

Academic vs. Community EP

Kamran Ahmad MD MSc FRCPC

Cardiology/Electrophysiology

St. Michael's Hospital

What is a cardiac electrophysiologist?

- Thoughts?

The go-to source:



WIKIPEDIA
The Free Encyclopedia

[Main page](#)

[Contents](#)

[Article](#) [Talk](#)

Cardiac electrophysiology

From Wikipedia, the free encyclopedia

Cardiac electrophysiology is the [science](#) of elucidating, diagnosing, and treating the electrical activities of the [heart](#).

EP in 2017

- Assess:
 - Known arrhythmias, patients who may have arrhythmias
- Ablate
 - AF, VT
 - SVTs
- Implant & Follow
 - ICDs, PM, CRTs
- Both non-university and university practices
- ? More volume in non-university

But also...

- Inherited arrhythmia, genetics
- +/- pediatric consults
- Congenital
- Tendency towards university practice

- General cardiology
- +/- echo, nuclear, etc.
- Probably more community for various reasons

And also...

- Teaching
- Research
- Administrative duties
- Policy direction
- Traditionally academic, but more and more examples of this in non-academic practice

- How is practice structured to include these different elements?

Types of appointments at the U of T

- Research
 - Clinician scientist: 80/20 research/clinical split
 - Clinician investigator: 50/50 split
- Education
 - Clinician teacher: 70/30 clinical/teaching
 - Clinician educator: 50/50 clinical/education
- Administration
 - Clinician administrator: 80/20 admin/clinical

- Clinician in Quality and Innovation: 70/30 clinical/QI
- Time ratios are approximate. Can be challenging to find “protected” time for non-clinical activities
- Some people seem to be “70/70/70” clinical/admin/research

Initial appointment

- Graduate degree w/thesis and/or publications
- Two year fellowship could serve in place of that (must be unique, w/publications)
- Can also be enrolled in part time graduate studies at the time of appointment

Alternatively

- Sustained teaching excellence
 - Clearly documented teaching dossier
 - Teaching awards
- Design/development of curricula, educational materials/offerings
- “Creative Professional Activity” in teaching/education (setting of practice standards)

CENTRAL ILLUSTRATION: Supply and Demand of the Cardiovascular Workforce

Factors impacting cardiovascular workforce excess demand

Growing cardiovascular disease burden

- Leading cause of death in the U.S.
- Aging population

Increased access to care

- Increasing number of insured patients

Therapeutic advances

- Enhanced treatment options and technologies



Factors impacting cardiovascular workforce undersupply

Decreased reimbursement

- Medicare payment reform
- Shift toward value-based payments

Gaps within workforce

- Sex, age, racial and geographic disparities

Cardiologist burnout

- Emotional exhaustion
- Loss of work interest

Cardiovascular training

- Lengthy and expensive
- Emphasis on subspecialization

Proposed strategies to balance the supply and demand

- Leverage cardiovascular care teams to streamline patient care
- Optimize training paradigm to align workforce supply and demand
- Increase focus on cardiovascular disease prevention

Narang, A. et al. J Am Coll Cardiol. 2016;68(15):1680-9.

How USA EPs spent their time 2010

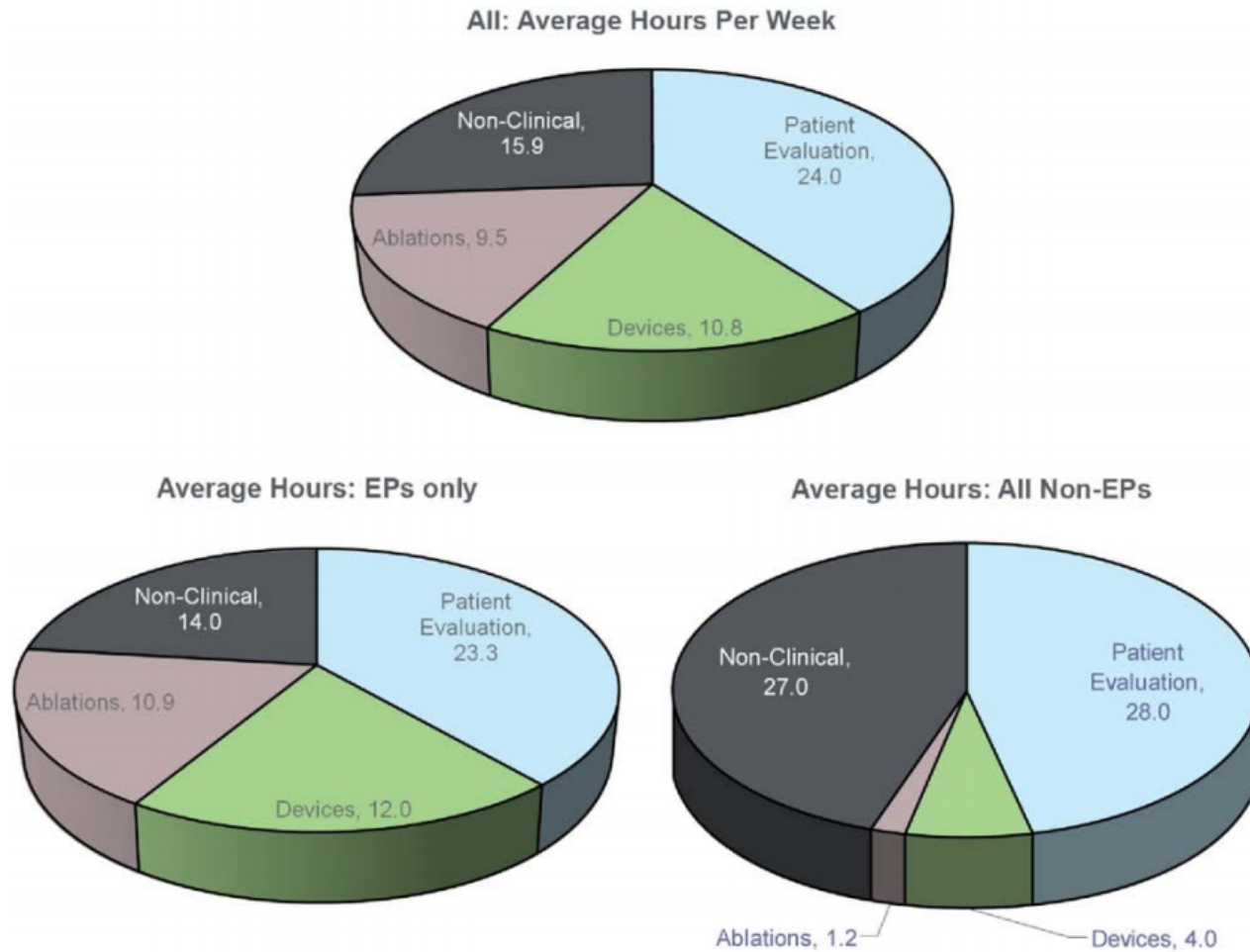


Figure 1 Breakdown of total work hours. N = 695 total respondents. N = 568 EP/124 non-EP (difference = non-response to question).

Device volumes – academic vs. non-academic

Table 3 Annual Device Procedure Volume–Academic v. Non-Academic Setting

	Academic (%)	Non-Academic Practice (%)
Pacemaker		
None	16%	4%
1–25	30%	16%
26–50	29%	17%
51–100	17%	38%
101–200	8%	21%
>200		4%
ICD		
None	19%	6%
1–25	30%	14%
26–50	26%	24%
51–100	19%	41%
101–200	4%	13%
>200	1%	2%
CRT-D		
None	25%	9%
1–25	46%	35%
26–50	20%	33%
51–100	7%	20%
101–200	1%	2%
>200	1%	1%

Ablation volumes academic vs non-academic

Table 4 Annual Procedure Volume–Academic v. Non-Academic Setting

	Academic (%)	Non-Academic Practice (%)
VT Ablation		
None	29.8	37.1
1–25	62.8	59.4
26–50	6.9	3.2
51–100	0.5	0.4
AF Ablation		
None	45.0	46.2
1–25	21.6	29.9
26–50	17.9	17.1
51–100	7.8	6.0
101–200	6.4	
>200	1.4	0.8
SVT Ablation		
None	22.5	23.6
1–25	15.1	14.8
26–50	23.9	26.8
51–100	24.3	24.8
101–200	10.1	8.8
>200	4.1	1.2

Academic/non-academic blurring

- Many larger non university affiliated practices have significant EP academic activity
- Sometimes it is via university affiliation and government grants, sometimes it is through grants from industry
- Large non-university institutions also have significant administrative roles to fill
- More and more teaching takes place in community settings, though fellowship level teaching is mostly at university affiliated institutions

General approach to career search

- Consider what things you like doing the best – also consider what non-clinical areas interest you and which you think are realistic
- Can you find out something new? (new research, teaching methods, admin style, policy formulation, etc)

General approach to career search

- Find out who is looking for an EP and what novel skill set they are hoping to bring into the institution
 - Speak with heads of EP, Cardiology, Medicine
 - Contact academic heads
- Work on how to market yourself to prospective employers