Reducing Heart Failure Readmissions from a Nursing Perspective

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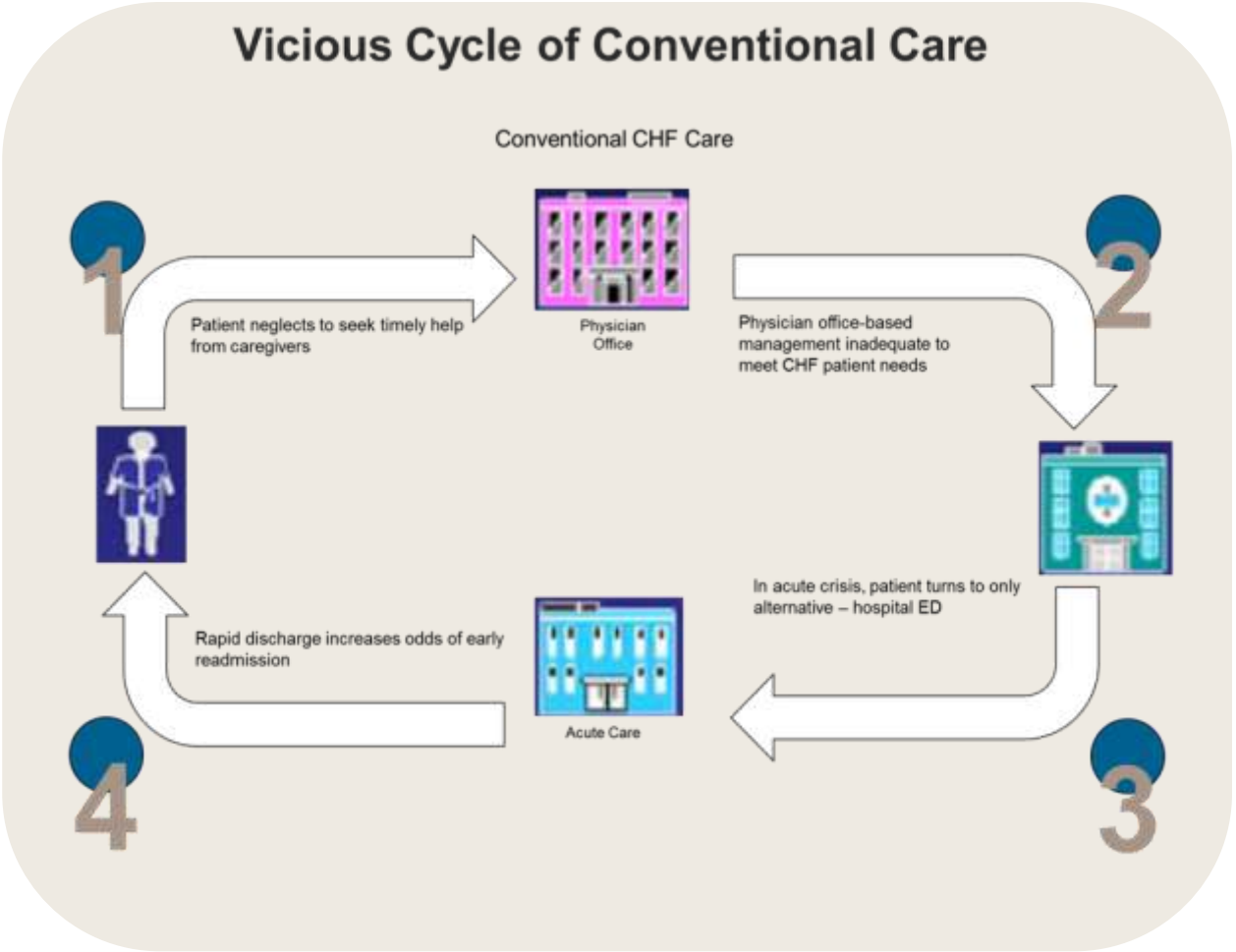
Improving People's Lives
through innovation in research, education and patient care

Disclosures

Heart Failure Statistics

- Approx 5.1 million patients in the US have HF; 23 million worldwide
- 400-700 new cases diagnosed/year
- 5-Year mortality ~ 50%
- Leading cause of hospitalization for people over 65 in the US
- >1 million patients hospitalized with primary dx of HF, accounting for a total Medicare expenditure exceeding $17 billion
- Lifetime risk is one in five for men and women

Vicious Cycle of Conventional HF Care



Heart Failure Readmissions

- Discharge from a HF hospitalization is followed by a 30 day readmission in ~ 24% of cases.
- Recurrent HF/CV conditions account for only about half of the readmissions
- Despite established clinical predictors and psychological/socioeconomic factors, it is difficult to assemble a risk model for readmission that is robust and actionable.

Heart Failure Readmission Strategies

- Early hospital follow-ups
- Transitional clinics
- IV Lasix
- Outpatient procedures
- Remote monitoring
- Cardiac rehab
- Research trial

Early Hospital Follow Up

- HF Nurse Navigator f/u call 24-48 hours post discharge
- HF NP clinic visit w/in 3-7 days; frequent NP clinic visits if needed
- PCP appointment w/in two weeks
- Local cardiologist appointment within one month, if indicated

HF Transition Clinic

- Facilitate the transition between discharge and clinic appointment with outside cardiologist.
- The aim is to prevent readmissions and improve education about HF medications and special diet, as well as titration of medication if required
- Within one week of discharge
- Only for hospital f/u and a primary dx of HF
- Patients seen only 1-2 times based on HF s/s

Medical Center

OSU Heart Failure Program

Dear Patient:

Welcome to The Ohio State University Heart Failure Program Transition Clinic. Our goal is to make sure you have a good recovery after your recent hospitalization.

What to expect from us:

- To educate you about heart failure including your medications, following a low sodium diet, and self-monitoring tasks
- To optimize your medical regimen
- To screen for other causes of shortness of breath or diseases that could help your doctor take care of your heart failure
- To follow up on laboratory work or procedures we order
- To communicate recommendations from our visit with your physician

What we expect from you:

- To bring your medications (or a medication list) to your appointment
- To monitor your weight and blood pressure at home and keep a log that you and your physician could review to make medication adjustments
- To let us know if you have any questions or concerns

We will give you written instructions about any medication changes made and let you know test results ordered during our visit. Please communicate with your primary care physician or cardiologist (heart doctor) in case your symptoms return or worsen and / or if you need any medication refills after our visit.

Thank you for allowing us to participate in your care.

Sincerely,

The Ohio State University Heart Failure Team

Your heart's in the right place

IV Lasix as an Outpatient

- Availability to give IVP Lasix to our decompensated HF patients.
- Option to give IVP lasix at home for our patients with HHN
- Scheduled IVP lasix as an OP and IV lasix gtts
- Augmentation of loops diuretics with metolazone/HCTZ

Outpatient Procedures

- Outpatient Ultrafiltation
  - Diuretic resistance or intolerance
  - Diuretic holiday

- Outpatient Paracentesis
  - Significant abdominal ascites; comorbid liver disease

Remote Monitoring

- Cardiomems (pulmonary pressure monitoring)
  - Both HFpEF and HFrEF
  - FDA-approved HF System proven to significantly reduce HF hospital admissions and improve quality of life
- Optivol
  - Objectively tracks fluid changes by monitoring intrathoracic impedance, thereby assisting in the detection of impending heart failure
- Latitude

Medtronic

Heart Failure Management Report

Device:	Serial Number:	Date of Visit:
Patient:	ID:	Physician:

Date of Birth History	EF, on Implant	20% Jun 1, 2009 01-Jun-2009	Hospital

Clinical Status (01-Oct-2009 to 01-Mar-2010)

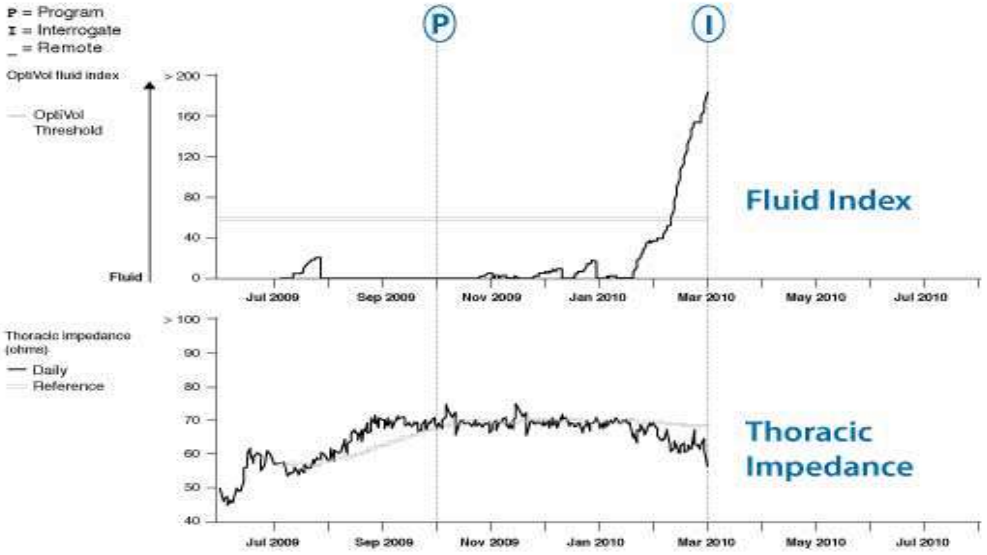
Treated VT/VF	0 episodes	V. Pacing	99.8%	Lower Rate	50 ppm
AT/AF	22 episodes	Atrial Pacing	17.2%	Upper Rate	130 ppm
Time in AT/AF	< 0.1% hr/day (0.2%)			Battery	OK

Observations (1) (01-Oct-2009 to 01-Mar-2010)

Possible fluid accumulation: exceeded OptiVol Threshold, 28-Feb-2010 – ongoing.

OptiVol Fluid Trende (Jun 2009 to Mar 2010)

OptiVol fluid index is an accumulation of the difference between the daily and reference impedance.



All patient data are fictitious and for demonstration purposes only.

Cardiac Rehab

- New Medicare Guidelines: “February 18, 2014, Medicare covers cardiac rehabilitation services to beneficiaries with stable, chronic heart failure defined as patients with left ventricular ejection fraction of 35% or less and New York Heart Association (NYHA) class II to IV symptoms despite being on optimal heart failure therapy for at least 6 weeks.”
- Close monitoring (weights, BP, HF s/s): Seen three times a week

Research Trial/CALM program

- Research Trials
  - Close f/u with HF research nurse
  - Provide medical therapies/devices to patients who may not otherwise qualify or are not candidates for advanced cardiac therapies
- CALM program
  - Integrative group medical visits plus mindfulness training for patients recently discharged with CHF.
  - 8 weekly visits focusing on patient education about medications, diet, exercise, sleep, and stress management; group support; and training in mind-body skills such as mindfulness, self-compassion, and loving-kindness

Future

- Home visit from HFNP
  - Most effective way to assess patient's resources
- Improved hospice and palliative care
  - Involve sooner
  - Educate patient/families