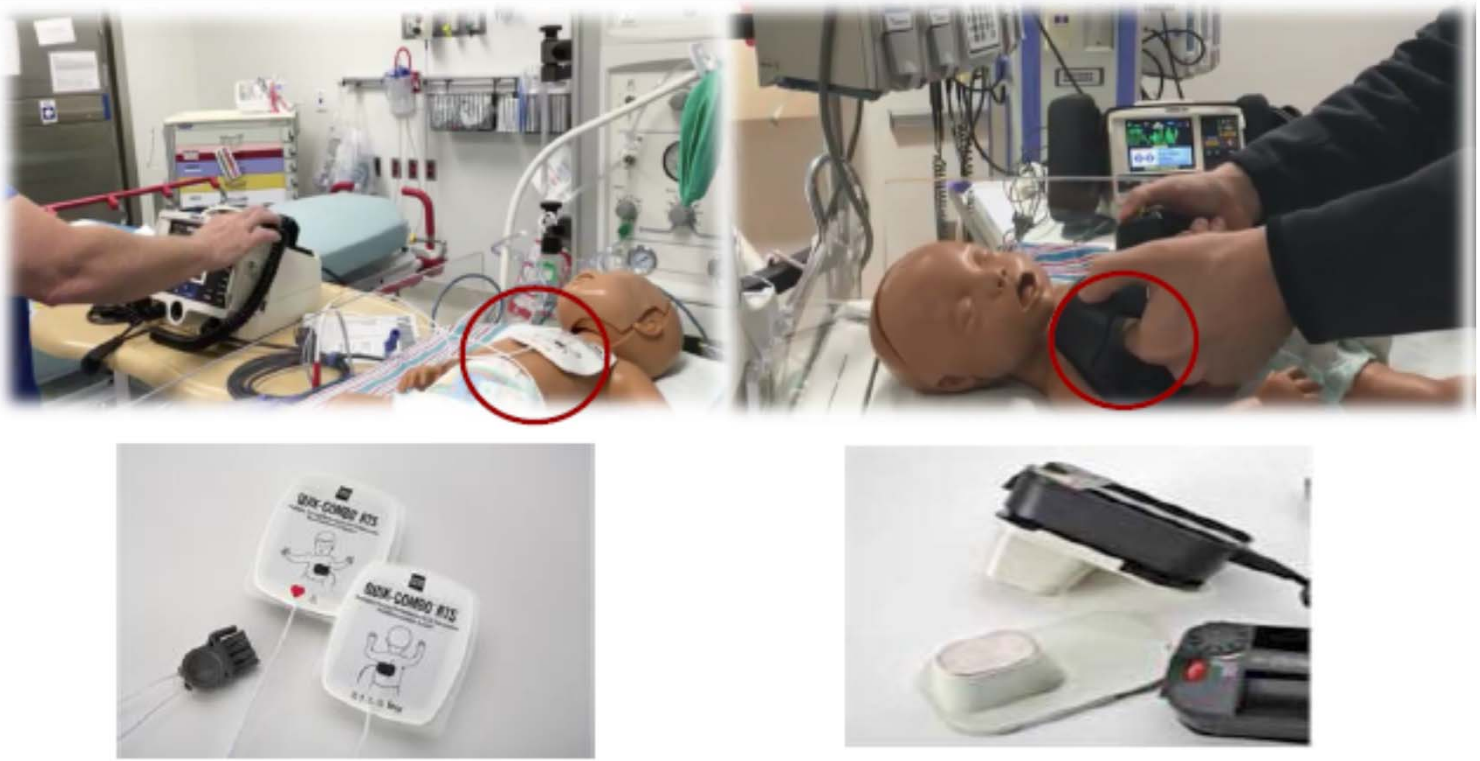


Figure 1: The defibrillation using pads versus paddles. Most providers used adult paddles instead of pediatric paddles.

The Children's Hospital of San Antonio
CHRISTUS Health

Baylor College of Medicine

METHODS

Defibrillation Study Check-list

Date: ___/___/_____ (MM/DD/YYYY)

Please circle the item applicable to you -

Provider level:

Faculty NP RN

Trainee PL1 PL2 PL3 PL4 PL5 PL6

Years in practice: <2 2-5 5-10 10-20 >20

Primary location of work: PICU ER Peds Floor NICU Transport

Certified in: PALS PEARS NRP BLS ACLS All None

Date of certification: (MM/YYYY)

Did you ever use the **study defibrillator** in the past?: Y N Not sure

If Yes, last time you used the **study defibrillator**:

__ days __weeks __months __years back in real /mock code

Did you ever use the **non-study defibrillator** in the past?: Y N Not sure

If Yes, last time you used the **non-study defibrillator**:

__ days __weeks __months __years back in real /mock code

Check-list for Facilitator:

1. Provider applied pads: Yes No
2. Provider used pediatric pads/paddles: Yes No

If yes, did the provider apply pediatric pads/paddles appropriately? Yes No

3. Provider used adult pads/paddles? Yes No

If yes, did the provider apply pediatric pads/paddles appropriately? Yes No

4. Provider selected correct energy: Yes No
5. Provider charged the device: Yes No
6. Provider announced "I am clear, you are clear, everyone is clear": Yes No
7. Provider applied shock: Yes No
8. Provider announced "Restart chest compressions": Yes No
9. Time to connect the pads/paddles to the device: __seconds
10. Total time to shock:__seconds
11. Struggle with connecting pads/paddles: Yes No
12. Struggle with using pads/paddles: Yes No
13. Struggle with buttons on the device: Yes No

Figure 2: The defibrillation Study Checklist showing the provider-specific questions and defibrillation-specific questions

The Children's Hospital of San Antonio
CHRISTUS Health

Baylor College of Medicine

RESULTS

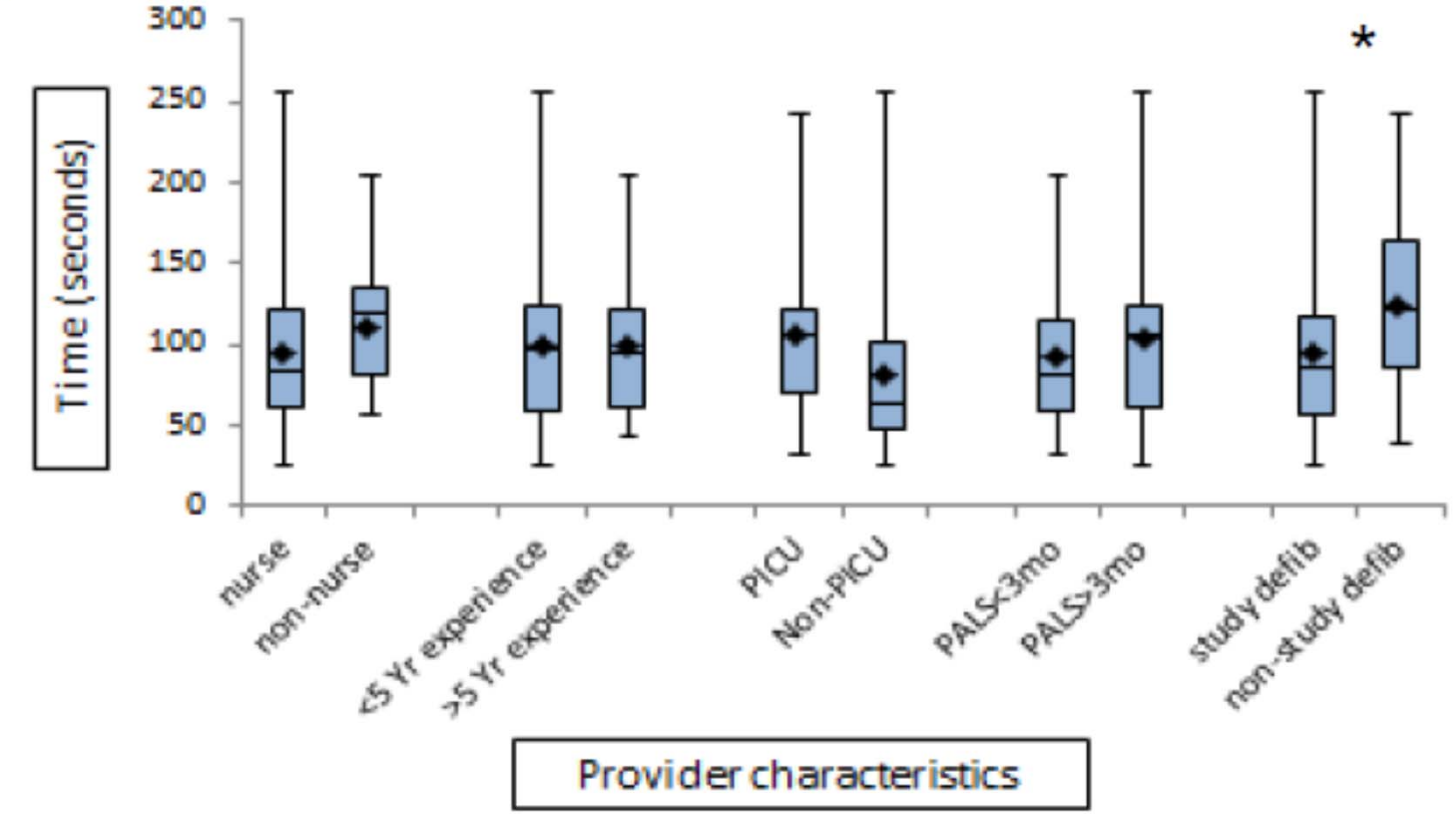


Figure 3: The bar diagram showing comparison of provider characteristics and time to shock in seconds. * = significant

The Children's Hospital of San Antonio
CHRISTUS Health

Baylor College of Medicine

RESULTS

Acute Care Providers	Number
Nurses	52
Non nurses	16
Total	68

Years of experience:<5 years- 46%,>5 years- 54%

All providers PALS trained, Last PALS certification-Median of 273 days prior to VFCA

Median time-to-shock using paddles - 97 sec (IOR:60-122.5 sec) and the median time-to-shock with pads - 77.5 seconds (IQR: 59-105 sec)

RESULTS

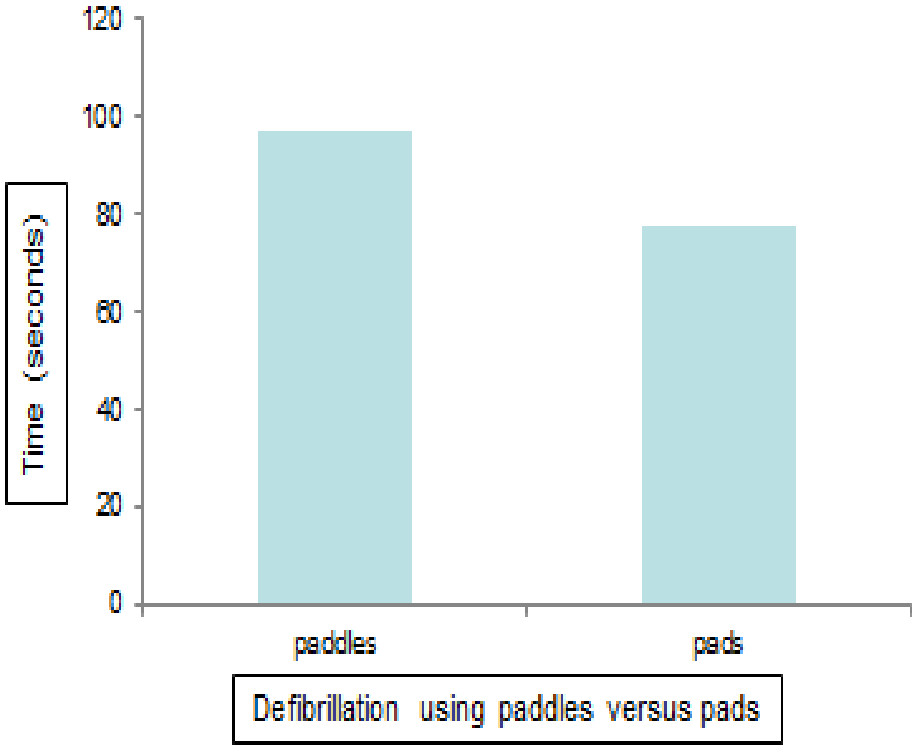


Figure 4: Time-to-shock with use of paddles Vs. pads

The Children's Hospital of San Antonio
CHRISTUS Health

Baylor College of Medicine

CONCLUSIONS

Time-to-shock by pediatric providers in VFCA is not statistically significantly longer with use of paddles as compared to pads

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HYPOTHESIS

Pediatric providers lack sufficient defibrillation skills due to human factors and machine-related factors

METHODS

Check-list for Facilitator:

Provider applied pads: Yes No

Provider used pediatric pads/paddles appropriately: Yes No

Provider selected correct energy: Yes No

Provider charged the device: Yes No

Provider announced "I am clear, you are clear, everyone is clear": Yes No

Provider applied shock: Yes No

Provider announced "Restart chest compressions": Yes No

Time to connecting the pads/paddles: __seconds

Total time to shock (Sum of all the times if able to complete all the steps):__seconds

Struggle with connecting pads/paddles: Yes No

Struggle with using pads/paddles: Yes No

Struggle with buttons on the device: Yes No

Figure 1: Check list for evaluating hands-on shock skills

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METHODS

Figure 2: Use of adult pads and paddles (top).Machine related factors (red circles) (bottom).

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RESULTS

Struggle with Machines (>10sec delay)

A significant proportion of providers struggled with connecting pads/paddles to the machine, using buttons and using pads/paddles on the manikin

38% Struggle with using pads/paddles

46% Struggle with using buttons on device

50% Struggle with connecting pads/paddles to device

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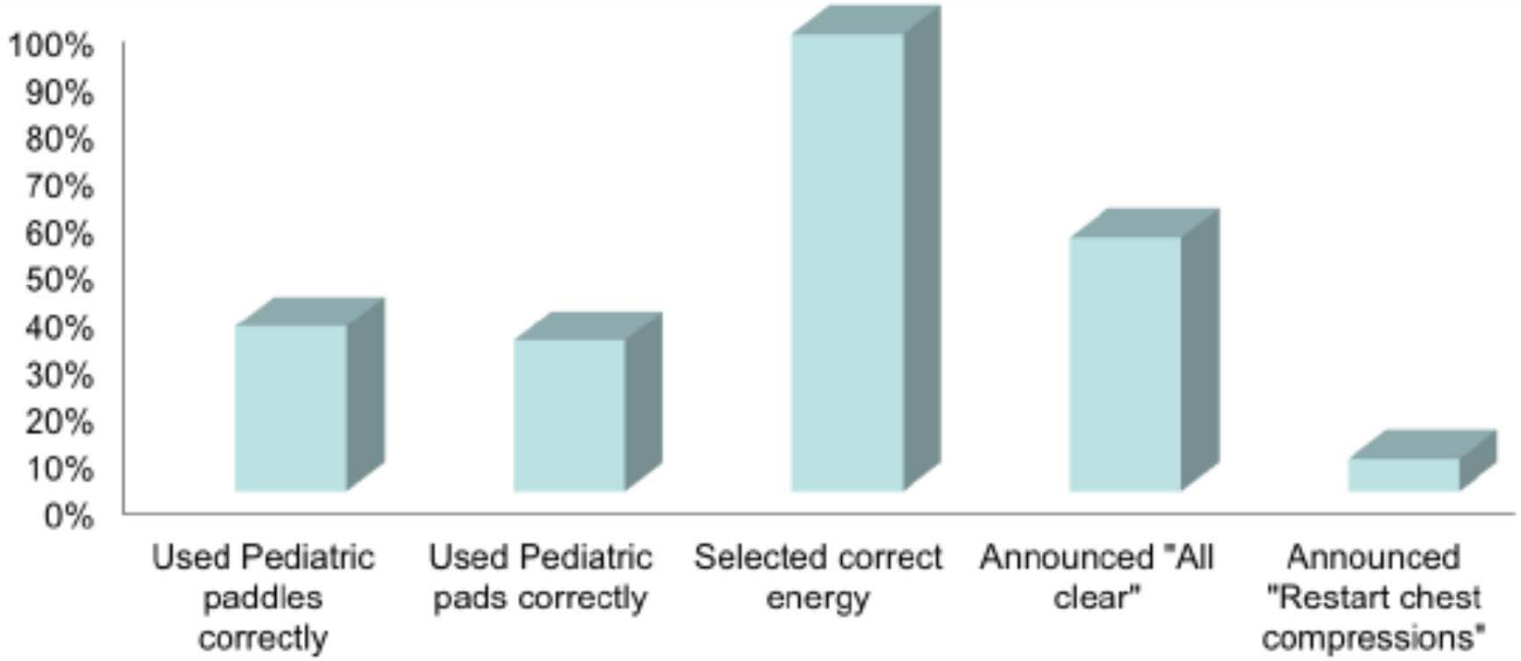
RESULTS



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CONCLUSIONS

Pediatric providers lack sufficient hands on defibrillations skills. It is associated with human and machine related factors.

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FUTURE DIRECTIONS

Future studies on hands-on defibrillation training of acute care providers

Future simulation studies on defibrillation choreography during VFCA scenario

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ACKNOWLEDGEMENTS

Special thanks to the ICU staff and other acute care providers at Children's Hospital of San Antonio

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Questions?

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of San Antonio
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Thank You!

Alan I. Fields Award

- Award Recipient
  - Two or More Years of Clinical Experience
    - **Teresa A. Allison, PharmD**, Heather Hartman, PharmD, Jennifer Gass, PharmD, Pei Jen Lin, PharmD, Kenneth Chong, PharmD, H. Alex Choi, MD, Miguel Escobar, MD.
      - *Low Dose 4-Factor Prothrombin Complex Concentrate in Reversal of Xa Inhibitors in a Neuro ICU*

Low Dose 4-Factor Prothrombin Complex Concentrate in Reversal of Xa Inhibitors in a Neuro ICU

Teresa A. Allison, PharmD, BCPS, BCCCP
Pharmacy Clinical Specialist, Neurosciences
Memorial Hermann – Texas Medical Center
Houston, Texas

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Co-Investigators

- Heather Hartman, PharmD, BCPS, BCCCP[1]
- Jennifer Gass, PharmD, MS, BCPS, BCCCP[1]
- Pei Jen Lin, PharmD[2]
- Kenneth Chong, PharmD[1]
- H. Alex Choi, MD[3]
- Miguel Escobar, MD[4]

1. Memorial Hermann – Texas Medical Center, Department of Pharmacy, Houston, TX
2. Houston Methodist Hospital, Department of Pharmacy, Houston, TX
3. The University of Texas Health Science Center at Houston, Department of Neurosurgery and Neurology, Houston, TX
4. The University of Texas Health Science Center at Houston, Department of Hematology, Houston, TX

Background

- No FDA-approved reversal agent for Xa-inhibitors
  - Andexanet alpha is under investigation
  - Dabigatran is reversed with idarucizumab (Praxibind®)
- 4-factor prothrombin complex concentrate (4PCC) is FDA approved for warfarin reversal
  - Used off-label in this pilot study
- Most commonly cited dose is 50 units/kg
- Our institution routinely uses 35 units/kg with a rounding protocol

Circulation 2011;124:1573 – 79
Circulation 2015;131:82 – 90

Objectives

- Primary objective
  - To evaluate the effectiveness of 4PCC 35 units/kg in the reversal of Xa-inhibitors in patients with head bleeds in the neuroscience intensive care unit
- Evaluated bleeding progression with computed tomography (CT)
- Hemostasis defined as a stable CT after administration of 4PCC

Methods

- Single center, retrospective, cohort study
  - Level 1 trauma center in Houston, Texas
  - 32-bed neuroscience intensive care unit (NSICU)
  - May 2013 – February 2016

- Inclusion Criteria
  - Greater than or equal to 18 years of age
  - Received a Xa inhibitor near time of admission
  - Major brain hemorrhagic event
  - Received 4PCC ~ 35 units/kg per institution protocol

Patient Demographics

	N = 38
Male, n (%)	20 (52.6)
Age, years	72.9 (13.9)
Weight, kg	80.6 (19.7)
Bleed Type, n (%)	
Traumatic Brain Injury	27 (71.1)
Intracerebral Hemorrhage	8 (21.1)
Subarachnoid Hemorrhage	3 (7.9)
Admission Glasgow Coma Score	14.5 [11, 15]
Admission APACHE II Score	17 [12.8, 25]

Data expressed as mean (SD) or median [IQR] unless otherwise specified

Patient Demographics

	N = 38
Xa Inhibitor	
Rivaroxaban	29 (76.3)
Apixaban	9 (23.7)
Indication for Xa Inhibitor	
Atrial Fibrillation	28 (73.7)
DVT/PE	7 (18.4)
Other	3 (7.9)
Antiplatelet Therapy	
Aspirin	9 (23.7)
Clopidogrel	2 (5.3)
Aspirin / Clopidogrel	3 (7.9)

Data expressed as n (%)

Results: Coagulation Labs Prior to 4PCC

Lab	Normal Values	TEG group (n = 8)	rTEG group (n = 25)
PT	12.0 – 14.7 seconds	18.1 (3.5)	17.6 (4.4)
PTT	22.9 – 35.8 seconds	33.5 (5.6)	35.4 (6.9)
INR	-	1.5 (0.4)	1.4 (0.5)
		TEG	rTEG
Split point	-	-	0.7 (0.2)
ACT	86 – 116 seconds	-	124.1 (16.9)
R-time	TEG: 5 – 10 minutes rTEG: 0.4 – 0.7 minutes	4.5 (0.9)	0.8 (0.2)
K-time	1 – 3 minutes	1.4 (0.3)	1.0 (0.2)
α-angle	53 – 72 degrees	69.3 (7.5)	77.5 (2.5)
Maximum amplitude	50 – 70 mm	65.8 (3.7)	67.6 (6.1)
G-value	4.5 – 11 K d/sc	9.8 (1.9)	10.9 (2.9)
Est % Lys	0 – 7.5 %	-	1.7 (2.9)
Lys 30	0 – 7.5 %	0.7 (1.0)	-
Coag Index	-3 – 3	2.1 (1.1)	-

Data expressed as mean (SD)

Results: Labs Prior to 4PCC

Lab	Normal Value	n = 35
Hemoglobin	14 – 18 g/dL	12.1 (1.8) g/dL
Hematocrit	42 – 54%	36.5 (5.8) %
Platelets	133 – 450 k/cm^2	228 (88) k/cm^2

Data expressed as mean (SD)

- 5/11 patients on a single anti-platelet therapy received platelets
  - 3/3 patients on dual anti-platelet therapy received platelets

Results: 4PCC and CTs

Process	Time (median [IQR])
Time between Check-in to CT, hours	1.0 [0.3, 1.8]
Time between Check-in to 4PCC Administration, hours	2.3 [1.5, 5.4]
Time between CT to 4PCC, hours	2.4 [0.9, 4.5]
Time between CT and Repeat CT, hours	6.0 [4.3, 8.1]
Time between 4PCC and Repeat CT, hours	3.7 [0.9, 6.0]

- Median [IQR] dose of 4PCC = 32.8 [27.9, 35.1] units/kg
- Repeat CT showed no progression of the bleed in 33 (86.8%) patients
- 3 of 5 patients without cessation of bleeding received a 2nd dose
  - Mean dose = 33.1 units/kg
  - All 3 had cessation of bleeding with 2nd dose

Length of Stay and Disposition

- Length of stay, median
  - ICU: 2.1 [1.5, 6.1] days
  - Hospital: 9 [3.8, 15.2] days
- Disposition
  - SNF: 14 (36.9%)
  - Home: 13 (34.2%)
  - Deceased / Hospice: 7 (18.4%)
  - LTAC: 4 (10.5%)
- 2 patients were made comfort care

Conclusions

- 4PCC 35 units/kg was associated with cessation of bleeding, clinically and radiographically, in 86.8% of patients

- No clinical evidence of adverse events

- If 4PCC continues to be used for this indication further evaluation of this dose is required

Alan I. Fields Award

- Award Recipient
  - Less than Two Years of Clinical Experience
    - **Elizabeth Franco, PharmD**, Garbo Mak, MD, Jennifer Cortes, PharmD.
      - *Duration of mechanical ventilation with non-benzodiazepine vs. benzodiazepine-based sedation*

Duration of Mechanical Ventilation in Patients Treated with Non-Benzodiazepine vs. Benzodiazepine-Based Sedation

*Elizabeth Franco, PharmD, ±Garbo Mak, MD,
*Jennifer Cortes, PharmD, BCPS, BCCCP

* Memorial Hermann – Texas Medical Center, Houston, Texas
± University of Texas Health Science Center at Houston – School of Medicine

PRESENTED AT:
Society of Critical Care Medicine
The Intensive Care Professionals

Background

- 2002 SCCM guidelines for sustained use of sedatives and analgesics
  - Benzodiazepines (BZ) as first-line agents for mechanically ventilated adults
- 2013 SCCM guidelines for management of pain, agitation and delirium
  - Analgosedation as first-line
  - Non-benzodiazepine (NBZ) sedation before BZ sedation
- Lack of comparison studies in combination sedative therapies with either NBZ or BZ-based sedation

Crit Care Med. 2002; 30: 119–141.
Crit Care Med. 2013; 41: s30–s38.

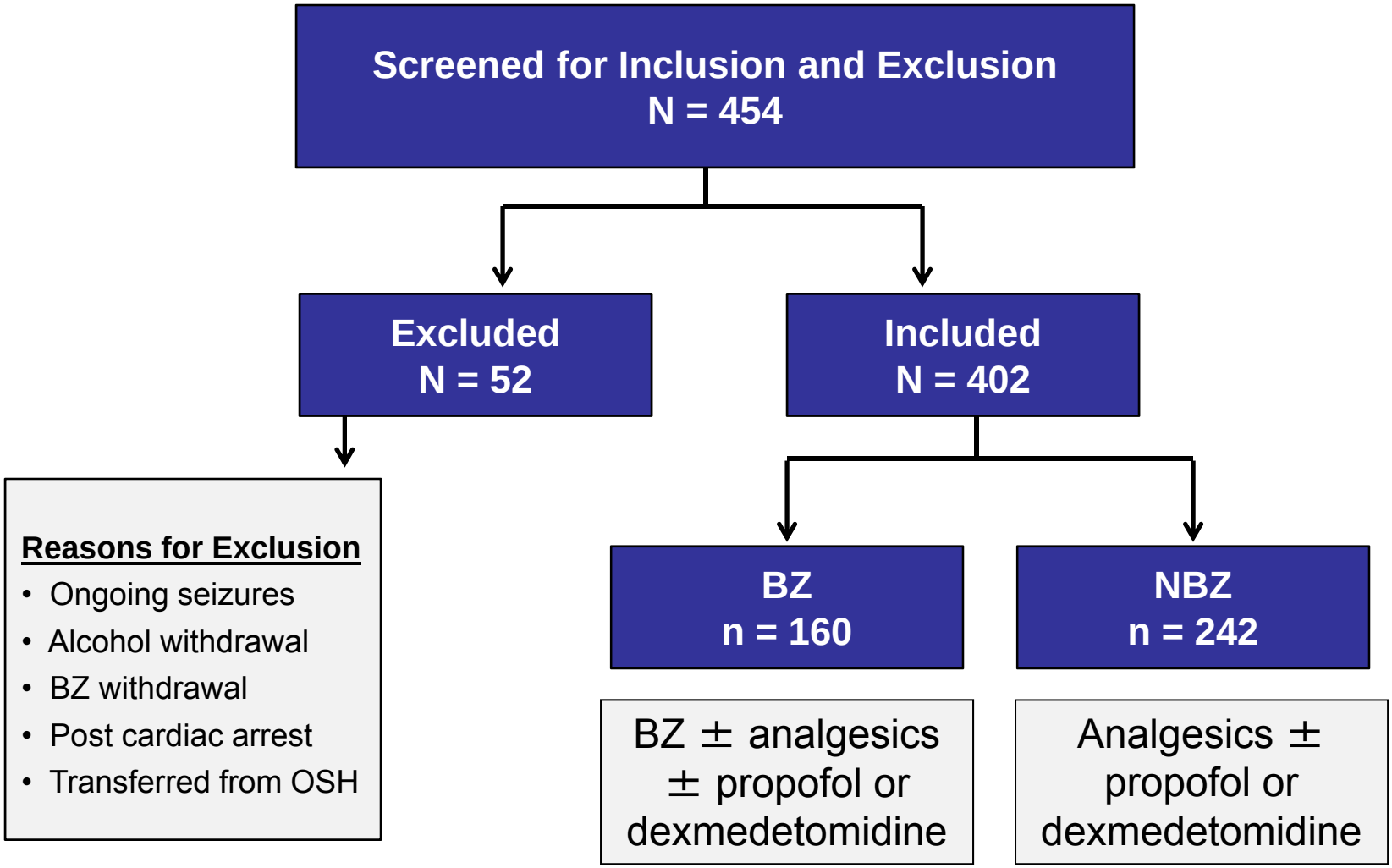
Objectives

- Primary objective
  - Duration of mechanical ventilation (MV) during the patients' ICU stay in those who received combination sedative strategies with either BZ or NBZ-based therapies
- Secondary objectives
  - ICU LOS
  - Hospital LOS
  - Prevalence of delirium

Methods

- Inclusion criteria:
  - Patients ≥ 18 years, admitted to the medical ICU (MICU), received MV > 24 hours and continuous intravenous infusion of either BZ or NBZ-based sedation
- Exclusion criteria:
  - Transferred from outside hospital/ICU, ICU readmission during same hospitalization, continuous paralysis, pregnant, tracheostomy, status epilepticus, alcohol or BZ withdrawal, comfort care, post cardiac arrest
- Statistics:
  - Continuous data- Mann-Whitney U test, Kruskal-Wallis test, Dunn-Bonferroni test
  - Categorical data- Chi-squared test

Study Population



Patient Population

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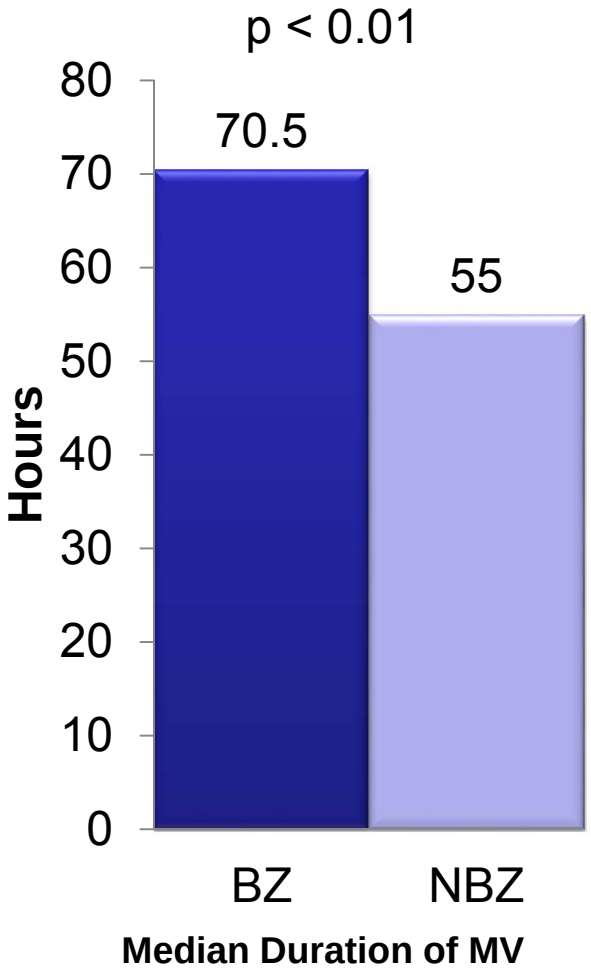
- No difference in baseline characteristics, past medical history, home medications, or admission diagnosis

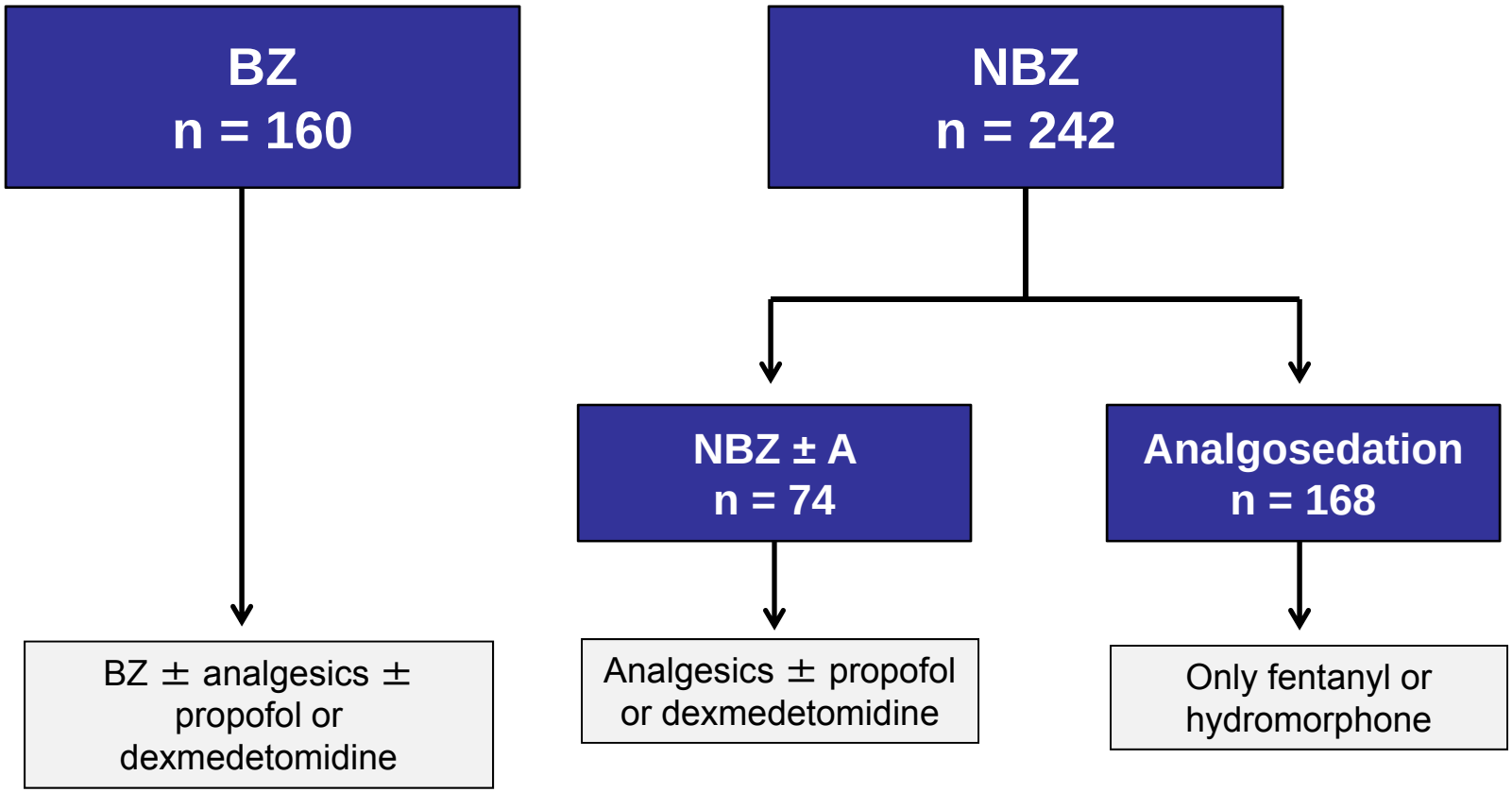
Variable	BZ (n = 160)	NBZ (n = 242)	*p*-Value
APACHE II score- *median [IQR]*	25 [21-32]	26 [21-30]	NS
Respiratory failure- *no. (%)*	36 (22.5)	64 (26.4)	NS
Bolus fentanyl (mcg)- *median [IQR]*	100 [75-275]	106.3 [50-225]	NS
No. treated *(%)*	75 (46.9)	106 (43.8)	< 0.01
Bolus hydromorphone (mg)- *median [IQR]*	2 [1-3.3]	3 [1-5]	NS
No. treated *(%)*	14 (8.7)	11 (4.5)	NS
Bolus midazolam (mg)- *median [IQR]*	5 [3.7-9]	4 [2-7]	< 0.01
No. treated *(%)*	78 (48.7)	100 (41.3)	NS

Results



Outcome- *median*	BZ (n = 160)	NBZ (n = 74)	*p*-Value
ICU LOS, *d*	4.8	3.7	< 0.01
Hospital LOS, *d*	10.3	7.5	< 0.01
Positive CAM-ICU, *no.*	65.8	50.2	< 0.01

Subgroup Analysis



Subgroup Analysis

Outcome- *median*	BZD (n = 160)	NBZ ± A (n = 74)	*p*-Value
Duration of MV (hrs)	70.5	49.4	< 0.01
ICU LOS (days)	4.8	3.7	0.04
Hospital LOS (days)	10.3	6.8	< 0.01

Outcome- *median*	BZD (n = 160)	Analgosedation (n = 168)	*p*-Value
Duration of MV (hrs)	70.5	55.9	< 0.01
ICU LOS (days)	4.8	3.7	0.02
Hospital LOS (days)	10.3	7.9	NS

Discussion

- Appropriateness of sedation goals, dosing, medication titration, and time spent within target sedation was not possible to assess
- Reason for bolus doses unknown
- Duration of MV is shorter than previously published studies
- Could not analyze any adverse events secondary to medication use

Conclusions

- This study reports a reduction in MV, incidence of delirium, ICU LOS, and hospital LOS associated with NBZ sedation
- Subgroup analysis revealed potential benefit in outcomes in both combination and analgosedation therapy
- Patients requiring MV who do not have an indication for BZ, should receive analgosedation and NBZ as first-line therapy

Duration of Mechanical Ventilation in Patients Treated with Non-Benzodiazepine vs. Benzodiazepine-Based Sedation

*Elizabeth Franco, PharmD, ±Garbo Mak, MD,
*Jennifer Cortes, PharmD, BCPS, BCCCP

* Memorial Hermann – Texas Medical Center, Houston, Texas
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PRESENTED AT:
Society of Critical Care Medicine
The Intensive Care Professionals

Alan I. Fields Award

- Award Recipient
  - Less than Two Years of Clinical Experience
    - **Amanda Holyk, PharmD**, Michael J. Melroy, PharmD.
      - *Evaluating Outcomes of Poractant alfa (Curosurf) vs. Calfactant (Infasurf) in Neonates*

Evaluating Outcomes of Poractant alfa (Curosurf) vs. Calfactant (Infasurf) in Neonates

Amanda Holyk, PharmD

PGY2 Critical Care Pharmacy Resident

Houston Methodist Hospital

Houston, TX

Disclosure Statement

- None of the authors of this presentation have information to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation.

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Background

- Endogenous surfactant produced by type II pneumocytes
- The primary role of pulmonary surfactant:
  - Decrease surface tension
- Increased surface tension can lead to:
  - Decreased compliance and lung collapse
  - Respiratory Distress Syndrome (RDS)
- Exogenous pulmonary surfactant
  - Evidence indicating reduction in morbidity and mortality
  - Decreased Hospital and ICU length of stay
- Little data directly comparing poractant alfa with calfactant
- Memorial University Medical Center (MUMC) has used both products within recent years

J Pediatr Pharmacol Ther 8.2 (2003): 97-114.
Neonatology 103.4 (2013): 353-68.
J Pulm Respir Med S13.01 (2013

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Purpose and Objectives

- To retrospectively evaluate safety and efficacy outcomes of using poractant alfa as compared to calfactant for the treatment of RDS in neonates
- Primary Outcome
  - Time on ventilator
- Secondary Outcomes
  - Length of stay
  - Number of redoses
  - Mortality/Survival rate
  - Cost of surfactant

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Methods

- Single center, retrospective electronic medical record review
  - 605 bed teaching hospital
  - Level III NICU
    - 62 beds
- Date range
  - Calfactant: March - September 2015
  - Poractant alfa: March - September 2014
- IRB approved

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Methods

- Inclusion Criteria
  - Neonates born before 34 weeks' gestation
  - 500-2000g
  - ≥ 1 dose(s) of calfactant or poractant alfa within 48 hours of life
  - RDS within 15 hours of life
- Exclusion Criteria
  - Meconium aspiration syndrome
  - Early onset B streptococcal pneumonia
  - Death before 7 days of life
  - Congenital malformation
  - Pulmonary hemorrhage

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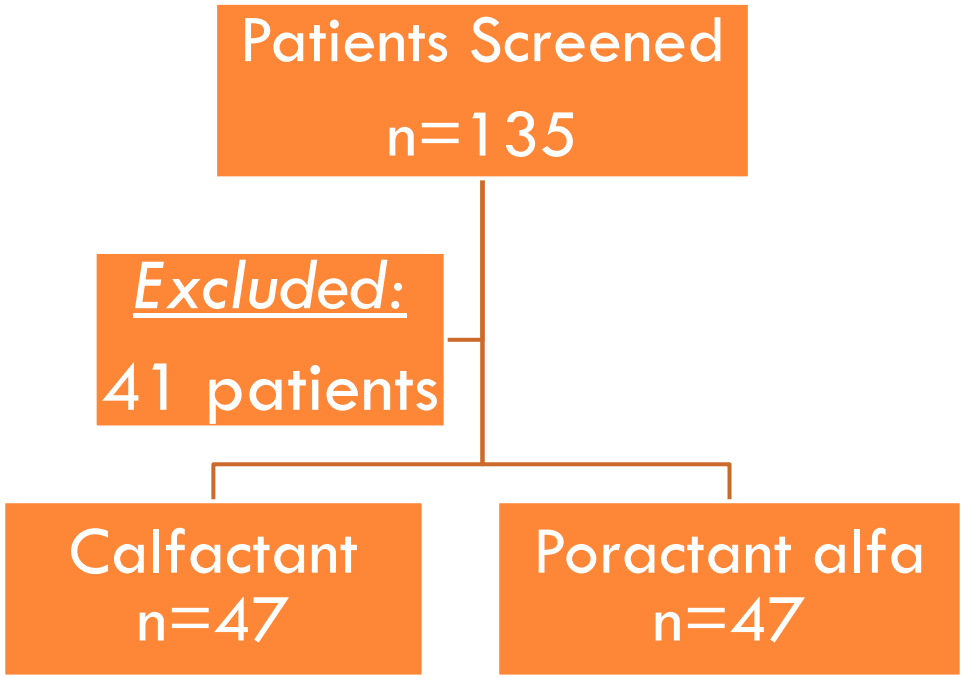
Results



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Baseline Characteristics

	Poractant alfa (n = 47)	Calfactant (n = 47)	p-value
Gender (% male)	49	53	0.6750
Gestational Age (wks.) (μ±SD)	28. 7 ± 2.5	28.5 ± 3	0.8367
Body weight (g) (μ±SD)	1129.4 ± 403.4	1105.6 ± 390	0.7726

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APGAR Severity Score

- Used to categorize the status of a newborn infant right after birth and post-resuscitation if needed

	Poractant alfa (n = 47)	Calfactant (n = 47)	p-value
APGAR 1 min (μ±SD)	4.8 ± 2.7	4.1 ± 2.6	0.2445
APGAR 5 min (μ±SD)	6.9 ± 1.7	6.6 ± 2.2	0.3460
APGAR 10 min (μ±SD)	7 ± 1.6	5.8 ± 1.9	0.0669

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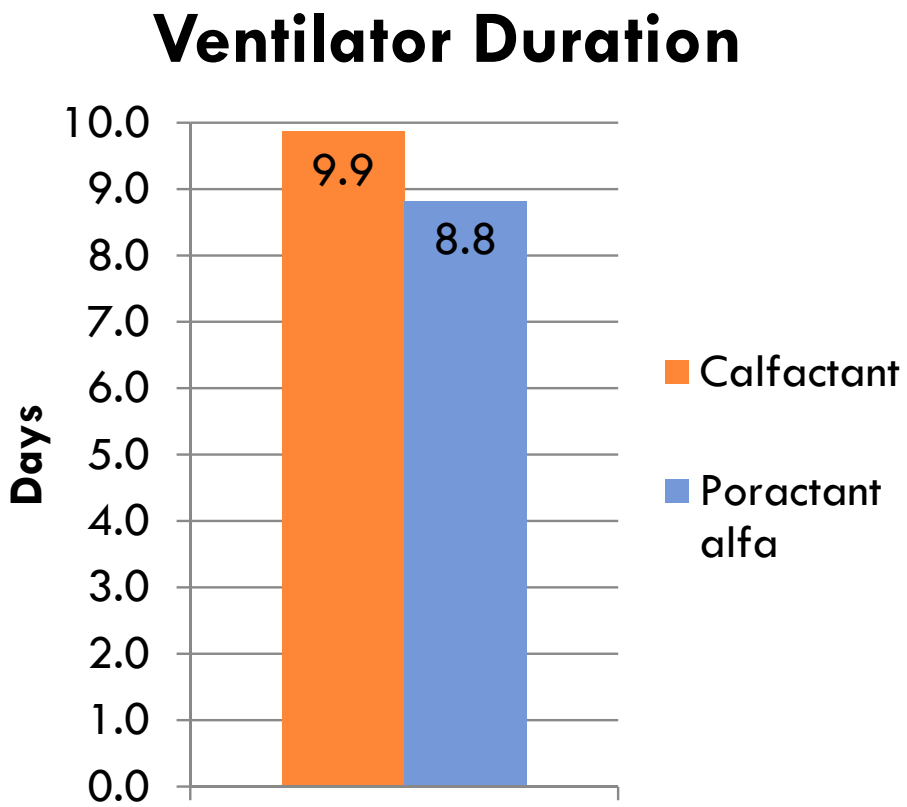
Results: Primary Outcome



p-value = 0.2346

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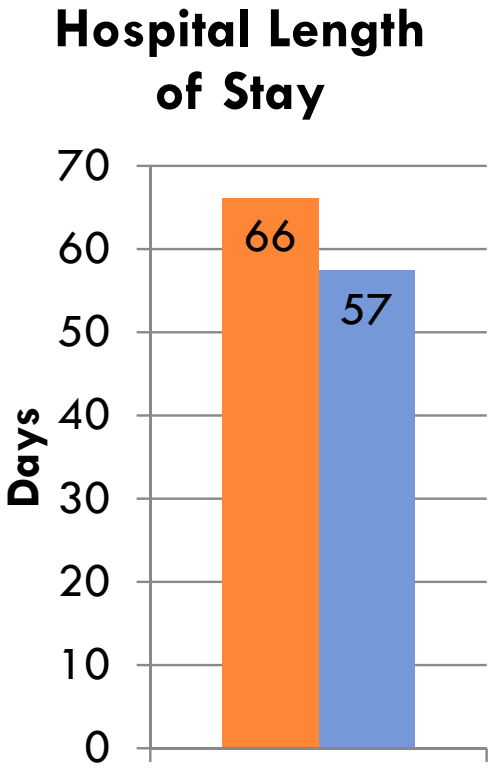
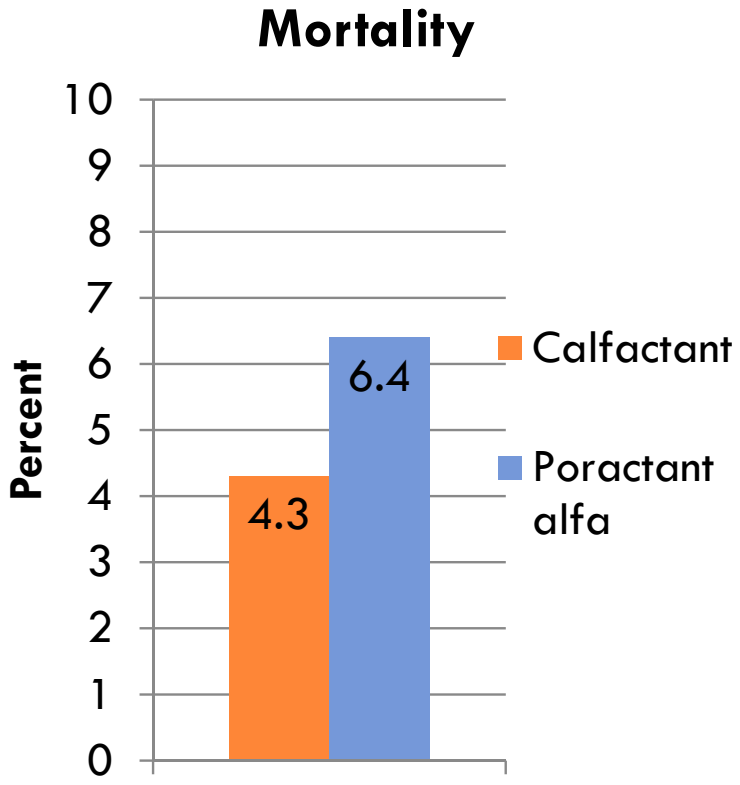
Results: Secondary Outcomes



p-value = 0.6187



p-value = 1.0000

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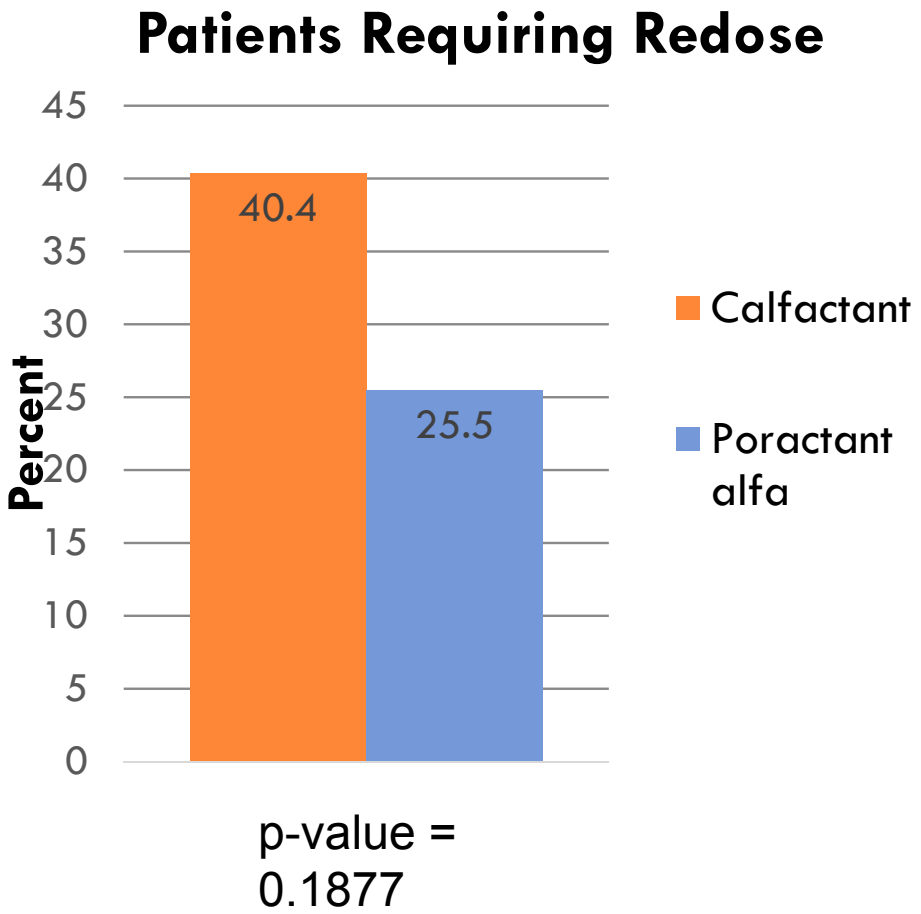
Results: Secondary Outcomes



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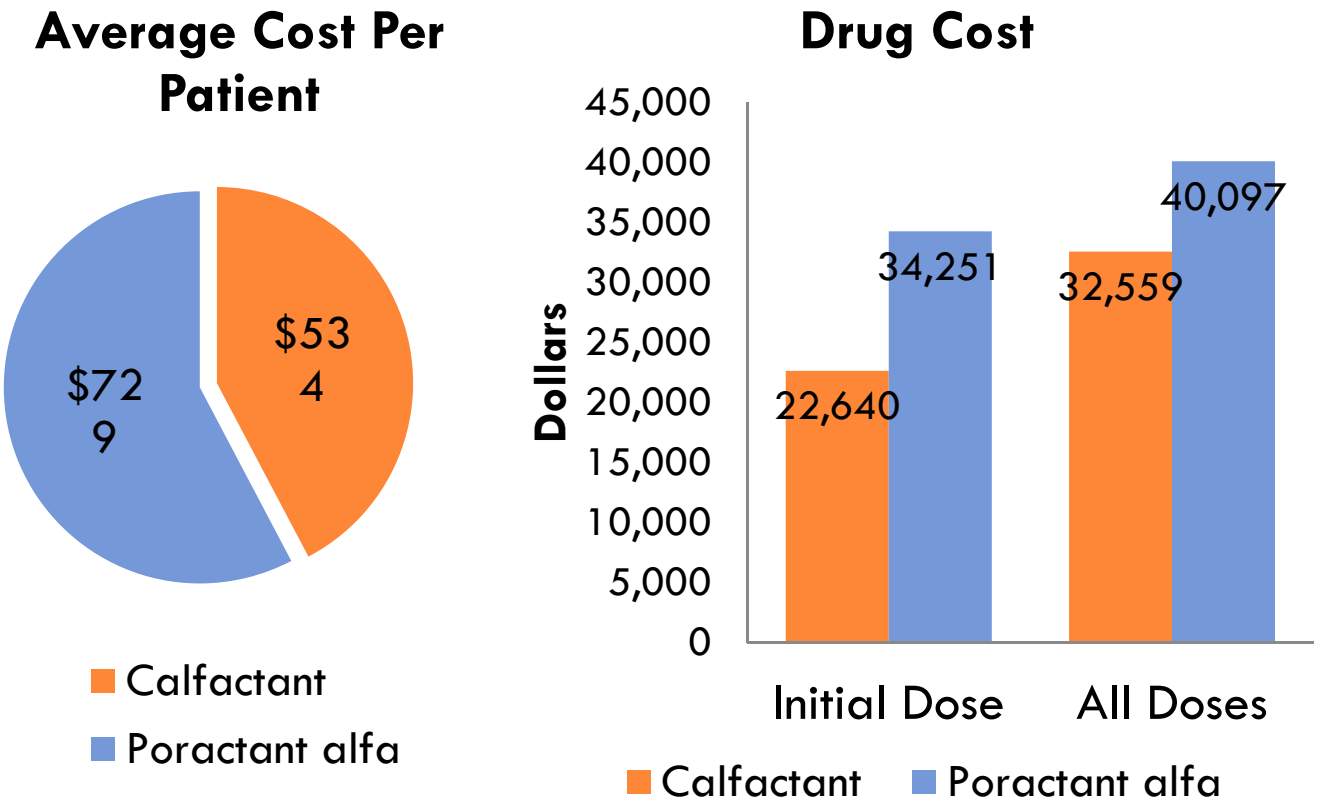
Results: Secondary Outcomes



Total difference after redoses: $7,538

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Discussion

- Although poractant alfa was associated with fewer days of mechanical ventilation and a reduced length of stay, these results were not statistically significant, but may be of clinical significance.
- Fewer redoses of poractant alfa were required, narrowing the overall cost differential to $7,538 for a six month period.
- Strengths
  - Well designed, robust data collection
  - Addresses a void in literature
  - Useful cost and redose information
- Limitations
  - Small sample size (n = 94)
  - Two different electronic medical record systems
  - Unable to determine incidence of reflux

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Conclusion

- This analysis was unable to definitively determine which surfactant is associated with optimal patient outcomes, but the results may be utilized with other available information to aid in the overall clinical picture.

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Acknowledgements

- Dr. Mike Melroy
- Dr. Brad Buckler
- Society of Critical Care Medicine- Texas Chapter

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AWARDS Committee

- Chair: Lisa Beil, MSN, APRN, AGACNP-BC, ACNS-BC

- Committee Members
  - Tiffany Mundie, MSN, APRN, ACNP-BC, CCRN
  - Vi Nguyen, OTR, MOT, RRT

- Charge
  - To recognize SCCM TX Chapter members for their contributions to the Chapter and care of critically ill patients
  - Facilitate nomination process for deserving SCCM TX Chapter members for national SCCM awards

AWARDS Committee

- Award Categories
  - Outstanding Member Awards (up to 5 awards – 1 per region)
    - Houston: Lan Bui, PharmD, BCPS
    - Dallas/Fort Worth: Jennifer Roth, PharmD, BCPS, BCCCP
    - San Antonio: Utpal Bhalala, MD, FAAP
  - Excellence in Service Awards (up to 3 awards)
    - Clinical Practice: Wendi Jones, MSN, RN, ACNP-BC
    - Education: Daniel Arellano, MSN, RN, CCRN, ACNP-BC
    - Research Quality Improvement: Petra Grami, MSN, RN, CCRN, NE-BC, CVRN

Executive Committee Award

- Distinguished Service Award
  - Brian Burleson, PharmD, BCPS
    - Communications Committee Chair (2015)
    - Concise and thorough committee reports
    - Exceptional attendance at Exec Council meetings
    - Frequent attendance at chapter meetings
    - Coordinates communication for all 4 major regions throughout TX
    - Responsive to all requests from Exec Council
    - Expanded delegation of duties amongst his committee

SCCM Texas Chapter
Financial Status

- 2016 Financial Margin
  - ~$24,000 positive (Jan 1st, 2016 to Dec 31st, 2016)

- Chapter remains in good standing with IRS and Texas Secretary of State's Office for nonprofit status

2016 Elections

First . . . Thank You!

- Nominations Committee
  - Chair: Michael Bocci, BS, RRT, RCP
    - Rebecca Attridge, PharmD, MSc, BCPS
    - Olga Rodriguez, RN
    - Bridgett Sterling, RN, MSN, MHA, DNP
    - Laura Withers, MBA, RRT
- Communications Committee
- All SCCM TX Chapter members who nominated a colleague
- All nominees

SCCM TX Chapter – Executive Committee 2017

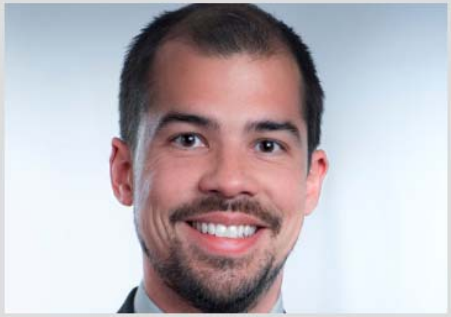
Executive Committee

MATTHEW A. WANAT, PHARMD, BCPS, BCCCP
President

MARY LOU WARREN, DNP, RN, CNS-CC, FCCM
President-Elect

SHARLA TAJCHMAN, PHARMD, BCCCP, BCNSP
Treasurer

DARRELL ALLEY, MD, MBA, FACS
Secretary



MICHAEL SIRIMATUROS, PHARMD, BCNSP, BCCCP, FCCM (2016-17)
Immediate Past President

Welcome New Officers!

- President-Elect (3-year term)
  - Mary Lou Warren, DNP, RN, CNS-CC, FCCM (Houston)
- Secretary (2-year term)
  - Darrell Alley, MD, MBA, FACS (Houston)

- Board of Directors (3-year terms)
  - Physician Representatives
    - Utpal Bhalala, MD, FAAP (San Antonio)
    - Olakunle Idowu, MD (Houston) (filling 1-year vacancy)
  - At-Large Representatives
    - Daniel Arellano, MSN, RN, CCRN, ACNP-BC (Houston)
    - Rebeca Halfon, PharmD (Houston)

Looking Ahead in 2017

Looking Ahead in 2017

- Increasing Member Benefits
  - Research Awards (Alan Fields Award & Symposium Award)
  - Congress Scholarships (2018 Congress in San Antonio)
  - Student Scholarships
  - ICU Quality Improvement/Research Grants
  - Social events in each region

- Increased Non-industry Sponsored Meetings
  - Non-branded talks, in each of our 4 regions
  - Allows opportunities for Texas Chapter Members to give lectures
  - Allows members to attend that previously couldn't

Looking Ahead in 2017

- Establish SCCM Texas Chapter Speakers Bureau
  - Database of Texas Chapter Members (content experts)
  - May be used for speaking at local meetings, annual symposium or SCCM congress
  - Many opportunities for chapter members
- Advances in Technology
  - Web conferencing solutions for Exec/BOD meetings and chapter meetings
  - Symposium technology (registration, mobile app, etc)

Questions?

- Have you joined a committee?
  - Want to get involved…but don't know how…talk to us!!!
- Do you have any suggestions for changes?
- Do you have any recommendations for how to recruit and retain members?
- Are you getting the most out of your membership?