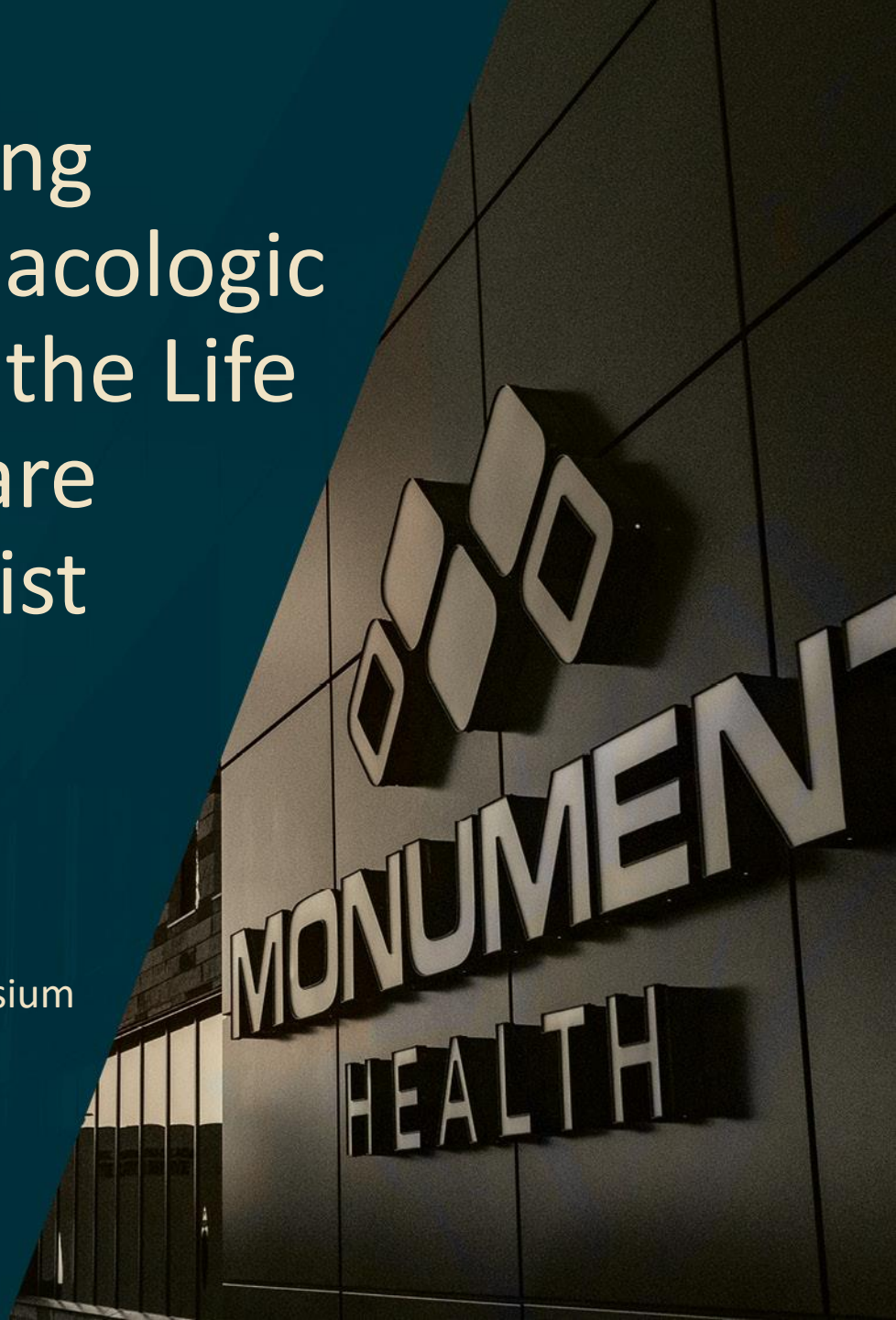
Attempts at Improving Ejection with Pharmacologic Perfection: A Day in the Life of an Ambulatory Care Cardiology Pharmacist

Holly Flynn, PharmD, BCACP

Cardiovascular Disease and Wellness Symposium
October 17, 2024



MONUMENT HEALTH

Financial Disclosures

I have had no financial relationship over the past 24 months with any commercial sponsor with a vested interest in this presentation.

MONUMENT HEALTH

Objectives

- Summarize the value of team-based care for the management of heart failure, including pharmacist-directed initiatives
- Describe the role of the ambulatory care cardiology pharmacist at Monument Health Heart and Vascular Institute
- Analyze cost considerations associated with heart failure medications, including available cost-saving options

MONUMENT HEALTH

Team-based Care

- 2022 AHA/ACC Guidelines recommend (1A) that patients with HF receive care from a multidisciplinary team to:
  - Facilitate medication therapy implementation
  - Address barriers to self-care
  - Reduce the risk for subsequent hospitalizations and improve survival
- Improved access to care
- Reduced redundancy with clearly delineated roles
- Improved outcomes and patient satisfaction

Heidenreich PA, et al. Circulation. 2022;145:895-1032.
Sokos G, et al. J Cardiac Fail. 2023;29(6):943-958.

MONUMENT HEALTH

Pharmacist's Role

- Role as medication experts enables pharmacists to:
  - Manage medication titration
  - Provide patient education
  - Address adherence issues

- Studies reveal that pharmacist involvement:
  - Increases optimization of medication therapy
  - Improves medication adherence rates
  - Improves patient understanding of medications
  - Increases frequency of contact with heart failure team member

Schumacher PM, et al. ESC Heart Fail. 2021;8(5):3566-3576.
Attar D, et al. J Cardiac Fail. 2020;26(10):129.

MONUMENT HEALTH

Pharmacist's Role in Optimizing Care

- Utilization of medication therapy in usual care settings is low
  - Of 2588 US patients in a HF registry, target doses were achieved in very few patients
    - 25% MRA
    - 20% BB
    - 11% ACEi/ARB
    - 2% ARNI
    - Only 1% of patients were receiving target doses of ACE/ARB/ARNI, BB, and MRA

- Inclusion of pharmacists in interdisciplinary clinics typically improves HF management
  - Retrospective study of 148 patients compared a pharmacist-led medication titration assistance clinic (MTAC) to management by General Cardiology (GC) providers
    - After 12 months, 64% of MTAC vs 40% GC patients reached target doses of ACE/ARB and BB

Greene SJ. J Am Coll Cardiol. 2019.
Greene SJ. J Am Coll Cardiol. 2018.
Bhat S. Ann Pharmacother. 2018.

MONUMENT HEALTH

Role at Monument Health

- Ambulatory Clinical Pharmacy Specialist, Cardiology
- Primary focus of the role is optimization of heart failure management
  - Medication therapy optimization
  - Iron deficiency screening and management
  - Patient education
  - Medication access assistance, including rare cardiomyopathies
- Additional roles:
  - Drug therapy questions
    - Lipid management
    - Anticoagulation management
  - Medication access assistance

MONUMENT HEALTH

Collaborative Practice Protocol

- Beginning stages of development began September 2022
- Approved and implemented February 2023

- Outlines the following:
  - Goals and purposes
  - Responsibilities
  - Documentation
  - Quality assurance
  - Pharmacist training and on-going competency

MONUMENT HEALTH

Collaborative Practice Protocol

I. Purpose and Goals

Purpose:

•The purpose of this protocol is to assist cardiology providers at Monument Health in improving outcomes for patients with heart failure (HF) through medication regimen optimization and patient education.

II. Providers Authorized

•A provider within the Heart and Vascular Institute may refer patients to receive care pursuant to this protocol.

•Appropriately trained pharmacists working within the Heart and Vascular Institute may provide care to patients pursuant to this protocol.

MONUMENT HEALTH

Ambulatory Pharmacy Referral for Heart Failure Medication Optimization

Accept | Cancel

Class: Internal Referral | Internal Referral | Outgoing Referral

Priority: Routine | Routine | STAT

Referral: ☐ Override Restrictions

To Provider:

To Department: RCHVIFB CARDIOLOGY | RCHVIFB CARDIOLOGY

Indication for Referral
☐ Heart failure medication optimization ☐ Iron deficiency anemia management
☐ Smoking cessation management ☐ Hypertension management
☐ Medication reconciliation, education, and/or cost reduction

Hypertension Goal
Goal: Blood pressure less than 140/90 mmHg | Goal: Blood pressure less than 130/80 mmHg
Goal: Blood pressure less than 150/90 mmHg | Goal: Other (Comments)

Comments: Insert SmartText | 100%

Status: Normal | Standing | Future

Expected Date: Today | Tomorrow | 1 Week | 2 Weeks | 1 Month | 3 Months | 6 Months ☐ Approx.

Expires: 4/5/2024 | 1 Month | 2 Months | 3 Months | 4 Months | 6 Months | 1 Year

Additional Order Details

Next Required | Accept | Cancel

Collaborative Practice Protocol

III. Responsibilities Authorized by this Protocol

Pharmacist Scope of Practice

- Patient interview and assessment
- Medication therapy management:
  - Authorization to develop and execute appropriate therapeutic plans for heart failure, hypertension, iron-deficiency anemia, and smoking cessation
  - Initiation or optimization of medications
- Laboratory monitoring
- Patient education and counseling

Provider Responsibilities

- General supervision of the patient's care
- Maintaining an ongoing relationship with the patient
- Must be available to discuss care pursuant to this protocol

MONUMENT HEALTH

Collaborative Practice Protocol

Table 1.

Primary Disease States: Heart Failure and Hypertension			
• ACEis • Aldosterone Antagonists • CCBs	• ARBs • SGLT2 inhibitors • Clonidine	• ARNI • Hydralazine • Alpha Blockers	• Beta Blockers • Nitrates • Thiazide or Potassium-sparing diuretics
• Any combination products of above			
Comorbid Disease States: Smoking Cessation and Iron-deficiency Anemia			
• IV iron supplementation	• Nicotine replacement therapy	• Varenicline	• Bupropion
• Any combination products of above			
Commonly Ordered Laboratory Tests			
• BMP • Lipid Panel • NT-pro BNP	• CMP • CBC (+/- diff) • Digoxin level	• Uric Acid • TFT (TSH/FT4) • Albumin/Cr	• Hb A1c • BNP • UPCR
• Iron studies			
• Any individual components of the above listed lab tests			

MONUMENT HEALTH

Medication Optimization Data

Demographics:

Number of patients: 170

Average age (years): 66.7

Sex (male): 73.5%

Race: 85% white, 14% American Indian, 1% other

Insurance type: 40% Medicare

Discharged patients: 93

Average number of visits to discharge: 8

Upon discharge:

Average number of medication changes: 4

Average medication doses:

- ACE/ARB/ARNI: 43% high dose
- BB: 68% high dose
- MRA: 31% high dose
- SGLT2: 83% high dose

MONUMENT HEALTH

Iron Management Protocol

- Developed in November 2023
- Created to fulfill 2023 goal for the Congestive Heart Failure Clinic
- Developed using data from clinical data exploring IV iron formulations use in heart failure
  - CONFIRM-HF

- IV iron is indicated for patients with a left ventricular ejection fraction (LVEF) <50% if the following conditions are met:
  - Hb is <15 g/dL **AND**
  - Ferritin <100 ng/mL **OR**
  - Ferritin 100-299 ng/mL **AND** iron saturation <20%

MONUMENT HEALTH

Iron Management Protocol

- Drug selection based on insurance coverage
  - VA or IHS coverage:
    - iron sucrose
  - Medicare and commercially-insured:
    - First line: ferric carboxymaltose
    - Second line: ferric derisomaltose
    - Last line: iron sucrose
- Dosing:
  - Ferric carboxymaltose – weight- and Hb-based
  - Ferric derisomaltose – weight-based
  - iron sucrose – Ganzoni equation

MONUMENT HEALTH

Iron Management Data

- Data was surveyed in July 2024
  - Includes data from July 2023 to July 2024

- Total patients: 144
  - Patients screened for ID: 128 (88.8%)
  - Patients meeting criteria for IV iron treatment: 52
    - 40% of all screened patients; 36% of all patients managed
  - Patients offered IV iron treatment: 49
    - 94% of eligible patients
- Patients receiving IV iron treatment: 39
  - 75% of eligible patients; 80% of patients who were offered treatment
  - 10 patients declined treatment

MONUMENT HEALTH

Iron Management Data

Demographics

- Total patients: 144
- Average age (years): 66
- Female: 26%

Pre-Intervention

- Avg Hgb: 14.1 g/dL
- Average ferritin: 160.8 ng/mL
- Average iron saturation: 23.5%

Post-Intervention

- Average Hgb after IV iron: 15.4 g/dL
- Average ferritin after IV iron: 262.3 ng/mL
- Average iron saturation after IV iron: 34.9%

MONUMENT HEALTH

Other Pharmacist Duties

- Drug therapy questions
  - Lipid management
  - Anticoagulation management
  - Drug-drug interactions
  - Patient questions
- Medication access assistance
  - Uncommon drug access logistics
  - Prior authorization assistance and appeals
  - Assistance programs and grant funding

MONUMENT HEALTH

Pharmacist Role in Facilitating Access

- Awareness of medication costs
  - Encourage proactive communication regarding cost
- Awareness of ways to improve affordability
  - Preferred formulary agents
  - Manufacturer assistance
  - Third-party grants

MONUMENT HEALTH

Pharmacist Role with Financial Assistance

- Copay cards:
  - Available for commercial insured patients
  - "Pays as little as ….”
- Free trial offers:
  - One-time per lifetime offer, regardless of insurance status
- Manufacturer assistance programs:
  - Typically for uninsured or underinsured patients meeting eligibility criteria
  - Functions similarly to a no-cost mail order pharmacy
- Third-party grants:
  - Patients with a qualifying diagnosis and qualifying medication meeting eligibility criteria
  - Functions similarly to a secondary-insurance

MONUMENT HEALTH

	Copay card	Free trial offer	Manufacturer assistance program	Third-party grant
ACE inhibitors	No	No	No	Eligible
ARNI	No	No	No	Eligible
sacubitril-valsartan	**Yes**	**Yes**	Novartis Patient Assistance Foundation	Eligible
Beta blockers	No	No	No	Eligible
MRAs	No	No	No	Eligible
empagliflozin	**Yes**	No	BI Cares Patient Assistance Program	Eligible
dapagliflozin	**Yes**	**Yes**	AZ&Me Prescription Savings Program	Eligible
ivabradine	**Yes**	No	Amgen Safety Net Foundation	Eligible
vericiguat	**Yes**	**Yes**	Merck Patient Assistance Program	Eligible

Conclusion

- Pharmacists can have a meaningful impact on high-quality, team-based care
  - Medication optimization
  - Medication access

- Since 2022, the ambulatory clinical pharmacy specialist in the Heart and Vascular Institute has assisted with:
  - Heart failure medication management
  - General cardiology medication therapy support
  - Medication access support

MONUMENT HEALTH

Attempts at Improving Ejection with Pharmacologic Perfection: A day in the Life of an Ambulatory Care Cardiology Pharmacist

Holly Flynn, PharmD, BCACP

hflynn@monument.health

MONUMENT HEALTH