Get With The Guidelines®-Resuscitation PMT® Updates

October 31, 2018

Presenter:
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Heart.org/Resuscitation

Tia T. Raymond, M.D.

PEDIATRIC CARDIOLOGY

Dr. Tia Raymond is a board-certified pediatric cardiac intensivist who primarily treats patients in the cardiac intensive care unit who have congenital or acquired heart disease. She focuses on treating children before and after heart surgery and has a dedicated mission to obtain the best possible outcomes in cardiac critical care. Through continuous study, lecturing, and research participation, she remains current in innovative management techniques, and invasive/noninvasive diagnostic and interventional technologies.

Dr. Raymond has worked in the Congenital Heart Surgery Unit at Medical City Children's Hospital for more than 10 years. She has served as a volunteer for the American Heart Association's Get With the Guidelines-Resuscitation and the emergency cardiovascular care committee, and she actively participates in updates for the pediatric advanced life support guidelines. A Fellow of the American Academy of Pediatrics and the American Heart Association, her research publications focus on in-hospital resuscitation, cardiac intensive care, and quality improvement. She is often sought after for her expertise in pediatric cardiac critical care, including advanced treatment for heart failure and the use of extracorporeal membrane oxygenation. Dr. Raymond, a Dallas native, is married and has two young sons.

EDUCATION

B.S., Pepperdine University; M.D., University of Texas Southwestern Medical School; Internship and Residency, Children's Medical Center Dallas; Fellowship, Texas Children's Hospital/Baylor College of Medicine; Specialty Training, Texas Children's Hospital

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Summary of Updates

- ARC Form Updates (August 2018)

- Other Form Updates (August 2018)

- New Code Blue Measure Group (October 2018)

- Tutorial for creating PowerPoint Slides for the Code Blue Measures

- Updated Quality, Descriptive and Reporting Measures

- Minor updates (October 2018)

- New CSV Uploader – MET Form (October 2018)

- New Site Characteristics: IHCA Incidence Tracking (October 2018)

ARC Form Updates: Vital Signs

Instead of all vital signs within 4 hours of the event, we are asking for the last set of vital signs within 4 hours of the event.

REQUIRED: Enter last set of vital signs within 4 hours of event. —

Date/Time	Heart Rate	Systolic BP	Diastolic BP	Respiratory Rate	SpO2	Temp	Units
	❏ ND	❏ ND	❏ ND	❏ ND	❏ ND		❏ ND

ARC Form Updates: Pre-existing Conditions

Under Pre-existing conditions, "Septicemia" was moved to Historic and replaced with "Sepsis"
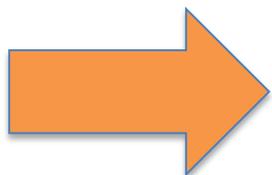
ARC 2.2 PRE-EXISTING CONDITIONS

Pre-existing Conditions at Time of Event (check all that apply)

- ☐ None
- ☐ Acute stroke
- ☐ Cardiac malformation/abnormality - acyanotic (pediatric and newborn/neonate only)
- ☐ Congenital malformation/abnormality (Non-Cardiac) (pediatric and newborn/neonate only)
- ☐ Congestive heart failure (prior to this admission)
- ☐ Hepatic insufficiency
- ☐ Major trauma
- ☐ Metabolic/electrolyte abnormality
- ☐ Myocardial ischemia/infarction (prior to this admit)
- ☐ Renal insufficiency
- ☐ Sepsis

- ☐ Acute CNS non-stroke event
- ☐ Baseline depression in CNS function
- ☐ Cardiac malformation/abnormality - cyanotic newborn/neonate only)
- ☐ Congestive heart failure (this admission)
- ☐ Diabetes Mellitus
- ☐ Hypotension/hypoperfusion
- ☐ Metastatic or hematologic malignancy
- ☐ Myocardial ischemia/infarction (this admission)
- ☐ Pneumonia
- ☐ Respiratory insufficiency

ARC Form Updates: Interventions Already in Place Part A

- Aligned with CPA 2.3 Interventions Already in Place
  - Moved "IIP Invasive airway", "Mechanical ventilation", "Nebulized therapies" to Historic
  - Added new elements: "Non-invasive assisted ventilation", "Intra-arterial catheter", "Conscious/procedural sedation"

ARC 2.3 INTERVENTIONS ALREADY IN PLACE
Interventions ALREADY IN PLACE when need for emergency assisted ventilation was fi

Part A: ☐ None

☐ Non-invasive assisted ventilation
    ☐ Bag-Valve-Mask
    ☐ Mask and/or Nasal CPAP
    ☐ Mouth-to-Barrier Device
    ☐ Mouth-to-Mouth
    ☐ Laryngeal Mask Airway (LMA)
    ☐ Other Non-Invasive Ventilation: (specify) ▭
☐ Intra-arterial catheter
☐ Conscious/procedural sedation
☐ End Tidal CO2 (ETCO2) Monitoring
☐ Supplemental oxygen (cannula, mask, hood, or tent)
☐ Invasive assisted ventilation, via an:
    ☐ Endotracheal Tube (ET)
    ☐ Tracheostomy Tube

Select Method(s) of confirmation used to ensure correct placement of Endotracheal Tube (ET) apply):
  ☐ Waveform capnography (waveform ETCO2)
  ☐ Capnometry (numeric ETCO2)
  ☐ Exhaled CO2 colorimetric monitor (ETCO2 by color change)
  ☐ Esophageal detection devices
  ☐ Revisualization with direct laryngoscopy
  ☐ None of the above
  ☐ Not Documented

Monitoring:
☐ Apnea
☐ Apnea/bradycardia
☐ ECG
☐ Pulse oximetry

Vascular access: ○ Yes ○ No/Not Documented ©
Any vasoactive agent in place? ○ Yes ○ No/Not Documented ©

ARC Form Updates: Interventions Already in Place Part B

OPTIONAL: Part B: ☐ None

☐ Chest tube(s)
☐ Dialysis/extracorporeal filtration therapy (ongoing)
☐ Extracorporeal membrane oxygenation (ECMO)
☐ Implantable Cardiac Defibrillator (ICD)
☐ Inhaled nitric oxide therapy
☐ IV/IO continuous infusion of antiarrhythmic(s)
☐ Prostaglandins - continuous infusion (newborn/neonate)
☐ Other prior interventions in place, specify:

New data elements

ARC Form Updates: Event and Other Interventions Tabs

Event Tab:
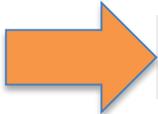
Was there an emergency airway team called?   ○ Yes ○ No ○ Not Documented ©

Added new element

Other Interventions Tab:
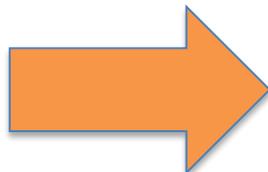
Moved "Drug Int Dextrose bolus" and "Drug Int Sodium Bicarbonate" to Historic

Drug Interventions (check all that apply)
- ☐ None (review options below carefully)
- ☐ Bronchodilator: Inhaled
- ☐ Bronchodilator: Sub Q or IV/IO
- ☐ Calcium chloride/Calcium gluconate
- ☐ Fluid bolus for volume expansion
- ☐ Magnesium sulfate
- ☐ Neuromuscular blocker/muscle relaxant
- ☐ Prostaglandin E1 (PGE)
- ☐ Reversal agent
- ☐ Sedative/induction agent
- ☐ Other drug interventions

Other Form Updates

CPA Newly born:
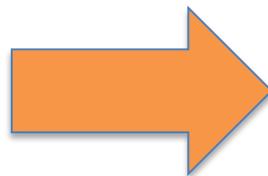
Moved "Apnea" and "Apnea/bradycardia"

from Historic to CPA 2.3

Admission/Discharge:

Added 4 Warnings for Admit and

Discharge CPC & PCPC fields

Monitoring:
- [ ] Apnea
- [ ] Apnea/bradycardia
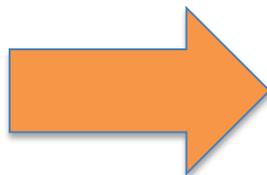
CPC/PCPC Scoring Definitions

Admission CPC:	[ ]	☑ Unknown/Not Documented/Not Applicable
Admission PCPC:	[ ]	☑ Unknown/Not Documented/Not Applicable (newborn)

Show/Hide

If patient survives to discharge

CPC at Discharge:	[ ]	☑ Unknown/Not Documented
PCPC at Discharge:	[ ]	☑ Unknown/Not Documented

Admission CPC Unk:
We recommend entering CPC/PCPC score for all patients. Information is often found in PT or OT otes, nutrition, neurology, and discharge notes.
QADMDIS500

Admission PCPC Unk:
We recommend entering CPC/PCPC score for all patients. Information is often found in PT or OT otes, nutrition, neurology, and discharge notes.
QADMDIS501

CPC at Discharge Unk:
We recommend entering CPC/PCPC score for all patients. Information is often found in PT or OT otes, nutrition, neurology, and discharge notes.
QADMDIS502

PCPC at Discharge Unk:
We recommend entering CPC/PCPC score for all patients. Information is often found in PT or OT otes, nutrition, neurology, and discharge notes.
QADMDIS503

Changes to Configurable Measure Reports

- Add Code Blue measure bundles: Adult, Pediatric, Neonate/Infant, Newly Born

Cross Form and Admission & Discharge Measures:	Select Measure ▼
CPA Special Measure Sets:	Select Measure **Code Blue (Adult)** **Code Blue (Pediatric)** **Code Blue (Neonate/Infant)** **Code Blue (Newly Born)**
Historic Measures:	

- Add "Advanced Reporting" links after the measures drop-downs for easy access to the Frequency of Even Risk Adjusted Survival to Discharge

CPA Special Measure Sets:	Select Measure ▼
Historic Measures:	Select Measure ▼
Advanced Reporting:	Frequency of Events Report Get With The Guidelines-Resuscitation Risk Adjusted Survival to Discharge Report
Format:	▼

Code Blue – Adult, Pediatric, and Neonate/Infant

New Measures

- CPA: Event Location

- CPA: Illness Category

- CPA: Day of the Week

- CPA: Hour of Day in two-hour increments

- CPA: Subject Type

- CPA: Age

- CPA: Event Survival (ROC)

Existing Measures

- CPA: Survival to Discharge

- CPA: Initial Rhythm

- CPA: Time to first shock <= 2 min for VF/pulseless VT first documented rhythm (all patients)

- CPA: Time to IV/IO epinephrine <= 5 minutes for asystole or Pulseless Electrical Activity (PEA)

- CPA: Percent Pulseless Cardiac events monitored or witnessed

- CPA: Confirmation of airway device placement in trachea

Code Blue – Newly Born

- CPA: Event location

- CPA: Illness Category

- CPA: Day of the week

- CPA: Hour of Day in two-hour increments

- CPA: Subject type

- CPA: Age

- CPA: Event survival (ROC)

- CPA: Survival to discharge

- CPA: Initial Rhythm

- CPA: Percent pulseless cardiac events occurring in an ICU setting versus a ward setting

- CPA: Confirmation of airway device placement in trachea

Benchmarks

REPORT 1

Recognition Measures:	CPA: Time to first shock <= 2 min for VF/pulseless VT first documented rhythm ▼
CPA & PCAC Measures:	Select Measure ▼
ARC Measures:	Select Measure ▼
MET Measures:	Select Measure ▼
Cross Form and Admission & Discharge Measures:	Select Measure ▼
Historic Measures:	Select Measure ▼
Format:	Bar Chart ▼

CPA: Percent of initially pulseless events with VF/pulseless VT first documented rhythm with time to first shock <= 2 minutes.

Because we do not measure seconds, this measure reflects output exactly according to the ACLS guidelines. It includes all times from 0 minutes to 2 minutes and 59 Seconds (one second short of 3 minutes). We do not use "3 minutes" in the measure description because if we used "3 minutes" then it would include 0 minutes to 3 minutes 59 seconds (one second short of 4 minutes). ECC (developers of the ACLS courses), our volunteers, and TJC in developing their CA proposed measures made the decision that <= 2 minutes was in compliance with the existing studies not the minute longer of <= 3 minutes.

Compare to:
(ctrl-click to select multiple)

- My Hospital
- Academic Hospitals
- All Hospitals
- All OH Hospitals
- Bed Size for CPA - 500+ Beds
- Bed Size for MET - 300+ Beds
- Children's Hospital Members
- East North Central Hospitals
- Midwest Region Hospitals
- Newborn/neonate Levels - Level IIIc
- Pediatric Beds - < 100 Beds
- Pediatric only hospitals - Yes

Benchmark groups continue to be selected by site for relevance.

Add Another Report

Tutorial: Creating PowerPoint slides

To share your code blue report group, you may want to place the graphs or tables into PowerPoint slides.

1. After generating a report bundle, **select "print"** (note: because there are 13 reports being downloaded, it does take a few seconds or more to generate)

Print | **Export to Excel** | **Export to .csv**

2. Next, the option to open or save appears. Select "open".

What do you want to do with MeasureResults-342237-30-Oct-2018-215336.pdf?
From: heart.irp.iqvia.com

Open   Save   ⌄   Cancel   ✕
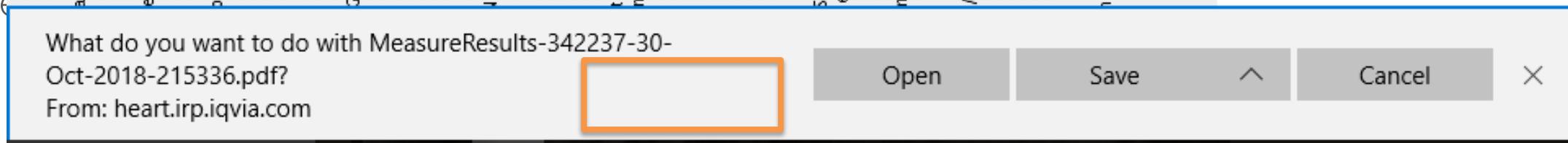
Tutorial: Screen Capture Option 1

1. If you have a screen grabbing tool, such as "Snipping Tool" or "SnagIt" or the print screen button, you may choose any of those to copy the graphs and paste them into a PPT slide. If you choose this method, you may need to reduce the size of the image within the .pdf. **Click on the "zoom" minus sign** until you reach a desired size.
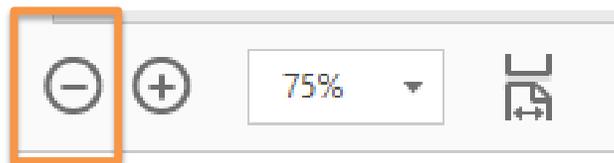
Tutorial: Screen Capture Option 1

4. Next, use your screen capture program of choice to select the graph or table image, then **copy (ctrl + c) and paste (ctrl+v)** into a PowerPoint slide.

5. You can resize, crop, or format your image within PowerPoint.

6. **Repeat these steps** for each graph or table you'd like in your PPT.

CPA: Event Location
Histogram breakdown of event location
Time Period: Jan 2018 - Sep 2018; Site: AHA National Demo Site (59274)
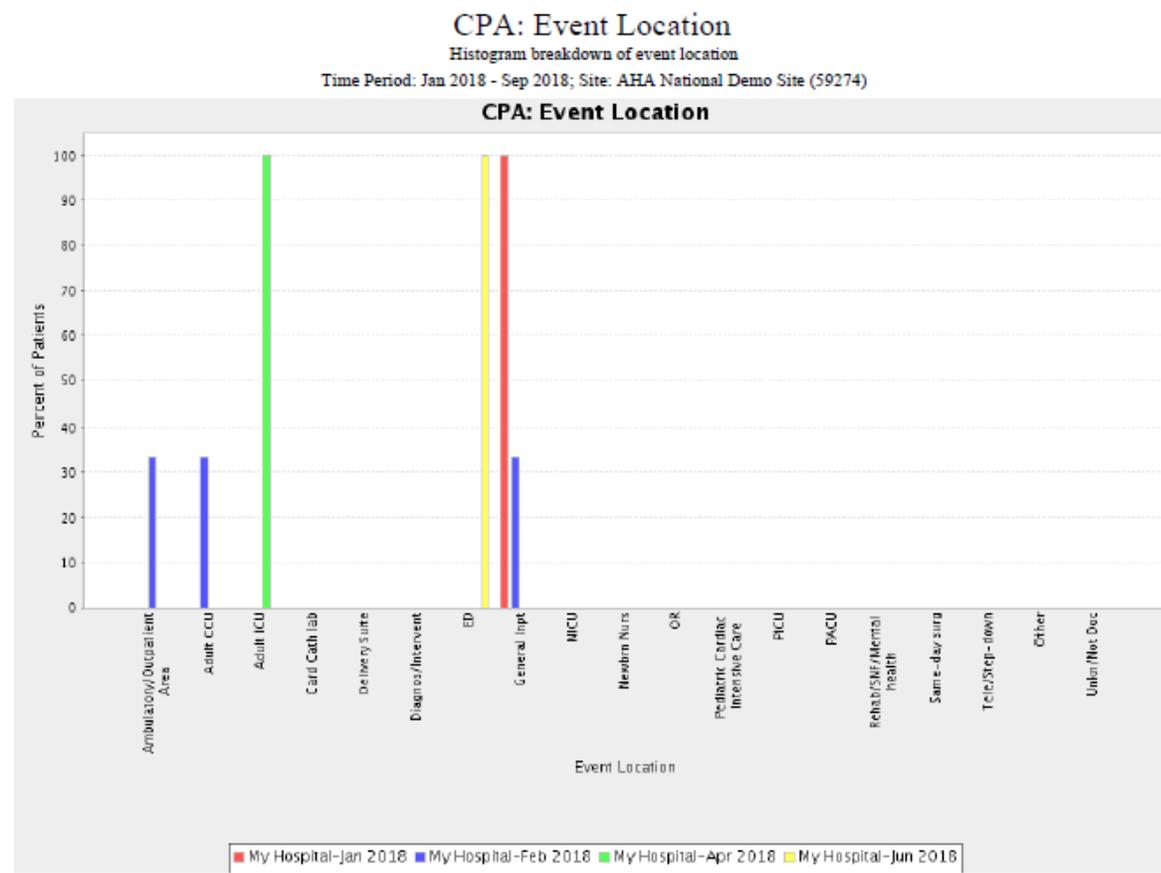
Tutorial: Screen Capture Option 2

Or, you may find it easier to open PowerPoint and use the "Screen Clipping" tool to insert an image of the slide or table.

1. Open PowerPoint

2. Then, make sure the pdf of your **code blue report is open, the minimize it.**

3. Next, in PPT, **go to "Insert" then "Screenshot"**
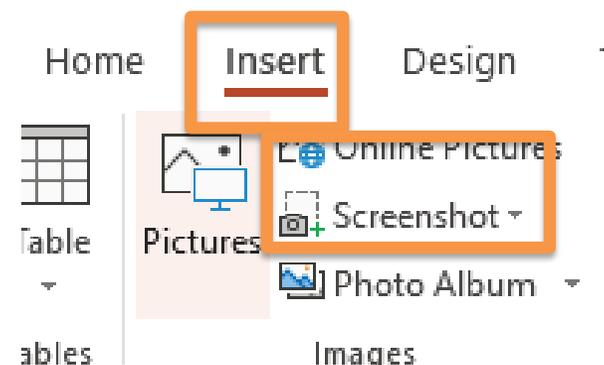
Tutorial: PPT Screenshot

6. Now you will **select** "Screen clipping"

7. You can resize and crop the image once it appears on your PPT slide.

8. **Repeat these steps** for each graph or table you'd like in your PPT.
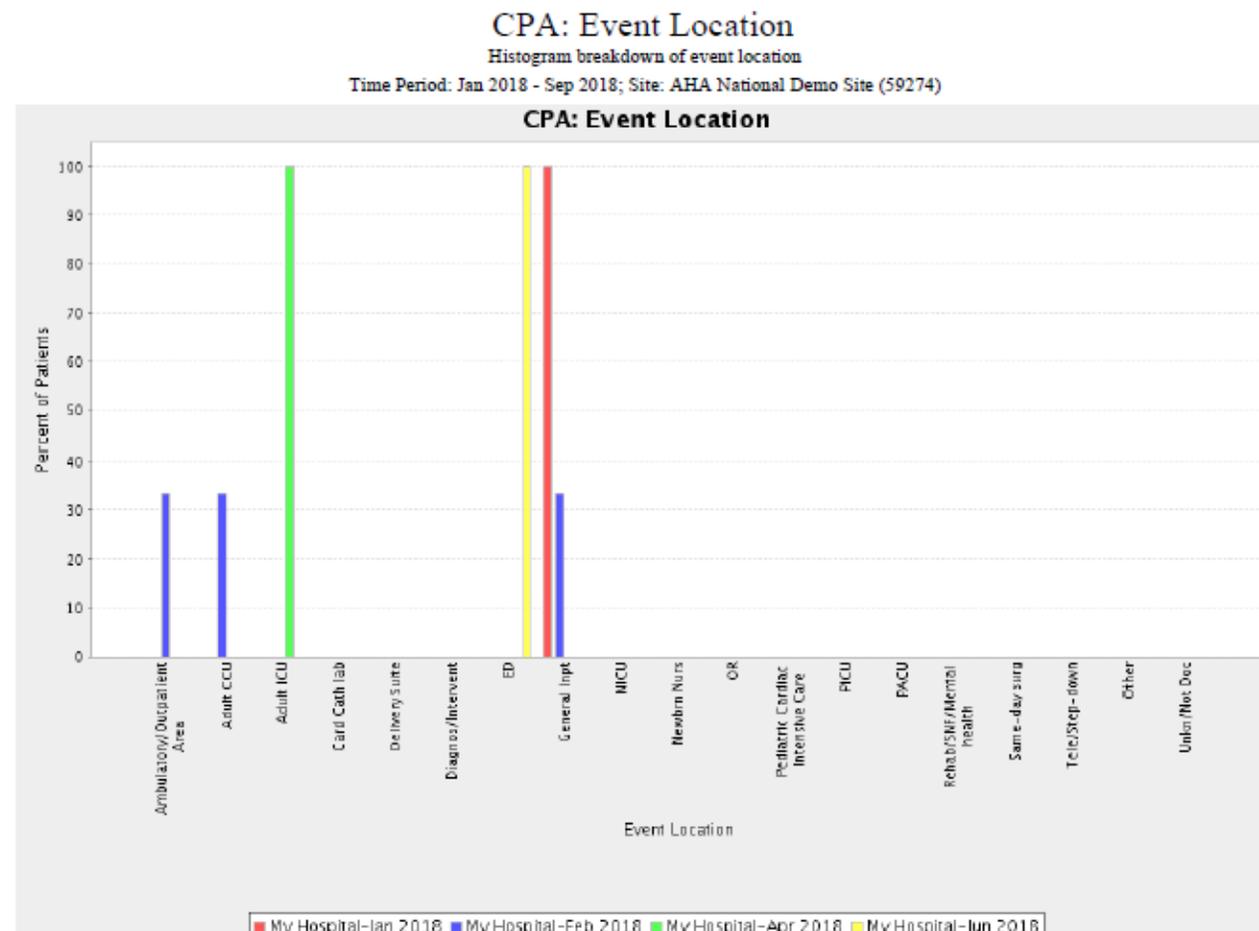
Tutorial: Screen Capture Option 3

Some Adobe programs allow for exporting directly into PPT.

1. Click on **"Export PDF"**
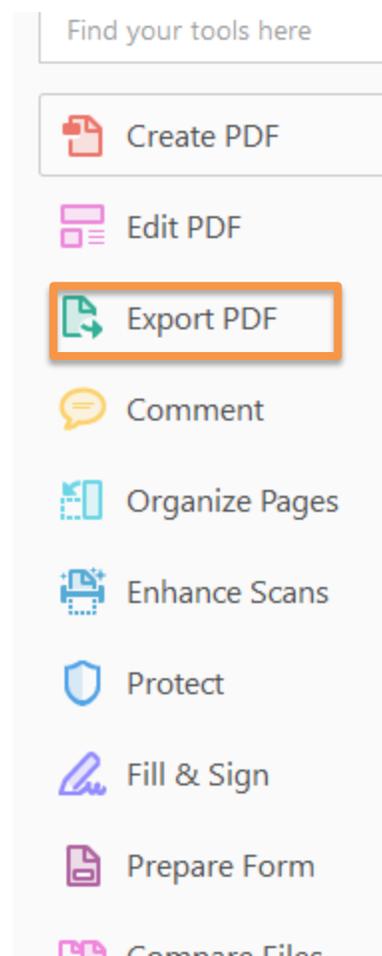
Tutorial: Export to PPT

2. Then, select "PowerPoint"

3. Then, "Export"

Export your PDF to any format

Microsoft Word

Spreadsheet

Microsoft PowerPoint

Image

HTML Web Page

More Formats

PowerPoint presentation

MeasureResults-34223....pdf

Export

Tutorial: Export PDF to PPT

1. A new window will appear and you will need to **save the export**. (Make sure the **"open file after export"** box is checked)

2. **Save your PPT** to your desired location

3. Once saved, the PPT will open with the graphs and tables formatted to fit onto each slide (next slide shows a sample)
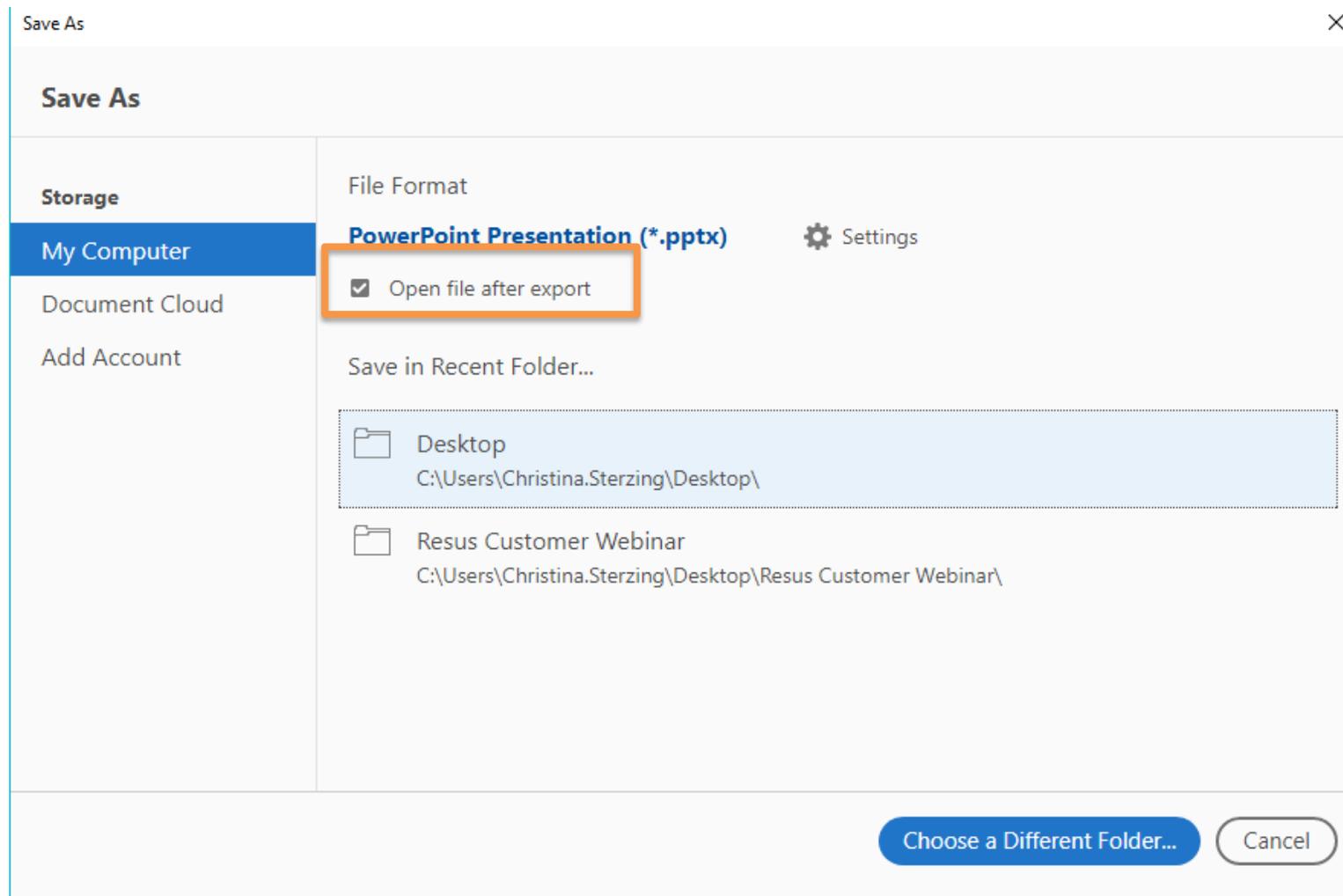
CPA: Day of the Week
Histogram breakdown of Day of Week
Time Period: Jan 2018 - Sep 2018; Site: AHA National Demo Site (59274)
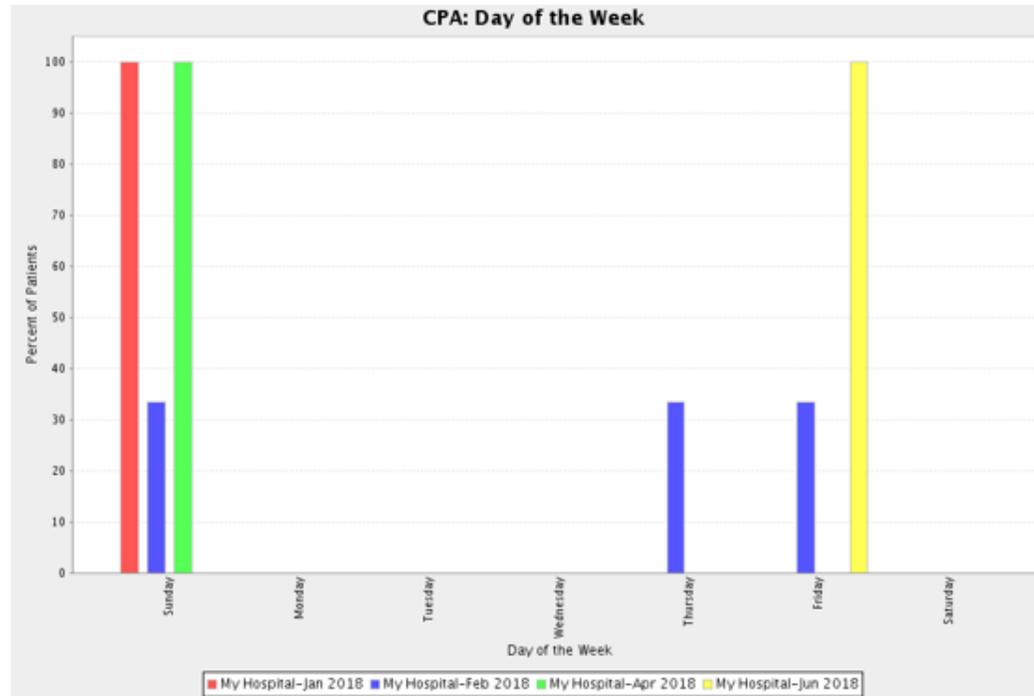
Data For: CPA: Day of the Week
Note: Time periods at the end of the graph and data table
have been omitted because there were no patient records during that time.

Benchmark Group	Time Period	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
My Hospital	Jan 2018	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1
My Hospital	Feb 2018	1 (33.3%)	0 (0%)	0 (0%)	0 (0%)	1 (33.3%)	1 (33.3%)	0 (0%)	3
My Hospital	Mar 2018								0
My Hospital	Apr 2018	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1
My Hospital	May 2018								0
My Hospital	Jun 2018	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (100%)	0 (0%)	1

Tutorial: Final Notes

Option 3 is the quickest way to create a PPT for your code blue report group; however, not all Adobe versions offer this.

You may need to check with your hospital IT staff for questions about upgrading to a current version of Adobe DC or purchasing Adobe Pro.

Measure updates

- Updates to Quality, Reporting, and Descriptive Measures
  - Each measure was updated to align with the population definition changes that took

    place in 2017

- New Medical History under Cross-Form Measures

Medical History Report

- On Configurable Measure Reports, click on the drop-down for Cross Form and Admission & Discharge Measurses

- Select "CPA, ARC & PCAC: Medical History"

CPA, ARC & PCAC: Medical History

A histogram of previously known medical history.

Time Period: Jan 2018 - Sep 2018; Site: AHA National Demo Site (59274)

CPA, ARC & PCAC: Medical History

Legend: ■ My Hospital–Jan 2018 ■ My Hospital–Feb 2018 ■ My Hospital–Apr 2018 □ My Hospital–Jun 2018

Y-axis: Percent of Patients; X-axis: Medical History

Data For: CPA, ARC & PCAC: Medical History

Note: Time periods at the end of the graph and data table have been omitted because there were no patient records during that time.

Benchmark Group	Time Period	None	Acute CNS non-stroke event	Acute stroke	Baseline depression in CNS function (Pediatric and newborn only)	Cardiac malformation - acyanotic (Pediatric and newborn only)	Cardiac malformation - cyanotic (Pediatric and newborn only)	Congenital malformation (Pediatric and newborn only)	Congestive heart failure (this admission)	Congestive heart failure (prior to this admission)	Diabetes mellitus	Hepatic insufficiency	Hypotension/hypoperfusion	Major trauma	Metastatic or hematologic malignancy	Metabolic/electrolyte abnormality	Myocardial ischemia/infarction (this admission)	Myocardial ischemia/infarction (prior to admit)	Pneumonia	Renal insufficiency	Respiratory insufficiency	Sepsis	Septicemia (Historic)	Total
My Hospital	Jan 2018	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1
My Hospital	Feb 2018	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (33.%)	0 (0%)	1 (33.%)	1 (33.%)	0 (0%)	0 (0%)	1 (33.%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (33.%)	0 (0%)	1 (33.%)	3
My Hospital	Mar 2018																							0
My Hospital	Apr 2018	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1	
My Hospital	May 2018																							0
My Hospital	Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2

Frequency of Events Report

Time Windows of either 4-hour or 2-hour increments
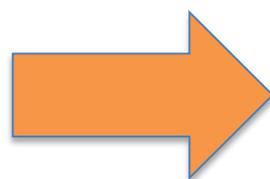
Frequency of Events by Time and Location Report

Show filters This report shows all records. 14 of 14

Patient ID	Event Date and Time	Patient Population	Form	Form Status	Day of Week	Time Window (4 hour increments)	Time Window (2 hour increments)	Event Location (area)
0001	09/11/2018 09:00	Adult	CPA	Incomplete	Tuesday	08:00-11:59	08:00-09:59	

Patient ID	Event Date and Time	Patient Population
no filter ∨	no filter ∨	no filter
RES1004	07/31/2018 00:00	Newly Born Neonate
RES1003	07/31/2018 00:00	

Patient Population column displays "Neonate/Infant" and "Newly Born"
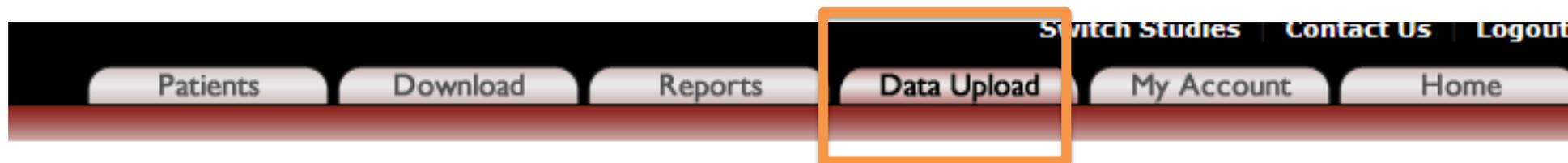
MET CSV uploader

Contact your local QI Director for more information about the MET form csv uploader

Site Characteristics: IHCA

- New site traits for collecting information for In-hospital Cardiac Arrest measures

- Stay tuned for webinars discussing this information: where to get it within your hospital and why we're collecting it!

- Review our website for the call to action for improving In-Hospital Cardiac Arrest: http://www.heart.org/en/professional/quality-improvement/get-with-the-guidelines/get-with-the-guidelines-resuscitation/get-with-the-guidelines-resuscitation-clinical-tools

IHCA	
How many med/surg bed days?	
How many ped ward bed days?	
Total adult admissions	
Total ped admissions	
Total neonate/infant	
Total newly born	
Adult ICU bed days	
Ped ICU bed days	
NICU bed days	

Questions?

Contact Us to Learn More

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Thank you for your active participation
and contributions to
Get With The Guidelines-Resuscitation!