CHFS SCIC
Canadian Heart Failure Society
Société canadienne d'insuffisance cardiaque

@CanHFSociety #HFupdate

What Should HF Training Look Like?

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Learning Objectives

- Identify the recognized subspecialties within HF practice
- Propose training solutions to the HF provider crisis

Various Clinicians, Various HF Training Needed

- Advanced Practice Providers
  - Nurse Practitioners
  - Physician Assistants
- Primary care providers (PCP) – family practice, internists
  - At least 1/3 patients with ADHF are not admitted to cardiology service
  - Many outpatients with HF are treated by PCPs
- Cardiologists
- Advanced heart failure/transplant cardiologists (since 2008)

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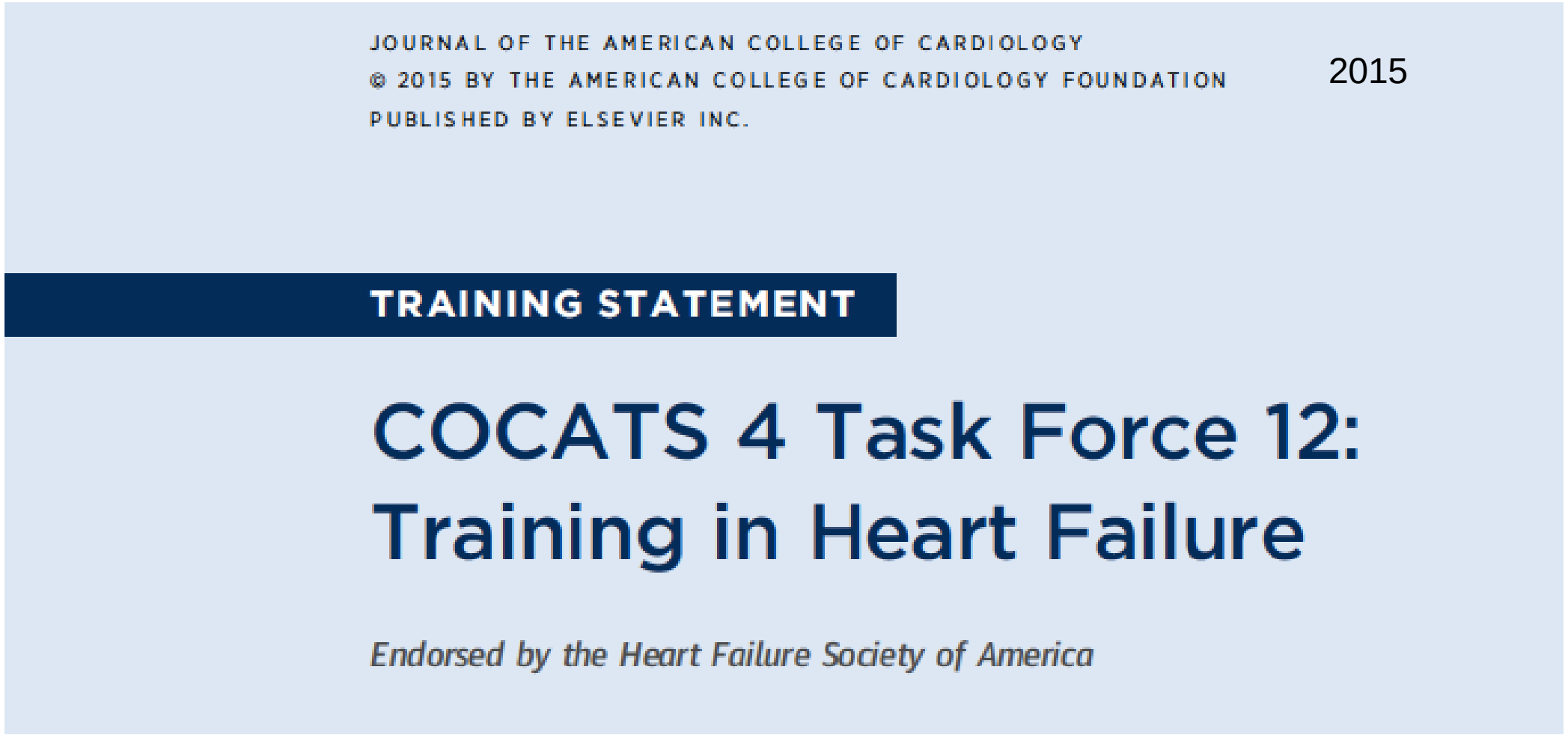
- **Advanced heart failure/transplant cardiologists** (since 2008)

Current State: We Have Problems

- Increasing numbers of patients with heart failure
- Increasing complexity of HF diagnostic and therapeutic strategies
  - The days of dig and diuretics are LONG gone!
- Woeful delivery of GDMT to our patients, costing them quality of life and years of life
  - *Only 1% of patients with HFrEF in US outpatient clinics who were eligible for triple therapy received target doses of ACEi/ARB/ARNI, BBL, MRA*
- Many patients (certain populations disproportionately) are either referred late or never referred for LVAD or heart transplant

CHAMP Registry; Greene, JACC, 2018; AHA Scientific Statement: Guidance for Timely and Appropriate Referral of Patients with Advanced Heart Failure; Morris, Circ Heart Failure, 2022

Current Guidance on HF Training



COCATS = Core Cardiology Training Statement

COCATS 4: Heart Failure Training

- **Designated level I, II, and III**
- Level I
  - All cardiologists during first 2 years of general cardiology fellowship
  - 2 months on HF consultative service
- Level II
  - Those interested in more rigorous training in HF, typically completed in 3rd year of general cardiology fellowship
  - Additional exposure to advanced heart failure (including hemodynamics, outpatient HF clinics, genetics) and HF didactics (research conferences and journal clubs with HF as primary focus)
- Level III
  - Additional training beyond a 3-year cardiology fellowship
  - Advanced HF/Transplant cardiology (Advanced Training statement)

Level I vs. Level II

Medical Knowledge

Level I

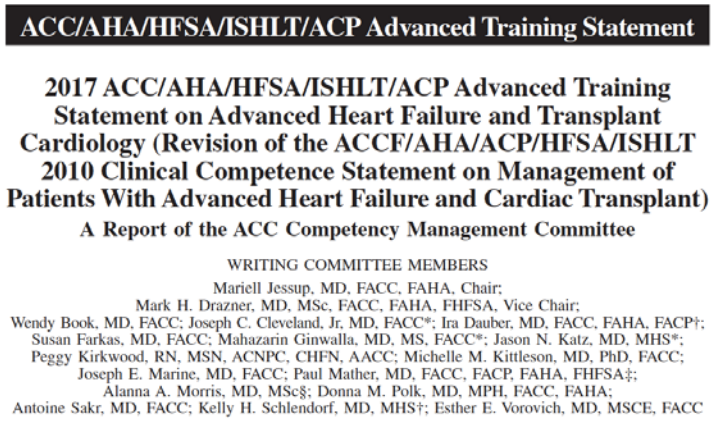
- Indications/contraindications/pharmacology of meds used in HF treatment
- Indications for referral for heart transplant

Level II

- Indications/contraindications/pharmacology of meds used in HF of all etiologies and degrees of severity and special populations
- Types and indications of mechanical circulatory support
- Immunosuppression used in treatment of rejection
- Diagnostic/management strategies for infiltrative/restrictive/inherited cardiomyopathies, and those associated with chemotherapy and pregnancy

What Happened after COCATS 4?

- Advanced Training Statement published in 2017
- Little use of Level II designation
  - Not well delineated
  - The field advanced:
    - Increased interest in cardiogenic shock
    - Improved temporary circulatory support
    - Durable LVADs
    - Emergence of subspecialty areas



ACC/AHA/HFSA/ISHLT/ACP Advanced Training Statement

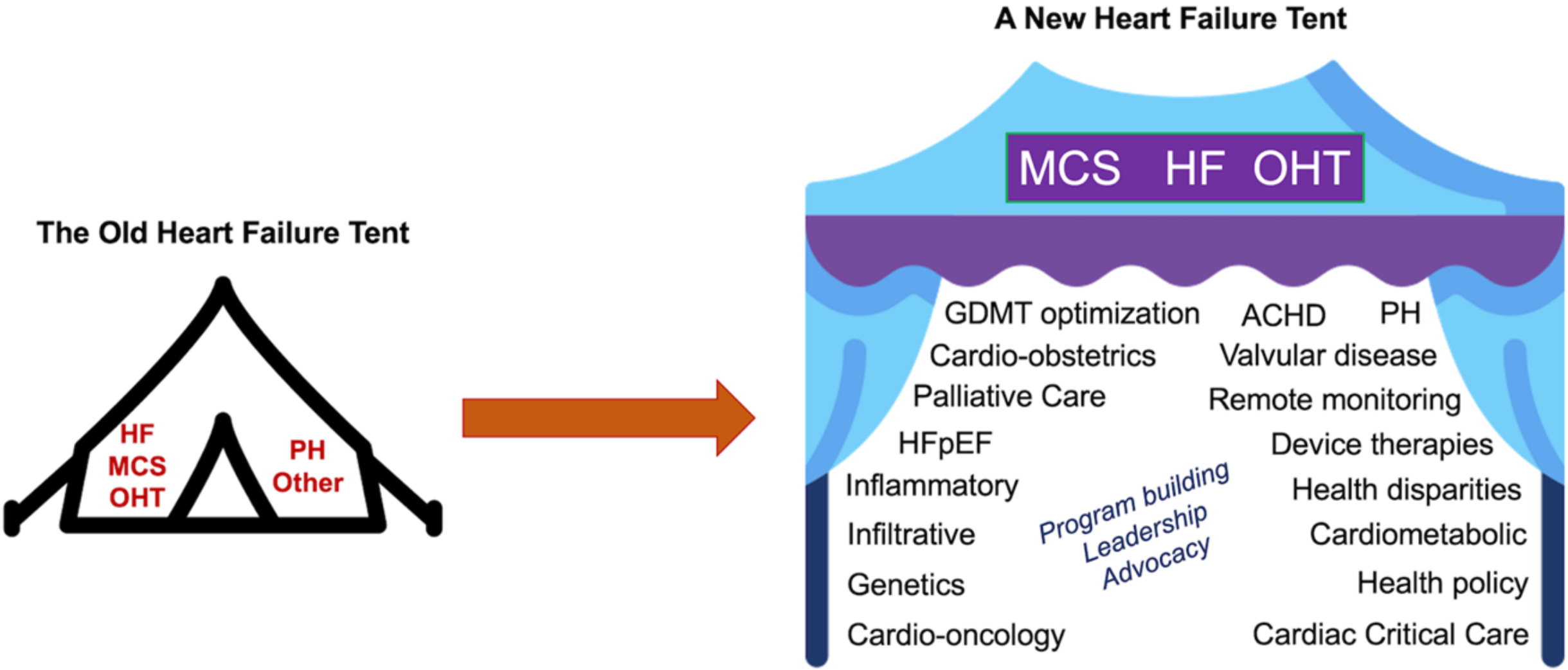
2017 ACC/AHA/HFSA/ISHLT/ACP Advanced Training Statement on Advanced Heart Failure and Transplant Cardiology (Revision of the ACCF/AHA/ACP/HFSA/ISHLT 2010 Clinical Competence Statement on Management of Patients With Advanced Heart Failure and Cardiac Transplant)

A Report of the ACC Competency Management Committee

WRITING COMMITTEE MEMBERS

Mariell Jessup, MD, FACC, FAHA, Chair; Mark H. Drazner, MD, MSc, FACC, FAHA, FHFSA, Vice Chair; Wendy Book, MD, FACC; Joseph C. Cleveland, Jr, MD, FACC*; Ira Dauber, MD, FACC, FAHA, FACP†; Susan Farkas, MD, FACC; Mahazarin Ginwalla, MD, MS, FACC*; Jason N. Katz, MD, MHS*; Peggy Kirkwood, RN, MSN, ACNPC, CHFN, AACC; Michelle M. Kittleson, MD, PhD, FACC; Joseph E. Marine, MD, FACC; Paul Mather, MD, FACC, FACP, FAHA, FHFSA‡; Alanna A. Morris, MD, MSc§; Donna M. Polk, MD, MPH, FACC, FAHA; Antoine Sakr, MD, FACC; Kelly H. Schlendorf, MD, MHS†; Esther E. Vorovich, MD, MSCE, FACC

We Need a Bigger Tent: Expanding the Reach and Coverage of Training in Advanced Heart Failure; Apr 05, 2022 | Mark Belkin, MD, FACC; Joyce Njoroge, MD; Nosheen Reza, MD, FACC; ACC.org



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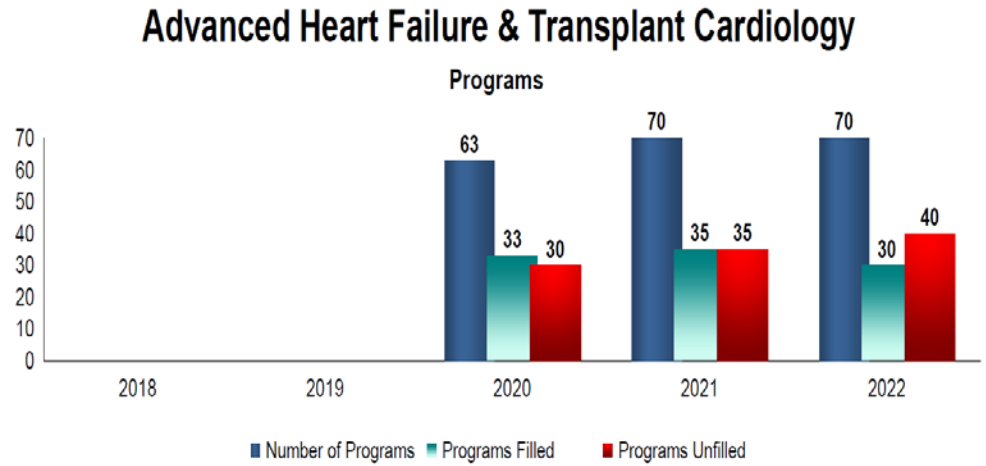
    - Durable LVADs
    - Emergence of subspecialty areas
  - **No market value of Level II vs. Level I to my knowledge**
    - No responsibilities/credentialing tied to that designation

What About Level III (AHFTC) Training?

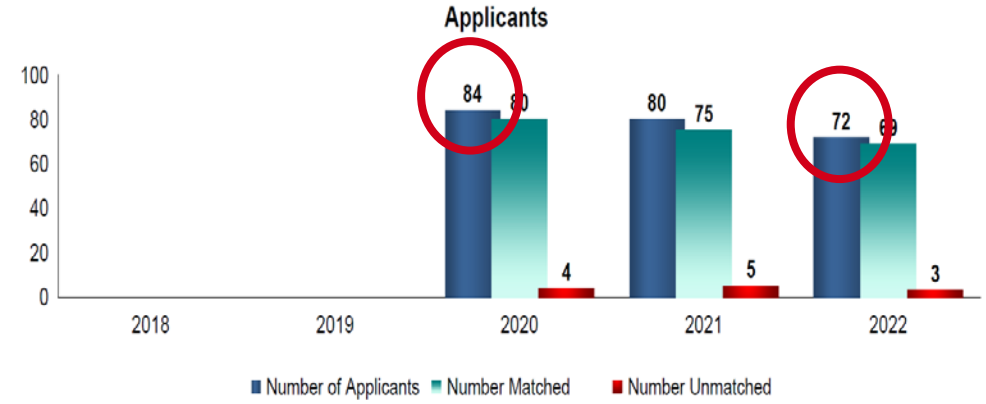
Programs



Positions

2023:
127 positions offered, 71 filled

Applicants

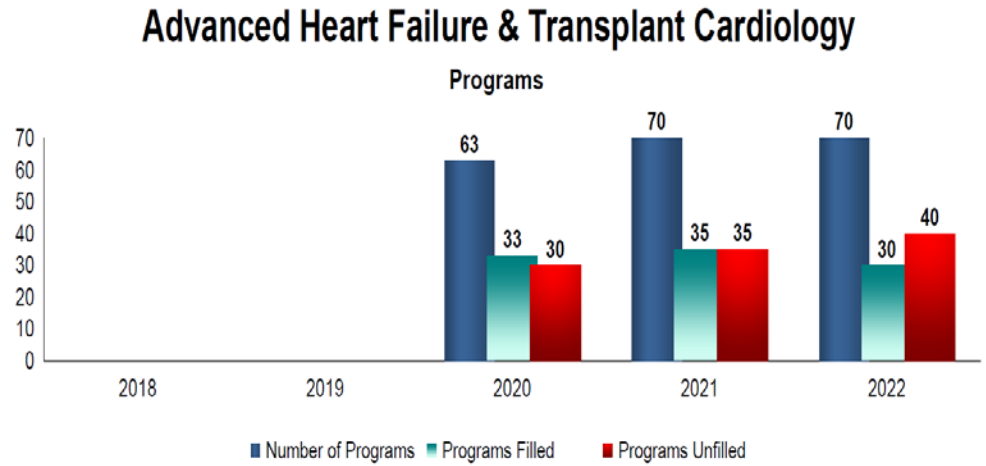


2023:
N=74 applied

What About Level III (AHFTC) Training?

Waning interest

Programs



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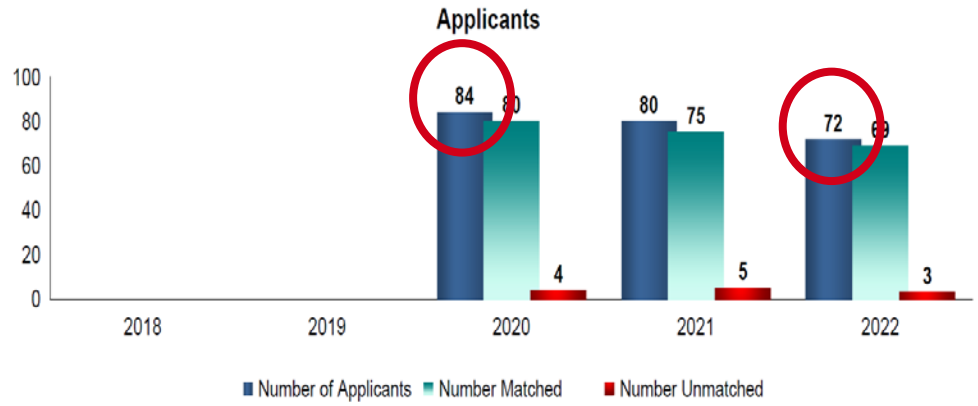

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The HFSA Response

- Crystallized the concept:

  Increase the value proposition of an AHFTC fellowship

  - Value is broadly defined as satisfaction (quality of fellowship training; long-term career satisfaction) and compensation
  - Established the AHFTC Task Force to develop recommendations to HFSA Board

HFSA Task Force

- Mark Drazner, MD, MSc, FHFSA - Chair
- Amrut Ambardekar, MD, FHFSA
- Vanessa Blumer, MD
- Safia Chatur, MD
- Will Grandin, MD
- Rachna Kataria, MD
- Michelle Kittleson, MD, PhD, FHFSA
- Andrew Lenneman, MSCI, MD
- Ken Margulies, MD, FHFSA
- Jane Wilcox, MD, FHFSA, MSc

Task Force Charge

Identify initiatives to increase the value proposition of an Advanced Heart Failure Transplant Cardiology (AHFTC) fellowship

Task Force Timeline (2023)

January

- Task force held 1st meeting
- **Engaged consulting firm**
- Identified key stakeholders for interviews and/or participation in a Consensus Conference
- Broad representation of stakeholders

February

- Questions for interviews developed
- Interviews started
- Identify additional data needed including surveys

March

- Complete interviews and gather survey data
- Develop outcome themes, based on interviews, for discussion at consensus conference

April

- Refine themes and prioritize with Task Force
- **Consensus Conference April 26 – 27 held in conjunction with Board meeting in Atlanta**
- **Report to BOD: April 28**

May

- Identify if additional data are needed
- Present final recommendations to Board of Directors

HFSA AHFTC Fellowship Consensus Conference Attendees

- Mark Drazner, MD, MSc, FHFSA - Chair
- Amrut Ambardekar, MD, FHFSA
- Katie Berlacher, MD, MS, FACC
- Vanessa Blumer, MD
- Richard Cheng, MD
- Richard K Cheng, MD
- Eiran Gorodeski, MD, MPH, FHFSA
- Will Grandin, MD, MEd, MPH
- Rachna Kataria, MD
- Jason Katz, MD, MHS
- Michelle Kittleson, MD, PhD, FHFSA – HFSA BOD
- Arun Krishnamoorthy, MD
- Anuradha Lala, MD, FHFSA
- Nicole Lohr, MD
- Andrew Lenneman, MSCI, MD
- Ken Margulies, MD, FHFSA – HFSA BOD
- Rob Mentz, MD, FHFSA
- Nosheen Reza, MD, FHFSA
- Quentin Youmans, MD
- **Shelley Zieroth, MD**
- John Teerlink, MD, FHFSA – HFSA President

The Bridger Group:

- Bret Schroeder
- Marcy Suntken

HFSA Staff:

- John Barnes
- Kris Fridgen
- Anna Leong

Why Are Fewer People Choosing AHFTC Fellowship?

- Lack of exposure when fellows choose subspecialties
  - Little HF in year 1 of general cardiology fellowship
  - Many cardiology programs do not have VAD/Transplant capabilities
- Fellows entering an AHFTC fellowship typically desire a job in VAD/transplant in an academic setting. Anything less is a disappointment.
- Not attractive to those who want to do HF clinical care but NOT VAD/Transplant
- Lack of financial return for extra year of training (vs. a 3-year general cardiology fellowship)
- Work/Life balance

Why Are Fewer People Choosing AHFTC Fellowship?

- ***Work harder***
- ***Get paid the same***

(or less if RVUs drive compensation)

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This is a hard sell!

What Should HF Training Look Like?
Proposed Re-design

What Should HF Training Look Like (Level I)

- **All cardiologists**
  - Refine the requirements for HF training
  - Moving beyond “2 months on HF consultative service” and “Know the indications for referral for cardiac transplantation”
  - Incorporate the teaching/deliberate practice of *3 new competencies*:

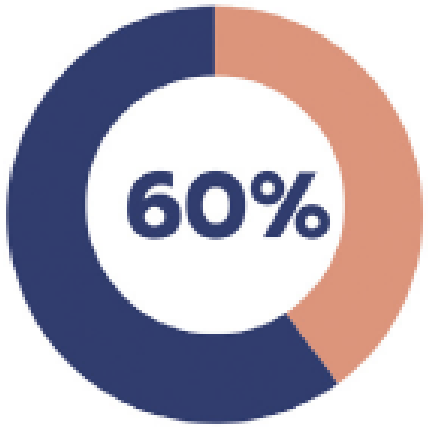
    1. GDMT implementation
    - Outpatient HF clinic rotation, minimum 2+ weeks

CJC Open 4 (2022) 866–872

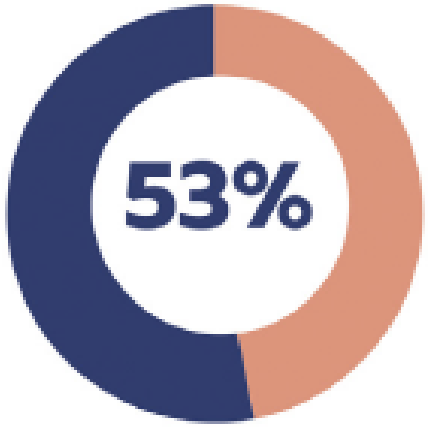
Original Article

Proposal for an Ambulatory Heart Failure Management Curriculum for Cardiology Residency Training Programs

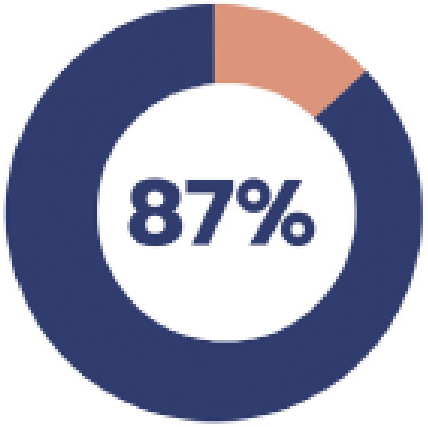
Aws Almufleh, MBBS, MPH, FRCPC,[a] Ricky D. Turgeon, BSc (Pharm), ACPR, PharmD,[b,c] Anique Ducharme, MD, MSc, FRCPC,[d] Filio Billia, MD, PhD, FRCPC,[e] and Justin Ezekowitz, MD, MBBCh, MSc, FRCPC[f]



Only 60% of programs required >=1 ambulatory HF rotations.



53% of these programs had < 5 clinics/month



Encouragingly, 87% of programs are willing and able to adopt our tailored HF training curriculum

 # It is hoped that GDMT implementation could be improved through enhancing HF training of Cardiology residents

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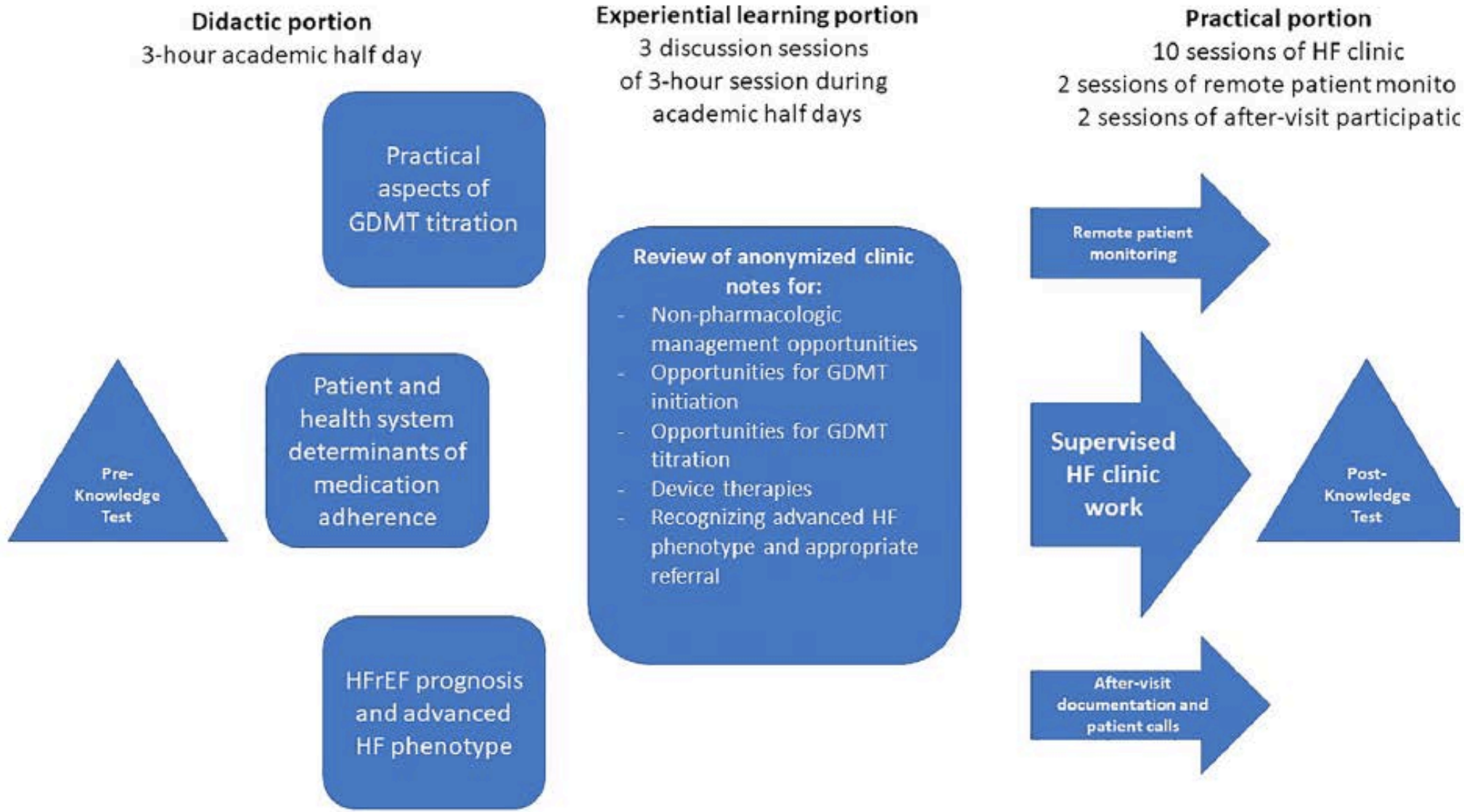

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1. GDMT implementation

- Outpatient HF clinic rotation, minimum 2+ weeks

2. Identification of patients with advanced heart failure

- Class I indication (2022 AHA/ACC/HFSA guidelines)

3. When to refer for MCS/OHT

- Minimum 2+ weeks on advanced HF service, when available
- Didactics if no advanced HF specialists in fellowship program
- Away rotations

Trainees must demonstrate proficiency in these 3 competencies

What Should HF Training Look Like (Level II)

- **Develop a new cadre of "HF specialists" (equivalent to Level II)**
  - Could be offered as a "Distinction in HF/cardiomyopathy"
  - Focused education in heart failure during 3rd year (? 4 months)
  - **Examples of competencies to be gained**
    - Expert in GDMT implementation and outpatient HF disease management
    - Referral for structural heart therapies in patients with heart failure (MV, TV, TAVR)
    - Management of advanced HF
    - Treat outpatients with LVAD/transplant in conjunction with Level III AHFTC
  - **Advocate for value to be assigned to this training**
    - HF specialist on structural heart team
    - Lead outpatient heart failure disease management program/clinic
    - Qualification to round in CCU (paucity of critical care cardiologists)

What Should HF Training Look Like (Level III)

- 1 year after general cardiology
- Rename AHFTC fellowship to MCS/Transplant cardiology
- Same competencies as current level III VAD/Transplant (6-8 months)
  - Include wellness/resiliency (learn from palliative care)
- **Additional skill set ("Minor" or "Distinction") during 4th year** (4 months)

Pick one!

- Critical Care Cardiology (? new board)
- HCM
- Sarcoid
- Amyloid
- Cardio-oncology

- Interventional HF (IABP, Impella)
- Neuromuscular cardiomyopathy
- Pulmonary hypertension
- Genetics
- Imaging (additional echo, CMR)
- Adult congenital heart disease
- Cardio-palliative care

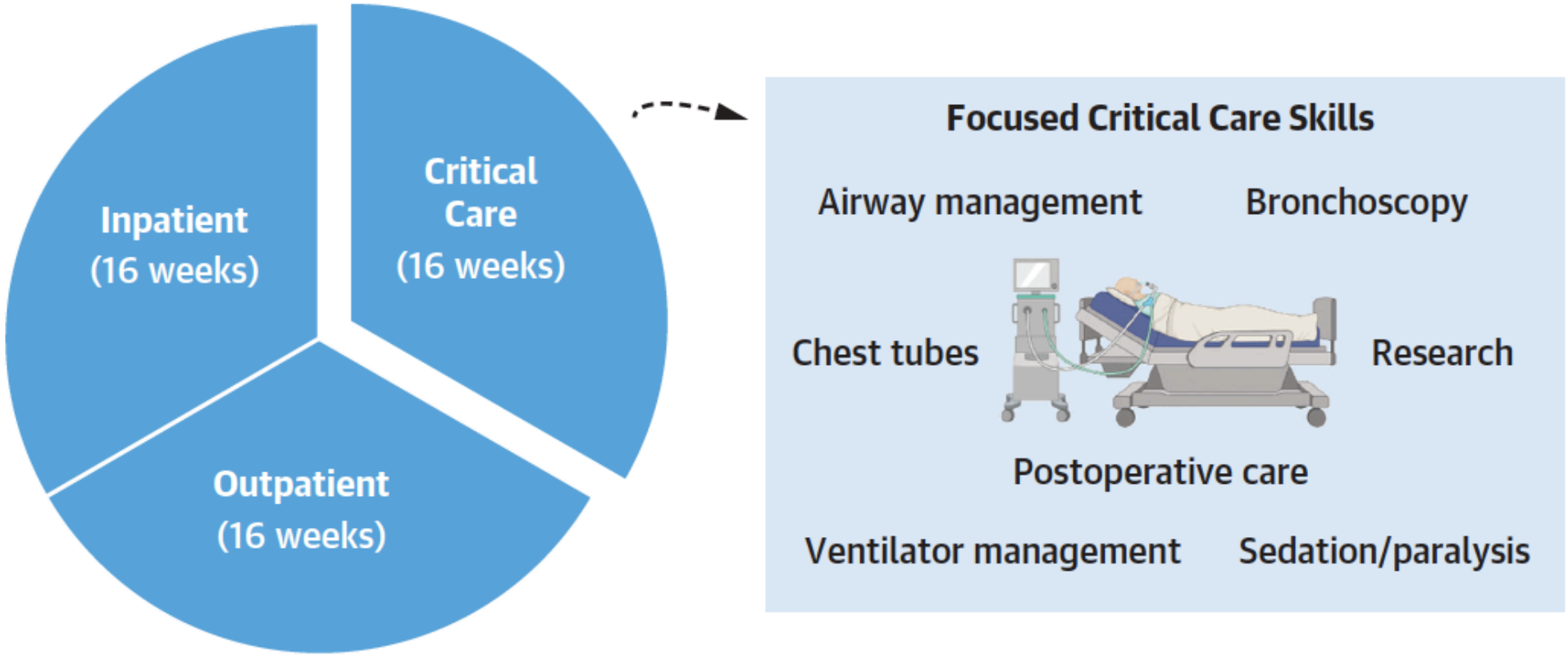
- **Alternatively 3 boards in 4 years (General Cards, MCS/Transplant, and Critical Care)**

Critical Care Enrichment During Advanced Heart Failure Training

Anthony P. Carnicelli, MD,[a] Richa Agarwal, MD,[b] Ryan J. Tedford, MD,[a] Vijay Ramaiah, MBBS,[b] G. Michael Felker, MD,[b] Jason N. Katz, MD[b]

JACC, 2023

FIGURE 1 Advanced Heart Failure Training With Critical Care Enrichment



Key Takeaways

- Redesign training across the spectrum of trainee interest in HF
  - ***All cardiologists acquire 3 new competencies***
    - GDMT implementation
    - Identify advanced HF
    - When to refer to advanced HF center
  - Level II: Develop a ***new cadre of HF specialists***
    - "Distinction in HF/Cardiomyopathy"
    - Achievable during 3-year general cardiology fellowship (4 months dedicated to HF)
    - Advocate for regulation to provide value for achieving this level of expertise
  - Level III: **3 Boards/4 years OR *Additional skill set during 4th year*** *(4 months)*
    - Critical care cardiology, amyloid, HCM, sarcoid, interventional HF, etc
    - Tailor to trainee's interest (flexibility)
    - Increase marketability for jobs