Evolution of the Cardiology PA Workforce

ACC Physician Assistant Cardiology Workforce Survey 2016
Writing Committee Members

Dorothy D. Pearson, BA, PA-C, AACC, Chair

• Sondra M. DePalma, MHS, PA-C, AACC
• Sharon M. Dickinson, MS, PA-C, AACC
• Camille J. Dyer, MS, PA-C, AACC, DFAAPA

• Viet T. Le, MPAS, PA-C
• KellyAnn Light-McGroary, MD
• Sherrie R. Webb, BS, PA-C

\(^a\) Boston Children’s Hospital, Brigham and Women’s Hospital, Boston, Massachusetts; \(^b\) PinnacleHealth CardioVascular Institute, Harrisburg, Pennsylvania; \(^c\) Cardiac Solutions, Peoria, Arizona; \(^d\) New Brunswick Cardiology Group, Somerset, New Jersey; \(^e\) Intermountain Healthcare, Rocky Mountain University of Health Professions, Salt Lake City, Utah; \(^f\) University of Iowa Hospitals and Clinics, Iowa City, Iowa; \(^g\) currently retired, previously with Sanger Heart and Vascular Institute, Carolinas Healthcare System, Charlotte, North Carolina
Introduction

• Physician assistants (PAs) are health care professionals who are helping to address the growing need for high-quality cardiovascular (CV) health care providers in the U.S.

• As the PA profession marks its 50th anniversary, a new survey reveals that as the profession has matured, so has the role of PAs who work in cardiology.

• Conducted by the ACC’s PA Work Group of the CV Team Council, the survey provides important insights into their experience, scope of practice and services provided in CV practice, as well as opportunities to enhance professional membership.
Methods

• Surveys were sent electronically to 3,501 PAs including those known to the ACC as well as Association of Physician Assistants in Cardiology (APAC).
  – PAs not working in cardiology were excluded.
  – PAs who reported only working in the outpatient setting were excluded from questions concerning the inpatient setting and vice versa.

• Survey results were compared with those of two prior similar surveys of cardiology PAs conducted in 2007 and 2012.
  – Limited comparison was made with a 2007 survey conducted by APAC.
  – Extensive comparison was made with the 2012 ACC PA Work Group survey of 340 PAs working in cardiology.
Results

• Of the 3,501 PAs receiving survey invitations, there were 363 respondents for a total response rate of 10.4%.

• Nearly half (46%) of the respondents were ACC members.
The median number of years of experience as a PA in any specialty by the 2016 survey respondents was 11 to 15, with 25% of PAs reported having > 20 years of experience in any specialty.
The median experience level reported in 2016 as a PA in cardiology was 6-10 years, with 30% reporting 1-5 years. The proportion of respondents who had >10 years of experience in cardiology increased to 46% and >15 years increased to 24%, from 28% and 15%, respectively, in 2012.
The majority of PAs surveyed (52%) work in a CV group practice. A small percentage (6%) work in a multispecialty group practice.

Type of Practice in 2016

- Cardiovascular Group: 51.9%
- Non-governmental Hospital: 15.3%
- Medical School/University: 12.40%
- Multi-Specialty Group: 6.4%
- Other (including industry and insurance co.): 5.1%
- Government Hospital or Agency: 4.5%
- Solo Practice: 3.5%
- Retired: 1.0%
- Other: 0.0%
The majority (54%) work in practices that are hospital owned. A reported 22% work in practices that are physician owned; 10% work in practices that are medical school or university owned.
In the inpatient setting, hospital rounds, discharge summaries, cardiology consults and admission history and physicals were the most common responsibilities.
• Compared with the 2012 survey results, statistically significant differences were found for four areas of responsibility.

• Fewer PAs reported performing admission history and physicals (82% vs. 73%), patient management responsibilities in the emergency department (ED) (41% vs. 29%) and inpatient research responsibilities (16% vs. 5%).

• In contrast, more PAs in 2016 reported post-procedure management responsibilities (61% vs. 50% in 2012).
In the outpatient setting, follow-up visits, prescription refills, patient education, medication titration and initiation of CV medications were the most common responsibilities.
• Compared with 2012 results, significantly fewer PAs reported supervising outpatient stress tests (55% vs. 45%) or other tests (23% vs. 16%).

• The majority (65%) of PAs reported they work with an attending cardiologist who is onsite most of the time and available for consultation.

• Compared with 2012, clinical autonomy for PAs in cardiology increased in 2016.
  – More PAs (13.5% vs. 19.5%) report the attending cardiologist is usually offsite but available for immediate consultation.
  – Fewer PAs report most duties require interaction with the attending cardiologist (22% vs. 16%).
Procedures were performed by 21% of PAs in the 2016 survey. There was no difference in this proportion compared with 2012 or in the types of procedures performed.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>2016 Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balloon Pump Removal</td>
<td>11%</td>
</tr>
<tr>
<td>Elective Cardioversion</td>
<td>9%</td>
</tr>
<tr>
<td>Central Line Placement</td>
<td>8%</td>
</tr>
<tr>
<td>Temporary Pacing wires</td>
<td>7%</td>
</tr>
<tr>
<td>Swan-Ganz Placement</td>
<td>6%</td>
</tr>
<tr>
<td>Right Heart Cath</td>
<td>5.5%</td>
</tr>
<tr>
<td>Left Heart Cath</td>
<td>5%</td>
</tr>
<tr>
<td>Balloon Pump Placement</td>
<td>5%</td>
</tr>
<tr>
<td>PCI/Stent</td>
<td>4%</td>
</tr>
<tr>
<td>PTA/Stent</td>
<td>3%</td>
</tr>
<tr>
<td>Permanent Pacemaker</td>
<td>3%</td>
</tr>
<tr>
<td>ICD Placement</td>
<td>3%</td>
</tr>
<tr>
<td>Implantable Loop Recorder</td>
<td>3%</td>
</tr>
<tr>
<td>Transesophageal Echo</td>
<td>2%</td>
</tr>
<tr>
<td>PCC Line Placement</td>
<td>1%</td>
</tr>
</tbody>
</table>
• According to the 2016 survey, most PAs (88%) did not have any structured post-graduate training in cardiology or focused guidance to assist their evolution into the practice of cardiology.

• Of those who had training or assistance, required reading was reported by 58%, cardiology rotation by 55%, a formal training program by 29% and a formal residency program by 19%.
Discussion

- The survey demonstrates that as the profession has matured, so too have its members—at least in cardiology.
- Compared to the prior surveys of 2007 and 2012, respondents in 2016 have more years of experience as a PA overall, and more years of experience as a PA in cardiology.
Discussion

• The disparity continues between the supply of CV specialists and the demand for CV care, which is projected to increase by 20% between 2013 and 2025.\textsuperscript{1,2} An estimated 22,000 cardiologists currently practice in the U.S.\textsuperscript{3} About 3,300 PAs report working in cardiology, according to data from the National Commission on Certification of Physician Assistants (NCCPA), representing a substantial addition to the workforce.
Discussion

• Increased acceptance of PAs by hospitals, insurers and patients, along with a short supply of cardiologists and a desire by physicians for a favorable work-life balance may all contribute to greater autonomy for PAs.

• Higher levels of autonomy when performing procedures may be impacted by the same factors affecting overall clinical autonomy.
Conclusion

• The ACC is well positioned to serve as the professional home for cardiology PAs, with its support of education, advocacy and an enhanced patient care experience.

• Professional organizations, such as the ACC, can provide support in the development and promotion of professional PA competencies (in cardiology or other fields). Exploration of advanced CV education for cardiology PAs, perhaps mirrored on COCATS (ACC’s Core CV Training Statement) may be warranted.

• Adoption of clinical ladders by health care systems for the career and professional development of cardiology advanced practice providers may be a further avenue for recruiting and retaining needed talent.
References

