

# American College of Cardiology Multi-state Chapter Cardio-Oncology Network to Improve Physician Participation, Awareness and Education in Cardio Oncology

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## Background

A relatively small number of physicians are involved in Cardio Oncology and this may have negative Public Health implications.

In 2019 The American College of cardiology (ACC) Board of Governors awarded the Florida (F) Chapter and the Cardio Oncology (CO) Section a grant to survey cardiologists and oncologists about education and resources available in CO and to establish an educational program to improve access to care. We subsequently:

- Started a Cardio Oncology Committee for Florida ACC Chapter with members from different geographic areas.
- Established a strong partnership with FLASCO (Florida Chapter of ASCO) for Cardiology-Oncology collaboration in combined programs.
- Completed an educational program in basic cardio oncology for FCACC and FLASCO members, delivered electronically through the state Chapter's electronic platforms/websites.
- Completed Survey amongst 2,500 cardiologists and 2,800 oncologists in the state of Florida utilizing FCACC and FLASCO electronic platforms.
- These surveys showed lack of awareness and knowledge in CO and these same deficiencies are likely to occur in other states (**Table 1**)

### Methods

We aim to establish a multi-state ACC network to amplify the ACC mission at the state and local level in order to increase physician participation through surveys, local targeted educational programs, and encourage collaboration with oncologists at both academic and nonacademic settings.

We seek to foster working relationships and partnerships at the local level, particularly outside of large academic medical centers.

#### Table 1. Florida Survey.

#### Results

#### 303 physicians respondents:

165 of 2800 oncologists (FLASCO) and 138 of 2500 cardiologists (FCACC) responded to their respective surveys.

Question in the Survey	Oncologists N=165	Cardiologists N=138
Very Comfortable treating Cardio Oncology patients.	14%	16%
Cardio Oncology services in their communities	46%	42%
Refers to Cardio Oncology services if available	93%	34%
Excellent cooperation between Cardiology and Oncology	34%	34%
Lack of local Cardio Oncology educational resources.	64%	20%
Attended none or 1 educational session in CO (past 3 years)	65%	55%

#### Oncologist referral patterns:

58% of the oncologists consult general cardiology and 38% consult cardio oncology for evaluation of potential cancer treatment related cardio-toxicity (CT).

#### Frequency of Oncology treatment of Possible CT:

29% of oncologists treat patients with potential CT more than once/week and 35% less than once/month.

#### Most common CT seen in oncology practices:

CHF/reduced LVEF 84%, arrhythmias/atrial fibrillation 43%, VTE and arterial thromboembolism 42%, QT prolongation 36%.

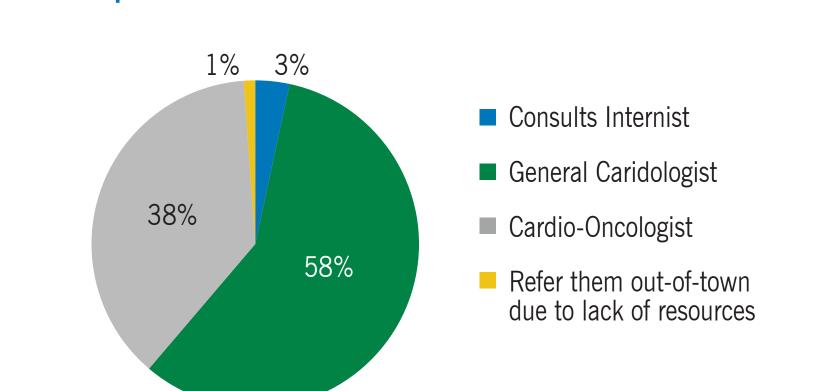
#### Oncologists were not familiar with CT of:

proteasome inhibitors (PI): 45%, multi-targeted tyrosine kinase inhibitors (TKI): 33%; 5 fluorouracil (5-FU): 30%; cisplatin (C): 35%; immune check point inhibitors (ICI): 23%.

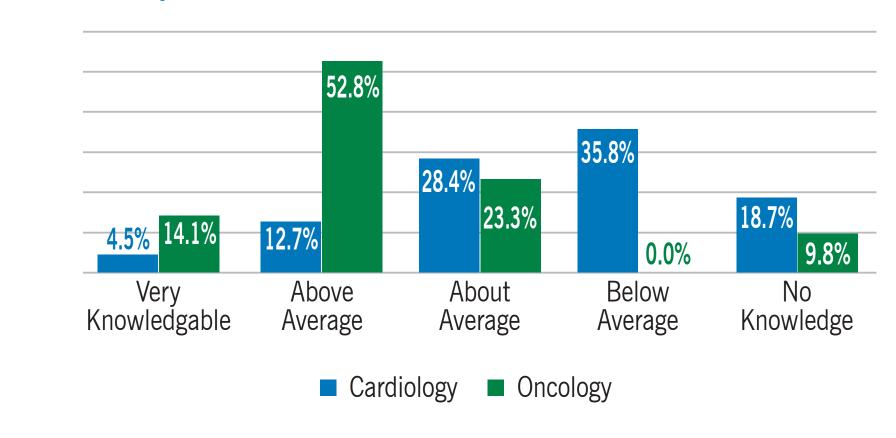
## Oncology initiated cardiac evaluations were triggered by:

anthracyclines (A) 95%; trastuzumab (T): 88%; C: 33%; 5 FU: 28%; vascular endothelial growth factor inhibitors: 55%, TKI: 47%, PI: 35%, ICI: 39%.

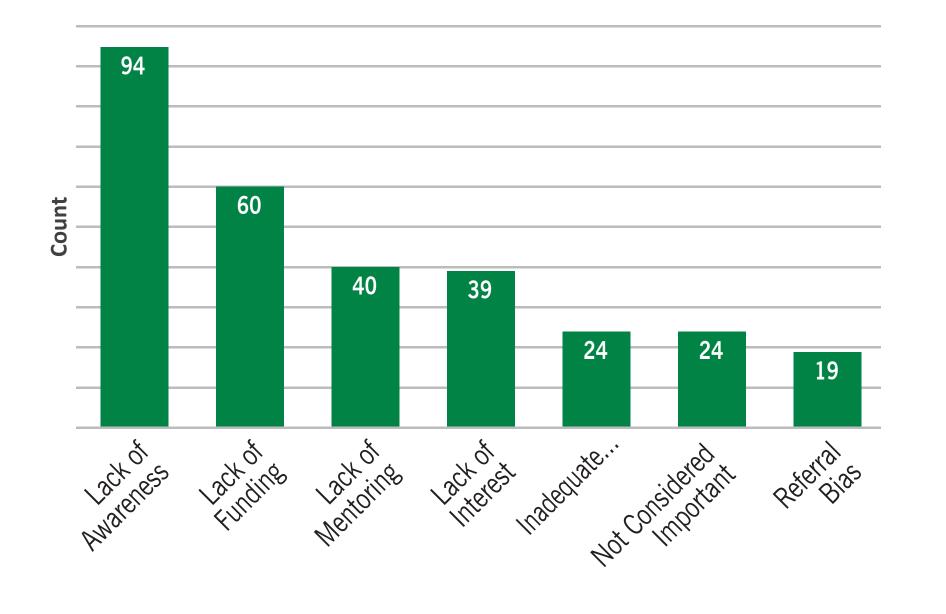
## Graphics Most Common Consults for Cardiovascular Complications in Cancer Patients



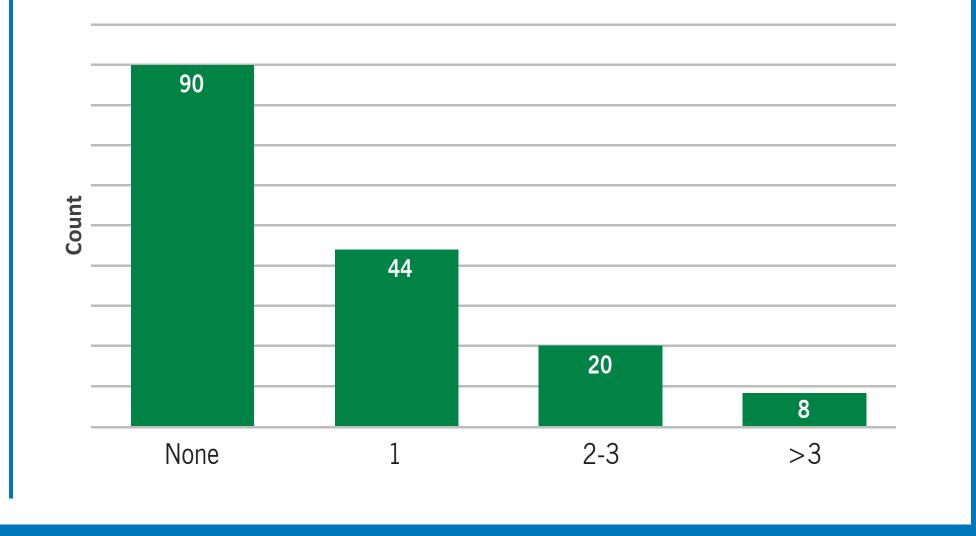
## Most Common Consults for Cardiovascular Complications in Cancer Patients



## Most common barriers to establishing a cardio-oncology program?



## How many educational programs/sessions regarding cardio-oncology have you attended in the previous 3-5 years? (Oncologists)



### Results

There are members of 17 ACC state Chapters participating in our CO network: Florida, Texas, Tennessee, Indiana, Illinois, California, Connecticut, Ohio, Georgia, Pennsylvania, New York, Virginia, Maryland, Michigan, North Carolina, Missouri, Minnesota.

We established a platform for partnerships between ACC state chapters and State Cancer Society Chapters. The Florida Chapter of the American Society of Clinical Oncology (FLASCO) led the initiative and there are six state cancer societies that will collaborate.

We designed a survey to address gaps in knowledge, areas of need, barriers and regional awareness in different states/areas.

We will utilize platforms for local education in state Chapters: Basic CO education electronic platform in Florida; Chicago Webinars; educational activities in Texas, Tennessee, Indiana.

We are collaborating with the International Cardio Oncology Society (ICOS) to incorporate international Chapters to participate in this initiative. The first international Chapter (Canada) recently joined our network. Other international Chapters will follow soon.

#### Conclusions

A multi-state network can increase physician engagement in CO. The ability to integrate providers at the local and state level amplifies the reach of the ACC by engaging providers who take care of a large number of patients with cancer and heart disease.

Partnership with state cancer societies will improve communication, and enhance collaboration in research and patient care.

Non cardio oncologists who treat a large number of patients with cancer and heart disease may benefit from basic knowledge in this growing area.

## Clinical Implications

Cardiovascular disease in cancer patients has large Public Health implications given the growing population of cancer survivors with cardiovascular disease/effects of cancer treatments. Increasing awareness and participation at the state level may improve access to CO care.

**Disclosure of faculty relationships:** No conflict to disclose by any of the authors. Contact at: <a href="mailto:sadlerd@ccf.org">sadlerd@ccf.org</a>