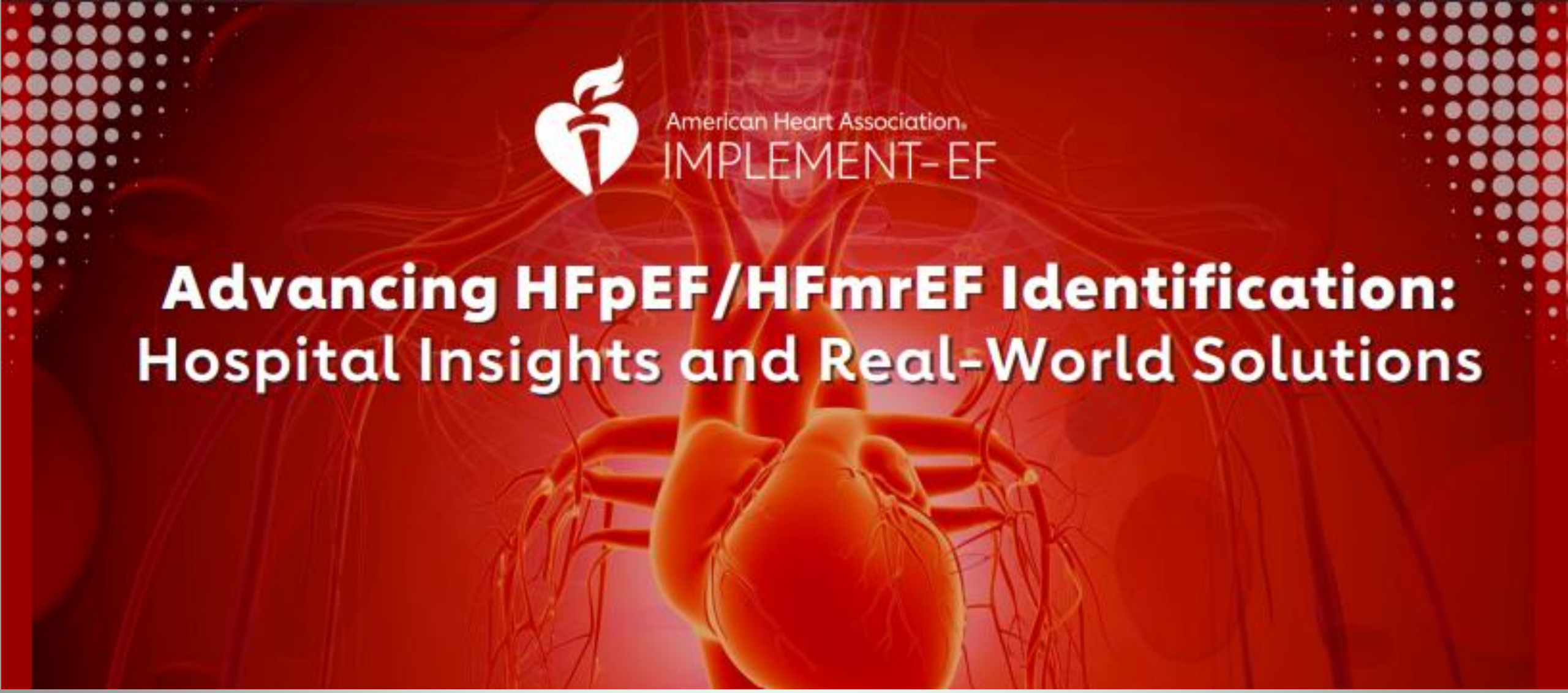


Webinar will begin shortly

The American Heart Association's IMPLEMENT-EF initiative is supported by Bayer

American Heart Association.
IMPLEMENT-EF

IMPLEMENT-EF Initiative **Overview**

Scan the QR code to see a map of participating sites, stay informed about upcoming educational opportunities, and insights from the initiative.

heart.org/IMPLEMENTEF

In 2025, the American Heart Association, launched a quality improvement initiative to:

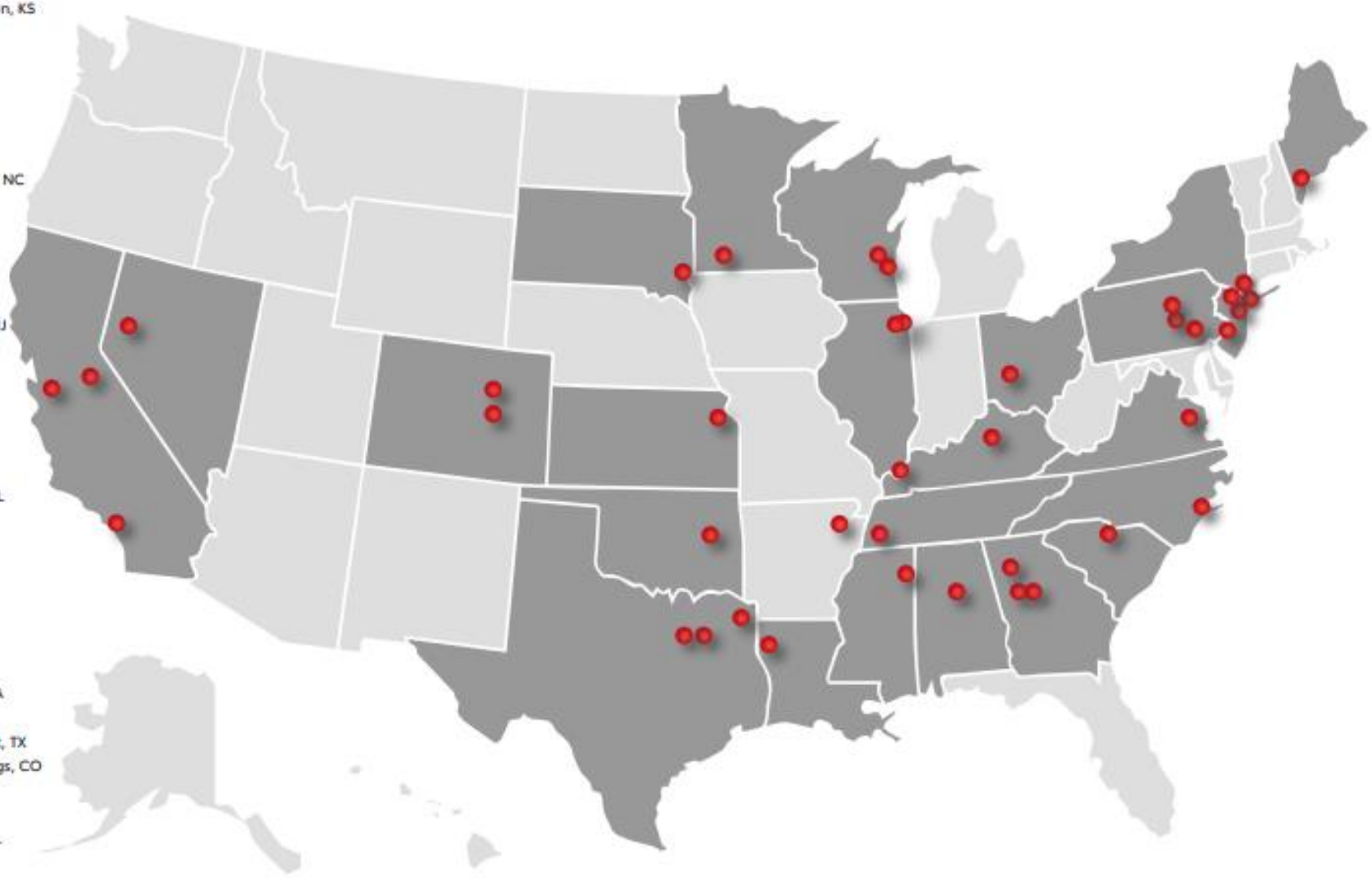
- Discover current gaps and identify ideal care models in the HFpEF/HFmrEF patient journey
- Build a network of multidisciplinary team members focused on improving HFpEF/HFmrEF care
- Amplify HFpEF/HFmrEF awareness with providers and monitoring adherence to evidence-based therapies for HFpEF/HFmrEF patients in hospitals

https://www.heart.org/en/professional/quality-improvement/implement-ef

American Heart Association.
IMPLEMENT-EF

IMPLEMENT-EF Participating Sites

1.	AdventHealth Redmond	Rome, GA
2.	AdventHealth Shawnee Mission	Shawnee Mission, KS
3.	Avera McKennan Hospital & University Health Center	Sioux Falls, SD
4.	Baptist Health Paducah	Paducah, KY
5.	Baptist Health Lexington	Lexington, KY
6.	Baptist Memorial Hospital - Memphis	Memphis, TN
7.	Bon Secours St. Mary's Hospital	Richmond, VA
8.	Carolina Pines Regional Medical Center	Hartsville, SC
9.	Carteret Health Care	Morehead City, NC
10.	Dayton Veterans Affairs Medical Center	Dayton, OH
11.	Froedtert Hospital	Milwaukee, WI
12.	Froedtert West Bend Hospital	West Bend, WI
13.	Geisinger Medical Center	Danville, PA
14.	Hackensack Meridian JFK University Medical Center	Edision, NJ
15.	Hackensack Meridian Southern Ocean Medical Center	Manahawkin, NJ
16.	Hackensack University Medical Center	Hackensack, NJ
17.	MaineHealth Maine Medical Center Biddeford	Biddeford, ME
18.	Mount Sinai Health System	New York, NY
19.	Murray County Medical Center	Slayton, MN
20.	NEA Baptist Memorial Hospital	Jonesboro, AR
21.	North Mississippi Medical Center	Tupelo, MS
22.	Northwestern Medicine Palos Hospital	Palos Heights, IL
23.	NYC Health + Hospitals / Elmhurst	Elmhurst, NY
24.	Ochsner LSU Health Shreveport	Shreveport, LA
25.	Penn Medicine Lancaster General Health	Lancaster, PA
26.	Penn State Health Milton S. Hershey Medical Center	Hershey, PA
27.	Renown Regional Medical Center	Reno, NV
28.	Saint Francis Hospital Muskogee	Muskogee, OK
29.	Stanford Health Care	Stanford, CA
30.	Sutter Medical Center, Sacramento	Sacramento, CA
31.	Texas Health Fort Worth	Fort Worth, TX
32.	Titus Regional Medical Center	Mount Pleasant, TX
33.	UCHealth - Memorial Hospital Central	Colorado Springs, CO
34.	UCHealth University of Colorado Hospital	Aurora, CO
35.	UI Health	Chicago, IL
36.	University of Alabama at Birmingham Hospital	Birmingham, AL
37.	University of California Irvine Medical Center	Orange, CA
38.	University of Texas Southwestern Medical Center	Dallas, TX
39.	WellStar Kennestone Regional Hospital	Marrieta, GA
40.	WellStar Paulding Hospital	Hiram, GA



heart.org/IMPLEMENTEF

Zoom Events

Microphones are muted and cameras are disabled at start of event.

Feel free to ask questions by typing your question in the Q&A box located at the bottom of your screen in the Zoom control bar.

For live attendees, a PDF of the presentations will be available in the resources section of the Zoom Platform.

For viewers watching the recording you can access a PDF of the presentations at the bottom of the page.

Disclaimer

The recommendations and opinions presented by our guest speakers may not represent the official position of the American Heart Association. The materials are for educational purposes only, and do not constitute an endorsement or instruction by AHA/ASA. The AHA/ASA does not endorse any product or device.

IMPLEMENT-EF:

Advancing HFpEF/HFmrEF Patient Identification: Hospital Insights and Real-world Solutions

Jessica Nensel DNP, ACNS-BC
CV-Service Line Program Coordinator
University of Colorado Hospital

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Disclosures

I have no disclosures

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University of Colorado Hospital Overview

- Available hospital beds: 844
- Number of employees: 14,815 (Denver Metro)
- Number of inpatient admissions and observation visits: 56,130
- Number of outpatient visits: 2,095,822
- Number of Emergency Department visits: 185,960
- Number of EMS transports to ED: 29,154

- American College of Surgeons (ACS) Level I Trauma Center.
- American Burn Association (ABA) Verified Burn Center
- National Cancer Institute (NCI) Designated Cancer Center
- The Joint Commission (TJC) Certifications:
  - Advanced Comprehensive Stroke Center Certification
  - Advanced Ventricular Assist Device Certification
  - Advanced Inpatient Diabetes Advanced Certification
  - Advanced Palliative Care Advanced Certification
  - Spinal Cord Injury Rehabilitation Certified

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Our system has been recognized as a leader in quality both locally and nationally.

#1 in CO: **University of Colorado Hospital, 13th year in a row**

#2 in CO: **Medical Center of the Rockies**

#4 in CO: **Memorial Hospital**

Health Care's Most Wired

CHIME recognizes 26 hospitals
University of CO Hospital #20 in 2024

Top Major Teaching Hospital

Fortune/OINC AI 100 Top Hospitals 2024
University of CO Hospital #11

CMS 5-star quality rating

Top Employer for Women

Forbes 2023 Best Employers for Women
UCHealth (Colorado) #12

Magnet Designation, American Nurses Credentialing Center

Medical Center of the Rockies, Poudre Valley Hospital, and University of Colorado Hospital have all been awarded multiple Magnet designations for nursing excellence. University just received their 6th designation. Memorial Hospital received their first designation in 2023.

Ranked UCHealth as one of the country's Top performing health care systems in social responsibility, health care value and patient outcomes.

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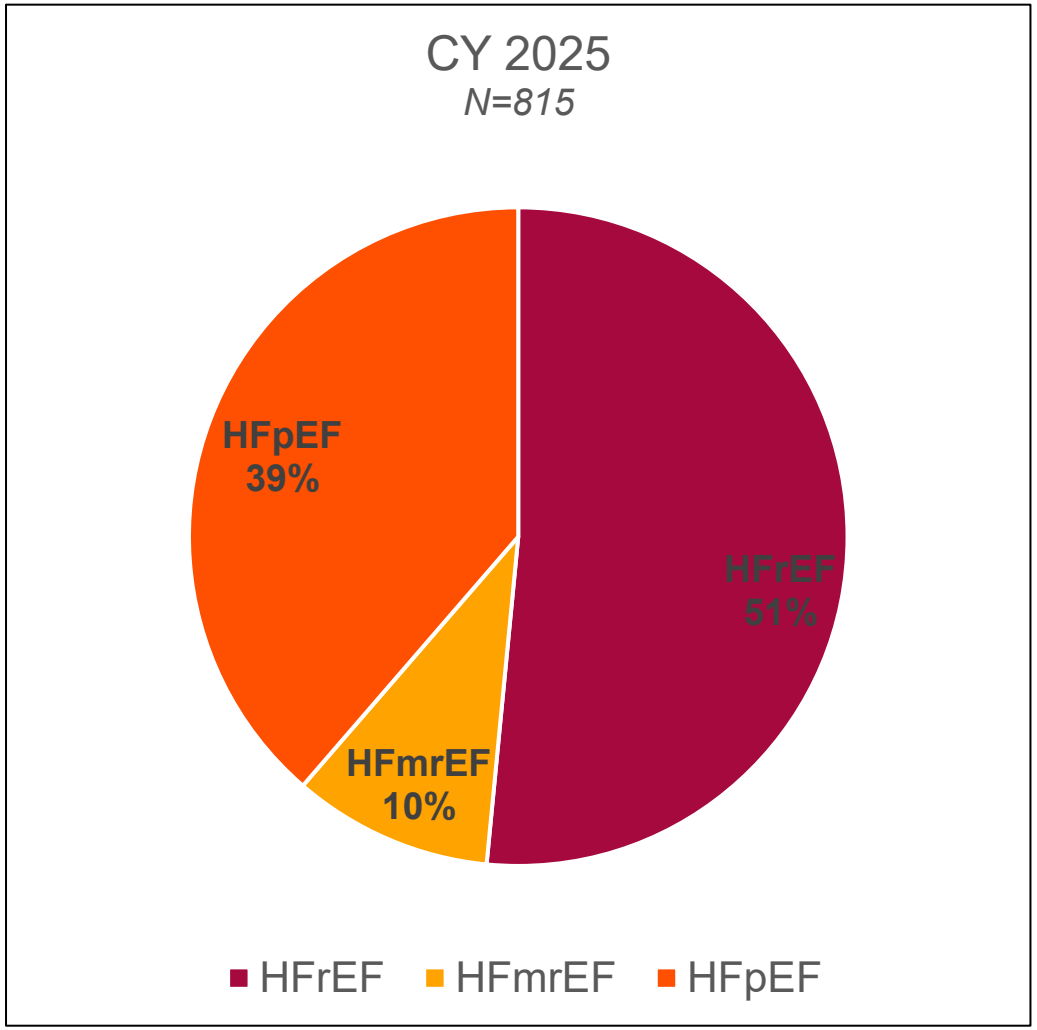
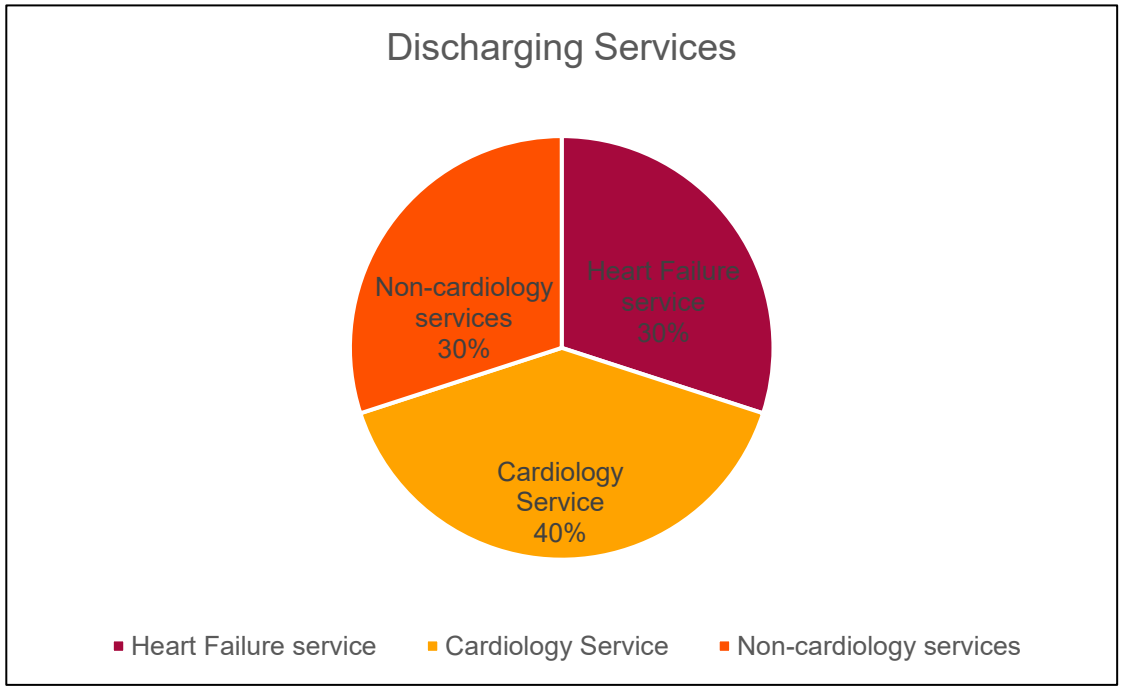
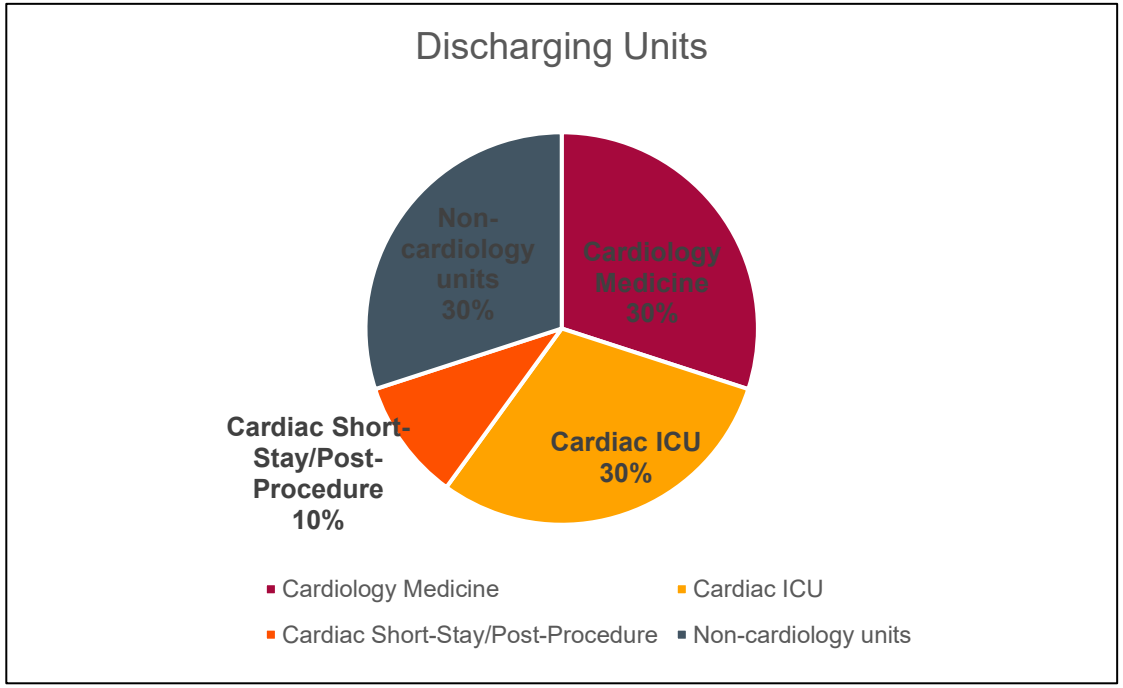
University of Colorado Hospital: Heart Failure Population







What are our challenges with identifying patients with heart failure during hospitalization

- Non-cardiology services managing ~1/3 of our IP heart failure population
  - Use of non-cardiology order sets
  - Key quality metrics not addressed during MDRs
  - TOC elements may be missed

- OPA alerts do not capture all captures on admission
  - Providers can defer the alert
  - Manual review process
  - Criteria sensitivity and specificity

- Patients presenting with the trifecta of hypertensive heart and chronic kidney disease
  - Challenging to determine primary reason for admission
  - Concurrent coding

- Rotating housestaff
  - Ensuring education on order sets, evidence-based guidelines, and quality metrics
  - Monthly education when starting cardiology rotation

- Some of our GWTG-HF metrics are missed TOC efforts for HFpEF patients
  - Heart failure discharge education
  - 7 day follow-up appointment

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Epic Tools to Assist in Identifying Patients with Heart Failure

- Epic tools:
  - On admission:
    - OPAs
    - Cardiology and heart failure admission order sets
    - Patient lists (EF, HFpEF on problem list)

  - On discharge
    - OPAs
    - Cardiology and heart failure discharge order set

  - Care Progression Report Banner

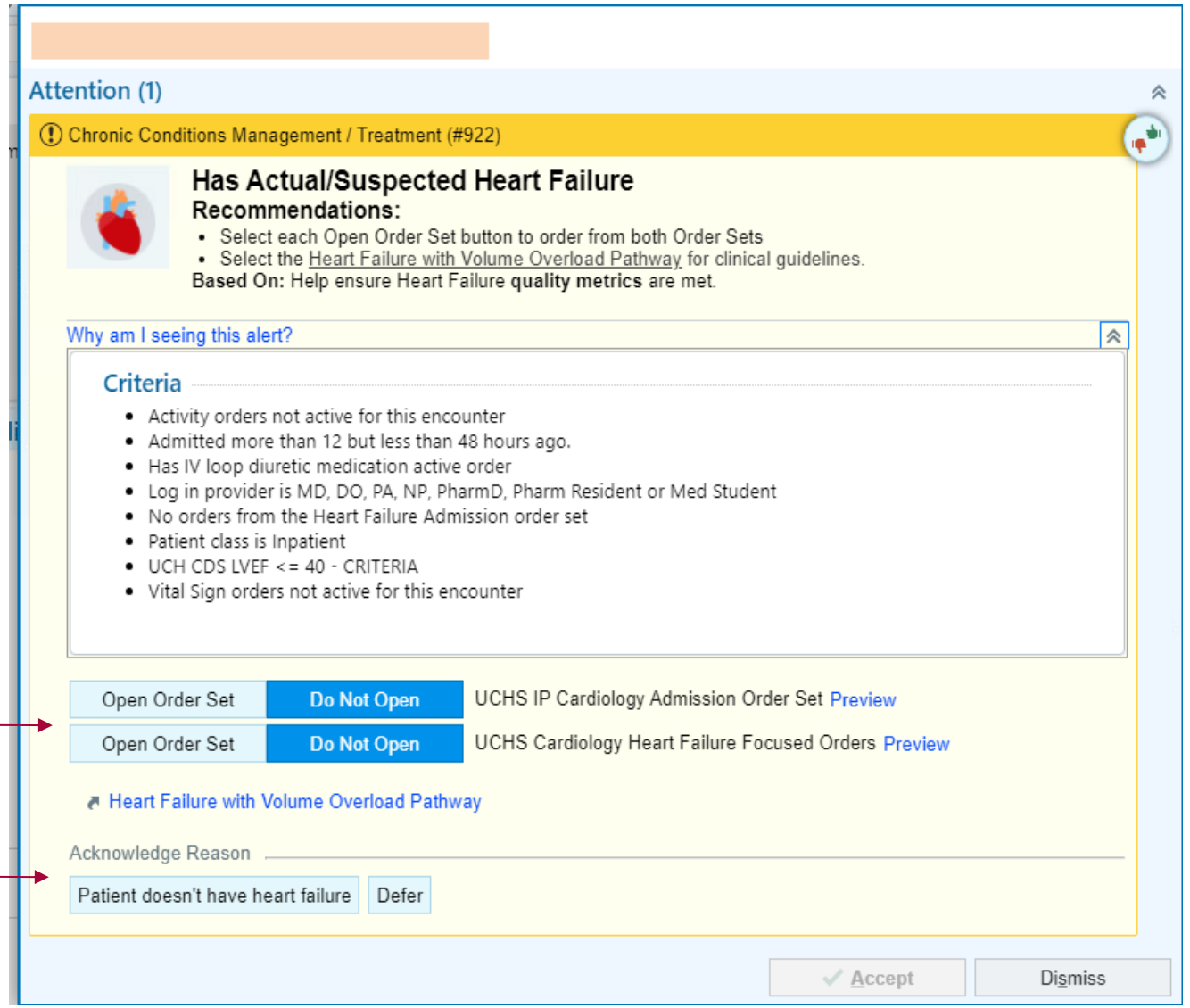
  - ARNI OPA

Epic Tools:
Heart Failure OurPractice Advisory (OPA) on Admission

- Purpose of OPA:
  - Alert providers during admission process that patient may have heart failure
  - Provides notification that OPA fired to the heart failure quality team
  - Encourage admitting provider to consider using the evidence-based heart failure admission order set if clinically appropriate
  - Provides link to heart failure order sets
  - Provides link to heart failure pathway

Links to admission order sets

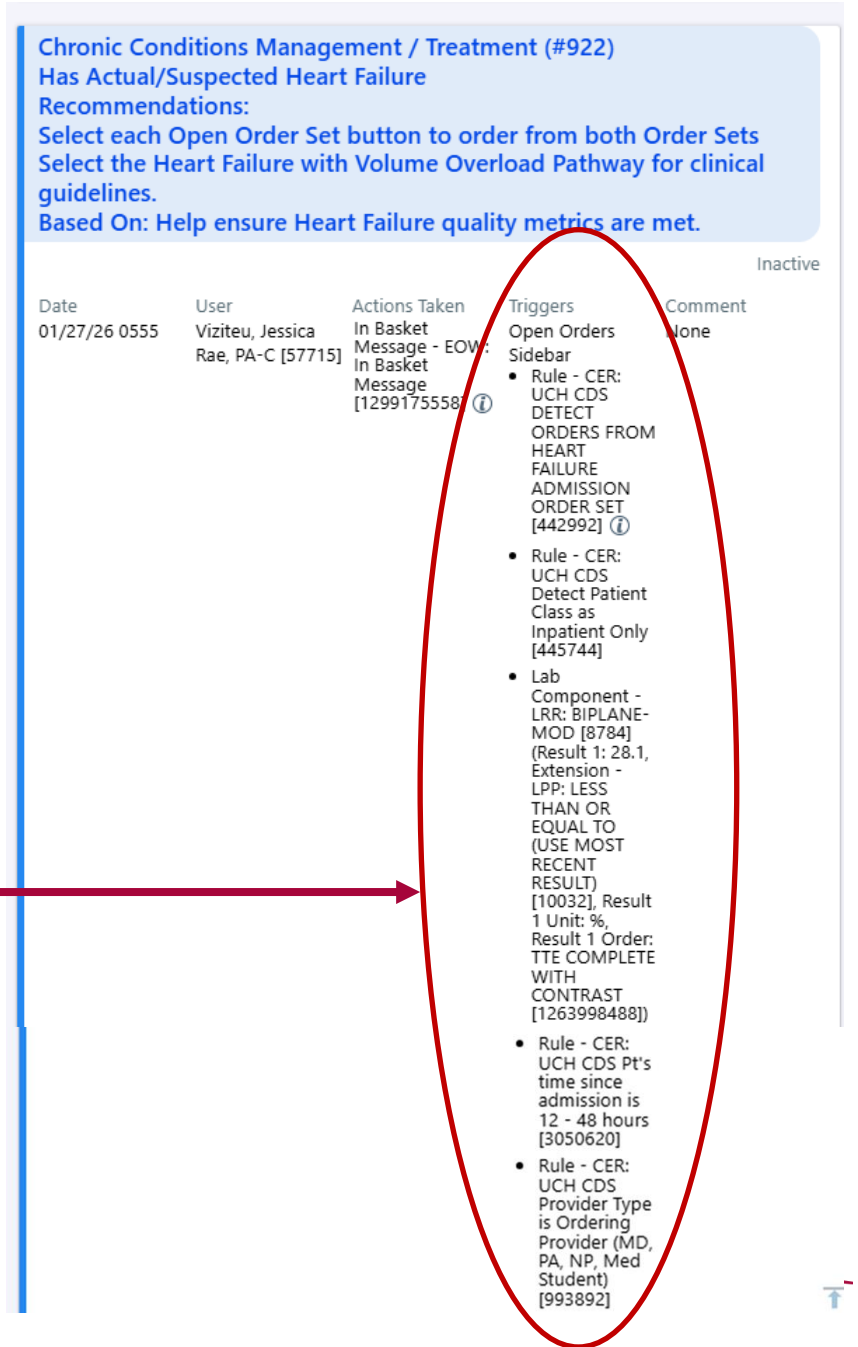
Link to heart failure pathway



Epic Tools:
In Basket Notification of Heart Failure Admission OurPractice Advisory (OPA)

- Notification that appears in Epic InBasket that OPA fired
- Includes triggers that made OPA fire
- Requires chart review to determine reason for admission
- If appropriate, patient added to Heart Failure Inpatient List
- List shared with multidisciplinary teams
  - Pharmacy
  - Nursing
  - Care Management
  - PT/OT

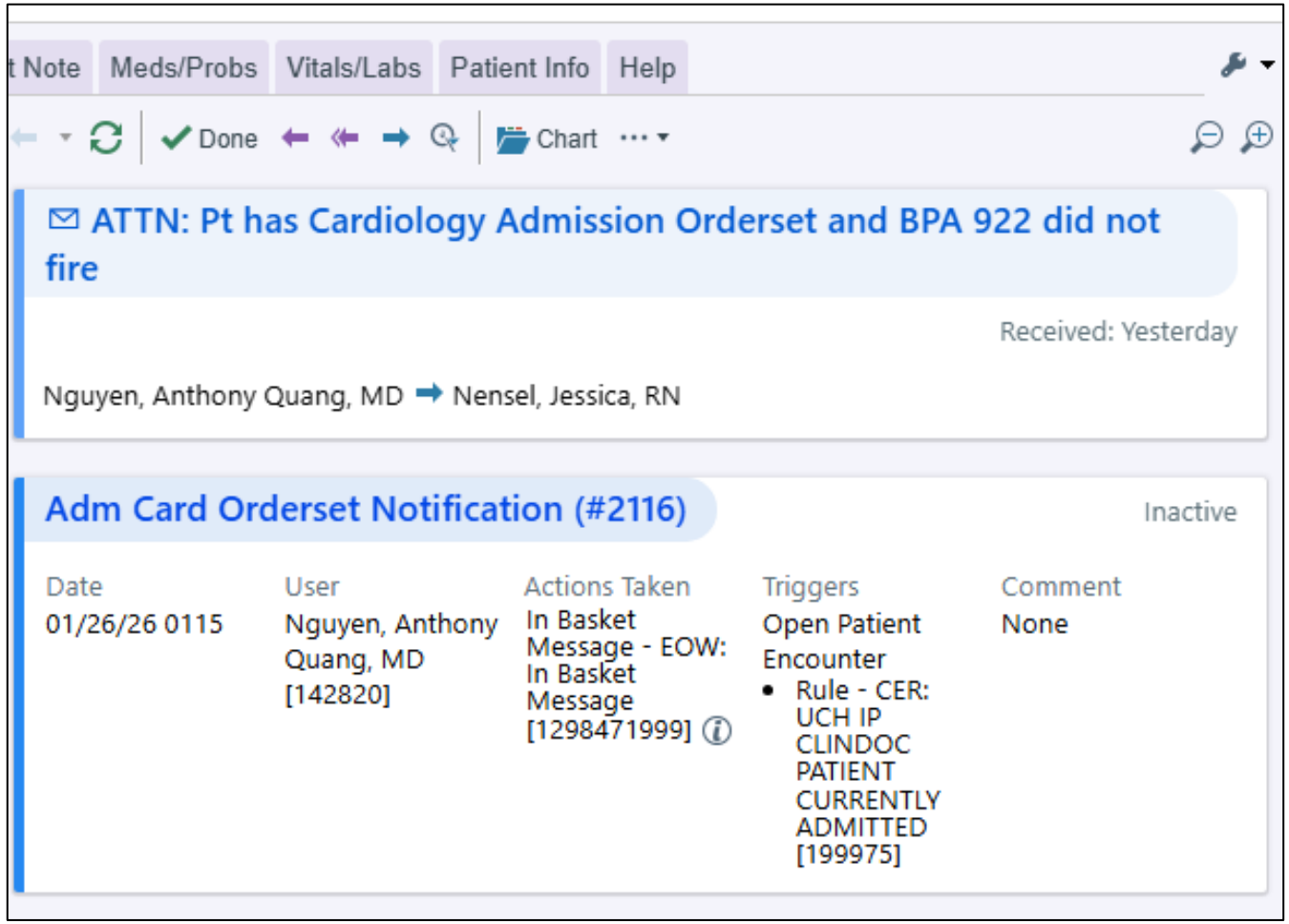
Triggers that made OPA fire



Epic Tools:
In Basket Notification of Cardiology Admission Order Set

- Notification that order set placed
- Behind the scenes….no alert to provider
- Requires manual chart review to determine

  reason for admission
- If appropriate, patient added to:
  - Heart Failure Inpatient list
  - Acute MI Inpatient list
    Failure Inpatient List or the AMI Inpatient List



Epic Tools:
Cardiology Admission Order Set

- One-stop shop for all cardiology admission order needs
- Ensures guideline-based care
- General cardiology admission order set with diagnosis-specific focused order sets
  - Heart failure
  - Acute Coronary Syndrome
  - Mechanical Circulatory Support
  - Afib
  - Heparin gtt (ACS/Afib, DVT/PE)
- Automated orders
  - GDMT
  - Multidisciplinary team consults
  - Education

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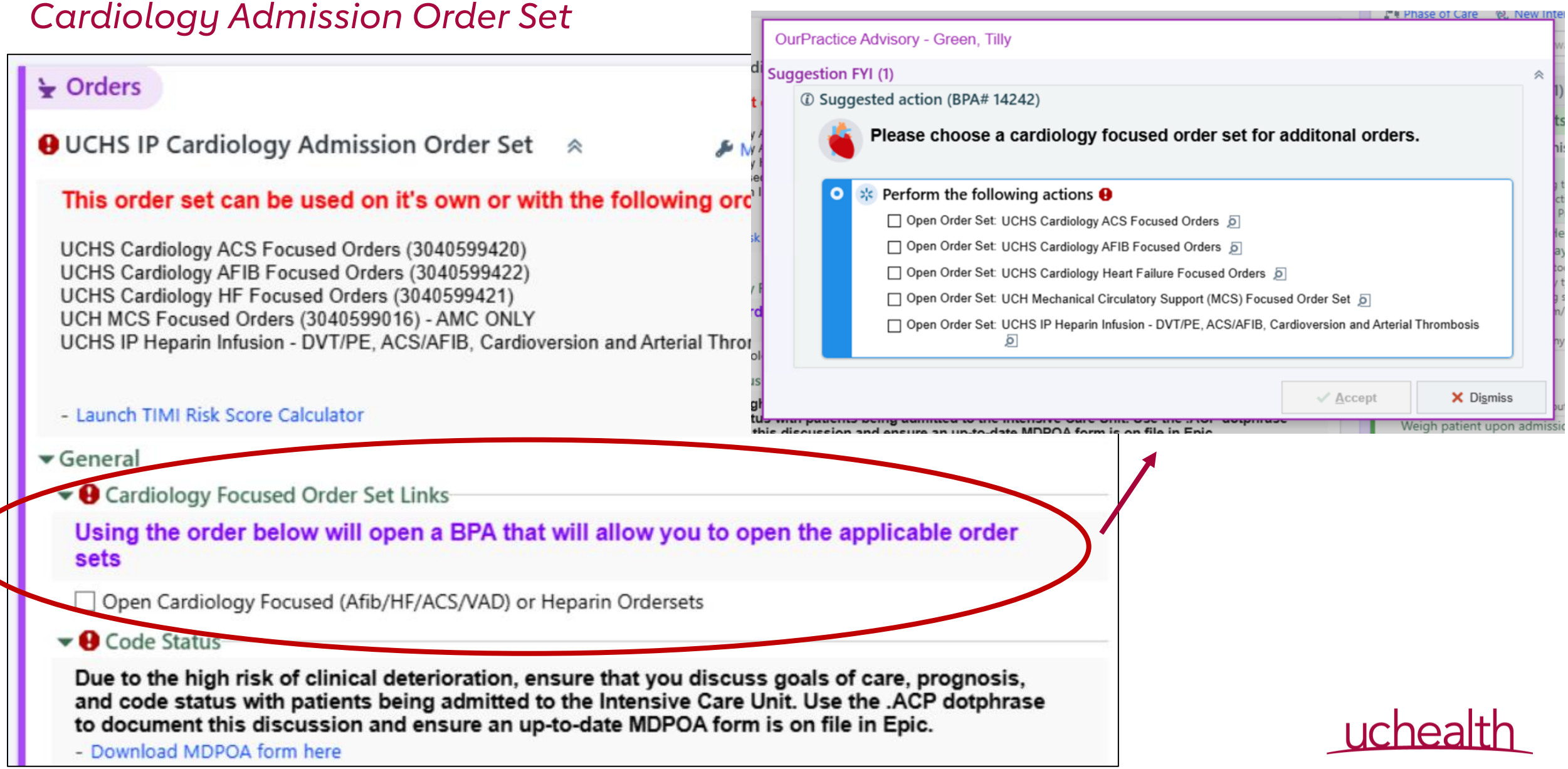
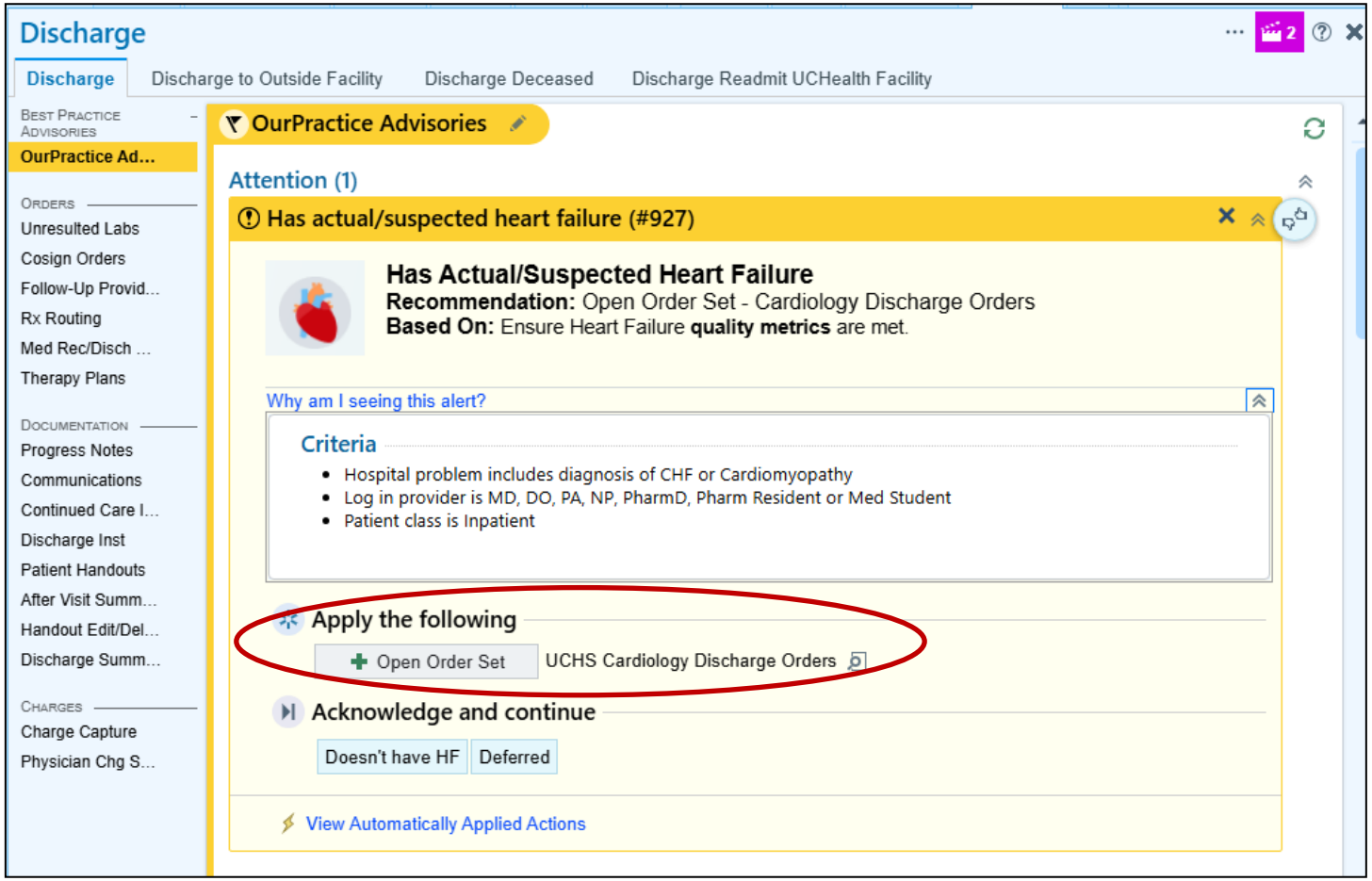
Epic Tools:
Cardiology Admission Order Set

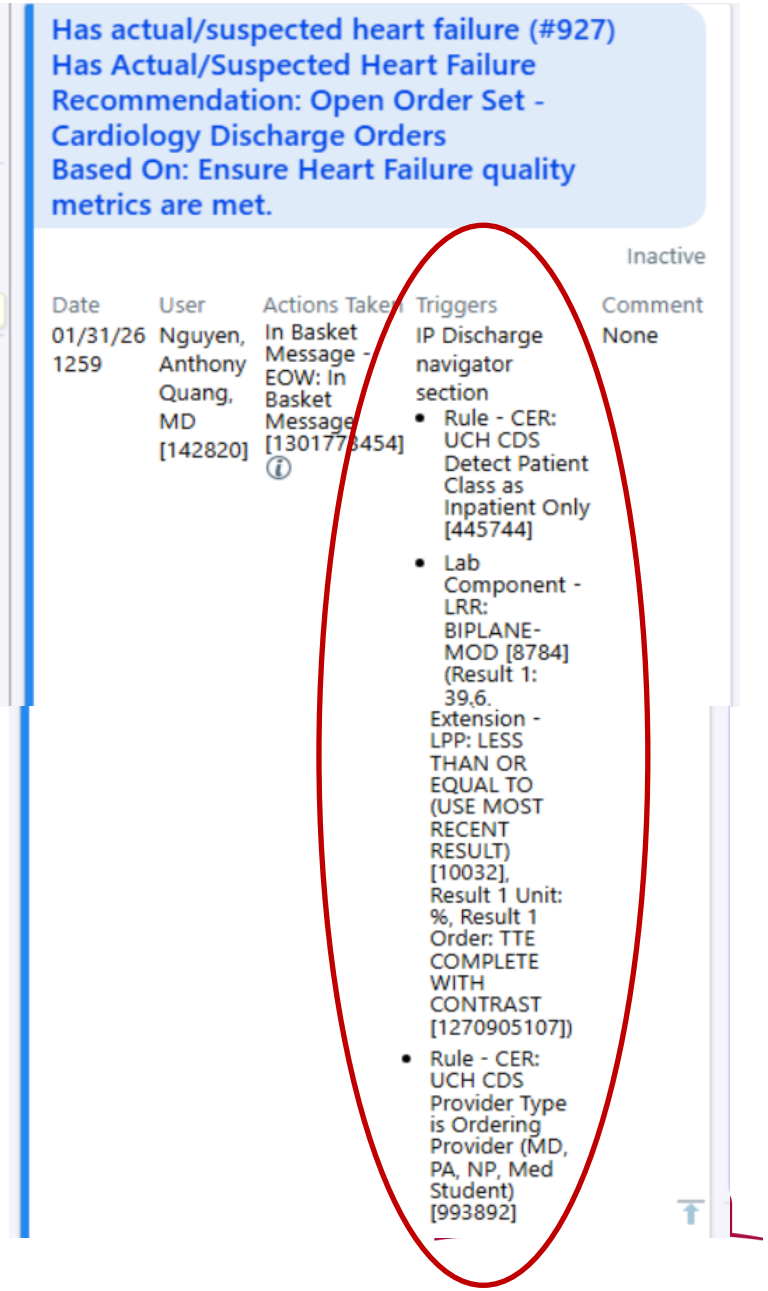


Epic Tools:
Heart Failure OurPractice Advisory (OPA) on Discharge



Epic Tools:
In Basket Notification of Heart Failure Discharge OPA

- Notification that appears in Epic InBasket that OPA fired
- Includes triggers that made OPA fire
- Manual chart review
- Ensure key heart failure interventions are in place prior to discharge



Epic Tools:
Cardiology Discharge Order Set

- One-stop shop for cardiology discharge orders
- Guideline-based care
  - GDMT
- Transitions of care
  - Follow-up appointments
  - Outpatient consults
  - Heart failure education
- General cardiology discharge order set with diagnosis-specific focused order sets
  - Heart failure
  - Acute Coronary Syndrome
  - Mechanical Circulatory Support
  - Heart transplant

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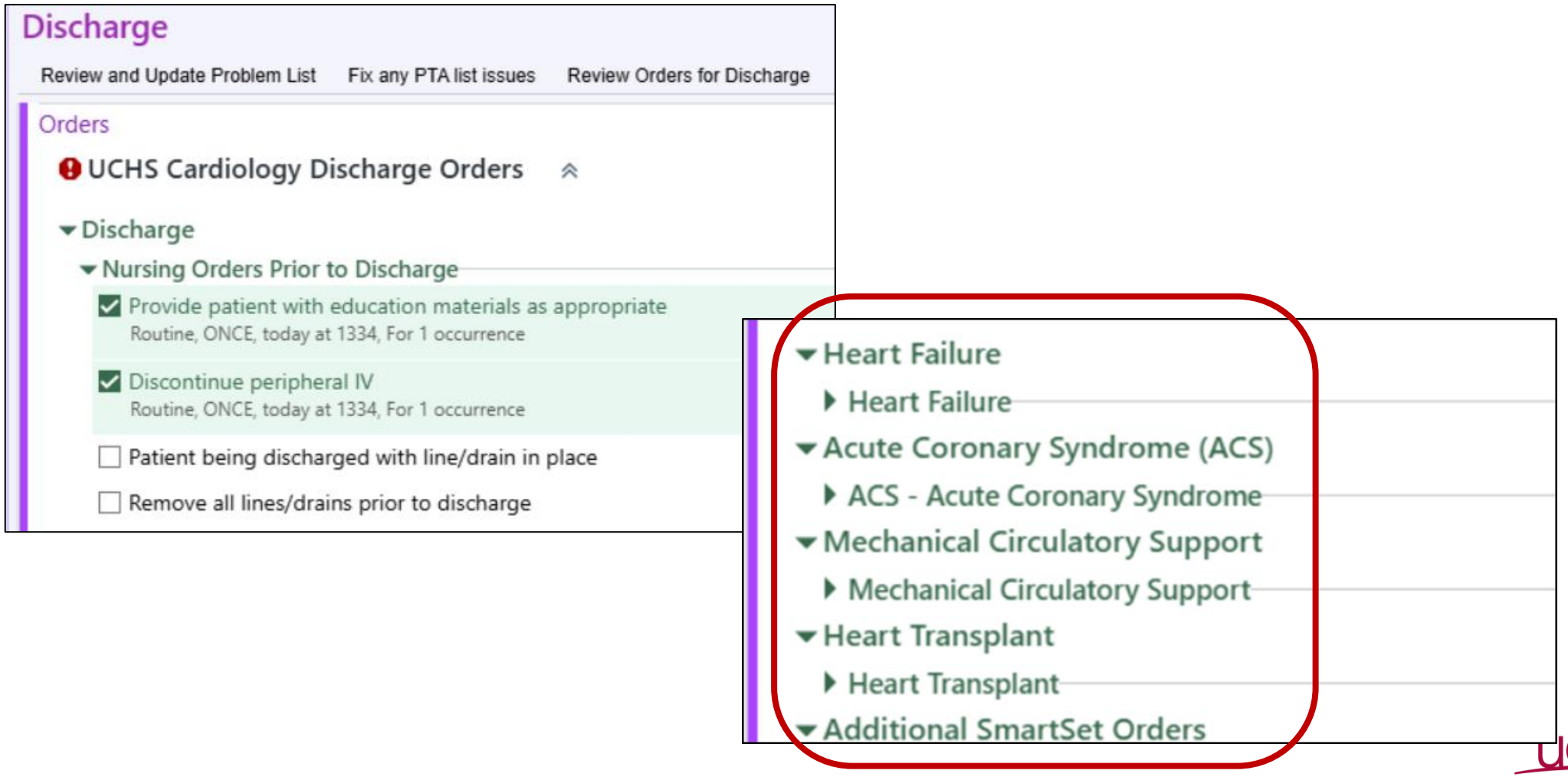
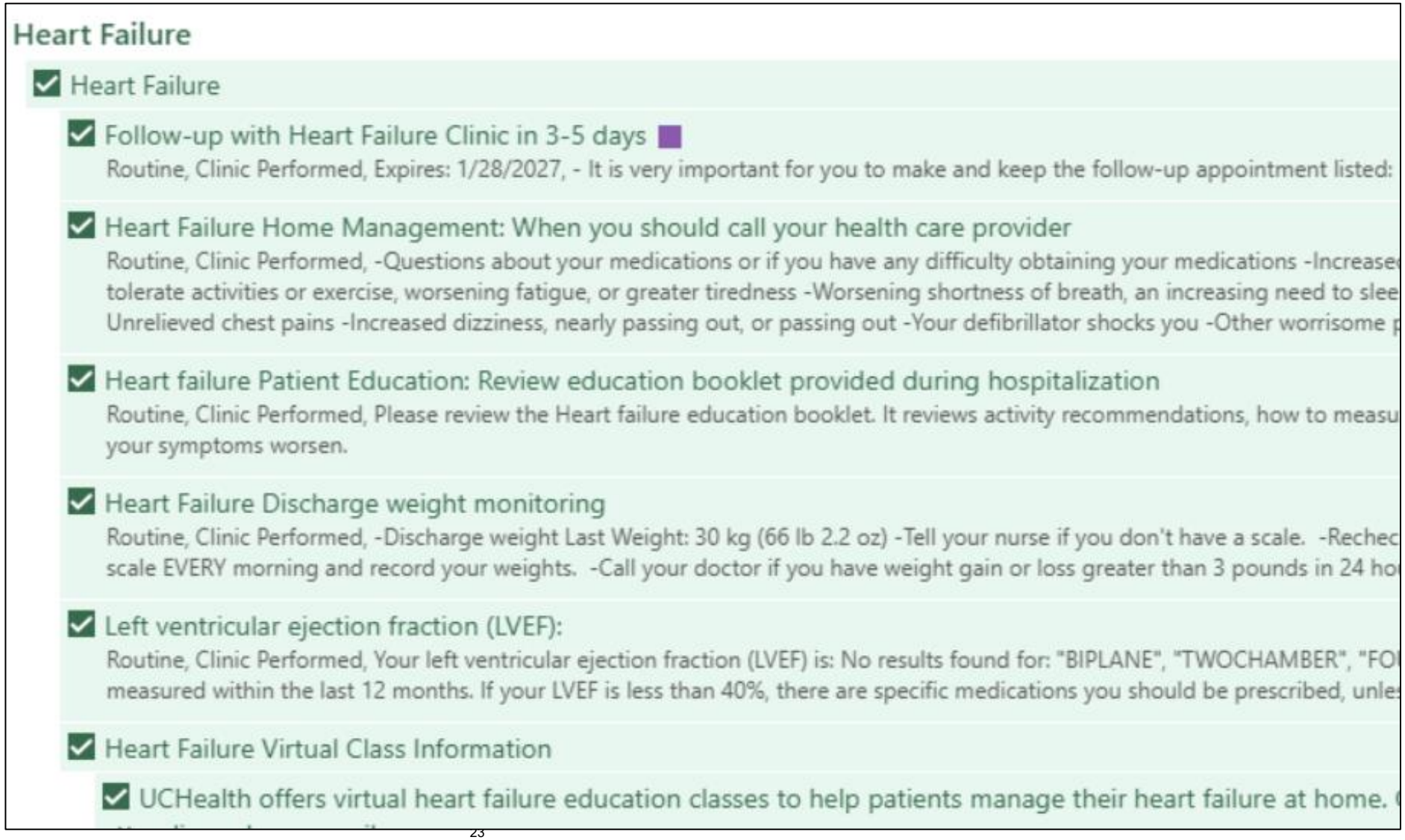
Epic Tools:
Cardiology Discharge Focused Order Sets



Heart Failure Discharge Order Set

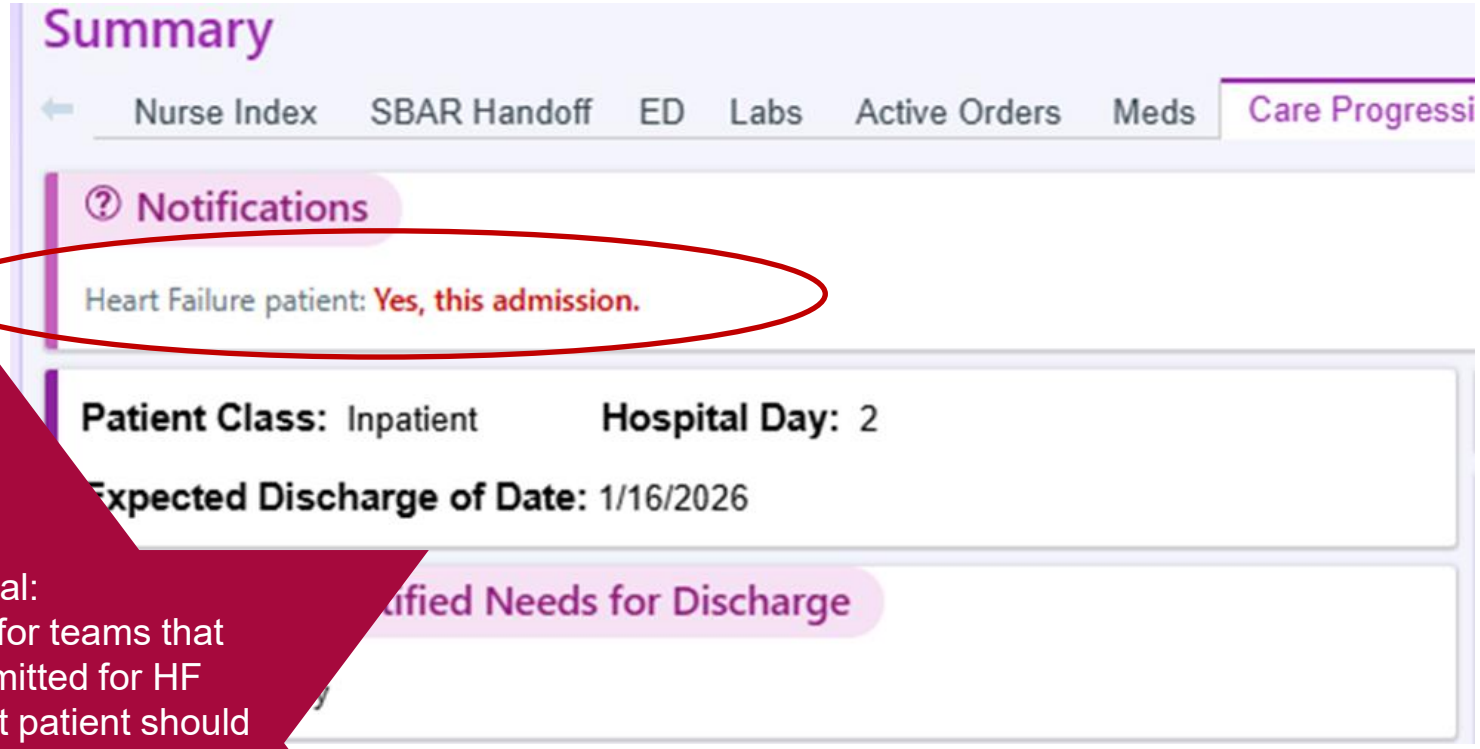
Heart Failure management information added to discharge AVS



Additional Tools for Heart Failure Identification and Management: *Cardiology multidisciplinary rounds*

- Cardiology multidisciplinary rounds
  - Attendees: provider, nursing, discharge RN, Case Management, Social Work, Pharmacy, Cardiac Rehab, Care Coordinator, Heart Failure nurse navigator
  - Purpose: briefly review patient's hospital course and predicted needs for discharge
  - Based on provider's verbal report out, may Identify additional patients with heart failure

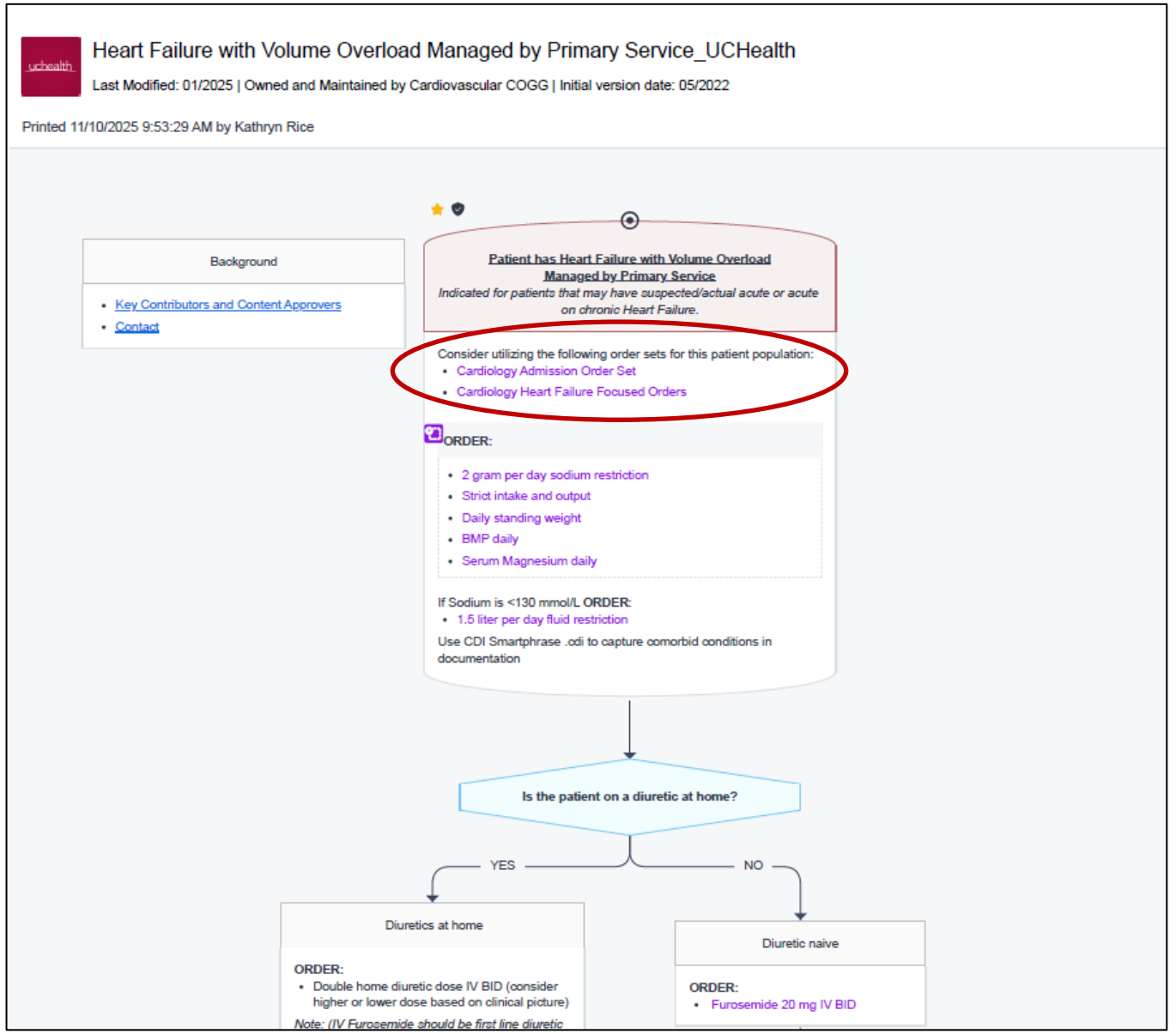
Additional Tools for Heart Failure Identification and Management:
Heart Failure Banner in Care Progression Report



Goal:
- Awareness for teams that patient admitted for HF
- Reminder that patient should receive all the HF interventions prior to DC
- CM to ensure RN order if going home with HHC

Additional Tools for Heart Failure Identification and Management: *HF Volume Overload Pathway*

- Purpose:
  - Assist non-cardiology primary services with diuretic management of patients with heart failure
  - Guide when to consult cardiology and/or renal teams



Heart Failure with Volume Overload Managed by Primary Service_UCHealth

Last Modified: 01/2025 | Owned and Maintained by Cardiovascular COGG | Initial version date: 05/2022

Printed 11/10/2025 9:53:29 AM by Kathryn Rice

Background

- Key Contributors and Content Approvers
- Contact

Patient has Heart Failure with Volume Overload Managed by Primary Service

Indicated for patients that may have suspected/actual acute or acute on chronic Heart Failure.

Consider utilizing the following order sets for this patient population:

- Cardiology Admission Order Set
- Cardiology Heart Failure Focused Orders

ORDER:

- 2 gram per day sodium restriction
- Strict intake and output
- Daily standing weight
- BMP daily
- Serum Magnesium daily

If Sodium is <130 mmol/L **ORDER:**

- 1.5 liter per day fluid restriction

Use CDI Smartphrase .cdi to capture comorbid conditions in documentation

Is the patient on a diuretic at home?

YES

NO

Diuretics at home

ORDER:

- Double home diuretic dose IV BID (consider higher or lower dose based on clinical picture)

Note: (IV Furosemide should be first line diuretic

Diuretic naive

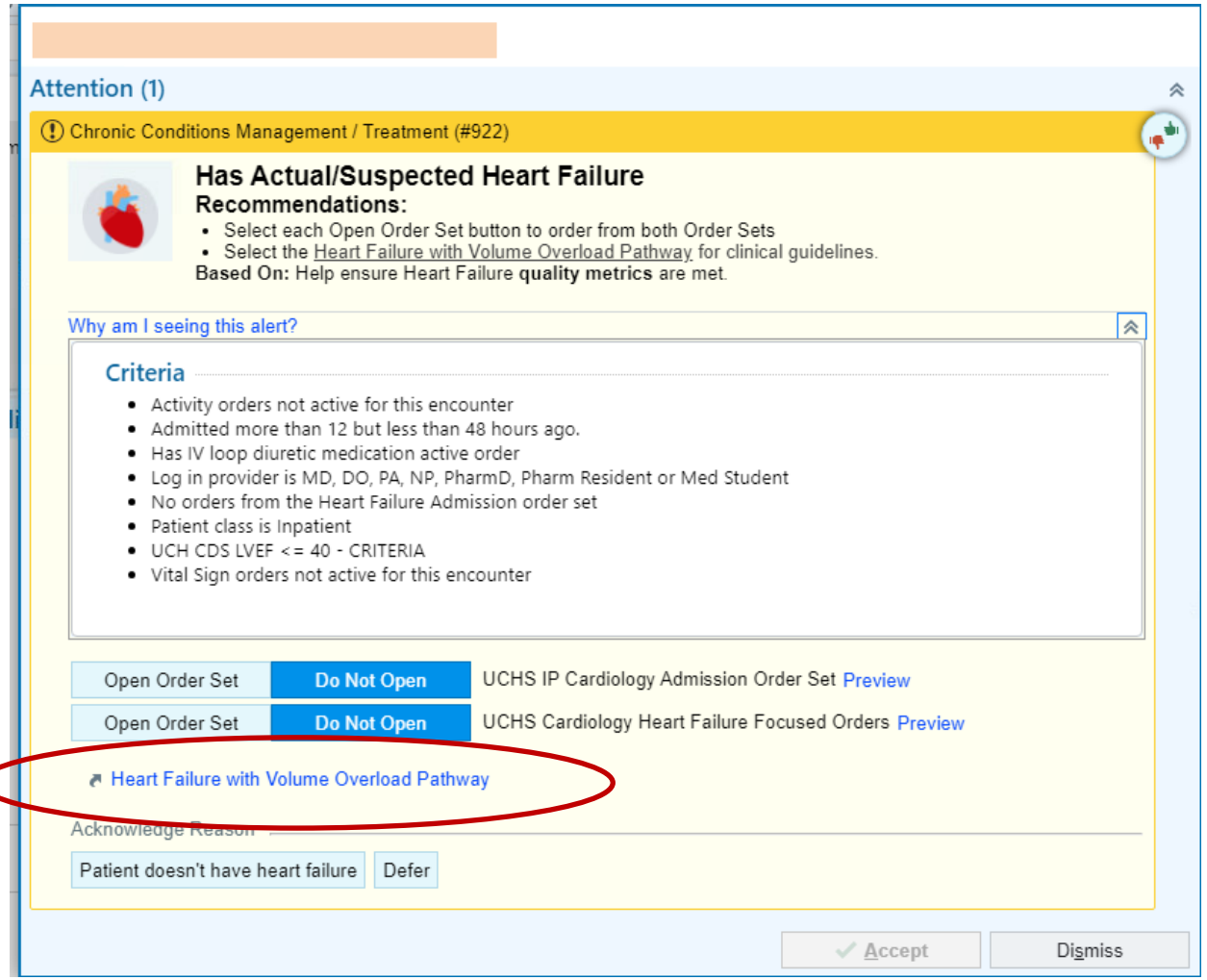
ORDER:

- Furosemide 20 mg IV BID

Additional Tools for Heart Failure Identification and Management: *Heart Failure OPA and HF Volume Overload Pathway*

Goal: Increase utilization of HF volume overload pathway

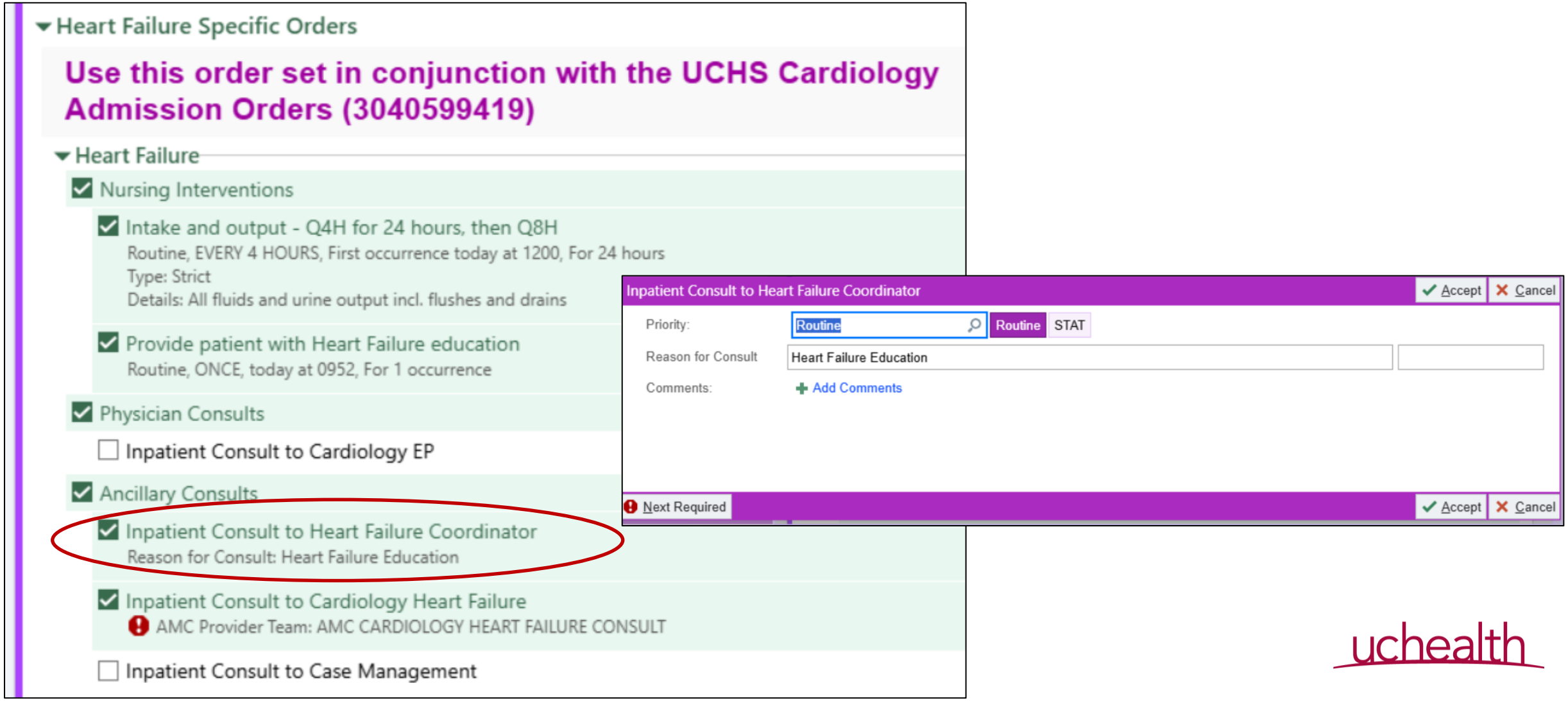
Heart Failure OPA



Additional Tools for Heart Failure Identification and Management: *Inpatient Heart Failure Nurse Navigator Consult Order*

- Inpatient heart failure nurse navigator order
- Focuses on the following quality metrics to assist with daily coordination of care and management of patients with heart failure during their hospital admission:
  - Ensure timely and appropriate hospital follow-up
  - Improve use of guideline-directed medical therapy
  - Improve patient education

Additional Tools for Heart Failure Identification and Management:
Inpatient Heart Failure Nurse Navigator Consult Order



Next Steps and Future Goals

- Consider future updates to cardiology order sets specific to HFpEF management
- Education to providers and staff specific to HFpEF clinical guidelines and management
  - Monthly resident education
  - Weekly housestaff and attending quality metric emails
  - Nursing staff lunch and learns
  - Nursing staff meetings
- Collaboration with Coding and CDI on current coding efforts
- Ongoing updates to heart failure OPAs
  - Capturing patients with HFpEF
  - Including ICD-10 grouper lists

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Thank you!

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Advancing HFpEF and HFmrEF Identification Hospital Insights and Real-World Solutions

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Heart Failure Coordinator, UCHealth Memorial Hospital Central
Colorado Springs, Colorado

Disclosure: The presenter reports no relevant financial or non-financial relationships to disclose.

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At UCHealth, we do things differently.

We strive to promote individual and community health and leave no question unanswered along the way. We're driven to improve and optimize health care.

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South Region Hospitals - UCHealth

Memorial Hospital Central- Colorado Springs

Pikes Peak Regional Hospital- Woodland Park

Grandview Hospital- Colorado Springs

Memorial Hospital North-Colorado Springs

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Our Local Context: HF Care Model at Memorial Hospital

- Heart failure patients are **admitted and managed by hospitalists**
- Cardiology involvement is **consult-based**, not primary admitting
- Consults typically occur for:
  - Inotropic support in the ICU
  - New-onset heart failure
  - Advanced or end-stage HF
- Requires broad HF guideline education across hospitalist teams

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HF Guideline Education: A Unique Challenge

- Large and diverse hospitalist group
- Variable comfort with HF guidelines across providers
- Ongoing education required for:
- GDMT optimization
- HF phenotype recognition
- Discharge planning standards
- Supported by a **hospitalist HF Champion**

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Operational Reality: No Dedicated HF Unit

- No dedicated heart failure unit
- HF patients admitted to **all units across the hospital**
- Across the South Region:
- Over **680 inpatient rooms**
- Four hospitals
- Manual identification would be impractical

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Why Epic IT Tools Are Essential

- OPA enables **early, system-wide identification**
- Snapshot and patient lists reduce chart-by-chart searching
- Sticky Notes support longitudinal tracking
- Epic chat enables real-time collaboration
- Allows navigators to focus on **care coordination**, not patient hunting

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Impact on AHA GWTG–HF Performance

- Early identification despite non-cardiology admitting model
- Standardized care across all units
- Improved case capture for abstraction
- Reduced missed HF admissions

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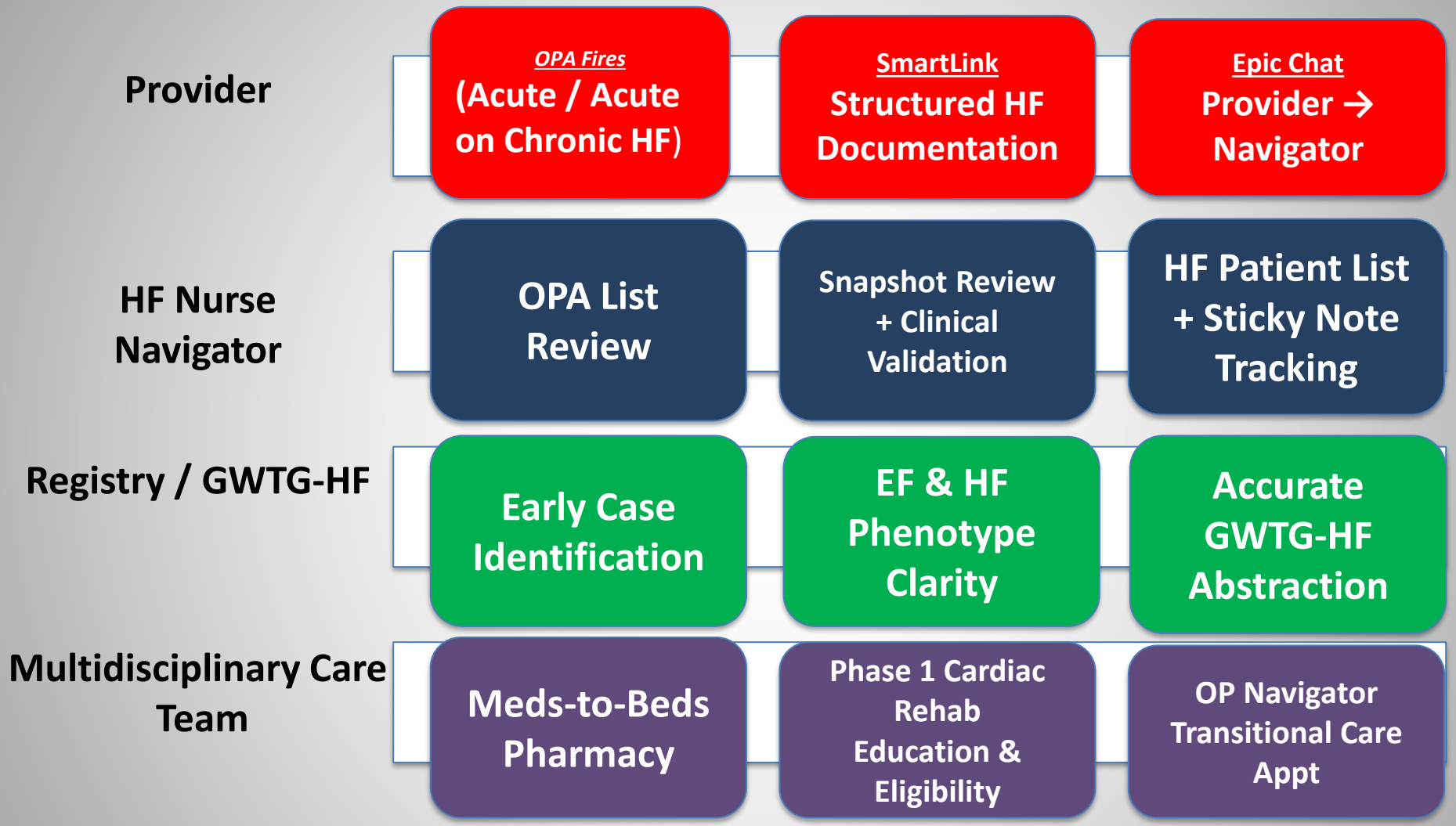
HF Identification & Care Coordination



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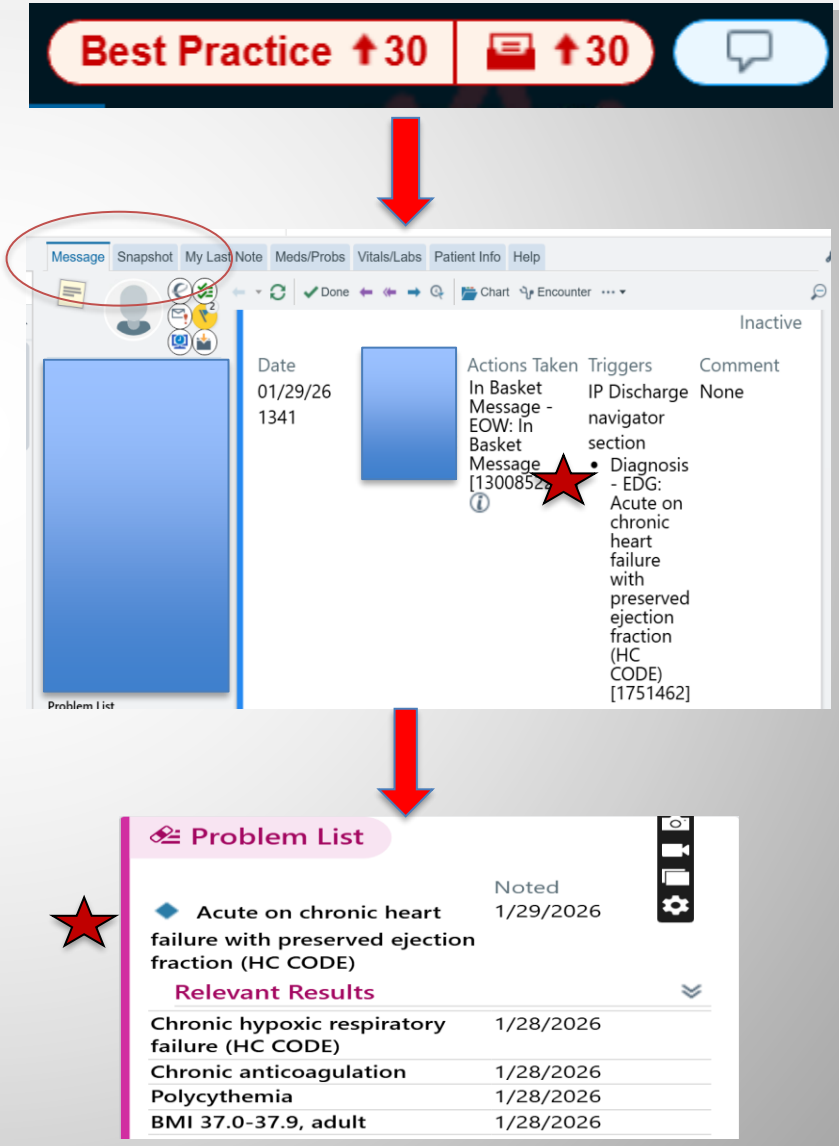
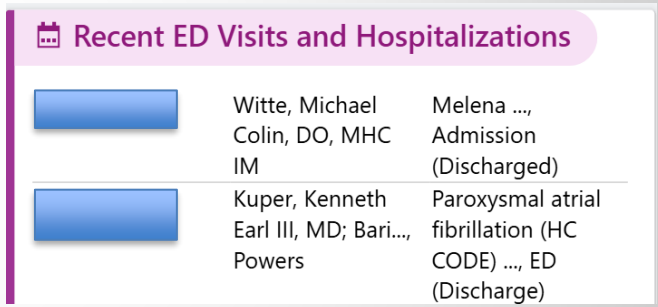
Navigator Snapshot Review

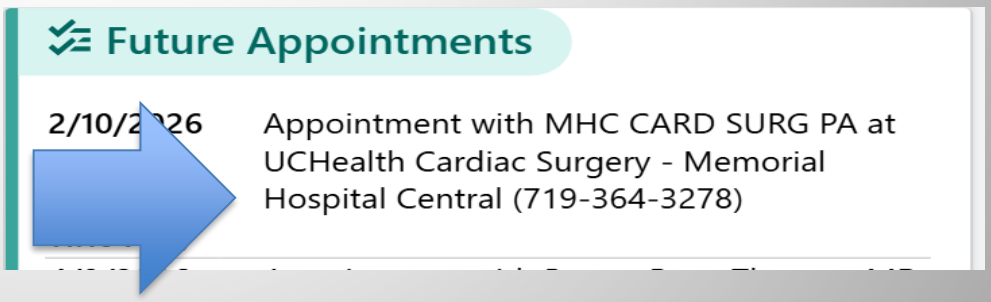
- OPA list auto-populates potential HF patients in Epic
- “Message” & “Snapshot” tab provides problem list with visit-linked dates
- Acute or acute on chronic HF prompts manual chart review



Snapshot View

- Manual chart review confirms decompensated HF as primary reason
- Recent ED visits and hospitalizations inform risk assessment
- Future appointments support early follow-up coordination





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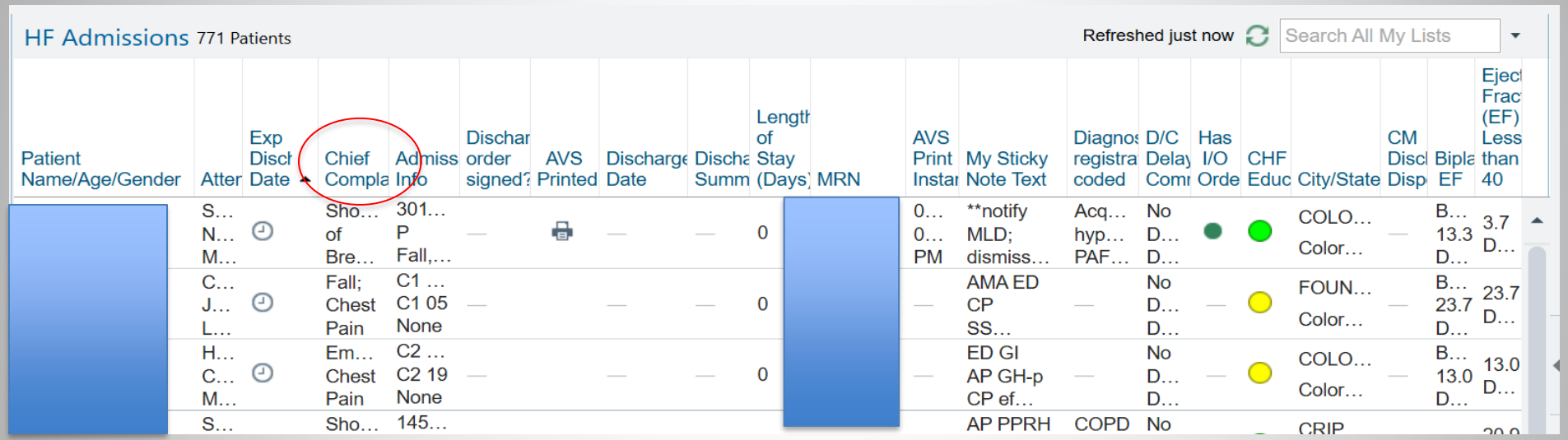
My Shared HF Patient List



- Chief Complaint
- LOS
- My sticky note

- Diagnosis Registration Coded
- DC Disposition (HHC, SNF, IPRH, Hospice)
- EF% and date

- Columns can be customized

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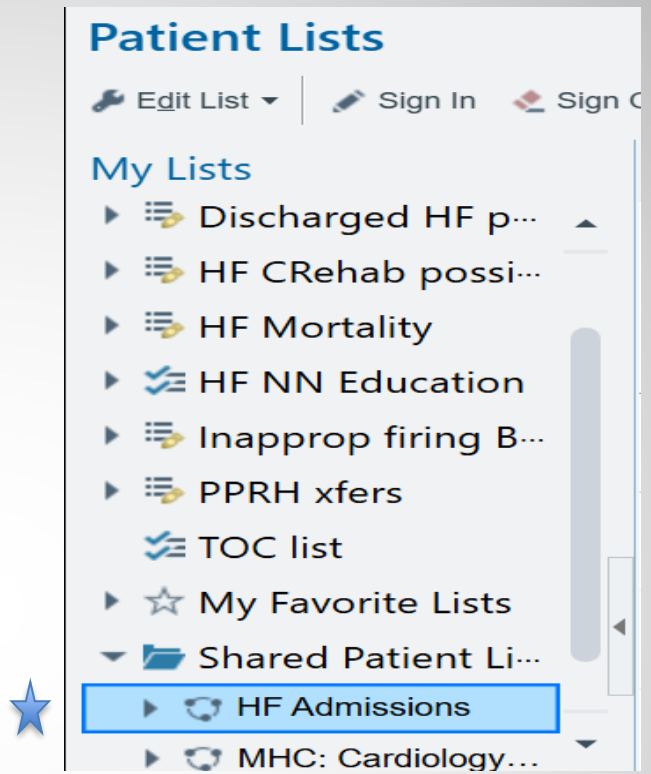
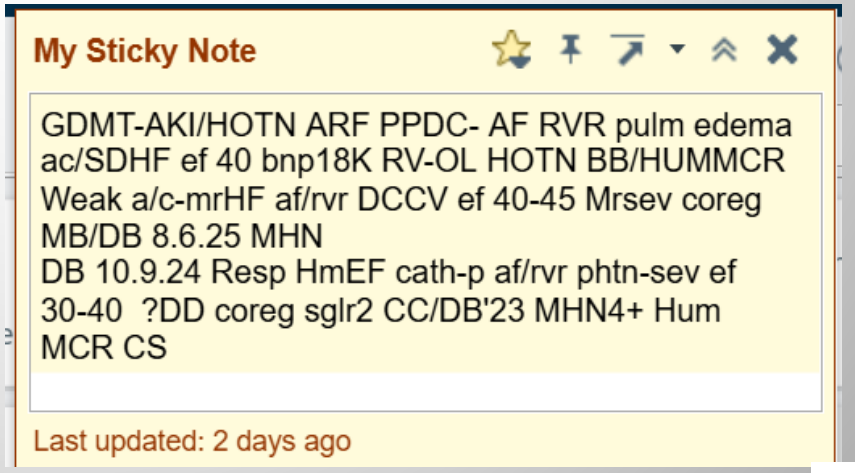
Multidisciplinary Shared Patient Lists and Longitudinal Tracking

- HF education/appt added to discharge paperwork
- Referrals sent to transitional care clinic partner
- Sticky Note tracks EF, GDMT follow-up, insurance, cardiologist, readmits, referrals





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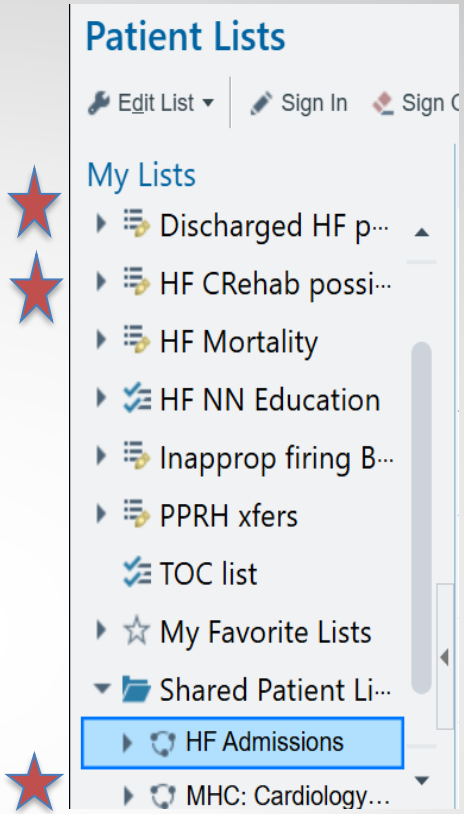
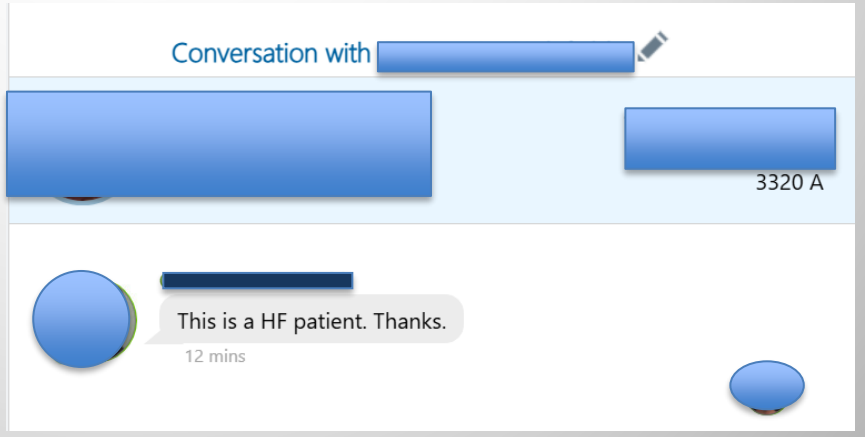
Epic Chat = Closed-Loop Communication

- Patient followed in real time until discharge
- Shared Lists support pharmacy, cardiac rehab, and OP navigation
- Epic Chat enables closed-loop communication with case managers and providers





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Why This Works

- Combines automation with clinical judgment
- Supports early navigator identification
- Enhances multidisciplinary collaboration
- Improves continuity across admissions

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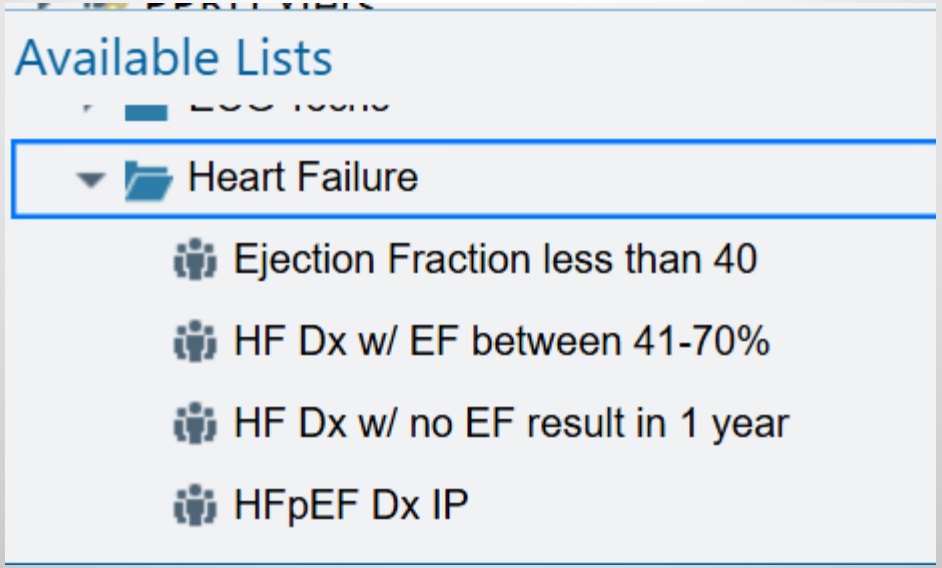
IT-Built HF Patient Identification Lists

- Heart Failure with Reduced Ejection Fraction (HFrEF): EF ≤ 40%
- Heart Failure with Mildly Reduced Ejection Fraction (HFmrEF): EF 41–70%
- Heart Failure with Preserved Ejection Fraction (HFpEF): Inpatient diagnosis



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Why This Categorization Matters

- Promotes consistent HF phenotyping
- Improves identification of HFpEF and HFmrEF
- Flags patients with documentation gaps
- Supports navigator prioritization and registry accuracy

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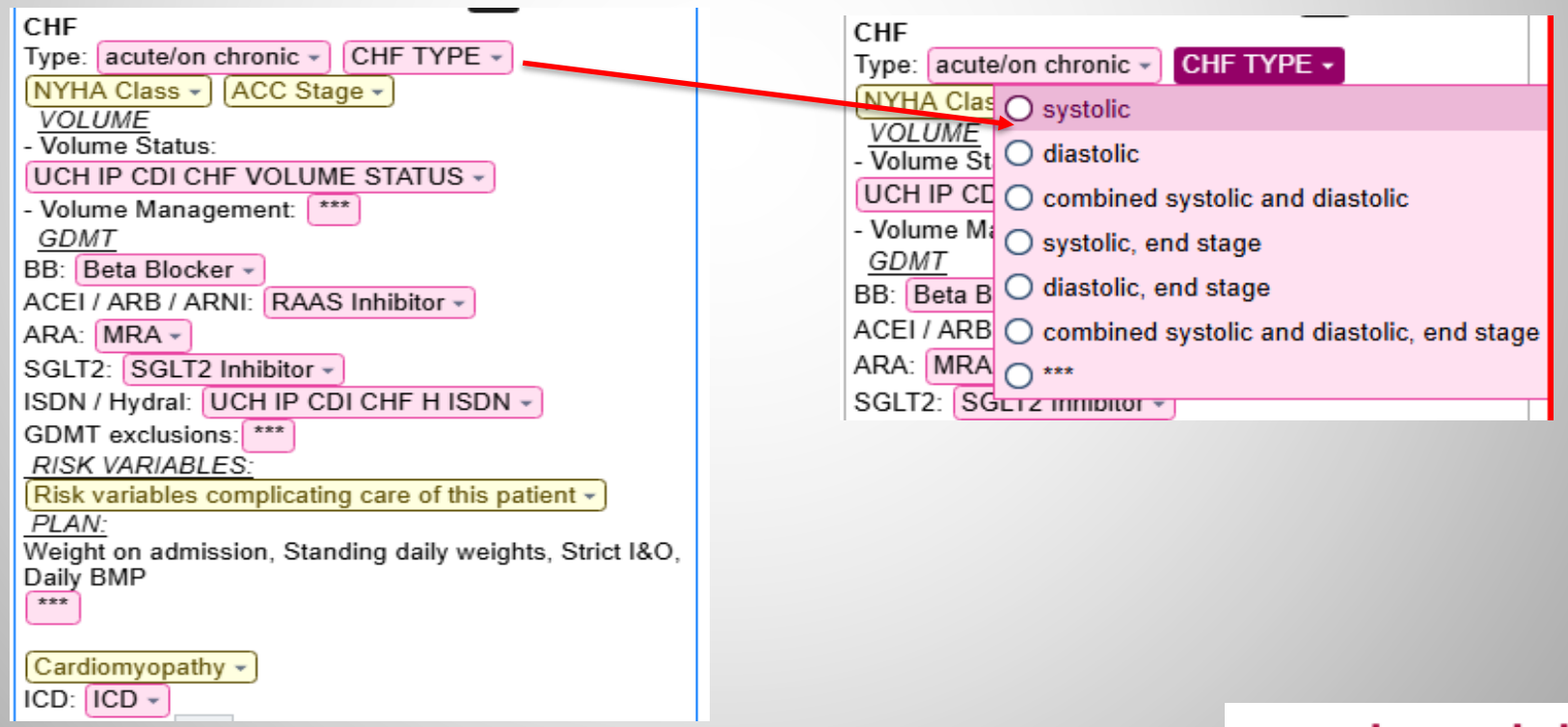
Other Helpful Tools

- SmartLink with discreet drop-down fields
- Suggested documentation aligns with AHA-GWTG-HF



Real-World Impact and Early Navigator Review

- Enables early identification of HFpEF and HFmrEF
- Supports early nurse navigator review
- Reduces manual chart abstraction
- Improves transitions of care
- Aligns with AHA GWTG-HF performance metrics

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Key Takeaways

- HFpEF and HFmrEF identification requires intentional system design
- BPA tools are most effective when paired with navigator-visible lists
- Early navigator engagement improves care coordination
- Alignment with AHA GWTG-HF definitions strengthens quality outcomes

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Thank You

Thank You
Thank you for your time and for the work you do supporting heart failure patients, quality improvement, and **AHA Get With The Guidelines–Heart Failure**.

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Questions and shared experiences are welcome.

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Questions?

Thank You.

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