

# **CTV PA Student Rotations**

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**An Educator's Perspective**

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# Session Objectives

- **Discuss** basic principles of PA student education
- **Outline** the process of setting up a new student rotation from hospital and organization perspectives and review the benefits of having students
- **Outline** the partnership process between hospital-based rotation sites and PA schools
- **Review and critique** the APACVS Cardiac Service Orientation Curriculum from an educator's perspective
- **Analyze** partnership opportunities between PAEA, the CTV PA community, and APACVS

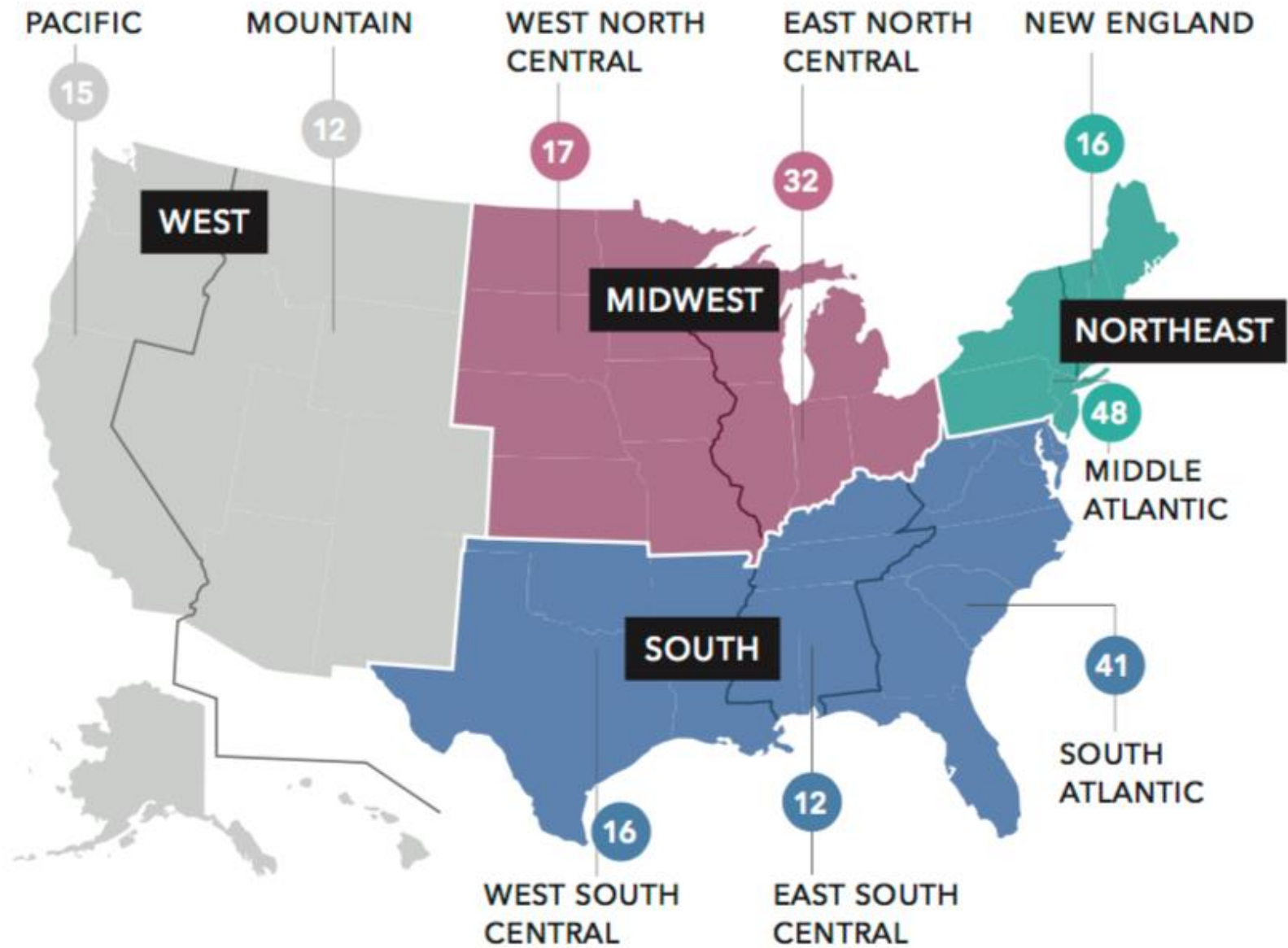
# By the Numbers

**229** programs are accredited by ARC-PA.

**60** of these are provisional.

**25%** are "traditional" 24 months in length; others vary from 25-36 months.

Clinical rotations can vary in length (between 4-8 weeks); electives may be less than or equal to core rotation.

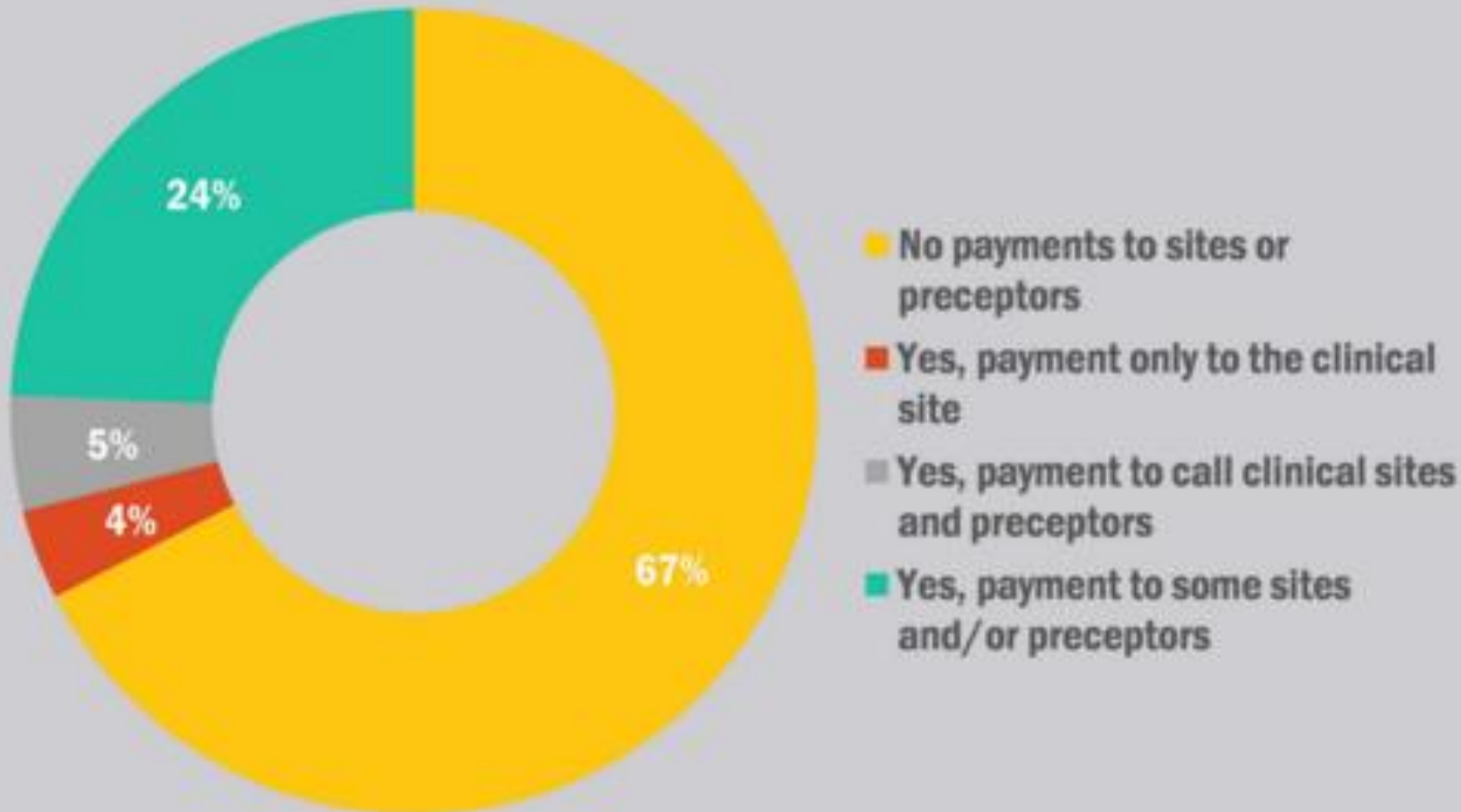


**TABLE 28. PA PROGRAM ENROLLMENT AND CAPACITY**

	<i>n</i> (P)	<i>n</i> (S)	Range	<i>M</i>	<i>SD</i>	P10	P25	P50 ( <i>Mdn</i> )	P75	P90
<b>Capacity</b>										
First year	199	9,586	17-240	48.2	25.1	25.0	32.0	42.0	56.0	80.0
Second year	189	9,186	17-240	48.6	25.5	25.0	32.0	42.0	59.0	80.0
Third year	110	4,929	12-100	44.8	18.6	24.0	30.0	40.0	55.0	70.0
Total	200	23,701	20-480	118.5	61.8	51.3	75.3	108.0	150.0	194.7
<b>Enrollment</b>										
First year	191	8,939	17-202	46.8	23.4	25.0	31.0	40.0	54.0	75.8
Second year	179	8,204	17-161	45.8	22.4	25.0	30.0	40.0	53.0	73.0
Third year	105	4,414	8-96	42.0	18.7	20.0	30.0	38.0	52.0	69.8
Total	193	21,585	20-363	111.8	58.8	46.2	69.0	102.0	143.0	182.2

*Note: Programs that reported 0 students enrolled in a class were excluded from these analyses. This includes programs that indicated that they did have students enrolled in a class, but did not report a headcount.*

# CLINICAL SITES PAYMENT PRACTICES



# 50.7%

of all program directors reported they are **very concerned** about the adequacy of the number of clinical training sites and preceptors for their students.

<http://paeaonline.org/wp-content/uploads/2015/09/PaymentClinicalSites-PreceptorsPAEducation.pdf>

# Basic Principles of PA Student Education

There are 6 main characteristics of adult learners, according to [Malcolm Knowles](#) (1980, 1984), one of the pioneers in this field.

1. **Self-directed**
2. **Uses knowledge and life experiences**
3. **Goal-oriented**
4. **Relevancy-oriented**
5. **Highlights practicality**
6. **Encourages collaboration**

# Both Sides Now

## Student Rotations

### PA Program

- Generally, students are enrolled in an elective course
- Tuition goes to the university
- Affiliation agreement that insures student for work at affiliated institution must be completed
- ARC-PA requires that students not replace employees
- Students gain valuable experience in setting that may be different from their home institution



### Hospital

- More often seen as a recruitment strategy for new staff
- Raises the visibility of the organization's reputation
- Provides stimulating environment for staff who enjoy teaching
- Administration may not be as enthusiastic as staff



# The Partnership Process

## Hospital-Based Rotation Sites & PA Programs



# Process Questions

- Why are you doing this?
- How many students?
- How many staff?
- Work hour restriction?
- Local programs or wide geographic reach?
- EMR access?
- Prerequisites?
- Capacity for teaching?
- Expectations of students?

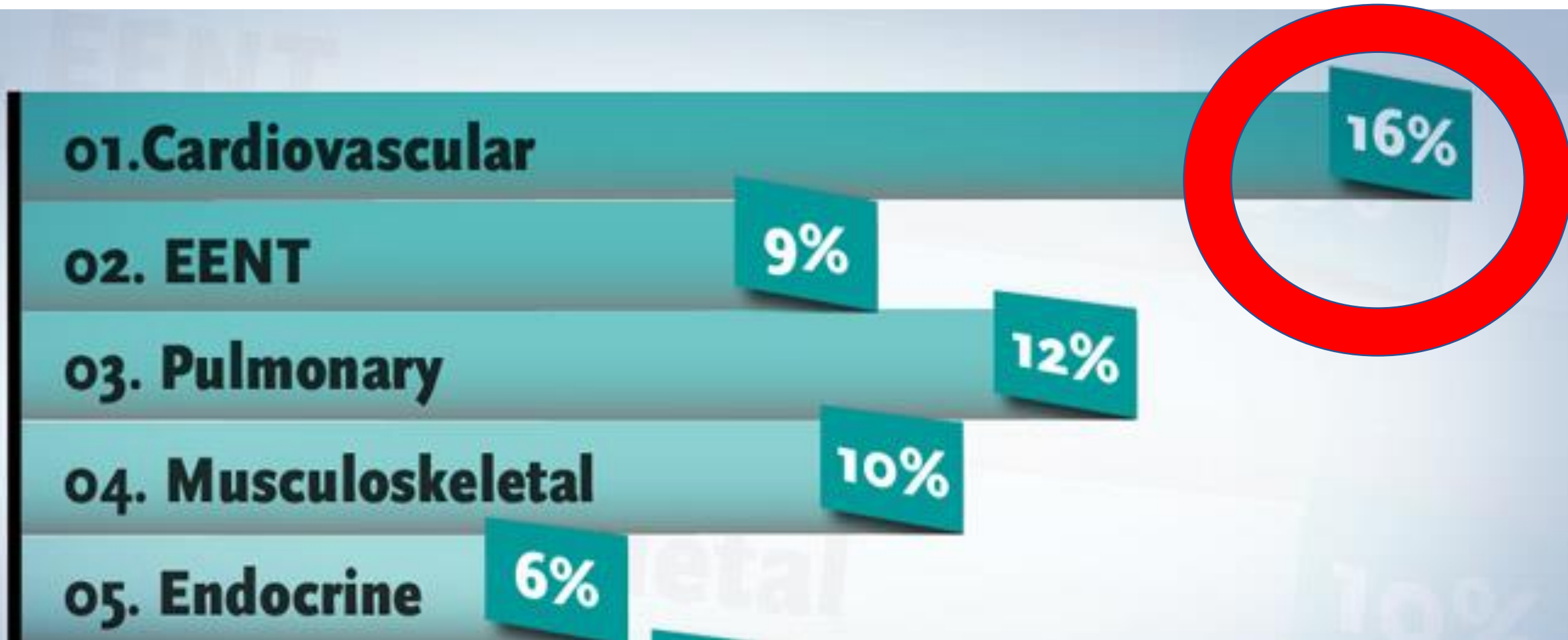


# Review & Critique

## APACVS Cardiac Service Orientation Curriculum



# PA Curricular Focus: NCCPA Blueprint



# The Cardiovascular System

## **Cardiomyopathy**

Dilated

Hypertrophic

Restrictive

## **Conduction Disorders**

Atrial fibrillation/flutter

Atrioventricular block

Bundle branch block

Paroxysmal supraventricular tachycardia

Premature beats

Sick sinus syndrome

Ventricular tachycardia

Ventricular fibrillation

Torsades de pointes

## **Congenital Heart Disease**

Atrial septal defect

Coarctation of aorta

Patent ductus arteriosus

Tetralogy of Fallot

Ventricular septal defect

## **Heart Failure**

### **Hypertension**

Essential

Secondary

Hypertensive emergencies

### **Hypotension**

Cardiogenic shock

Orthostatic hypotension

### **Coronary Heart Disease**

Acute myocardial infarction

Non-ST-segment elevation

ST-segment

Angina pectoris

Stable

Unstable

Prinzmetal variant

### **Vascular Disease**

Aortic aneurysm/dissection

Arterial embolism/thrombosis

Giant cell arteritis

Peripheral artery disease

Phlebitis/thrombophlebitis

Varicose veins

Venous insufficiency

Venous thrombosis

### **Valvular Disease**

Aortic stenosis

Aortic regurgitation

Mitral stenosis

Mitral regurgitation

Mitral valve prolapse

Tricuspid stenosis

Tricuspid regurgitation

Pulmonary stenosis

Pulmonary regurgitation

### **Other Forms of Heart Disease**

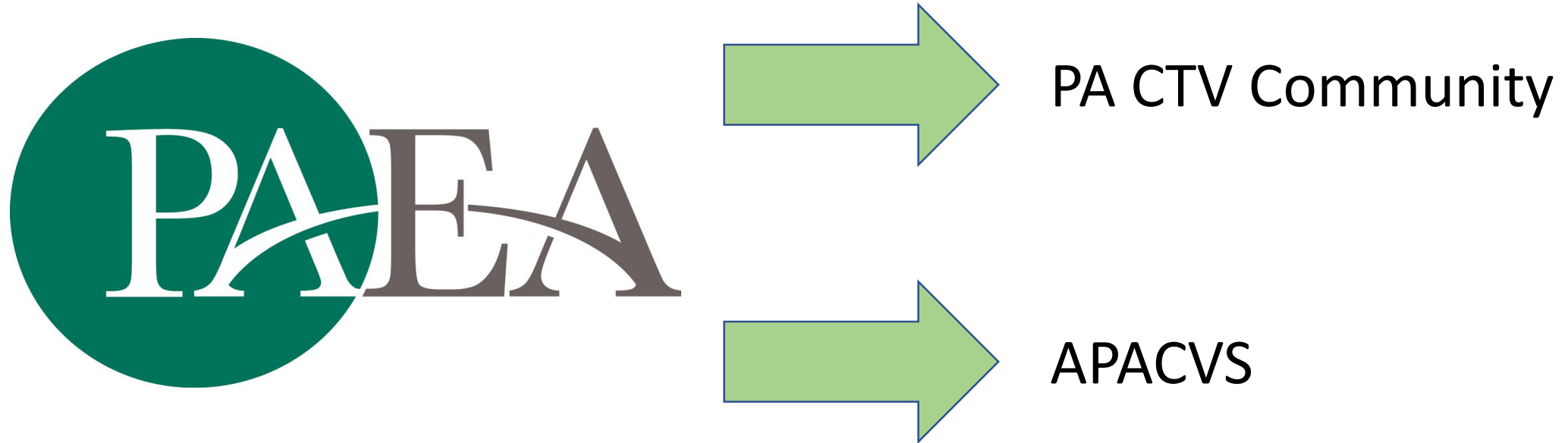
Acute and subacute bacterial endocarditis

Acute pericarditis

Cardiac tamponade

Pericardial effusion

# Partnership Opportunities



# The Three “C”s of Clinical Education

- PAEA member programs and their entire faculty and staff, including program directors and clinical faculty, agree to a value of cooperation and collaboration in the use of clinical training sites and preceptors.
- Programs should recognize the need for communication among their program directors and clinical faculty, and the need for all clinical training sites and preceptors to be asked by clinical faculty if they are or have been preceptors for other PA programs. If so, these programs should communicate in order to seek out cooperative and collaborative arrangements.
- Programs that use a clinical training site and preceptor that have been identified as having been previously used by other programs should follow up with those programs concerning the quality of the experience.
- Programs and clinical faculty agree to be sensitive to the issue of preceptor burnout when collaborating on the use of clinical training sites and preceptors.
- Programs collaborating on the use of clinical training sites should consider innovative clinical training opportunities such as team-based training models and other new and alternative experiences.

# PAEA Resources Available Online

In addition to publishing regular survey data reports, the PAEA Research Team periodically publishes brief reports focused on specific issues of interest.

- [The Impact of State Authorization on PA Training Programs \(2017\)](#)
- [The 3 “C”s of Clinical Education: Courtesy, Communication & Collaboration \(2015\)](#)
- [Matriculating Student Survey: Student Location and Movement \(2014\)](#)
- [Payment of Clinical Sites and Preceptors in PA Education \(2013\)](#)
- [Matriculating Student Survey: Demographics \(2013\)](#)
- [Matriculating Student Survey: Health & Well Being \(2013\)](#)
- [Matriculating Student Survey: Education, Admissions, and Choice \(2013\)](#)
- [Matriculating Student Survey: Indebtedness \(2013\)](#)