

DEMYSTIFYING HEART FAILURE MANAGEMENT— PRACTICAL TIPS



"The Light of Irene" was created by sḵáməxw

Territory Recognition

Our discussions are centered within the geographical region of Surrey-North Delta, and we respectfully recognize these are the shared traditional homelands of the Coast Salish First Nations and home to the Surrey Delta Métis Association.

The Surrey-North Delta Division of Family Practice is committed to learning and building relationships with the people whose lands we are on.

Rules of engagement

Be curious
and authentic

Be gentle and
kind

Share the
floor

Collaborate with intention

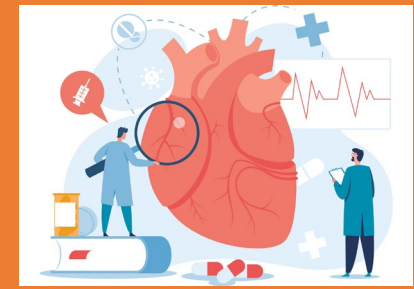
Share airtime

Respect
differences

Listen to
understand

Have a
learning
mindset

Agenda



	Activity	Facilitator
1.	Welcome	Dr. Lamis Samaan/Alina
2.	Housekeeping	Alina
3.	Project updates	Alina
4.	Demystifying the Heart Failure Management-Practical tips Q&A	Dr. Tarun Sharma
5.	Conclusions & Evaluation survey completion	Alina

Housekeeping

- **Registration:** Registration required upon arrival
- **Sessional payment & Evaluation:** You must stay for the whole duration of the event and complete the evaluation and sessional payment form provided to you at the end of the session to receive your payment and CMEs
- **The CME certificate** will be delivered to you in a pdf format via email in the days following the event

Project Team:

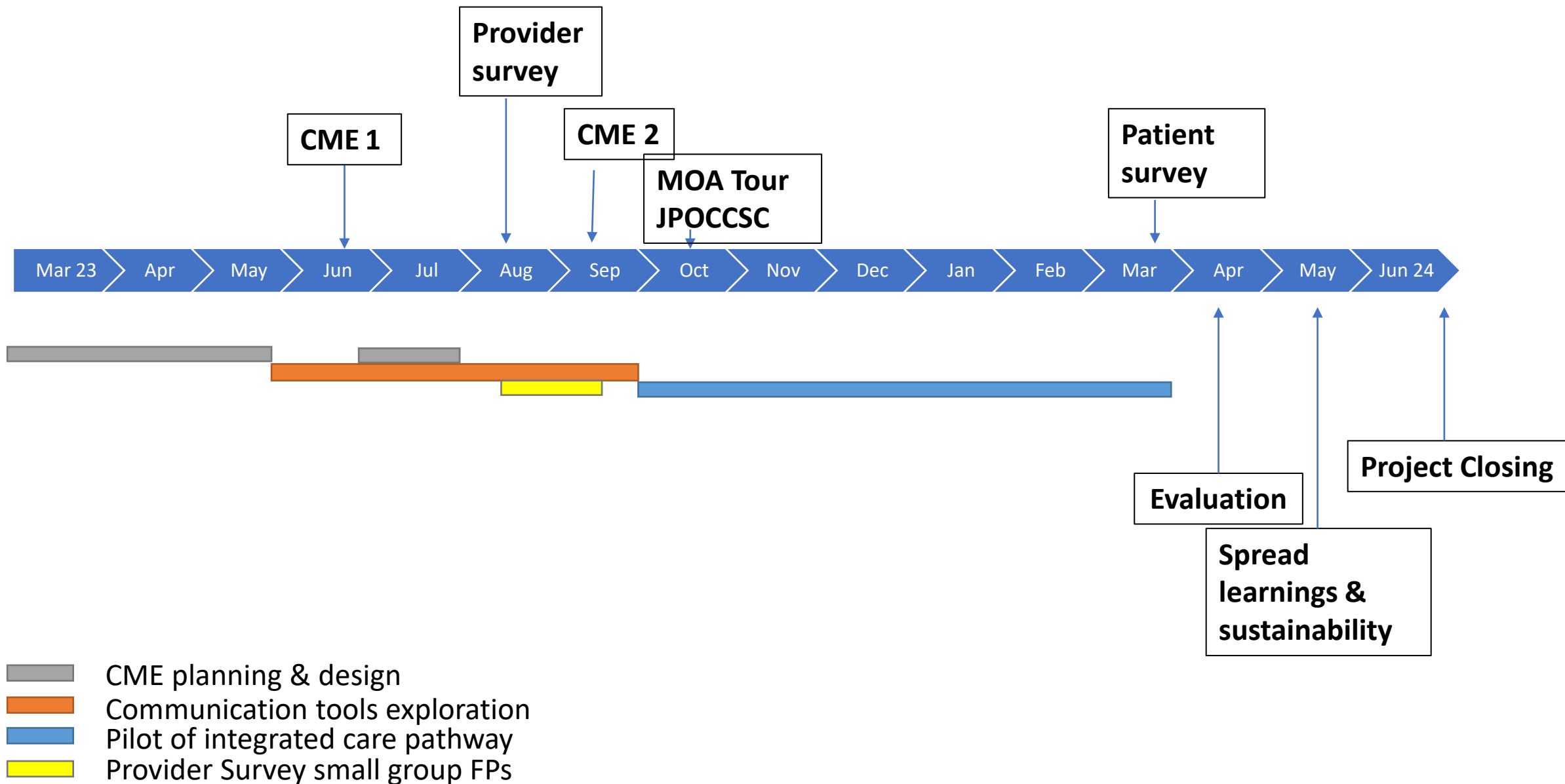


Dr. Lamis Samaan – FP, Physician Project Lead
Dr. Tarun Sharma – Cardiologist, Specialist Project Lead
Dr. Saroj Kumar - FP

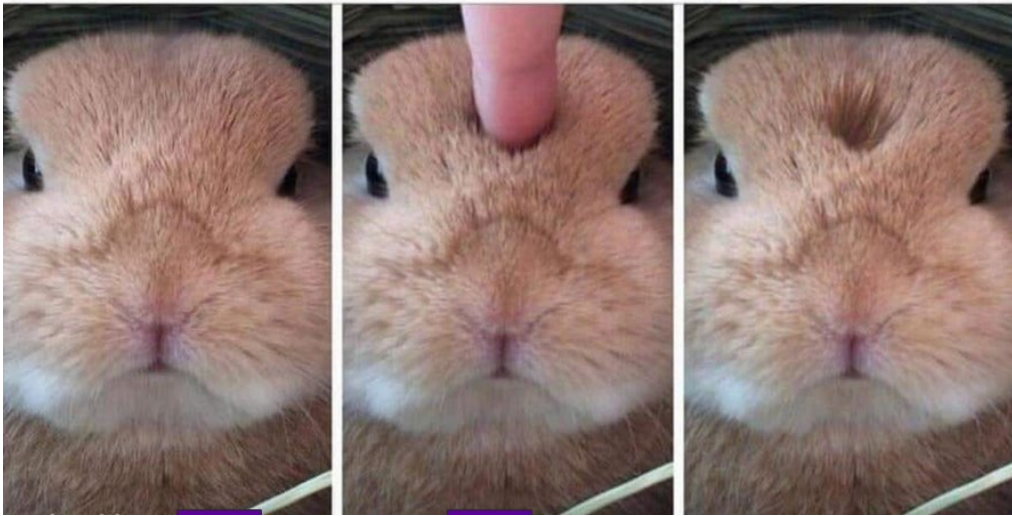
**Holly Kennedy-Simmons – FH, Cardiac Services,
Regional Strategic Lead, RNLead**
Jeraldine Washington – JPOCSC, HFC, RN

Moria Jones – JPOCSC, Clinical Ops Manager
Marissa McIntyre – FH, Lead Indigenous Health
Kimberly Choi – FH, JPOCSC, Director of Ops
**Tatjana RadosavljevicFH, Regional CNS, Cardiac
Network, NP**

Alina Alesu – SND DOFP, Project Manager
**Jody Friesen – SND DOFP, Director of Strategic
Initiatives & PCN**



When your non-compliant patient
with CHF goes off meds and starts a
high sodium diet

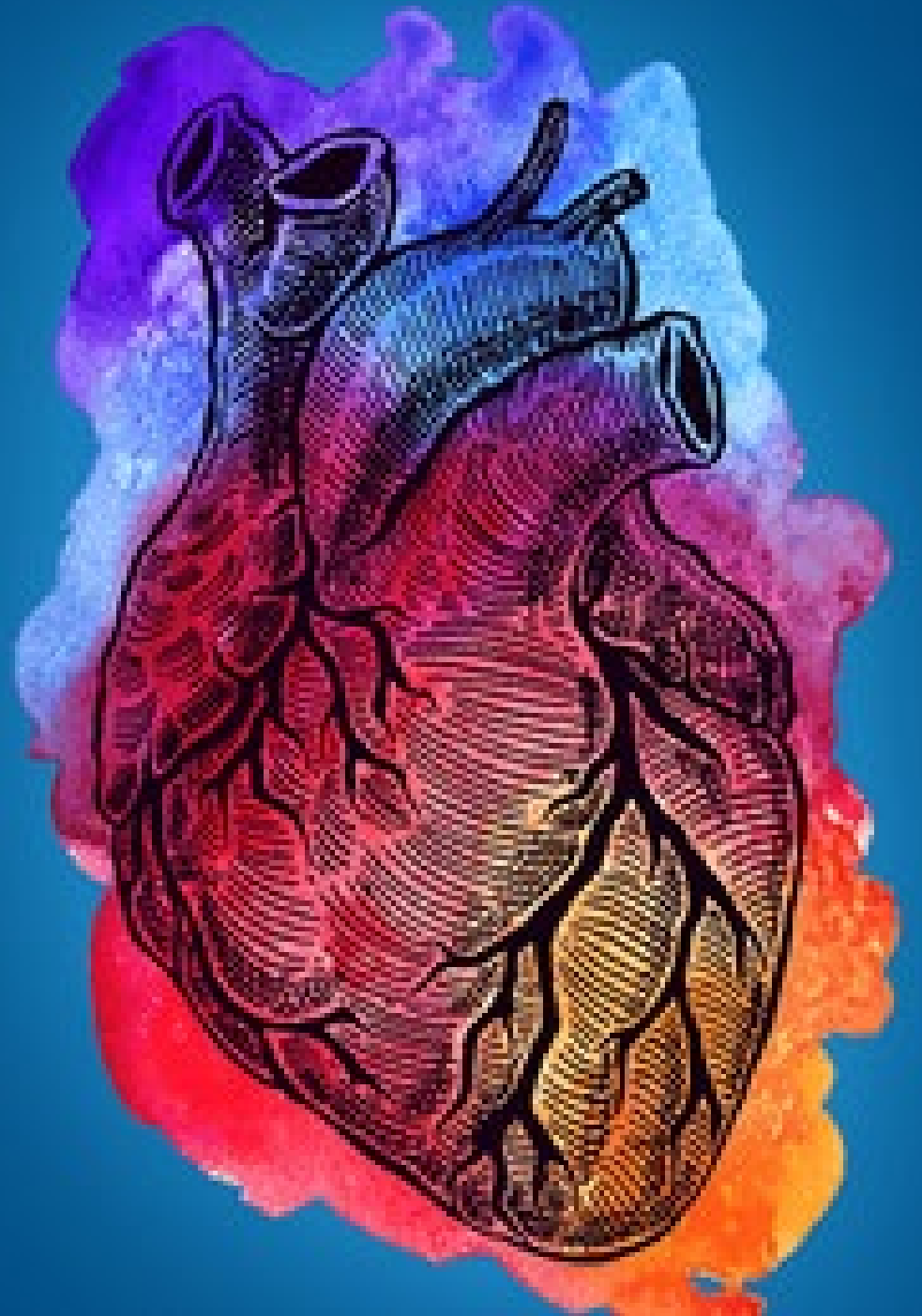


DE-MYSTIFYING HEART FUNCTION CLINIC

TARUN SHARMA, MD, FRCPC, FACC
CO-DIRECTOR, HEART FAILURE SERVICES
SURREY MEMORIAL HOSPITAL/JPOC

OBJECTIVE

- Help you recognize HF patients in office
- Define steps in management
- Review resources available



OUTLINE

- Review logistics of HF clinic
- Define HF and phenotype of HF patient
- Drug management
- Review clinical cases



In the last episode...

Background

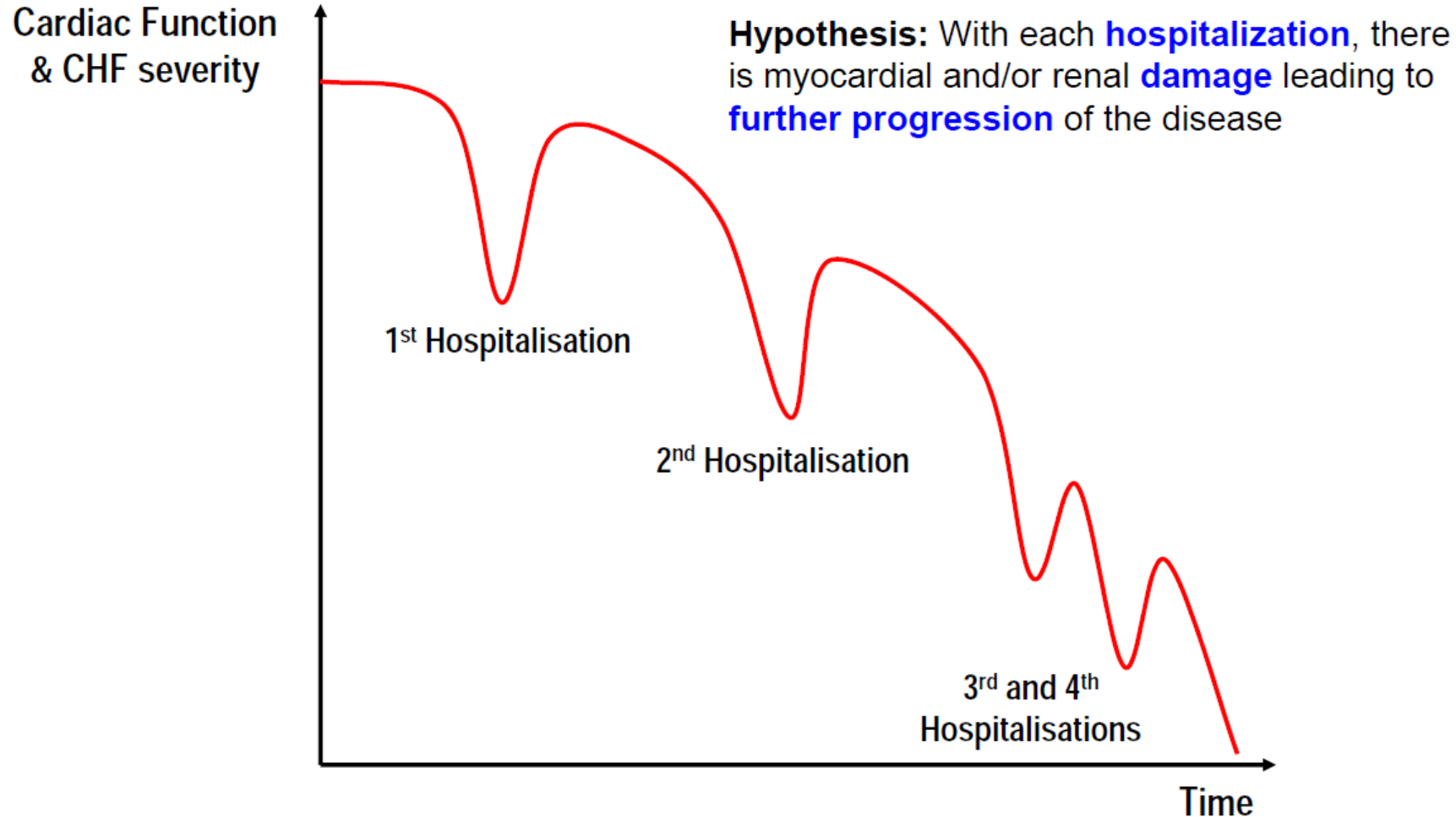
🇨🇦 750,000 patients with heart failure

🇨🇦 >100,000 patients diagnosed per year

🇨🇦 >2.8 billion/year in healthcare cost by 2030



Recurring Hospitalizations Impair Outcome



Team

- Cardiologists
- Registered Nurses
- Nurse Practitioners
- Pharmacists
- Dietitian
- Social worker
- Cardiac rehabilitation

Staff at HF Clinic at JPOCSC

Co-Directors of Heart Failure Service



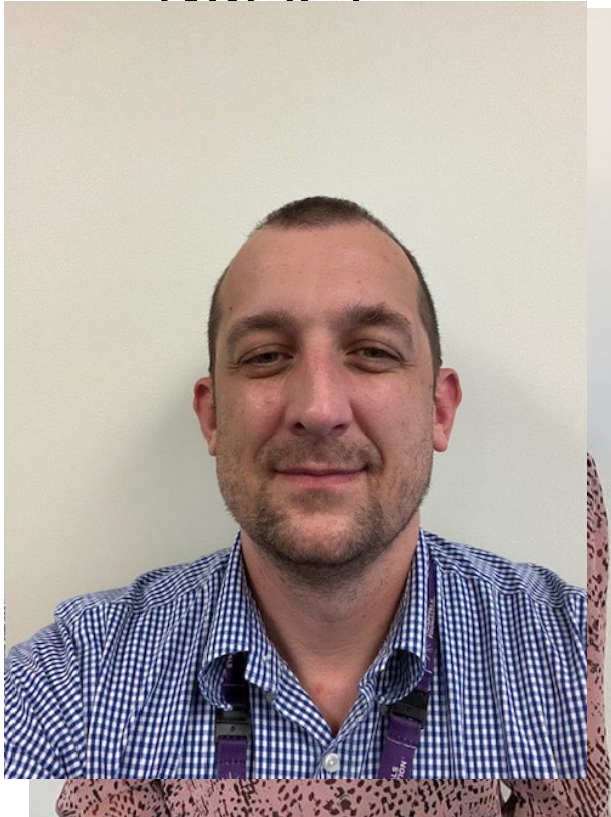
Dr. Tarun Sharma



Dr. Calvin Tong

Staff at HF clinic at JPOCSC

Nurses Pharmacists



Mark
Roshima
Jeraldine (PCC)



Soomi
Mona

Nurse Practitioners



Arden
Pamela

Rohini



Joan



SELECT SPECIALTY OR SERVICE ▼

Latest Specialist / Clinic Updates

A new specialist, [George Talany](#) (Ophthalmology), has been added (Surrey / North Delta).

A new specialist, [Jeffery Tong](#) (Internal Medicine), has been added (Surrey / North Delta).

[Jeffery Tong](#) (Internal Medicine) is now accepting electronic referrals through Pathways Referral Tracker.

[Jatinder Tiwana](#) (Family Medicine) has recently moved to a new office in White Rock.

[Elizabeth Varughese](#) (Family Medicine) has recently opened a new office in White Rock.

[David Zayonc](#) (Family Medicine) has recently opened a new office in White Rock.

A new clinic, [Headache Clinic at UBC](#) (Neurology), has been added (Vancouver).

News Updates

Surrey-North Delta Division



Share Your Perspective: Substance Use Disorder and Primary Care

We need your help to better understand your challenges in caring for patients with substance use disorder. **Your opinion matters, and it is vital for the success of this project.**

Our Substance Use Disorder Working Group invites you to help us reduce stigma and contribute to fatal overdose prevention in SND by sharing your perspective in the survey linked below.

****Participants will receive a 0.5 hour sessional payment upon survey completion.**

[--> Complete Survey](#)



SND Tech Fair: PCN Enablement Through Innovation and Technology

Back by popular demand! Connect with colleagues, learn about the latest technologies supporting medical clinics and get inspired at the Surrey-North Delta Technology Fair.

Representatives from technology companies recommended by Family Physicians in the community will be available to showcase how their tech can support you, and to answer any questions you have.

Featured Content

Clinician Tools

- 📁 [Prostate Cancer - PSA Screening Guidelines \(Canadian Urological Association\)](#)
- 📁 [Thinking about Weight Differently \(This changed my Practice\)](#)
- 📁 [COVID-19 Booster Dose Information \(Spring 2023\)](#)
- 📁 [Monkeypox information for providers \(BCCDC\) **UPDATED**](#)
- 📁 [Cervix Screening At Home for HPV Pilot Program - Information for Providers](#)
- 📁 [Eating Disorders - BC Clinical Practice Guidelines - 170 pages](#)
- 📁 [Infant Formula Shortage- Decision Tree for Specialized Formula for Infants with Food Allergies during a Shortage \(Canadian Pediatric Society\)](#)

Patient Info

- 📁 [COVID-19 Booster Dose Information \(Spring 2023\)](#)
- 📁 [Autism - New Diagnosis Hub \(Autism Community Training\)](#)
- 📁 [Autism - Mental Health \(BC Children's Kelty Mental Health Resource Centre\)](#)
- 📁 [Picky Eaters and Sensory Challenges \(BC Children's Kelty Mental Health Resource Centre\)](#)
- 📁 [Miscarriage - Pregnancy Loss Information and Resources \(BC Women's Hospital\)](#)

Pearls

- 📁 [Chronic Low Back Pain - Effectively Treated](#)

HEART FUNCTION CLINIC REFERRAL

☐ ARH ☐ BH ☐ JPOCSC ☐ LMH ☐ RCH ☐ RMH


Form ID: MSXX104940C

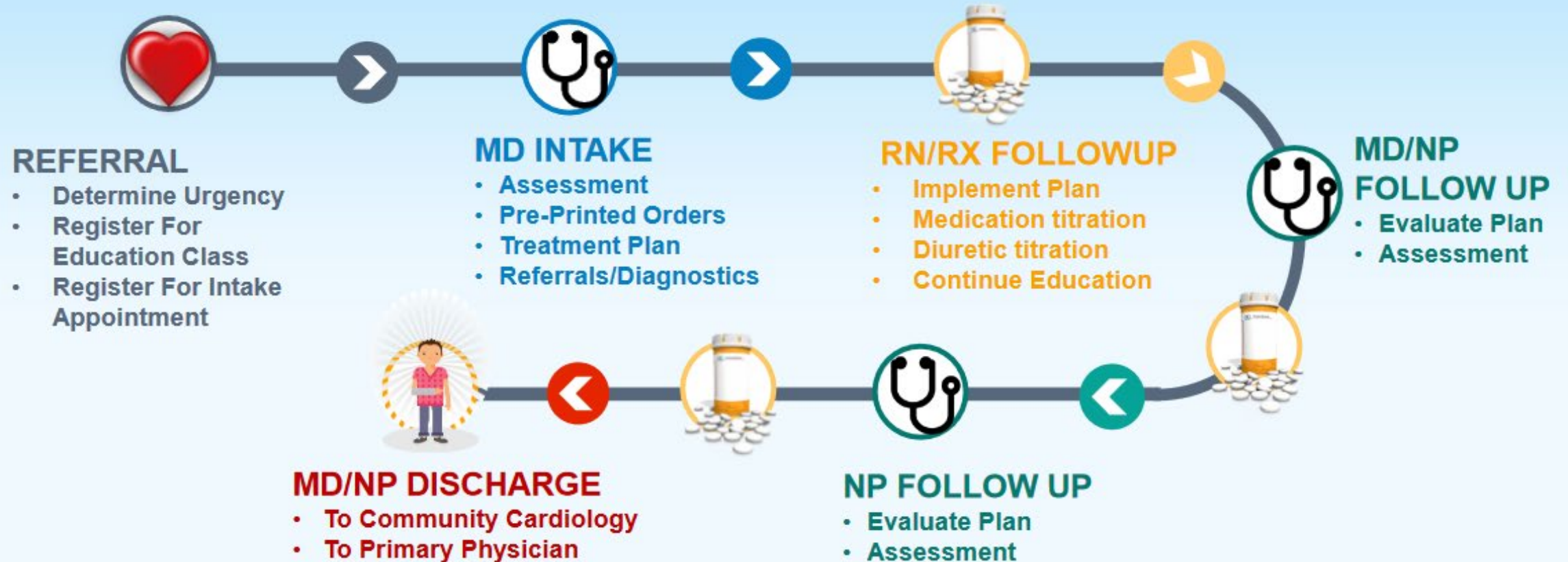
Rev: Feb 20/2020

Page: 1 of 1

<p align="center">*Patient</p> <p>Name: _____</p> <p>City, Province: _____</p> <p>Postal Code: _____</p> <p>Contact #: _____</p> <p>PHN#: _____</p> <p>DOB: _____</p>	<p align="center">*Referring Provider</p> <p>Name: _____</p> <p>Phone: _____</p> <p>Fax #: _____</p> <p>MSP #: _____</p> <p><input type="checkbox"/> GP <input type="checkbox"/> NP <input type="checkbox"/> ED <input type="checkbox"/> In patient</p> <p><input type="checkbox"/> Specialist, Specify: _____</p>																		
<p>Referral Criteria:</p> <p>1. Established heart failure of any etiology with an LVEF < 40%</p> <p>2. LVEF > 40% with sign's and/or symptoms of heart failure, with an elevated BNP or NT-PRO-BNP.</p>	<p>BNP Reference:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Age</th> <th>NT Pro BNP</th> </tr> <tr> <td><50 YRS</td> <td>> 450</td> </tr> <tr> <td>50-75 YRS</td> <td>> 900</td> </tr> <tr> <td>> 75 YRS</td> <td>> 1800</td> </tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Indicative of HF</th> <th>BNP</th> </tr> <tr> <td>Does not support HF</td> <td><100</td> </tr> <tr> <td>Borderline Zone</td> <td>100-250</td> </tr> <tr> <td>Supports HF</td> <td>250-400</td> </tr> <tr> <td>Strongly supports HF</td> <td>>400</td> </tr> </table>	Age	NT Pro BNP	<50 YRS	> 450	50-75 YRS	> 900	> 75 YRS	> 1800	Indicative of HF	BNP	Does not support HF	<100	Borderline Zone	100-250	Supports HF	250-400	Strongly supports HF	>400
Age	NT Pro BNP																		
<50 YRS	> 450																		
50-75 YRS	> 900																		
> 75 YRS	> 1800																		
Indicative of HF	BNP																		
Does not support HF	<100																		
Borderline Zone	100-250																		
Supports HF	250-400																		
Strongly supports HF	>400																		
<p>*Primary Community Cardiologist:</p>																			
<p>*Reason for Referral: Wait times are allocated within published benchmarks as listed below.</p>																			
<p><input type="checkbox"/> Emergent referral - speak with on-call Cardiologist</p>	<p>Emergent heart failure consultation is for cardiogenic shock, inotrope/vaso pressor requirements or respiratory distress.</p>																		
<p><input type="checkbox"/> New diagnosis of heart failure and UNSTABLE OR Post MI heart failure OR Post hospitalization HF OR Progressively worsening HF</p>	<p>Appointment within 2 weeks</p>																		
<p><input type="checkbox"/> Heart Failure with symptoms but NOT decompensated, OR New diagnosis of heart failure and STABLE</p>	<p>Appointment within 4 weeks</p>																		
<p><input type="checkbox"/> Chronic heart failure management OR Asymptomatic LV dysfunction</p>	<p>Appointment within 6 weeks</p>																		
<p><i>Every effort is made to maintain benchmark times however timing may vary due to volume of referrals.</i></p>																			
<p>*Care Management: all options will be invited to HF Group Education</p> <p><input type="checkbox"/> Shared care (for 6 months or until discharge criteria met)</p> <p><input type="checkbox"/> HF Medication Optimization (Titrations done by Pharmacist, Cardiologist or NP)</p> <p><input type="checkbox"/> Education only</p> <p><input type="checkbox"/> Advice only (consultation but no changes) Specific question referring provider would like answered?</p>																			
<p>Please attach a list of current medications, relevant history and investigations.</p> <p>*Primary Language Spoken, if not English, please ensure there is someone with the patient who can speak English</p>																			
<p>* Referring Physician/ NP: _____ Date: _____ # of pages faxed _____</p>																			
<p>* Fax: <input type="checkbox"/> ARH: 604-651-4782 <input type="checkbox"/> BH: 604-412-6189 <input type="checkbox"/> JPOCSC: 604-582-3783 <input type="checkbox"/> LMH: 604-514-6012 <input type="checkbox"/> RCH: 604-528-5057 <input type="checkbox"/> RMH: 604-463-1887</p>																			
<p align="center">To expedite care PLEASE ensure ALL aspects of this form are completed</p>																			

HEART FUNCTION CLINIC ROADMAP

TIME LINE 6 MONTHS

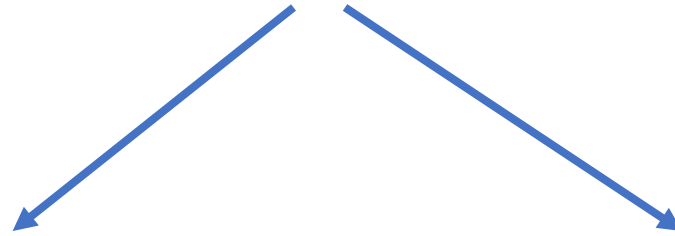


Back to the Basics



Heart Failure

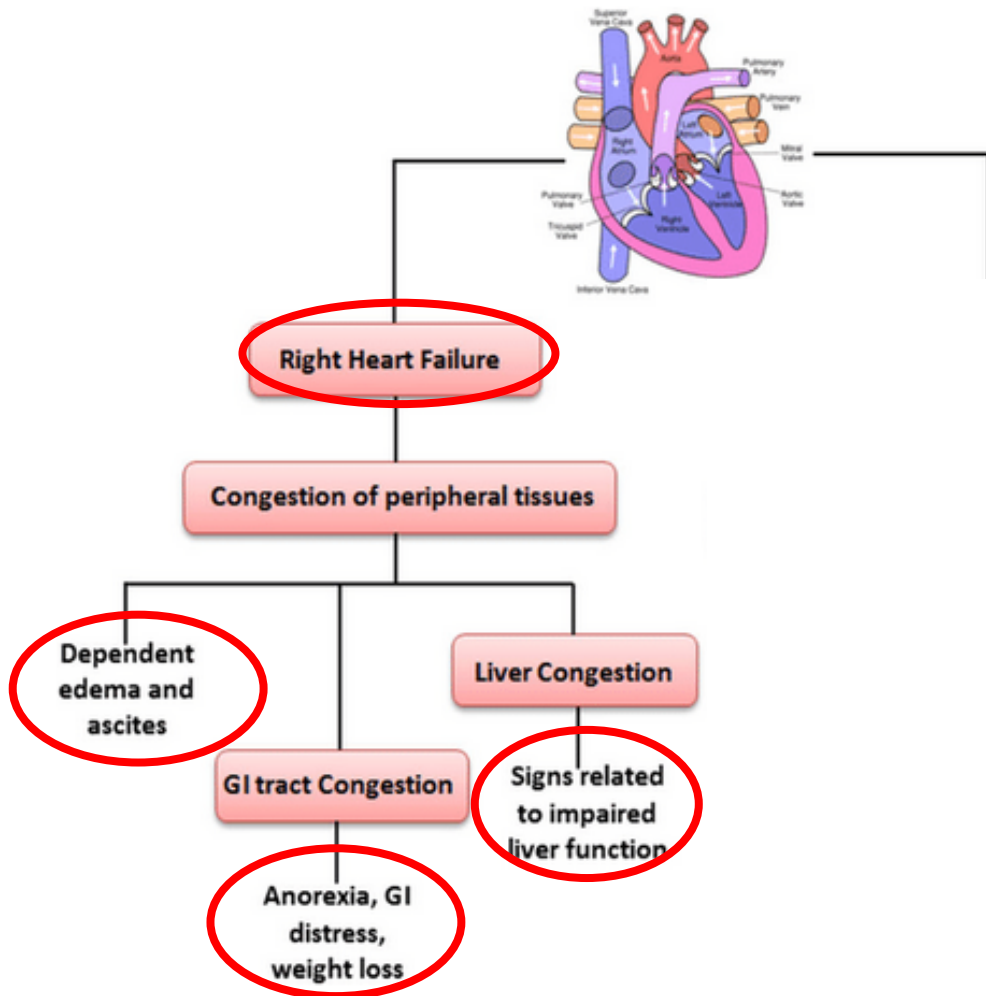
- Inability of heart to meet metabolic demands of the body



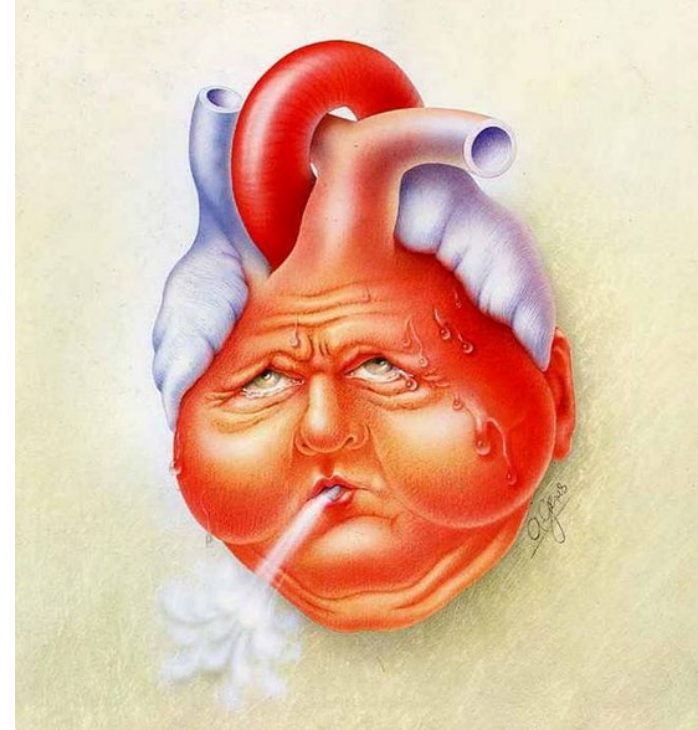
Reduced EF (HFrEF,
HFmrEF)

Need high pressures to
keep up (HFpEF)

Clinical presentation



Symptoms of right and left heart failure



Case #1:

- 69 year old male
- PMH: HTN, otherwise unknown
- Home meds: None
- First clinic visit, “I feel short of breath and tired”
- Vitals: BP 180/100 mmHg, pulse 80 bpm.
- Exam: No acute distress, Lungs clear, No edema, JVP cant see (refuses to remove his scarf)

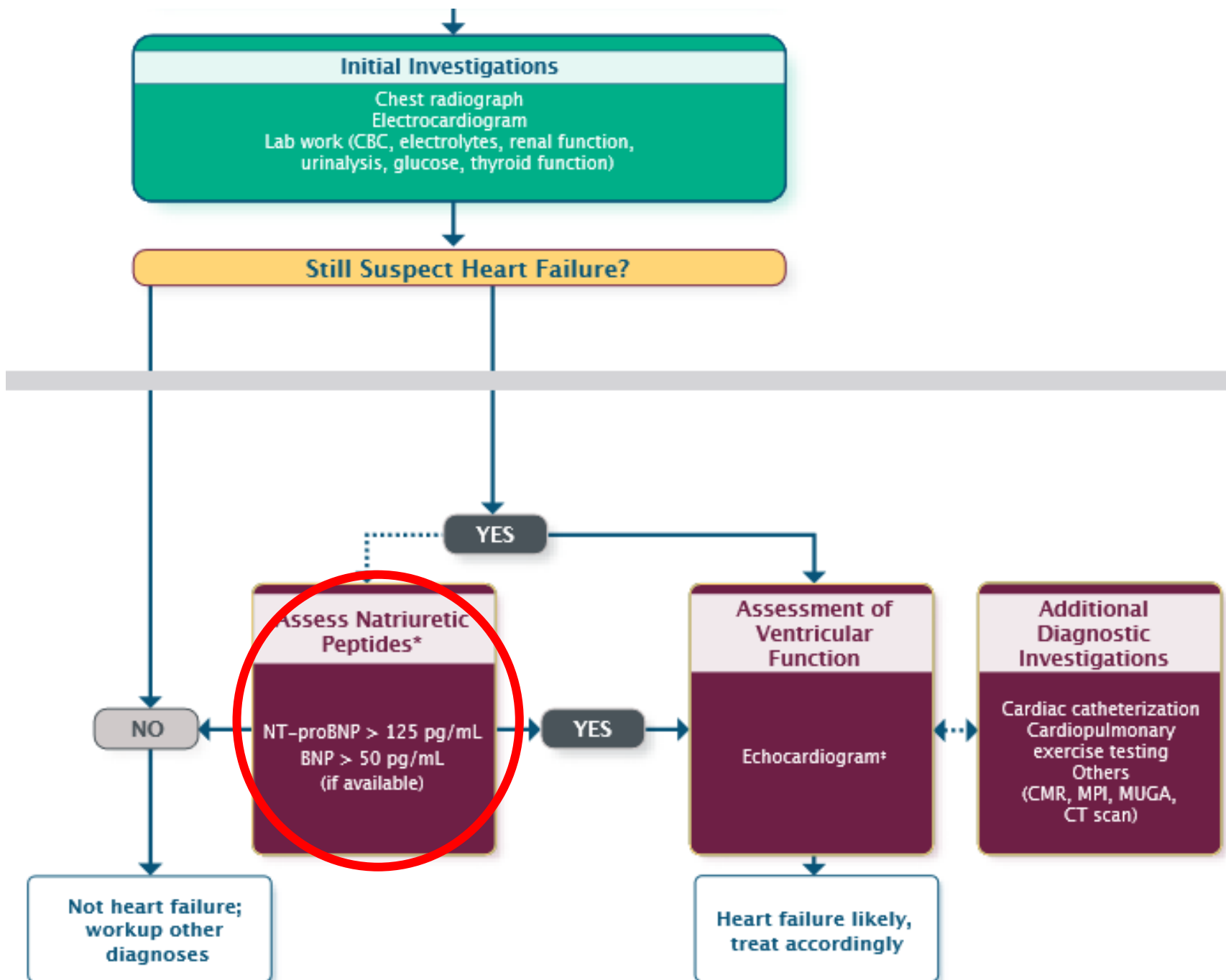


Case #1

- How do you want to manage this patient with shortness of breath with no other history?
- Order more testing
- Send patient to hospital
- Refer to cardiology
- Start Lasix 40 mg daily

What tests would you order?

- #1) Presuming usual things have been assessed for shortness of breath
 - i.e. fever, chills, cough ->infectious process, smoking hx -> COPD,
 - CBC (infection, anemia)
 - Chem 7 (renal failure, hyponatremia, hyperkalemia), TSH
 - BNP or NTproBNP (assess for HF)
 - ECG (assess for arrhythmias)
 - CXR
 - Echocardiogram (will take some time)



Case #1:

- Tests ordered. What would like to do to conclude the visit?
- See him next in 1-2 months
- See him in next 2 weeks
- Start ramipril (or amlodipine)
- Start Lasix 40 mg daily



Treatment

- DEPENDS on
 - Volume status
 - Associated co-morbidities
 - Ejection fraction (maybe)
 - Only Right sided vs Left sided/biventricular

Treatment for decreasing mortality/hospitalization/worsening HF

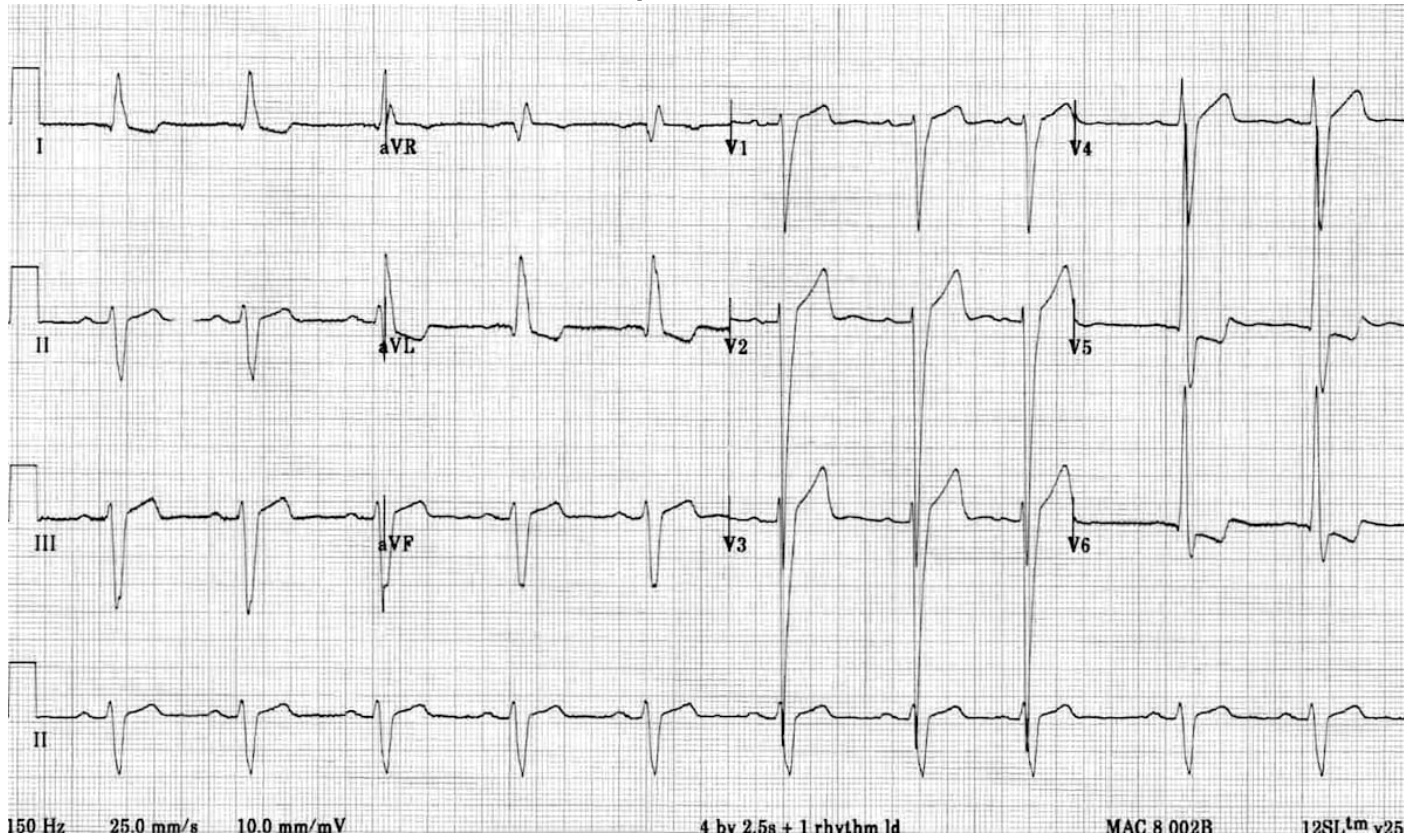
- Reduced EF (HFrEF i.e. LVEF <40%)
 - Beta blocker
 - ARNI (or ACE-i/ARB)
 - MRA (spironolactone)
 - SGLT2 inhibitors

Practical tip for treatment

- Target causes of heart failure (irrespective of EF)
 - If significant excess volume → then need diuresis
 - If Afib with RVR -> then beta blocker
 - If CAD suspected -> needs referral for cath [so cardio referral]
 - If HTN → then needs BP control (prefer foundational meds)
 - If murmur on exam → needs further assessment

Results are in!

- WBC 9, Hg 130, Plt 220
- Sodium 130, K 4, Cr 110, eGFR 45
- BNP 500 (or NTproBNP 2100)



Sinus rhythm with LVH and repolarization abnormality

Now, what would you like to do?

- Refer to heart function clinic

Reasonable to do now we have symptoms and biomarker evidence of HF (i.e elevated BNP)

- Refer to cardiology

- Increase ramipril to 10 mg daily

Especially if BP elevated

- Continue Lasix 40 mg daily

Reasonable based on volume status

- Start spironolactone 12.5 mg daily

Helps irrespective of EF (good for both HFpEF and HFrEF)

- Start SGLT2 inhibitor (dapagliflozin 10 mg daily or empagliflozin 10 mg daily)

Case #1 Continues



- Echo: LVEF 35%, mild RV failure
- BP 120/80 mmHg, pulse 80 bpm. Not volume overloaded.
- Meds: Ramipril 10mg daily, Furosemide 40 mg daily
- Labs: HgA1c 8, TSH 3.20, Sodium 135, K 5.5, Cr 130, eGFR 38 (prior 45)

What would you do next?

- Wait for cardiology/HF clinic appointment

- Stop/reduce furosemide

- Reduce ramipril

- Start spironolactone

- Start dapagliflozin

- Start beta blocker

Common issues

- Renal dysfunction
 - <30% change in Cr/GFR is reasonable
 - Try to get patients on lowest possible dose of diuretic
- Hyperkalemia
 - 5.5 or lower can be monitored
 - Reinforce reduction of potassium lowering foods

SELECT SPECIALTY OR SERVICE ▼

Latest Specialist / Clinic Updates

A new specialist, [George Talany](#) (Ophthalmology), has been added (Surrey / North Delta).

A new specialist, [Jeffery Tong](#) (Internal Medicine), has been added (Surrey / North Delta).

[Jeffery Tong](#) (Internal Medicine) is now accepting electronic referrals through Pathways Referral Tracker.

[Jatinder Tiwana](#) (Family Medicine) has recently moved to a new office in White Rock.

[Elizabeth Varughese](#) (Family Medicine) has recently opened a new office in White Rock.

[David Zayonc](#) (Family Medicine) has recently opened a new office in White Rock.

A new clinic, [Headache Clinic at UBC](#) (Neurology), has been added (Vancouver).

News Updates

Surrey-North Delta Division

Share Your Perspective: Substance Use Disorder and Primary Care

We need your help to better understand your challenges in caring for patients with substance use disorder. **Your opinion matters, and it is vital for the success of this project.**

Our Substance Use Disorder Working Group invites you to help us reduce stigma and contribute to fatal overdose prevention in SND by sharing your perspective in the survey linked below.

****Participants will receive a 0.5 hour sessional payment upon survey completion.**

[-> Complete Survey](#)










SND Tech Fair: PCN Enablement Through Innovation and Technology

Back by popular demand! Connect with colleagues, learn about the latest technologies supporting medical clinics and get inspired at the Surrey-North Delta Technology Fair.






Representatives from technology companies recommended by Family Physicians in the community will be available to showcase how their tech can support you, and to answer any questions you have.

Featured Content

Clinician Tools

-  [Prostate Cancer - PSA Screening Guidelines \(Canadian Urological Association\)](#)
-  [Thinking about Weight Differently \(This changed my Practice\)](#)
-  [COVID-19 Booster Dose Information \(Spring 2023\)](#)
-  [Monkeypox information for providers \(BCCDC\) **UPDATED**](#)
-  [Cervix Screening At Home for HPV Pilot Program - Information for Providers](#)
-  [Eating Disorders - BC Clinical Practice Guidelines - 170 pages](#)
-  [Infant Formula Shortage- Decision Tree for Specialized Formula for Infants with Food Allergies during a Shortage \(Canadian Pediatric Society\)](#)

Patient Info

-  [COVID-19 Booster Dose Information \(Spring 2023\)](#)
-  [Autism - New Diagnosis Hub \(Autism Community Training\)](#)
-  [Autism - Mental Health \(BC Children's Kelty Mental Health Resource Centre\)](#)
-  [Picky Eaters and Sensory Challenges \(BC Children's Kelty Mental Health Resource Centre\)](#)
-  [Miscarriage - Pregnancy Loss Information and Resources \(BC Women's Hospital\)](#)

Pearls

-  [Chronic Low Back Pain - Effectively Treated](#)

Other common issues

- 3 months later:
- Patient is back:
 - Now on: carvedilol 25 mg BID, Entresto 49/51 mg BID, spironolactone 12.5 mg daily, dapagliflozin 10 mg daily
 - Had flu 2 weeks ago, feels tired and recovering from flu
 - Sodium 138, K 5.4, Cr 180, eGFR 28 (prior Cr 110, eGFR 51)



What would you do next?

- Refer to Nephrology
- Stop all meds
- Hold meds for 3 days, then resume at half dose
- Repeat renal function (must be an error)





WHAT TO DO WITH Heart Failure Medications IF I'M SICK

Adapted from the 2020 Canadian
Cardiovascular Society
Heart Failure and
Diabetes Canada Guidelines



Name: _____ Date: _____

- When you are sick, it is easy to become dehydrated from throwing up, diarrhea, and/or a fever.
- If you become dehydrated, your body may be stressed. This can make certain medications cause problems.
- This means that **some** medications should be PAUSED when you are sick to prevent side effects.
- These medications can then be STARTED AGAIN once you have recovered from being sick.

MY PLAN



If I have been throwing up, having diarrhea, or a fever and I am worried that I am dehydrated because I cannot keep “anything down” for more than 24 hours, I will PAUSE (temporarily stop) the following medicine(s):

Type of Medication	My Medication
diuretic (water pill; e.g. furosemide LASIX , metolazone ZAROXOLYN)	<input type="checkbox"/>
ACE inhibitor (e.g. ramipril ALTACE)	<input type="checkbox"/>
angiotensin receptor blocker (e.g. valsartan DIOVAN)	
sacubitril-valsartan (ENTRESTO)	
spironolactone (ALDACTONE) or eplerenone (INSpra)	<input type="checkbox"/>
SGLT2 inhibitor (e.g. dapagliflozin FORXIGA , empagliflozin JARDIANCE) Go to the emergency department if you have abdominal pain, severe vomiting, or severe drowsiness.	<input type="checkbox"/>
others (such as metformin GLUCOPHAGE , glyburide DIABETA , glimepiride DIAMICRON)	<input type="checkbox"/>
For medications not included in this list, continue taking them as prescribed or consult your cardiologist, family physician, pharmacist, or heart function clinic.	



I will START these medications again at my usual dose when I am feeling well and my body has recovered from the illness.

For cough and cold products, do not take any products that contain:

- anti-inflammatory drugs such as ibuprofen **ADVIL**, **COMBAGESIC**, **MOTRIN** or naproxen **ALEVE**
- acetylsalicylic acid **ASPIRIN** for pain or fever: daily low-dose for cardiovascular protection is okay if prescribed
- decongestant tablets or sprays containing pseudoephedrine or phenylephrine

Instead, you can use:

- acetaminophen **TYLENOL** for pain or fever
- saline (salt water) nose spray **SALINEX** or rinse for congestion

SIGNS OF DEHYDRATION

unusually weak or tired
confused or
trouble focusing
thirsty, dry mouth
cool, clammy skin
less peeing
new or worsening dizziness
or light-headedness when
standing or sitting up

WHEN YOU ARE SICK
IT IS OKAY TO PAUSE
THESE MEDICATIONS
FOR A FEW DAYS.

REMEMBER TO:

HYDRATE

try to keep total fluids
to around 2 litres per
day, limiting caffeinated
beverages and replacing
fluid loss from throwing
up or diarrhea

WATCH SODIUM INTAKE
canned soup & packaged
foods are convenient but
can cause your body to
hold onto extra fluid

KEEP TRACK

continue weighing
yourself daily and if you
have a machine at
home, check your blood
pressure and heart rate
twice a day, especially if
you feel lightheaded

CONSULT

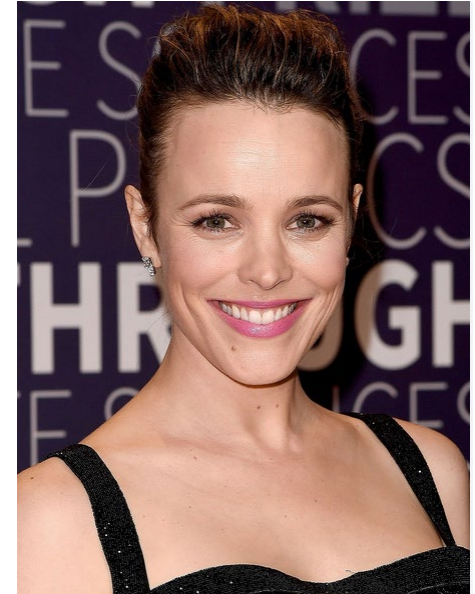
your provider if you have
questions, if your weight
goes ↑ or ↓ by more than
1.5 kgs (< 2 lbs) over 2 days,
if your blood pressure
is unusually low for you,
or if you need to PAUSE
your medications for
more than 2 days

S sulfonylureas
A ACE inhibitors
D diuretics, direct renin inhibitors

M metformin
A angiotensin receptor blockers
N nonsteroidal anti-inflammatory
S SGLT2 inhibitors

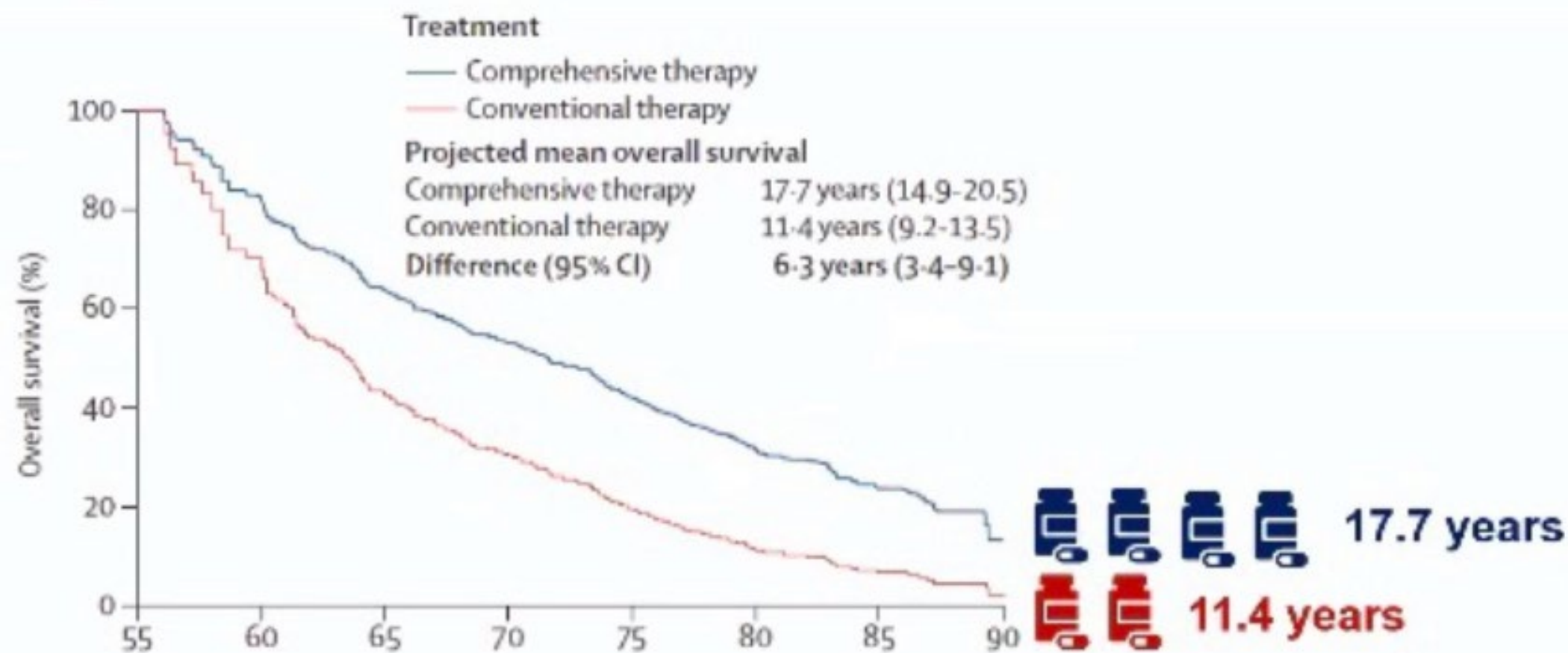
Case #2

- 46 year old female with prior myocarditis
 - EF 38%, stable and doing well
 - Ramipril 5mg daily, bisoprolol 5 mg daily
 - No concerns



What would you do next?

- Nothing. She is doing great
- Increase ramipril/bisoprolol
- Start spironolactone or SGLT2 inhibitor
- Refer her for ICD



Vaduganathan M et al. *Lancet* 2020

Case #3

- 89 year old male
 - HTN, DM, CKD (eGFR 35), Afib
 - 1 week history of abdominal bloating, palpitations, LE edema
 - Unable to sleep in bed, lying down in recliner, feels tired and dizzy
 - Prior LVEF 55%, moderate TR
- Vitals: 90/60 mmHg, pulse 130 bpm
- What would you do next?



What would you do next?

- Start spironolactone
- Start SGLT2 inhibitor (dapagliflozin 10 mg daily)
- Start diltiazem 120 mg daily and DC home
- Start metoprolol 25mg BID and send home
- Send to hospital

A word on BNP

B-type Natriuretic Peptide (BNP) or NT-proBNP, if available

- **BNP***

- < 100 pg/ml - HF unlikely

- = 100-400 pg/ml - HF possible but other diagnoses need to be considered

- > 400 pg/ml - HF likely

- **NT-proBNP***

- < 300 pg/ml - HF unlikely

- = 300-900 pg/ml - HF possible, but other diagnoses need to be considered (age 50-75)

- = 300-1800 pg/ml - HF possible, but other diagnoses need to be considered (age > 75)

- > 900 pg/ml - HF likely (age 50-75)

- > 1800 pg/ml - HF likely (age > 75)

**Values correspond to decompensated heart failure and do not apply for diagnosis of stable heart failure.*

Target doses

Drug Class	Specific Agent	Start Dose	Target Dose
ARNI	Sacubitril-valsartan	50-100 mg BID (dose rounded)	200 mg BID (dose rounded)
ACE inhibitor	Enalapril	1.25-2.5 mg BID	10 mg BID/20 mg BID in NYHA IV
	Lisinopril	2.5-5 mg daily	20-35 mg daily
	Perindopril	2-4 mg daily	4-8 mg daily
	Ramipri	1.25-2.5 mg BID	5 mg BID
	Trandalopril	1-2 mg daily	4 mg daily
ARB	Candesartan	4-8 mg daily	32 mg daily
	Valsartan	40 mg BID	160 mg BID
Beta-blocker	Carvedilol	3.125 mg BID	25 mg BID/50 mg BID (>85 kg)
	Bisoprolol	1.25 mg daily	10 mg daily
	Metoprolol (CR/XL)	12.2-25 mg daily	200 mg daily
MRA	Spirolonactone	12.5 mg daily	25-50 mg daily
	Eplerenone	25 mg daily	50 mg daily
SGLT2 inhibitor	Dapagliflozin	10 mg daily	10 mg daily
	Empagliflozin	10 mg daily	10-25 mg daily
	Canagliflozin	100 mg daily	100-300 mg daily
Sinus node inhibitor (If inhibitors)	Ivabradine	2.5-5 mg BID	7.5 mg BID
sGC stimulator	Vericiguat	2.5 mg daily	10 mg daily
Vasodilator	Hydralazine/	10-37.5 mg TID/	75-100 mg TID or QID/
	Isosorbide dinitrate	10-20 mg TID	40 mg TID
Cardiac glycosides	Digoxin	0.0625-0.125mg daily	N/A: monitor for toxicity

HEART FUNCTION CLINIC REFERRAL

☐ ARH ☐ BH ☐ JPOCSC ☐ LMH ☐ RCH ☐ RMH


Form ID: MSXX104940C

Rev: Feb 20/2020

Page: 1 of 1

<p align="center">*Patient</p> <p>Name: _____</p> <p>City, Province: _____</p> <p>Postal Code: _____</p> <p>Contact #: _____</p> <p>PHN#: _____</p> <p>DOB: _____</p>	<p align="center">*Referring Provider</p> <p>Name: _____</p> <p>Phone: _____</p> <p>Fax #: _____</p> <p>MSP #: _____</p> <p><input type="checkbox"/> GP <input type="checkbox"/> NP <input type="checkbox"/> ED <input type="checkbox"/> In patient</p> <p><input type="checkbox"/> Specialist, Specify: _____</p>																		
<p>Referral Criteria:</p> <p>1. Established heart failure of any etiology with an LVEF < 40%</p> <p>2. LVEF > 40% with sign's and/or symptoms of heart failure, with an elevated BNP or NT-PRO-BNP.</p>	<p>BNP Reference:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Age</th> <th style="text-align: left;">NT Pro BNP</th> </tr> <tr> <td><50 YRS</td> <td>> 450</td> </tr> <tr> <td>50-75 YRS</td> <td>> 900</td> </tr> <tr> <td>> 75 YRS</td> <td>> 1800</td> </tr> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Indicative of HF</th> <th style="text-align: left;">BNP</th> </tr> <tr> <td>Does not support HF</td> <td><100</td> </tr> <tr> <td>Borderline Zone</td> <td>100-250</td> </tr> <tr> <td>Supports HF</td> <td>250-400</td> </tr> <tr> <td>Strongly supports HF</td> <td>>400</td> </tr> </table>	Age	NT Pro BNP	<50 YRS	> 450	50-75 YRS	> 900	> 75 YRS	> 1800	Indicative of HF	BNP	Does not support HF	<100	Borderline Zone	100-250	Supports HF	250-400	Strongly supports HF	>400
Age	NT Pro BNP																		
<50 YRS	> 450																		
50-75 YRS	> 900																		
> 75 YRS	> 1800																		
Indicative of HF	BNP																		
Does not support HF	<100																		
Borderline Zone	100-250																		
Supports HF	250-400																		
Strongly supports HF	>400																		
<p>*Primary Community Cardiologist:</p>																			
<p>*Reason for Referral: Wait times are allocated within published benchmarks as listed below.</p>																			
<p><input type="checkbox"/> Emergent referral - speak with on-call Cardiologist</p>	<p>Emergent heart failure consultation is for cardiogenic shock, inotrope/vaso pressor requirements or respiratory distress.</p>																		
<p><input type="checkbox"/> New diagnosis of heart failure and UNSTABLE OR Post MI heart failure OR Post hospitalization HF OR Progressively worsening HF</p>	<p>Appointment within 2 weeks</p>																		
<p><input type="checkbox"/> Heart Failure with symptoms but NOT decompensated, OR New diagnosis of heart failure and STABLE</p>	<p>Appointment within 4 weeks</p>																		
<p><input type="checkbox"/> Chronic heart failure management OR Asymptomatic LV dysfunction</p>	<p>Appointment within 6 weeks</p>																		
<p><i>Every effort is made to maintain benchmark times however timing may vary due to volume of referrals.</i></p>																			
<p>*Care Management: all options will be invited to HF Group Education</p> <p><input type="checkbox"/> Shared care (for 6 months or until discharge criteria met)</p> <p><input type="checkbox"/> HF Medication Optimization (Titrations done by Pharmacist, Cardiologist or NP)</p> <p><input type="checkbox"/> Education only</p> <p><input type="checkbox"/> Advice only (consultation but no changes) Specific question referring provider would like answered?</p>																			
<p>Please attach a list of current medications, relevant history and investigations.</p> <p>*Primary Language Spoken, if not English, please ensure there is someone with the patient who can speak English</p>																			
<p>* Referring Physician/ NP: _____ Date: _____ # of pages faxed _____</p>																			
<p>* Fax: <input type="checkbox"/> ARH: 604-651-4782 <input type="checkbox"/> BH: 604-412-6189 <input type="checkbox"/> JPOCSC: 604-582-3783 <input type="checkbox"/> LMH: 604-514-6012 <input type="checkbox"/> RCH: 604-528-5057 <input type="checkbox"/> RMH: 604-463-1887</p>																			
<p align="center">To expedite care PLEASE ensure ALL aspects of this form are completed</p>																			

Thank You!