

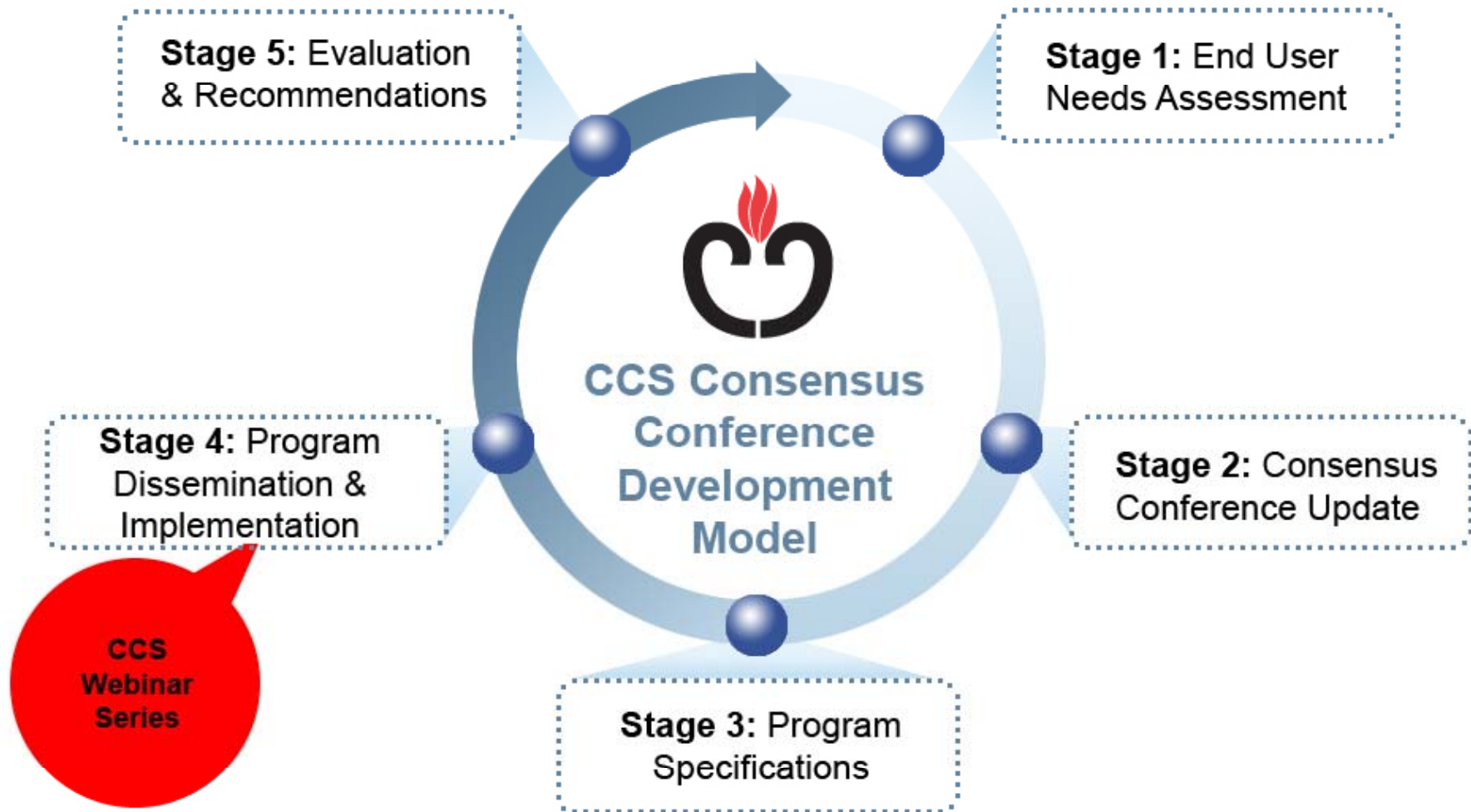
Canadian Cardiovascular Society

Leadership. Knowledge. Community.

Webinar #3

Transitioning Heart Failure Care

CCS Heart Failure Program



Faculty Members



Justin A. Ezekowitz, MBBCh MSc FRCPC

Assistant Professor, University of Alberta

Director, Heart Function Clinic, Mazankowski Alberta Heart Institute

Robert S. McKelvie, MD PhD FRCPC

Professor of Medicine, Division of Cardiology, McMaster University

Medical Director, Heart Failure Program, Hamilton Health Sciences

Medical Director, Cardiac Health and Rehabilitation Program, Hamilton Health Sciences

Jonathan G. Howlett, MD FRCPC FACC FSCAI

Clinical Professor of Medicine

University of Calgary and Foothills Medical Centre

Faculty Disclosures



Justin A. Ezekowitz:

available online at www.vigour.ualberta.ca

Robert S. McKelvie:

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Jonathan G. Howlett:

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Webinar Sessions



Session #1: *Make the Diagnosis: Acute Heart Failure*

Date: Wednesday January 13th 2010

Time: 1200-1300 hours EST

Session #2: *Treatment of AHF*

Date: Wednesday January 27th 2010

Time: 1200-1300 hours EST

Session #3: *Transitioning Heart Failure Care*

Date: Wednesday February 10th 2010

Time: 1200-1300 hours EST

Session #4: *Chronic HF problem management*

Date: Wednesday February 24th 2010

Time: 1200-1300 hours EST

Transitioning Heart Failure Care



Program Outline

12:00 Welcome and Introductions

12:05 Case Presentations

→ Case #1: A Stitch in Time Saves Nine

→ Case #2: Don't You Forget About Me!

→ Case #3: Home Remedies

12:50 Q&A period

13:00 Closing Remarks

Learning Objectives



1. Understand the goals of transition of care for patients with HF.
2. Understand the importance and impact of a transition of care plan for health care professionals as well as for patients and their families.



CASE #1
A Stitch in Time Saves Nine

CASE #1



➤ 86-year old male

- admitted to hospital, mid-August 2007
- with abdominal pain and distension

➤ Past history

- Previous MI (late 90's)
- CABG x 2 (1998)
- LVEF of 40% (2006)
- Type II diabetes
- Hyperlipidemia
- Atrial fibrillation
- Chronic renal failure (baseline creatinine 113-119)
- Previous hernia repair, cholecystectomy
- NKDA

CASE #1 (cont'd)



➤ While in hospital:

- Was found to have ascites
 - ✓ Ascites determined to be result of right-sided heart failure
- 1.5 litres drained, no malignant cells
- LVEF of 25%, with regional wall motion abnormalities
- In retrospect, patient had been getting more dyspneic over the past year (which was attributed to 'age'?)

CASE #1 (cont'd)



➤ In hospital medications:

- Atorvastatin, 20 mg
- Prevacid, 30 mg bid
- ECASA, 81 mg od
- Digoxin, 0.0625 mg od
- Metolazone, 2.5 mg od
- Furosemide, 120 mg bid
- Metoprolol, 37.5 mg bid
- Ramipril, 5 mg od
- Repaglinide, 0.5 mg
- Slow-K, 8 mg tabs bid
- Septra 1 od (SBP prophylaxis)
- Warfarin 2 mg od

CASE #1 (cont'd)



➤ In hospital status:

- Diuresed slowly but steadily
- Able to walk up to 24 steps
- Able to walk laps around the ward



QUESTION #1



Transitional Care



- A series of processes or actions designed to
 - ensure and enhance continuity of care and ongoing collaboration between health care professionals
 - facilitate safe and timely transfer of patients from one level of care (e.g., hospital, HF clinic) to another (e.g., primary care physician)
- Particularly targets patients at high risk for HF readmission (e.g., those with previous hospitalizations, multiple comorbidities or medications, the elderly or those who have concomitant frailty, cognitive/functional impairment, depression, limited social support)

Transition from Hospital to Community



Recommendations

- Patients and caregivers should be educated while in hospital and soon after discharge on
 - Signs and symptoms of worsening HF
 - Self management skills
 - Factors that may aggravate heart failure
 - Reasons for and appropriate use of medications

(Class I, Level C)

- Effective means of communication and collaboration between patient, caregiver and health care providers should be identified

(Class I, Level B)

Transition from Hospital to Community (cont'd)



Recommendations

- A written summary should be provided to the patient at the time of discharge and to the primary care physician within 48 h of discharge. It should cover
 - Diagnoses
 - Significant interventions in hospital
 - In-hospital complications
 - Medications at discharge (including prescriptions and explicit instructions for adjustment)
 - Plans for follow-up, including delineation of the roles of each caregiver

(Class IIa, Level B)

Transition from Hospital to Community (cont'd)



Practical Tips

- The goals and directions of care should be shared and openly discussed among the patient's health care professionals; any differences in perspective/opinion should be identified and a best solution agreed upon.
- **Personal contact with the referring or primary care physician should be considered at or before discharge.**
- RN/APNs with training and expertise in enhancing patient and caregiver HF management skills may assess the patient in hospital and then follow them at home.

Transition from Hospital to Community (cont'd)



Recommendations

- Health care institutions serving HF patients should provide resources for or access to appropriate disease management care for patients recently discharged from hospital with a primary diagnosis of HF .
(Class I, Level C)
- These have been shown to improve adherence to therapy, reduce readmission/resource use rates and may improve mortality and quality of life..

CASE #1 (cont'd)



➤ Hospital discharge:

- Discharged Sept. 3, 2007
- Home care arrangements provided for bathing, bedside commode, shower bench and walker
- Referred to heart function clinic (earliest appointment on October 3, 2007)



QUESTION #2



CASE #1 (cont'd)



➤ Heart Function Clinic visit:

- October 3, 2007
- Since discharge, significant decline
- Was seen by internist in the interim
 - Reduce Metolazone to Monday/ Wednesday/ Friday
- At HF clinic visit, patient reports:
 - Sleeping in bed for most of the time since discharge
 - Increasing fatigue and weakness (able to climb 6 steps at a time with difficulty)
 - Anorexic, weight loss of 5-6 kg
 - No chest pain or dyspnea

CASE #1 (cont'd)



➤ Heart Function Clinic visit:

- HF clinic exam:
 - Patient looks tired
 - BP 90/45 sitting
 - Radial pulse barely palpable when standing
 - HR 55
 - Atrial fibrillation
 - Heart sounds and chest unremarkable
 - JVP flat
 - Mucous membranes dry
 - No ascites
 - Abdomen unremarkable

CASE #1 (cont'd)



➤ Heart Function Clinic visit:

- Lab results:

- Creatinine 385
- Urea 61.3
- Digoxin 2.6 mmol/L
- Sodium 131
- Cl 90
- K 5.1
- Calcium 2.5
- Albumin 39
- Troponin 0.12
- CK 39
- hemoglobin 123
- MCV 81.4 (borderline)
- WBC 5.9
- plts 190

CASE #1 (cont'd)



➤ Heart Function Clinic visit:

- Chest X-ray:
 - Old CABG wires
 - Big heart
 - Some upper lobe vascular cephalization
 - No HF or other problems

CASE #1 (cont'd)



➤ Heart Function Clinic visit:

- Social Status:
 - Wife frail, in 2 weeks prior to husband's hospital admission, found it difficult to help him dress
 - Live in a side-split house, with 6 steps up and down
 - Patient has had memory loss for past 3-5 months
 - Patient has had low mood, passive death wishes
 - Feels isolated, wife does not have time to look after day-to-day household issues
 - Daughter is 1.5 hours away

CASE #1 (cont'd)



➤ What happened?

- Patient was re-hospitalized from October 3-13, 2007
- Cardiac medications were adjusted
- Was treated for depression
- MMSE 24/30, abnormal clock (cognitive impairment)
- At discharge:
 - Enhanced home care for bathing and dressing
 - Wife and daughter taught about fluid management and how to seek medical help if deterioration
 - Seen in HF clinic within 2 weeks of discharge and followed since
 - Referred to geriatric day hospital for outpatient rehabilitation
 - Close follow-ups = no re-hospitalization

CASE #1 (cont'd)



- Lessons to be learned about transition of care for heart failure patients:
 - Classic, 'fits the bill' of 'at-risk' senior
 - Multiple functional deficits
 - Polypharmacy
 - Limited social support system
 - 2+ total number of chronic health conditions
- Transitional care is a must
 - This patient fell through a 4 week 'crack'/black hole
 - He went through an avoidable 11 days hospital readmission (at about \$1000/day, for a grand total of \$13,000.00)



CASE #2
Don't You Forget About Me!

CASE #2



- 78-year old female
 - arrives in ER
- Obtunded, deep breathing, poorly responsive and confused
- Brought in by family
- BP 180/80, HR 45, regular
- Clear chest, no edema or JVD
- HS unremarkable, no murmurs
- Not moving left side

CASE #2 (cont'd)



➤ Further History:

- Her daughter tells you she was discharged from hospital early last week for Heart Failure and Afib
- Was doing well until the day of admission when she began to act 'funny'
- Brought in medications from home:
 - Metoprolol, ASA, ramipril, stool softener, amiodarone, digoxin, furosemide, spironolactone, gliclazide, metformin, zopiclone



QUESTION #3



CASE #2 (cont'd)



➤ Testing:

- Normal lytes, creatinine
- Hemoglobin 105, WBC, plts normal, BS normal
- ECG unchanged from previous-
 - Sbrady @ 55 bpm, LVH, strain pattern
- CXR no CHF or infiltrate
- And INR 7.1

CASE #2 (cont'd)



Why did this occur?

- On further history:
 - amiodarone and coumadin were new medications
- Family MD did not get Discharge Summary
 - Was away for 10 days
- No INR since discharge from hospital as it stated on summary family MD to follow INR
- What could have been done differently?

Transition from Hospital to Community



Recommendations

- A written summary should be provided to the patient at the time of discharge and to the primary care physician within 48 h of discharge. It should cover
 - Diagnoses
 - Significant interventions in hospital
 - In-hospital complications
 - Medications at discharge (including prescriptions and explicit instructions for adjustment)
 - Plans for follow-up, including delineation of the roles of each caregiver

(Class IIa, Level B)

Transition from Hospital to Community (cont'd)



Recommendations

- Health care institutions serving HF patients should provide resources for or access to appropriate disease management care for patients recently discharged from hospital with a primary diagnosis of HF.

(Class I, Level C)

- These have been shown to improve adherence to therapy, reduce readmission/resource use rates and may improve mortality and quality of life.

Transition from Hospital to Community (cont'd)



Practical Tips

- The goals and directions of care should be shared and openly discussed among the patient's health care professionals; any differences in perspective/opinion should be identified and a best solution agreed upon.
- **Personal contact with the referring or primary care physician should be considered at or before discharge.**
- RN/APNs with training and expertise in enhancing patient and caregiver HF management skills may assess the patient in hospital and then follow them at home.

Template for Transition of Care Plan



Communications on clinical status should include:

- Diagnoses
- Current problems and condition at discharge
- Recommendations from subspecialty consultants, if applicable
- Laboratory results (advise when to repeat, what to watch for, how to respond)
- Current drugs and doses
- Drugs requiring dose titration (advise when to titrate, what to watch for, target dose)
- Follow-up plan/tests (give timeframe to return, to see PCP, to see other providers)
- Resuscitation and other end-of-life issues discussed in hospital



CASE #3
Home Remedies

CASE #3



- 80-year old female living with family (daughter and son)
- Admitted for the third time in 2 months for CHF
- History of ischemic cardiomyopathy with previous CABG and MR annuloplasty ring
- Residual EF is 29% and moderate MR
- During admission, diuresed easily, with resumption of usual activities in about 4 days
- About to go home

CASE #3 (cont'd)



- Labwork:
 - You noticed during this admission Na 124
 - It was 134 at hospital discharge last time
 - You also notice it was similar to this her last two admissions
 - She typically would be OK for about 1 week followed by 2-3 weeks of worsening and then admission
 - Adamant she was compliant with medications
 - She had been doing well until blood work 3 months ago showed NA 133 when performed routinely

CASE #3 (cont'd)



- Discharge Medications:
 - Perindopril, nitroglycerine patch, furosemide, sprionolactone, metolazone when instructed, amlodipine, carvedilol, ASA, synthroid, acetaminophen
 - No herbal supplements
 - Patient at dry weight with her usual BP and heart rate

CASE #3 (cont'd)



- Discharge Instructions:
 - Exercise / patient goes for walks
 - Symptoms of HF / she always calls her clinic when worse
 - Scheduled to get her flu shot
 - Does not smoke
 - She asks about fluid and salt restriction, and states she is always thirsty!! She is also very worried about her Na level as she has been 'unable to fix this' since it was first identified.

CASE #3 (cont'd)



What do you do?

- Upon a reassessment of fluid and salt intake, you find that:
 - Her daughter was very concerned about the Na level
 - Since it was low when admitted, they thought adding Oxo cubes to her diet (1-2/day) would help
 - Instead more thirsty
- After re-education regarding salt intake, she has had no further hospital admissions.

Transition from Hospital to Community



Recommendations

- Patients and caregivers should be educated while in hospital and soon after discharge on
 - Signs and symptoms of worsening HF
 - Self management skills
 - Factors that may aggravate heart failure
 - Reasons for and appropriate use of medications

(Class I, Level C)

- Effective means of communication and collaboration between patient, caregiver and health care providers should be identified.

(Class I, Level B)

Template for Transition of Care Plan



Communications on education should include:

- Who was educated (i.e., patient, family or caregiver)
- What was taught – e.g., specific information on
 - Fluids
 - Food selection, salt restriction
 - Weight and what to do if weight gained
 - Identifying symptoms of worsening HF and what to do
 - Appropriate use of medications
 - Activity/exercise
- Information on when to call/see PCP and when to return to specialist
- Diagnoses
- Current problems and condition at discharge

Transition from Hospital to Community: Patients with Advanced Heart Failure



Recommendations

- Patients with advanced HF require management strategies to adequately control their symptoms
- Patients and their caregivers should receive counseling for
 - Physical, emotional, social and spiritual concerns and goals
 - Advance and end-of-life directives

(Class I, Level C)



A Word on Optimal Therapy

→ ACEi

→ Beta Blockers

ACE Inhibitors in Heart Failure: From Asymptomatic LVD to Severe HF



SOLVD Prevention (Asymptomatic LVD)

20% ↓ death or HF hosp.

29% ↓ death or new HF

SOLVD Treatment (Chronic Heart Failure)

16% ↓ mortality

CONSENSUS (Severe Heart Failure)

40% ↓ mortality at 6 mos.

31% ↓ mortality at 1 year

27% ↓ mortality at end of study

§ No difference in incidence of sudden cardiac death

SOLVD Investigators. N Engl J Med 1992;327:685-91.

SOLVD Investigators. N Engl J Med 1991;325:293-302.

CONSENSUS Study Trial Group. N Engl J Med 1987;316:1429-35.

HFSA 2006 Practice Guideline (7.5, 7.8) Pharmacologic Therapy: Beta Blockers



RECENT DECOMPENSATION OR EXACERBATION

Beta blocker therapy is recommended for patients with a recent decompensation of HF after optimization of volume status and successful discontinuation of IV diuretics and vasoactive agents.

Whenever possible, beta blocker therapy should be initiated in the hospital at a low dose prior to discharge of stable patients.

Strength of Evidence = B

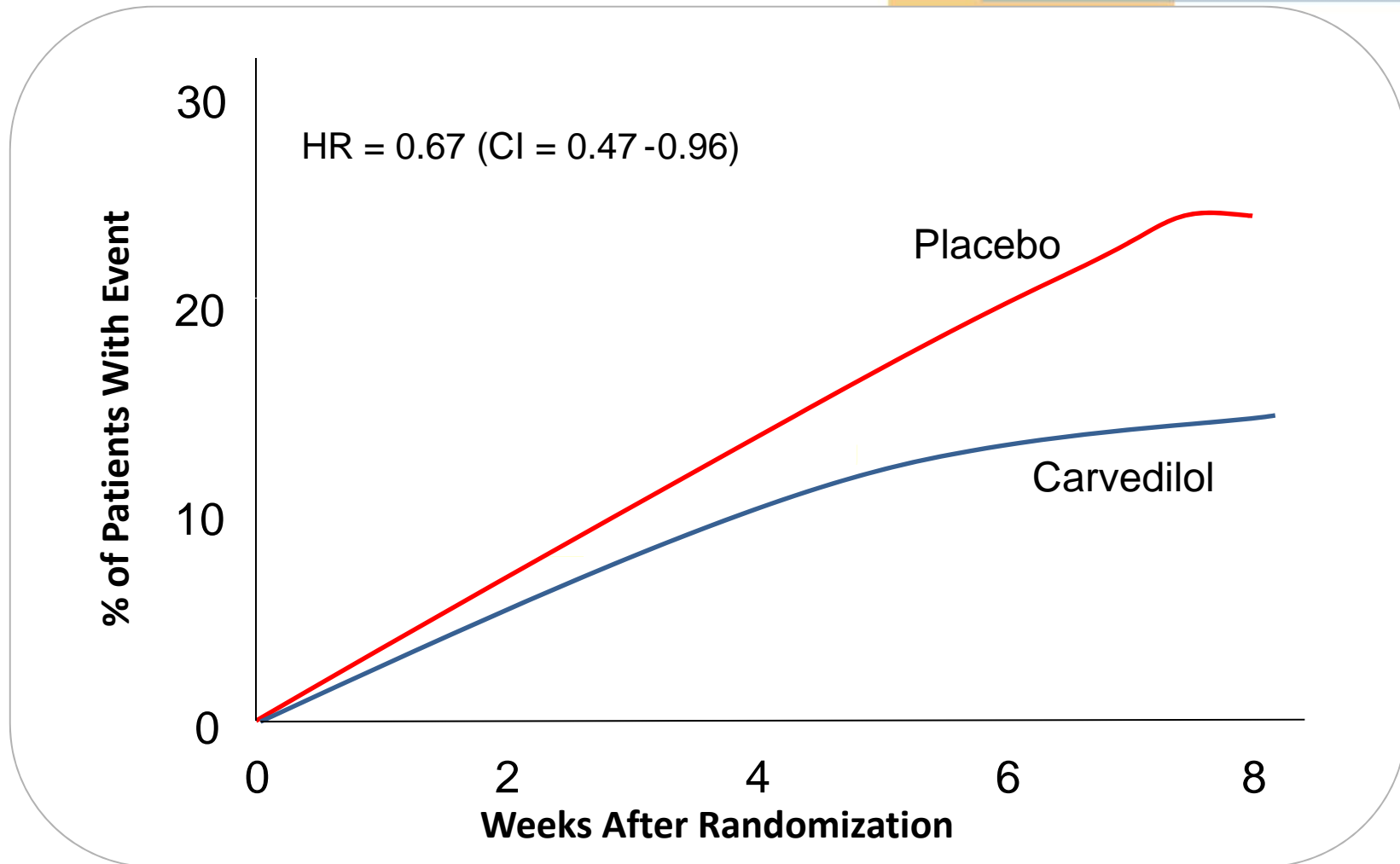
Continuation of beta blocker therapy is recommended in most patients experiencing a symptomatic exacerbation of HF during chronic maintenance treatment.

Strength of Evidence = C

- § If necessary, consider temporary dose reduction
- § Avoid abrupt discontinuation
- § Reinstate or gradually increase before discharge

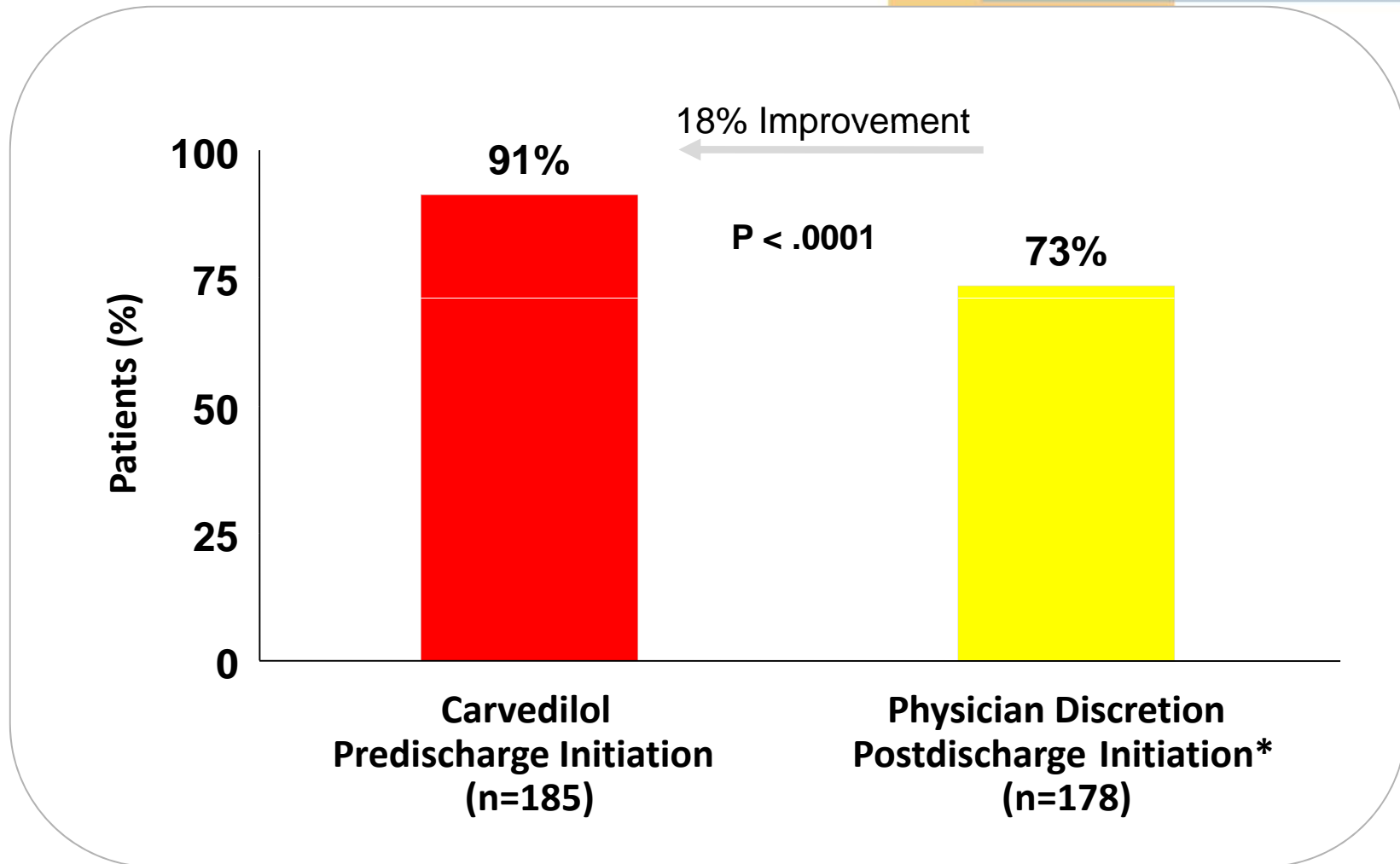
Adapted from: Adams KF, Lindenfeld J, et al. HFSA 2006 Comprehensive Heart Failure Guideline. J Card Fail 2006;12:e1-e122.

COPERNICUS: Death, Hospitalization, or Study Drug Withdrawal in High Risk Patients



Krum H et al. JAMA 2003;289:754-6.

IMPACT-HF Primary End Point: Patients Receiving Beta Blocker at 60 Days



Gattis WA et al. JACC 2004;43:1534-41.



End of Case Presentations



QUESTIONS





**For additional references, resources and
tools, please visit our website:**

www.hfcc.ca

