ENSURING TIMELY OPTIMIZATION IN HEART FAILURE CARE: A SYSTEMS APPROACH

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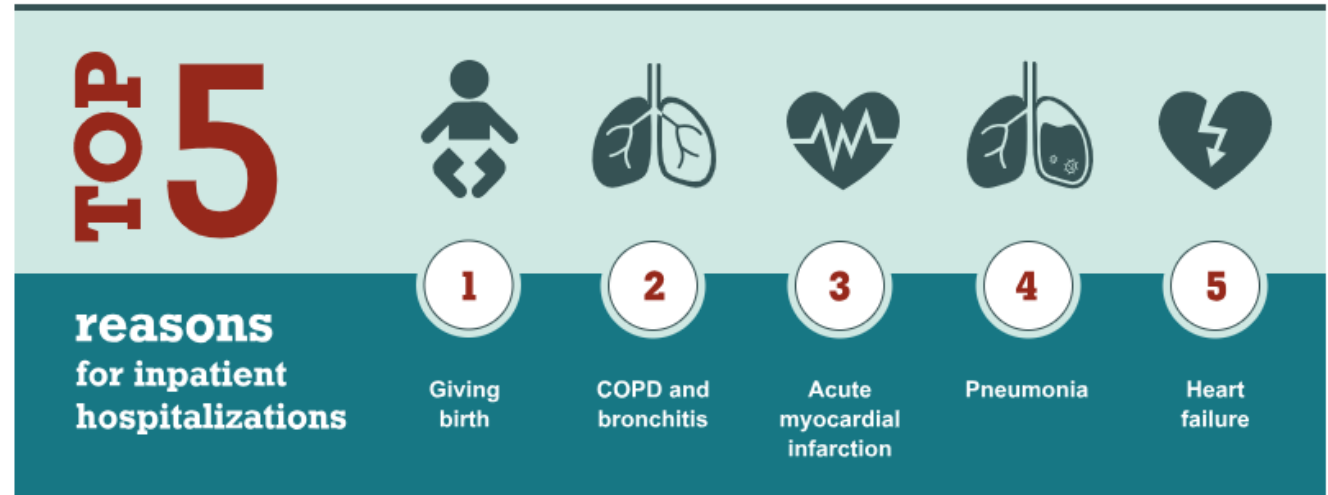
London Canada

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Conflicts of Interest

- No disclosures

Heart Failure- a National Problem

Canadian Institute for Health Information
Better data. Better decisions. Healthier Canadians.

TOP **5** reasons for inpatient hospitalizations

1 Giving birth
2 COPD and bronchitis
3 Acute myocardial infarction
4 Pneumonia
5 Heart failure

Top 5 reasons for hospitalization in Canada, 2017–2018

Reason for hospitalization	Number of hospitalizations	Percentage of hospitalizations	Average acute length of stay
1. Giving birth	362,700	11.8	2.2
2. COPD and bronchitis	93,353	3.0	7.2
3. Acute myocardial infarction	71,192	2.3	4.9
4. Pneumonia	70,149	2.3	6.7
5. Heart failure	68,972	2.2	8.9

https://www.cihi.ca/en/hospital-stays-in-canada
Accessed May 1, 2019

Burden of heart failure in Ontario

Population Ontario age 40+ years **7,206,368**

Approximately **280,000** people living with HF.

Incidence: 5 per 1000 in age 40+ years (about **38,000** new cases a year)

Prevalence: 39 per 1000 in age 40+ years

1 month mortality from diagnosis: 8%; 1 year mortality from diagnosis: 22.7%

30-day readmission following hospitalization: 9% (heart failure); 21% (all cause)

In 2015/16: 65,334 admissions that involved people with HF, 766,681 days in hospital

Acute Care Utilization in Ontario (FY 2015/16)
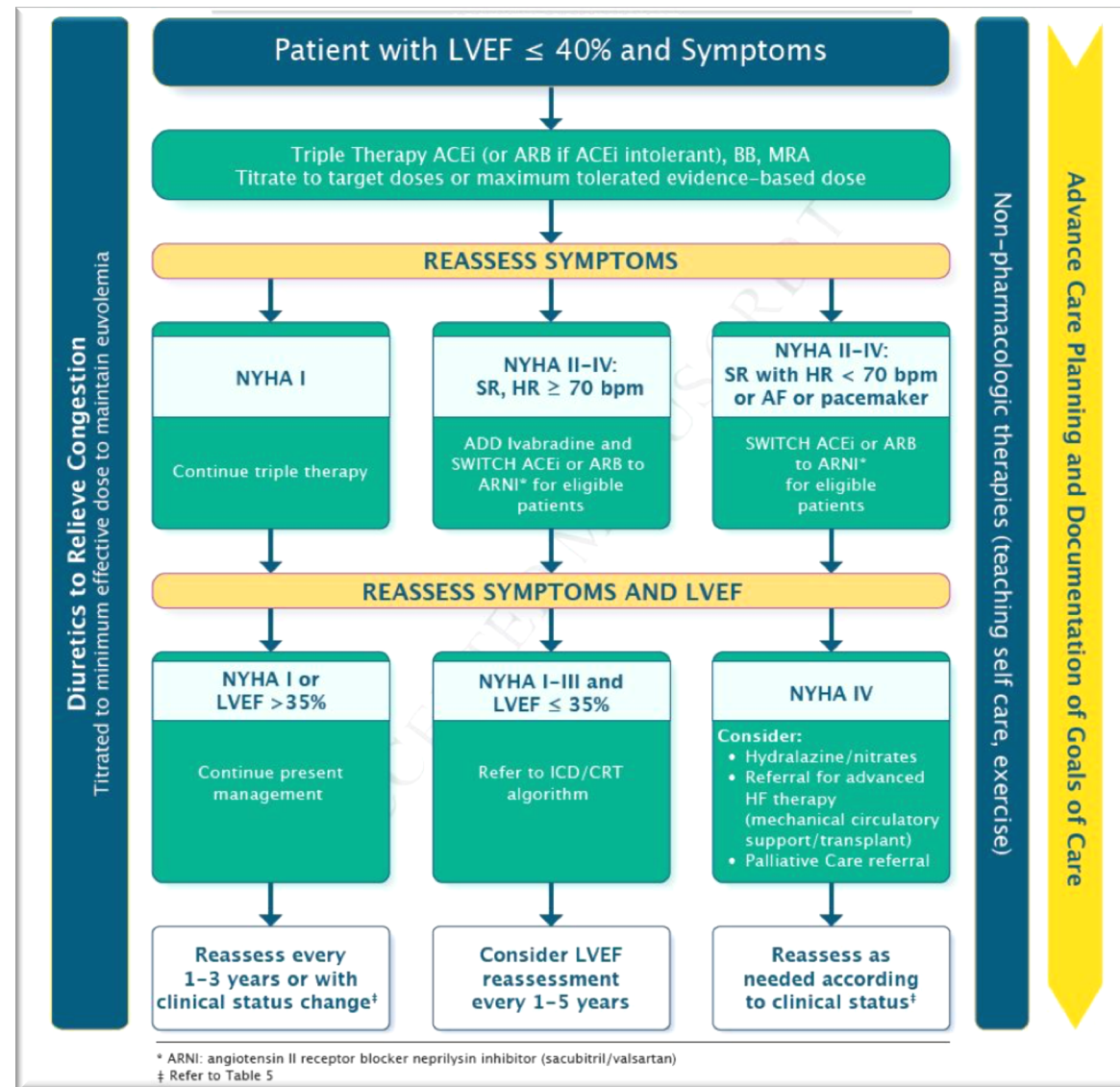
Approximately

- 83% of people with HF are 65+ years of age

- 38,000 ER Visits/Year

- 66,000 hospitalizations/year with a HF diagnosis
 Average LOS: 12 days

- 25,000 hospitalizations/year with a Main Dx of HF
 Average LOS: 9 days

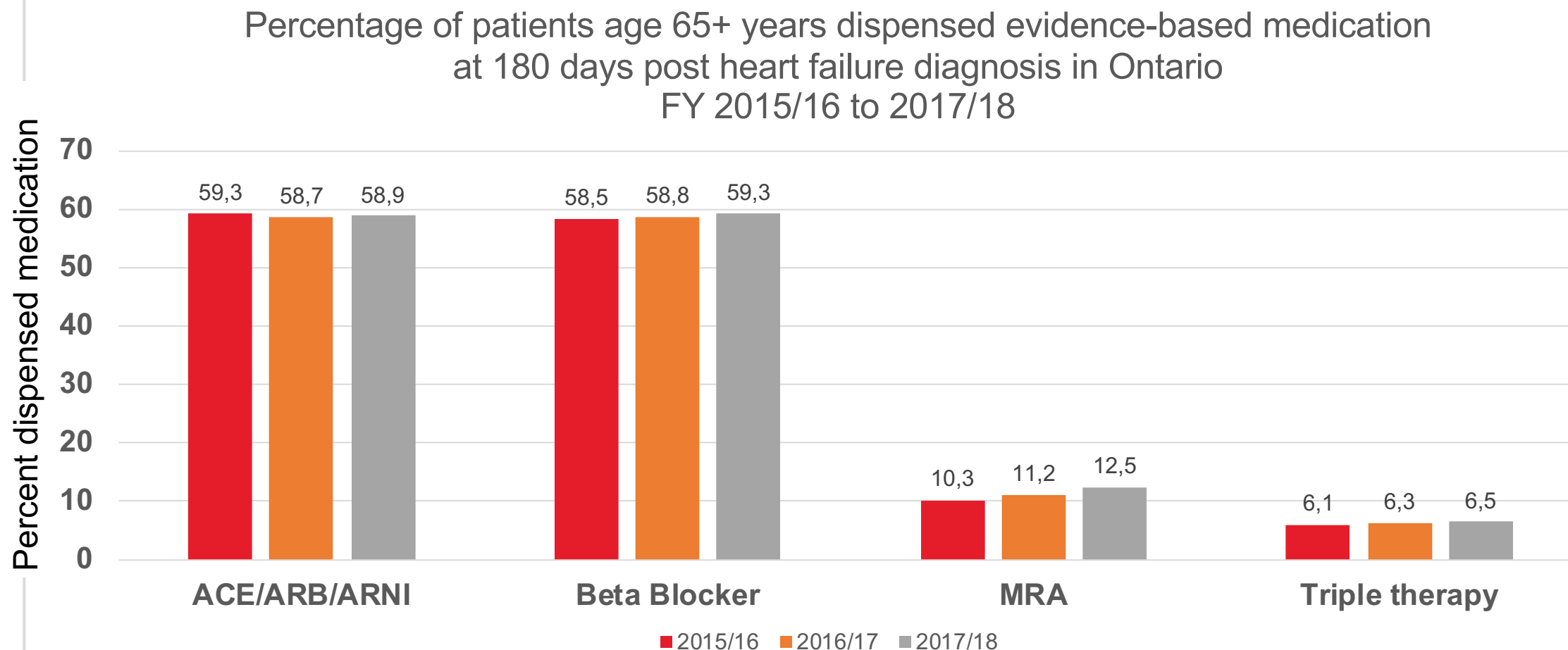- 770,000 days in hospital/year

Data source: CIHI DAD/NACRS (FY 2015/16)

Note- data represents Ontario residents with valid HCN, age 20+ years using acute care services

Case: Any diagnostic code is : "I255*" "I500*" "I501*" "I509*"

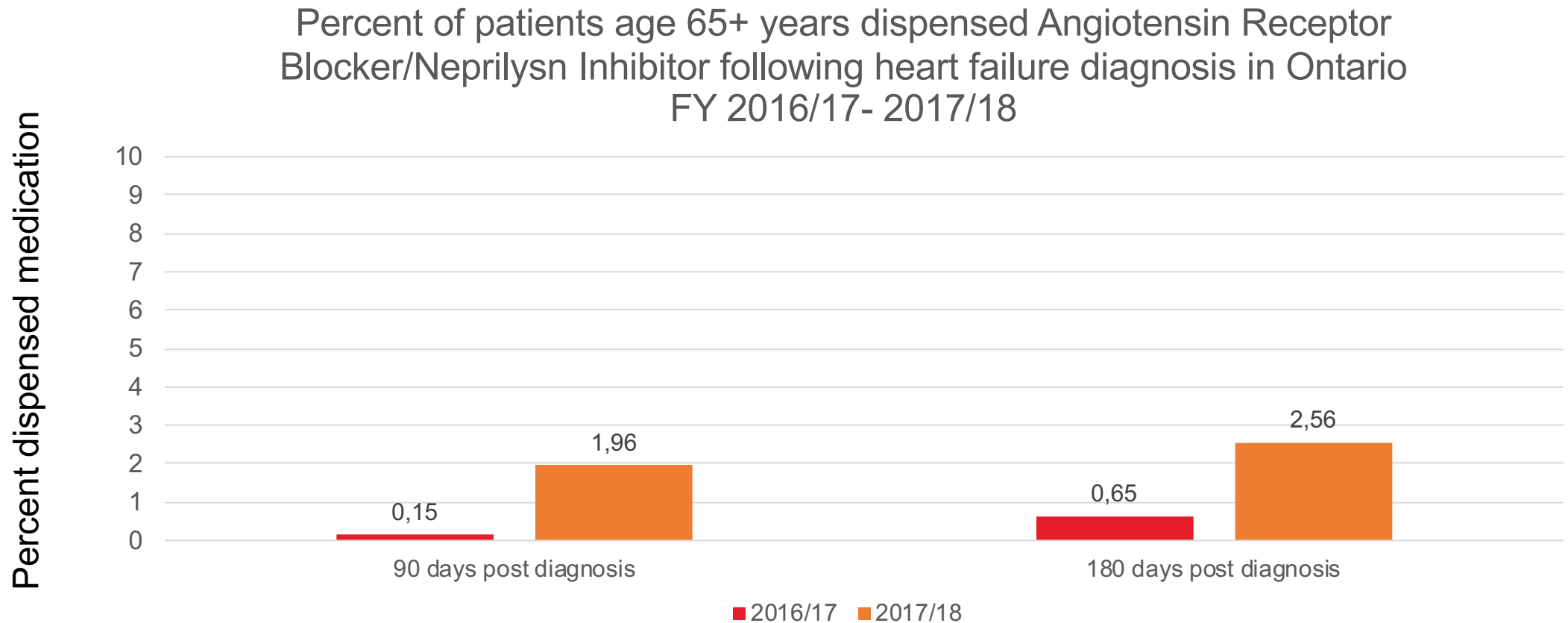# Therapeutic Approach to Patients with HFrEF
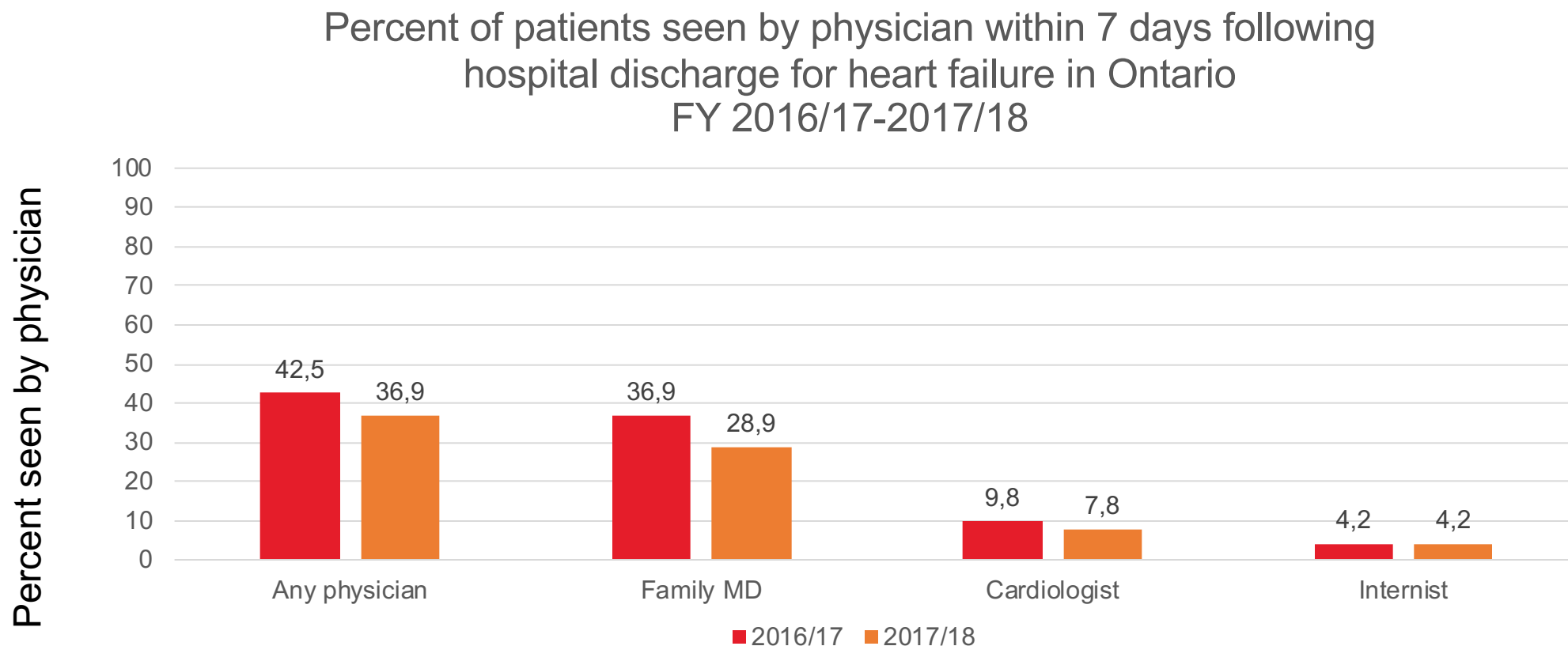
Ontario Landscape- Medications

Percentage of patients age 65+ years dispensed evidence-based medication
at 180 days post heart failure diagnosis in Ontario
FY 2015/16 to 2017/18

Percent dispensed medication

	ACE/ARB/ARNI	Beta Blocker	MRA	Triple therapy
2015/16	59,3	58,5	10,3	6,1
2016/17	58,7	58,8	11,2	6,3
2017/18	58,9	59,3	12,5	6,5

■ 2015/16   ■ 2016/17   ■ 2017/18

Data source: Discharge Abstract Database (DAD), Heart Failure Cohort (Schultz et al. 2013); National Ambulatory Care Reporting System (NACRS), Ontario Drug Benefit Claims (ODB), Ontario Health Insurance Plan (OHIP) Claims Database, Registered Persons Database (RPDB)

Ontario Landscape- Newer therapy

Percent of patients age 65+ years dispensed Angiotensin Receptor Blocker/Neprilysn Inhibitor following heart failure diagnosis in Ontario FY 2016/17- 2017/18

Data source: Discharge Abstract Database (DAD), Heart Failure Cohort (Schultz et al. 2013); National Ambulatory Care Reporting System (NACRS), Ontario Drug Benefit Claims (ODB), Ontario Health Insurance Plan (OHIP) Claims Database, Registered Persons Database (RPDB)

Ontario Landscape- follow up care

Percent of patients seen by physician within 7 days following hospital discharge for heart failure in Ontario FY 2016/17-2017/18

Data source: Discharge Abstract Database (DAD), Heart Failure Cohort (Schultz et al. 2013); National Ambulatory Care Reporting System (NACRS), Ontario Drug Benefit Claims (ODB), Ontario Health Insurance Plan (OHIP) Claims Database, Registered Persons Database (RPDB)

CCS Heart Failure Guideline Recommendations

- We recommend that all patients with recurrent HF hospitalizations, irrespective of age, multimorbidity, or frailty, should be referred to a HF disease management program. (Strong Recommendation, High Quality Evidence)

- We recommend that care for patients with HF be organized within an integrated system of health care delivery where patient information and care plans are accessible to collaborating practitioners across the continuum of care. (Strong Recommendation, Moderate Quality Evidence)

Ezekowitz et al., 2017

Purpose- honorable mention

Purpose- Highlight the systems approach to support better management of patients with HF in Ontario

Note- honourable mention that other provinces are exploring system approaches to managing heart failure

Building a model for supporting system integration for heart failure care in Ontario

Integrated Model of Heart Failure Care: Spoke-Hub-Node

Community Outreach Health Care Providers

Primary care providers Other solo HC Providers

Multidisciplinary heart failure team

Expert multidisciplinary heart failure team

Two-way communication among levels of care: i.e. face-to-face visits, phone, e-consult

Patient Risk and Complexity

LEVELS OF PATIENT CARE AND SETTING

SPOKE
Stable, low risk, few co-morbidities
Community provider office or clinic

COMMUNITY HUB
Moderate risk multiple, stable co-morbidities
Local hospital or community setting

TERTIARY NODE
High risk, multiple co-morbidities, complex needs
Advanced cardiac hospital

The intensity and level of care may vary over time with the patient's complexity and risk changes, but the goal is to ensure that high quality care is available as close to home as possible and that care is coordinated across all levels of care.

Goals of Integrated Heart Failure Care Initiative (IHFCI)

Understand how providers and teams could improve HF care, with regards to:

Improving compliance with clinical best practices

Reducing variation in practice and outcomes

Improving patient and caregiver experience

Providing evidence-based care close to home

Integrating care across the continuum

Integrating Heart Failure Care Initiative (IHFCI)- Project Objectives
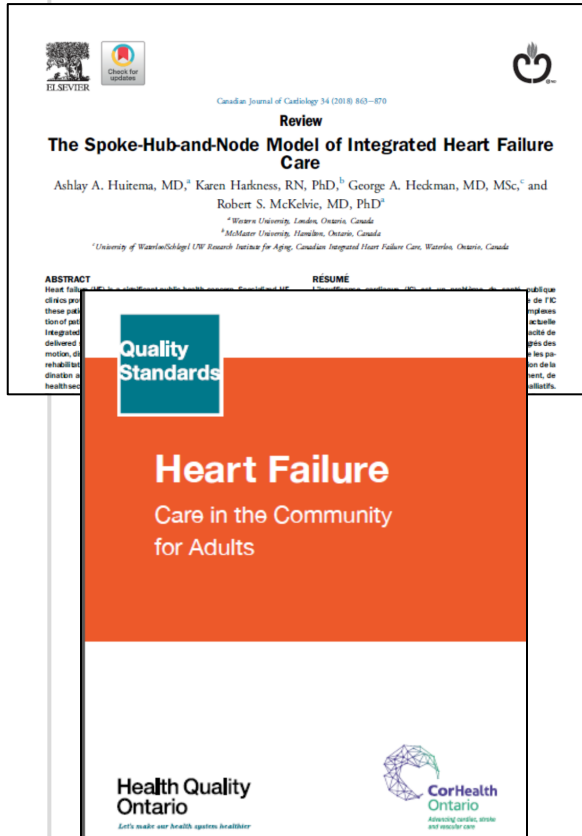
In three early adopter sub-regions (London, Ottawa, Guelph)

1. Implement CorHealth Ontario's *Spoke-Hub-Node Model* of organizing heart failure care

2. Implement Health Quality Ontario's *Heart Failure Care in the Community Quality Standard*

3. Develop a *Provincial Roadmap* for integrating heart failure care in Ontario based on the lessons learned through the three 'early adopter' teams (June 2018-March 2019)

Early Adopter Teams

1. London and area

2. Guelph/Kitchener area

3. Ottawa region

Early Adopter Teams

- Each early adopter team:

- Clinical and administrative leadership * need representation from spoke, hub and node locations

- Regional administrative leadership

- Front line providers

- Patient/caregivers

- CorHealth Ontario- project management support, coaching, provider education, administrative data interpretation, linking stakeholders ("match making")

Dedicated project manager at each site:

Field notes, lessons learned, biweekly meetings and reports submitted to CorHealth

(deep dive into notes- Evaluative report available electronically)

Sources of information to inform Roadmap
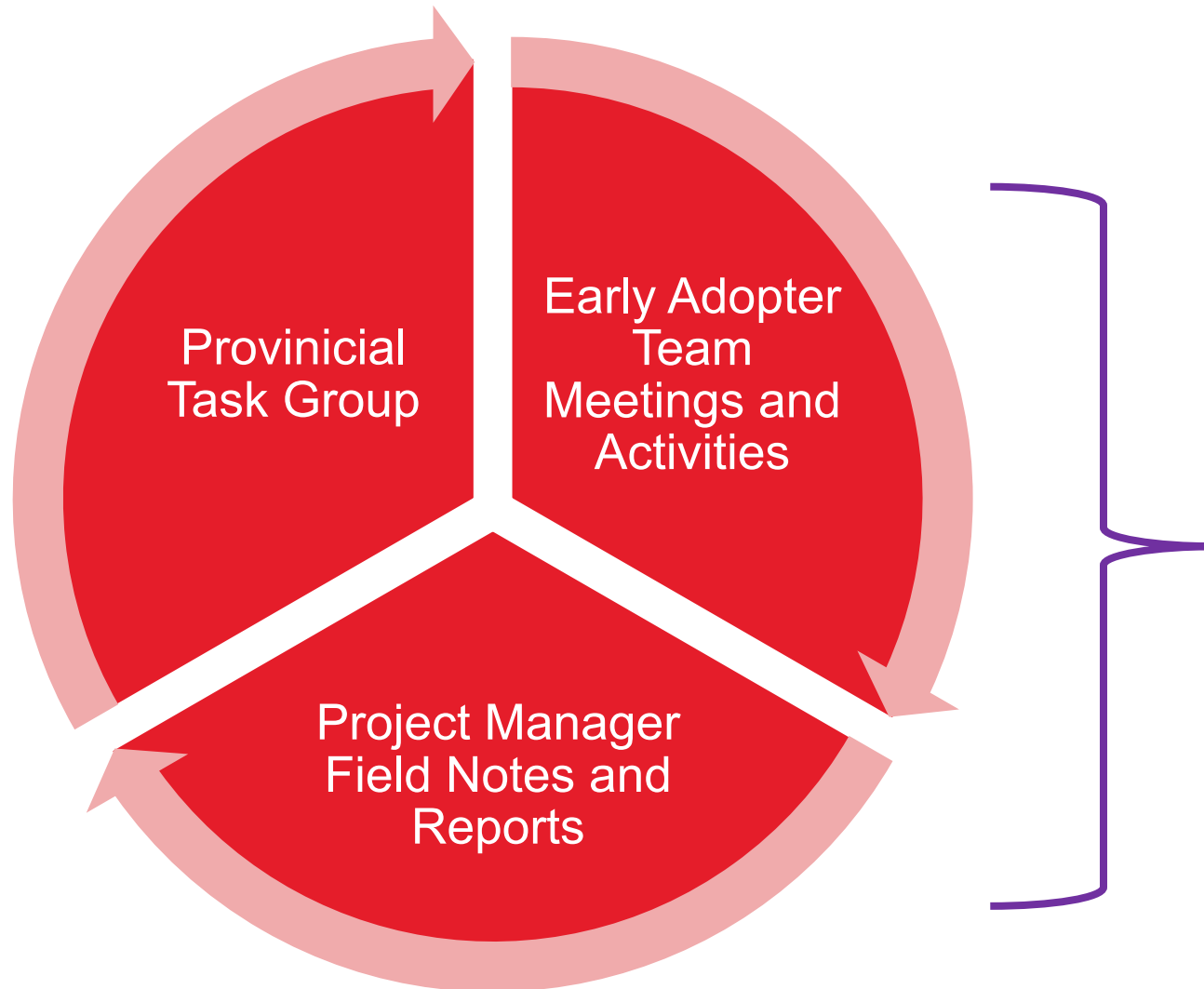
The Roadmap for Improving Integrated HF Care

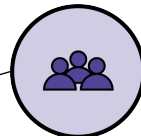Learnings from the 3 Early Adopter Teams distilled into 10 recommendations around *how to* implement **integrated, evidence-based HF Care.**

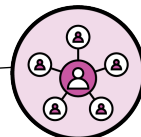Recommendations focus on 4 Critical Considerations Spanning all Phases

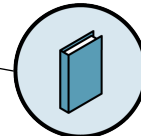**Phase 1:** Getting Started

Phase 2: Taking Action

Phase 3: Sustaining, Scaling Up and Spreading

Patient and Caregiver Voice

Collaborative Leadership

Education

Data and Reporting

Example from Roadmap

Recommendation 4: Provide targeted HF educational opportunities for providers (at the spoke, hub and node levels), as an effective way to increase HF expertise, generate interest and to find undiscovered HF champions, willing participants, and supporters.

Practical Tip!

- Refer to the Evaluative Report to learn about the Early Adopter Teams' experiences with providing HF educational opportunities.

From the Toolkit...

- Refer to the 'Heart Failure Education' folder of the Toolkit for various HF education links and resources for providers and patients/caregivers.

Example from Roadmap

Recommendation 7: Focus quantitative and qualitative measurement and key data elements on project implementation objectives. Use data gathered to drive quality improvement.

Practical Tips!

- HQO collects HF indicators using administrative data sets – these can provide some guidance around key data elements to consider. Refer to the HQO Heart Failure Quality Standard website for a Data Table and Measurement Guide.
- Consider using data collection forms that are standardized and shareable across sites.
- Refer to the Canadian Cardiovascular Society 'Quality Indicators for Heart Failure'.

IHFCI Implementation Support Toolkit

Overview

Integrating heart failure (HF) care requires an array of approaches and strategies. This toolkit was created to support interested clinicians, administrators, and health care teams to work towards integrating and connecting HF care in their local areas; that is, to provide 'wrap around care' for patients.

The contents of this toolkit are meant to be adapted by interested individuals and teams, as they see fit. It is not comprehensive, and is not meant to be prescriptive or limiting. Rather, these tools and resources are meant to serve as a guide to help teams get started.

Summary

- Timely optimizing of care for heart failure patients demands a systems approach to organizing care

- Integrating care at a systems level requires a paradigm shift in how we currently organize care

- Ontario is proposing a spoke-hub-node model of care – early days helped shape the Provincial Roadmap for Integrating HF Care

- Documents, tools, resources are available electronically- material will continue to evolve as the initiative continues to grow

Website for tools and resources: www.corhealthontario.ca