THE ROLE OF THE APP IN CARDIAC SURGERY

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OBJECTIVES

- Who are APPs
- PA history
- Np history
- APP advancement of clinical Quality
- APPs in cardiac surgery WHY?
- APP Statistical overview
- What do Southcoast Cardiac Surgery APP’s do?
- Future of Cardiac surgery APPs

APP
ADVANCED PRACTICE PROVIDER

- Who are they?

- Physician Assistant (PA)
- Nurse Practitioner (NP)
- Midwives
- CRNA

PHYSICIAN ASSISTANT

1965 first class of Physician Assistants graduated from Duke University

Medical training was based on US military war time General Medical Officer Training

1965 4 Navy Corpsman began training





PHYSICIAN ASSISTANT CONT.

- 1967 Surgeon's Assistant program developed at University of Alabama-Birmingham
- Dr. John Kirkland postulated that PA's could be trained to perform tasks traditionally performed by surgeons
- First surgical PA's trained in Cardiac Surgery
- 1973 two physician assistants were employed on a cardiothoracic surgical service at Emory University Hospital
- " The P.A. has assumed a position of increasing importance both in operating room assistance and in preoperative and postoperative care"
- J Thoracic Cardiovasc Surg. 1978 Nov;76(5):639-42

PHYSICIAN ASSISTANT CONT..

- 1980 PA's total 6,975
- 1988 Duke University PA program awards first Master's degree for PA education.
- 1990 Pa's total 14,387
- 2010 86,857 PA's and can prescribe in all 50 states

NURSE PRACTITIONER

- **1965*** Dr. Loretta Ford and Dr. Henry Silver develop the first Nurse Practitioner (NP) program at the University of Colorado
- **1967** Boston College initiates one of the earliest master's programs for NPs
- **1968** Directed by a nurse and physician team, the Boston-based Bunker Hill/Massachusetts General Nurse Practitioner Program begins

- AANP History

NURSE PRACTITIONER CONT..

- **1971** One of the first family NP programs, PRIMEX, opens its doors at the University of Washington
- **1973** More than 65 NP programs exist in the U.S
- **1974** The American Nurses Association (ANA) develops the Council of Primary Care Nurse Practitioners, helping legitimize the role
- **1975** The University of Colorado offers its first continuing education symposium for NPs
- **1979** Approximately 15,000 NPs in the U.S. (Pulcini and Wagner)
- AANP history

NURSE PRACTITIONER CONT...

- **1983** Approximately 22-24,000 NPs in the U.S. (Pulcini and Wagner)
- **1994** Mundinger publishes "Advanced Practice Nursing – Good Medicine for Physicians" in *The New England Journal of Medicine*, further supporting facts that NPs are cost-effective and quality primary health care providers
- **2002** In lieu of forming own organization, acute care NPs join AANP
- **2014** More than 192,000 NPs in the U.S. (AANP)

AANP history

APP'S ADVANCEMENT OF CLINICAL QUALITY AND PATIENT SAFETY

- As members of surgical teams, PAs can have a positive effect on clinical quality and patient safety.
- A PA at Geisinger Medical Center in Danville, Pa., championed an effort to manage perioperative blood glucose that was associated with decreased complications and mortality.[9]
- PAs in general surgery in Michigan successfully implemented a venous thromboembolism prevention program.[10]
- A study in New York discovered that a PA home care program decreased hospital readmissions by 25% after cardiac surgery through evaluation, education, and medication adjustments.[11]

APP'S ADVANCEMENT OF CLINICAL QUALITY AND PATIENT SAFETY CONT..

- PAs were central to the creation, development, and acceptance of endoscopic vessel harvesting that has been shown to be both safe and to decrease morbidity.[12]
- PA role as a part of the surgical team when using video-assisted thoracoscopic surgery techniques is integral to its success.
- PAs are involved with teaching the team-based approach to this minimally invasive technique to surgical teams throughout the country.

APP'S IN CARDIAC SURGERY WHY?

- The demand for Pa's/NP's in cardiovascular surgery has taken on a greater urgency for two additional reasons:
- * Regulations in resident duty hours have created a demand for PAs to support surgical services.[4,5]
- * PAs in the cardiac specialty also have filled a staffing void left as a result of the difficulty in filling cardiothoracic residency positions in recent years.[2]

CARDIAC SURGERY APP'S NATION WIDE



STATS!

- 108,00 PAs National
- 2015 survey shows 2,710 in MA
- 86,000 PAs responded to 2015 survey
- 3.3% in cardiac surgery

Approx. 2800 Pas for cardiac surgery in the nation

- Approx.. 85 per state!
- 6. Association of Physician Assistants in Cardiovascular Surgery. APACVS Annual Practice and Compensation Profile. Oak Creek, WI. 2012.

- 222,000 NPs National
- 2015 survey 7.7% in Acute Care
- 5,080 practicing NPs in state of MA
- No clear data reported on % of cardiac surgery NP's in state of MA.
- July 21, 2014, from https://www.aanp.org/legislation-regulation/state-legislation-

NATIONAL CARDIAC SURGERY APP PRACTICE STATISTICS

Patient Care %	Private Practice	University	Community Hospital	All
H&P/Consults	85.1	84.5	84	84.1
ICU/Critical Care	81.9	60.6	84.5	79.2
Stepdown Care	83	76.1	89.5	85.2
Patient Education	68.1	74.7	74.5	72.9
In-Services	28.7	26.8	38	33.4
Discharges	76.6	74.7	85.0	80.8

Procedure %	Private Practice	University	Community	All
Arterial lines	64.9	57.8	71	66.9
Swan Ganz	40.4	32.4	37.5	37.3
CVP line	53.2	40.9	47	47.4
Chest tubes	68.1	69	76.5	72.9
IABP	28.7	43.7	40.5	38.1

Procedure %	Private Practice	University	Community Hospital	All
SVG Harvesting	96.8	81.7	92	91.2
Radial Harvesting	58.5	50.7	67	61.6
IMA Harvesting	6.4	5.6	4.0	4.9
Sternal closure	59.6	62	60.5	60.6
First Assisting	96.8	91.6	92.5	93.4
Sternotomy	16	31	18	20

WHAT DO SOUTHCOAST APP'S DO?

- History and Physical
- Surgical First Assisting
- Insertion of invasive catheters
- Insertion of Chest tubes
- Consults
- Conduit harvest(EVH,ERH)
- Patient education
- Emergent Intubation
- Chest closures
- Closure of conduit harvest sites
- In-house coverage of CVICU,CVSD, and as needed CCU,ICU and surgical floors.
- Pre-op and post-op mgmt
- Outpatient follow up
- Coordination of care
- Discharges

SERVICES COVERED BY SOUTHCOAST CARDIAC SURGERY APP'S

- Cardiac surgery
- Thoracic surgery
- Convergent EP cases
- TAVR program

THE FUTURE OF APP'S

- recognize the presence of APPs in health care and the roles APPs play in delivering Quality Healthcare
- include certified APPs in leadership positions where policies and clinical roles are being defined;
- understand that the APP profession's are founded on team care and certified APPs are educated and trained to work with physicians and other medical staff in a patient-centered environment.
- Understand the APPs role is not a role that takes anything away from the physician but,in fact,allows the physician to focus more on the patient and improve quality of care.

THE FUTURE IS….



Thank you….

Questions??

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