



## **CHFS-HFSA Joint Workshop: Nursing Roles & Responsibilities: A Cross-Boarder Pulse Check**

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Friday, May 13; 11:45-12:30 pm ET



# Conflict of Interest Disclosures- Karen Harkness

- **Grants/research support:** None
- **Consulting fees:** None
- **Speaker fees:** None
- **Other:** None



## Objectives



Understand the various nursing roles in providing care for patients with HF in an outpatient/ambulatory HF clinic setting in Canada and the USA

Identify ways nurses implement processes to ensure evidence-based care of HF patients in an ambulatory HF clinic in Canada and the USA



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## Conflict of Interest Disclosures

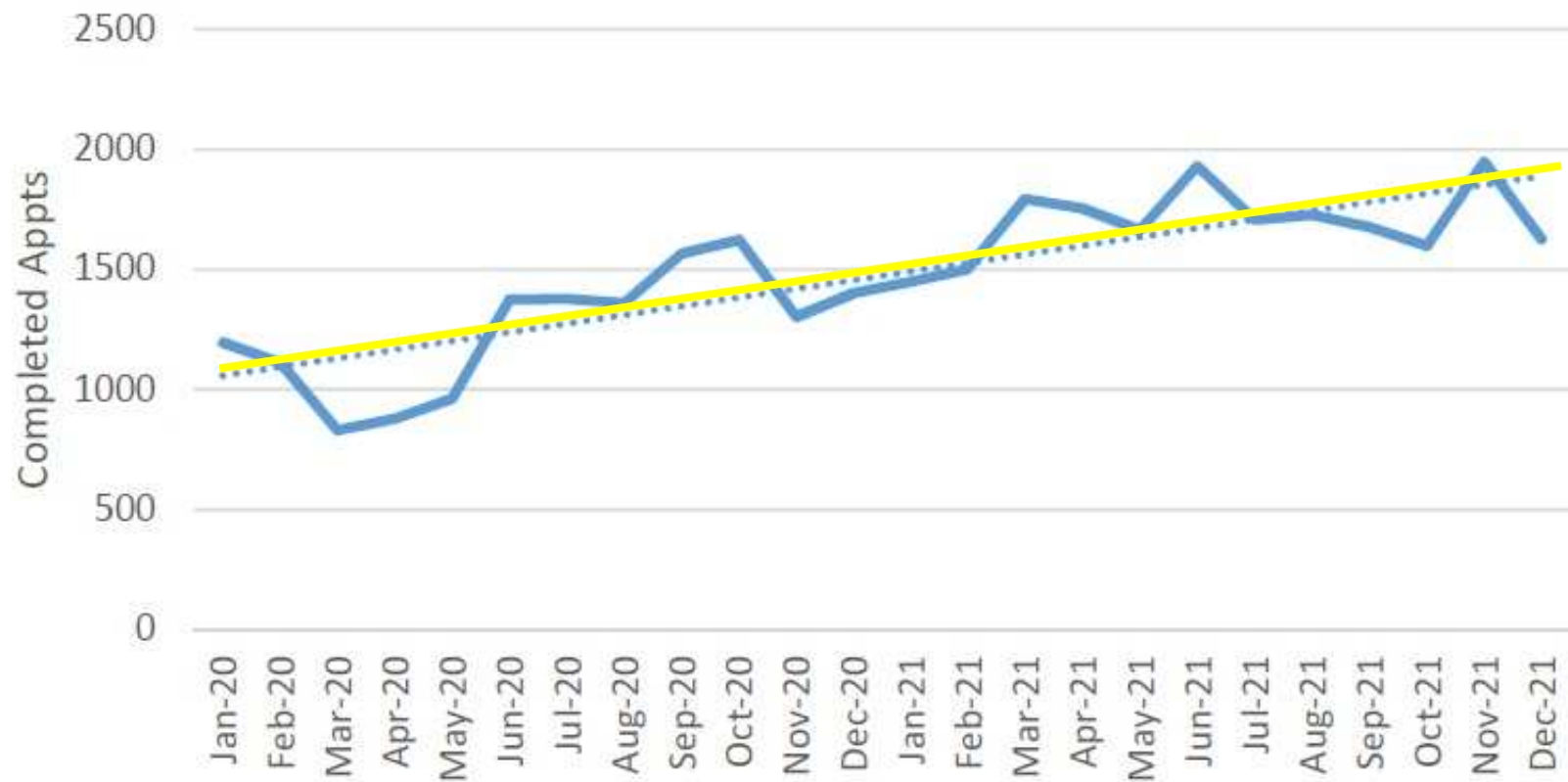
- **Consulting fees: Lynx LLC, Consultant for APP- Eidos ATTR-CM Virtual Advisory Panel**

**Hearty Humor** by Jonny Hawkins for AHA News



**"They're from the hospital administrators.  
They really need the bed space."**

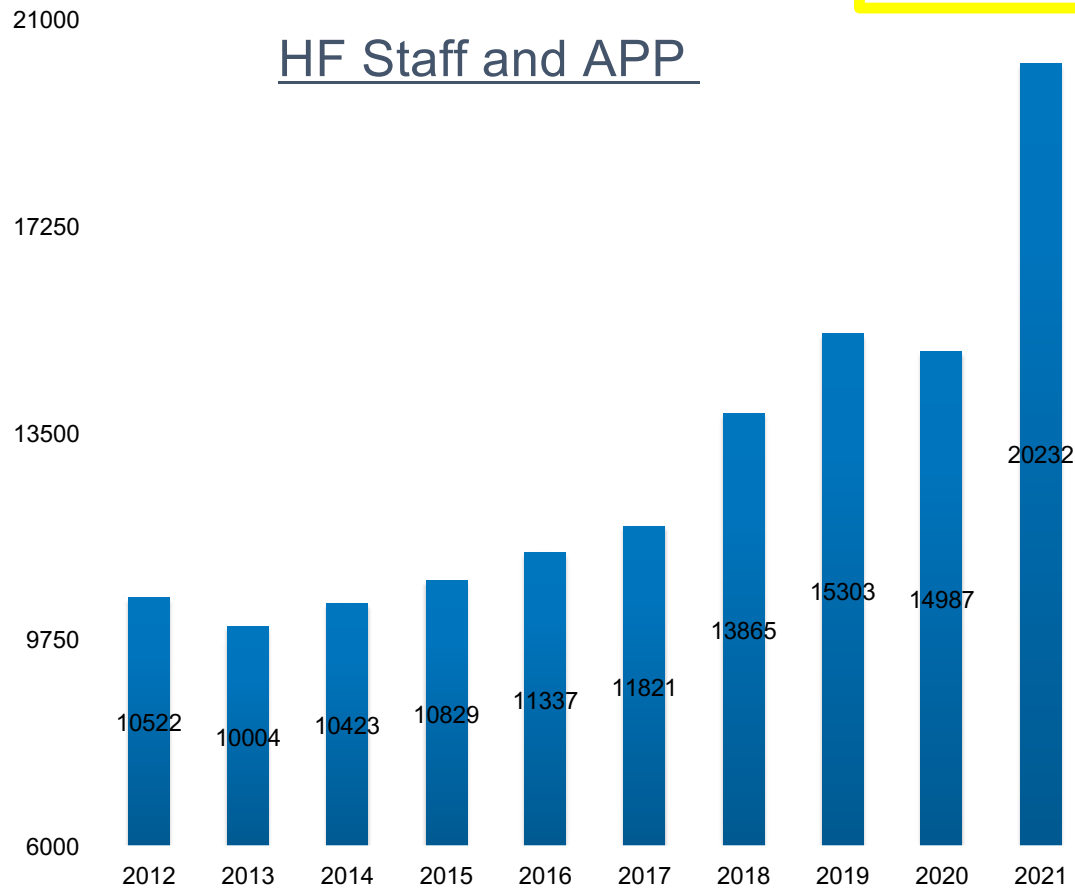
## J3-4 Heart Failure



## HF Section OPD Total Visits

~35% Increase

HF Staff and APP



HF Staff

YTD as of

Month  
(All) ▼

~42% Increase







## March 2022 Ambulatory Heart Failure Visits

- Total visits = 1683
- Highest volume among all Cardiovascular Medicine groups (Imaging, EPS, Intervention, Clinical, Vascular and Presentation)
- Advanced practice providers average = 5-6 visits per day

## Overview of our Ambulatory Advanced Heart Failure Clinic

- 18 Advanced Heart Failure Cardiologists + 6 Fellows
- 2 Advanced Practice HF Providers:
  - 1 Acute Care Nurse Practitioner
  - 1 Physician Assistant
- 1 RN Specialty Care Coordinator
- 2 HF Pharmacists
- 5 Registered Nurses
- 3 Medical Assistants





## Registered Nurses' role in GDMT

- HF Ambulatory Clinic nurses (5):
  - Phone calls and MyChart messages- triage, gather info and route appropriately
  - Ensures patients have medications- PA's, patient financial assistance, communication with pharmacy
  - First point of contact for new HF referrals- obtain and review patient records
  - Handle critical values from patient lab work
  - **Patient education**
  - **Reinforce Plan of Care (POC)**



## Registered Nurses' role in GDMT

- HF Specialty Care Coordinator (1):
  - Assists HF Staff in Amyloid clinic (scheduling appts/ coordination with Oncology colleagues)
  - Helps patients obtain Amyloid medications (PA's, patient financial assistance application, communication with vendor)
  - Remote PA sensor monitoring (frequent communication with CardioMEMS patients for med adjustments, routes lab work)
  - **Education**
  - **Review of Plan of Care (POC)**



## How Advanced Practice Nurses implement GDMT

- Advanced Practice Providers (1 NP, 1PA):
  - Provide frequent visits and lab work while titrating GDMT
  - Refer back to HF Staff once on OMT for appt with echo
  - Provide Virtual / telephone visits to increase access to care during medication titration
  - Referrals to consult service (ie EPS, endocrinology, sleep medicine)

## How Advanced Practice Nurses implement GDMT

- Medication titration between visits-
  - Review of lab results and testing
  - MyChart correspondence and phone calls with patient updates
  - Response to patient concerns
- **Education**
- **Reinforce POC**





## Help from our friends

- HF patients seen by MD/ Advanced Practice Registered Nurse in other specialty area:
  - Nephrology
  - Primary Care
  - HF Pharmacy Clinic
  - Chronic Care Clinic
  - Electrophysiology



## Our Strengths

- Largest Heart Failure team in the world
- A very talented and hardworking group
- Passionate about delivering the highest quality of care despite patients' geographical location





## Opportunities for improvement

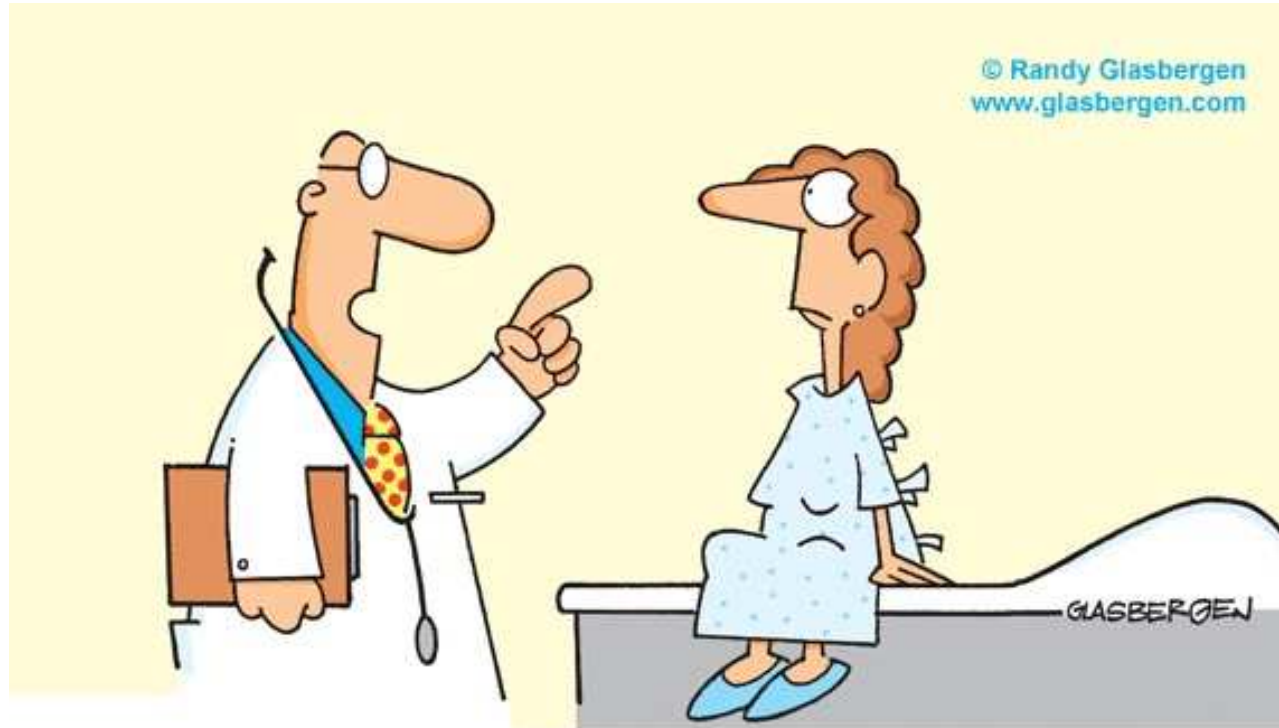
- Improve patient access:
  - Increase patient appointment slots
  - Increase administrative support to keep pace with patient demands (disability paperwork, Rx refills, lab/ testing orders, phone calls, Mychart messages)
  - Improve process for scheduling appointments



## Best advice for new clinic

- Clearly define protocols for managing patient concerns (i.e calls, messages)
- Define expectations for interval follow-up in HF clinic (Staff <> Advanced Practice Providers)
- If feasible, have same day access slots

# Keeping perspective



**"You went on Atkins and lost 90 pounds, lowered your cholesterol, cured your high blood pressure, and now you're walking five miles a day. But I'm warning you, a low-carb diet is bad for your health!"**



## References:

2022 ACC/AHA/HFSA Guideline for the Management of Heart Failure - DOI: [10.1016/j.cardfail.2022.02.010](https://doi.org/10.1016/j.cardfail.2022.02.010)





# A Snapshot from Canada

Karen Harkness

# Canadian Contributions

British Columbia

St. Paul's Hospital- Wynne Chiu, Suzanne Nixon

Saskatchewan

Saskatoon Heart Function Clinic, Krista Jelisavac

Manitoba

St. Boniface Hospital- Kyla Siatecki

Community Cardiology Practice- Estrellita Estrella-Holder

Ontario

University Health Network- Nadia Thomson

Newfoundland

Eastern Health – Rody Pike



# Summary of Findings

## **RN (Nurse Clinician, Clinic nurse)**

- Only 1 clinic did not have an RN role
- Role and responsibilities fairly consistent across settings

## **Nurse Practitioner**

- Only 1 clinic did not have an NP role
- Roles and responsibilities primarily independent practice, but some variety in breadth of responsibilities and determined by local unique programs and needs

## **Clinical Nurse Specialist**

Many clinics do not have a CNS role

Primarily support:

- Program development, quality improvement
- Creation & implementation of protocols/policies
- Staff education and development

## **Role in GDMT**

- All members of the team have a key role in promoting GDMT- complimentary approach
- CCS Guidelines a key resource that underpins tools and resources



# Roles of RN, Nurse Clinician in the Outpatient HF Clinic

## Care coordination

- Liaison between members of the multi-disciplinary team
- Help develop & implement patient action plan

## Clinic activity

- Triage and intake of new referrals
- Prepare the pt. chart with relevant history, consults, and current lab values
- Collaborate with clinic cardiologists conducting appointments
- Conduct independent pt. appointments with subsequent physician case review
- Administrative- flow and schedule

## Care between clinic visits

- Monitor the patient response to treatment and arrange/review all labs, tests, and procedures
- Respond to pt. and caregiver inquiries
- Remote monitoring/management
- Offer clinical support and/or appropriate triage to other members of the health care team
- Use tools such as diuretic dose adjustment and lifestyle modification to help manage changing clinical status

## Patient education/coaching

- Individual
- Group
- Ongoing

## Other

4 bed 'Day Unit'

- admin/ IV therapies such as IV Lasix/infusion, IV iron, blood transfusion
- draw labs, PICC line care etc.



# Roles of Nurse Practitioner

## Leadership

- Assist with education of community providers, trainees, precepting NP students, Clinic RN
- Assist with program development (e.g., educational materials and clinical pathways/care maps)

## Clinic activity

- Independent assessment, education, medication adjustment/titration, ordering diagnostic tests, referral to specialists
- Collaborate with clinic MD for assessment advanced therapies
- Support care coordination with advanced HF Centre
- Provides tailored HF care outside the clinic's typical "pathway" or patients with complex needs
- Support individual education/ coaching

## Care between clinic visits

- Assist with follow-up labs, patient and provider phone calls and follow-up with test results ordered by the clinic

## Other

- Rotate between acute and HFC responsibilities
- Rapid Assessment clinic-ED/hospitalization diversion
- Home IV milrinone program for pre-transplant pts
- Virtual Med Titration Clinic
- Home visits
- Cardiomechs program

# What are you most proud of?

## British Columbia

- Multidisciplinary team that provides patient-centered care
- Flexibility of team members to adapt to change quickly (esp during covid!)
- Team members knowledge/involvement in guidelines creation thereby ensuring knowledge translation
- Regular education (HF education rounds) that keeps members up to date with the latest research
- NP that has specialty knowledge in caring for vulnerable population

## Saskatchewan

- Commitment and motivation to provide patients with guideline directed care in a supportive team environment.
- Provide care to a large geographical area and are engaged in using virtual care and remote monitoring to help break down barriers to accessing care.

## Manitoba

- The self-development of the clinic, particularly our growth as we tackle new medications, titration protocols, guidelines and taking on extra education based on special interest as it pertains to HF
- Annual HF Awareness Day for patients since 2007

## Ontario

- Our NP run clinics and autonomous practice
- Continuity of care of patients with advanced HF
- Development of HF education materials and quality improvement initiatives

## Newfoundland

- Successful growing heart failure program encompassing all diagnosis of HF
- Partnership with pain & symptomatic team in CHF clinic



# Opportunity for improvement

## British Columbia

- More resources- allied health (RD, Social work, psychology)
- Job security for RN role (bumping)
- Better EMR functionality

## Saskatchewan

- More resources- Grow our clinic to include a pharmacy optimization clinic and an advanced heart failure program to allow patients to be optimized sooner, receive advanced therapies in a timely manner, see more patients

## Manitoba

- More nurses/ NPs being involved in HF care in the community with support/ funding from provincial government.
- Knowledge translation program opportunities and tools for nurses/ NPs in the community so they may feel comfortable taking care of HF patients in community funded clinics, primary care,, including rural, remote, northern settings

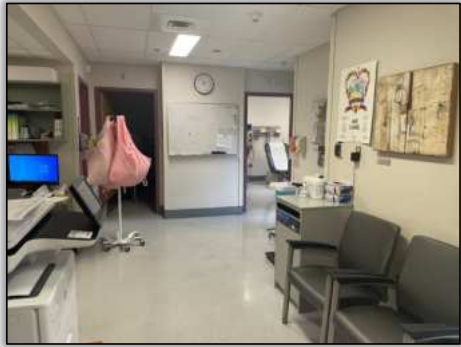
## Ontario

- Increased referrals to our NP HF medication titration clinic from outside the institution (i.e., perhaps from community cardiologists)
- Improve collaboration between the various HF clinics across the Toronto region; Support an opportunity for RNs and NPs to share clinic project work and resources/tools
- Enhance mentorship/preceptorship for novice or student NPs wishing to build their knowledge of HF care in the outpatient setting

## Newfoundland

- Build capacity for heart failure management through development of provincial program.
- Development of virtual/remote GDMT optimization clinic to improve access

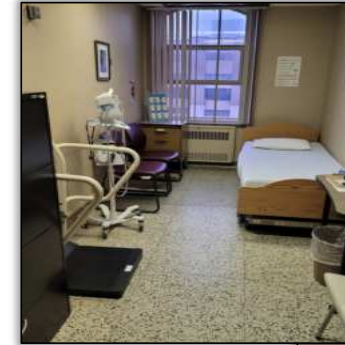




Wynne Chiu,  
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Estrellita Estrella-Holder,  
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# Open Forum Discussion

## Virtual Attendees: On the platform

Click this tab  on the right-hand side of your screen to enter your questions or comments for discussion

You may also use the chat feature





## Appendix-Case Study if time



## Case Study

- 56 year old male, HFrEF (LVEF 30%) and NICM
- PMHx: ETOH abuse, uncontrolled HTN, current tobacco 1.5 PPD and obesity
- Initial HFrEF diagnosis in 2020
- Not started on GDMT due to cost/ barriers with insurance
- Patient now has new insurance and is seeking care for HF



## Visit 1: Consult visit with HF Staff 2/2/2022

- No ETOH for past 18 months, ongoing cigarette smoking
- Vitals: **165/110**, 80 BPM, 218 lbs (stable)
- Pertinent labs: Na 135, K 4.7, BUN 12, SCr 0.86 (77umol/L)
- Impression: Warm, euvolemic and hypertensive
- 4 Pillars and plan:
  - BB: Metoprolol tartrate 50 mg BID > Carvedilol 6.25 mg BID
  - ACEi/ARB/ ARNi: add Losartan 25 mg QD
  - MRA: no
  - SGLT2i: no
  - Plan: start Atorvastatin, decrease smoking, schedule TTE (previous at outside facility 2020) and RTC with NP in 1 month





## Visit 2: Initial visit with Nurse practitioner 3/2/2022

- Feeling better, decreased cigarettes to 1/2 PPD, remains abstinent from ETOH
- Vitals: **153/100, 97 BPM**, 219 lbs (stable)
- Pertinent labs: same as last visit
- Impression: Warm, euvolemic, hypertensive
- 4 Pillars and plan:
  - BB: Carvedilol 6.25 mg BID > 12.5 mg BID
  - ACEi/ARB/ ARNi: Continue Losartan 25 mg daily
  - MRA: Start Spironolactone 25 mg once daily
  - SGLT2i: no
  - Plan: Repeat labs 5-7 days at satellite site, schedule echo (not scheduled from previous visit) and RTC in 3 weeks. Provided heart failure educational binder, encouraged smoking cessation

## Visit 3: Second visit with Nurse practitioner 4/8/2022

- Feeling good, remains 1/2 PPD cigarettes, no ETOH, med/ dietary adherent
- TTE 3/21/2022: LVEF 20%, LVIDD 6.8 cm, IVS 0.8 cm, PWT 1.0 cm, Grade II diastolic dysfunction, moderate LAE, mild RAE, no significant valvular abnormalities, RVSP 52 mmHg
- Vitals: **166/102, 85 BPM**, 218 lbs (stable)
- Pertinent labs 4/1/2022: Na 134, K 4.8, BUN 11, SCr 0.85 (75umol/L), NTproBNP 1,361
- Impression: Warm, euvolemic and hypertensive
- 4 Pillars and plan:
  - BB: Carvedilol 12.5 mg BID > 25 mg BID
  - ACEi/ARB/ ARNi: Losartan 25 mg daily > Sacubitril/ Valsartan 49-51 mg BID
  - MRA: Continue Spironolactone 25 mg once daily
  - SGLT2i: no
  - Plan: RTC 1 month with repeat labs and plan to add SGLT2i. Echo once on OMT +/- referral to EPS if LVEF < 35%



## **Appendix – Canadian Sites- additional information**

# Nursing Roles & Responsibilities: A cross Border pulse check

Heart Function Clinic - St. Paul's Hospital  
April 2022



HEART CENTRE  
PROVIDENCE HEALTH CARE



How you want to be treated.

# Clinic Environment



HEART CENTRE  
PROVIDENCE HEALTH CARE



How you want to be treated.

# Primary roles of nurses

Patient Education	Pt Clinical management	Clinic Management
Education session prior to 1 <sup>st</sup> clinic visit (Intake appointment)	Medication titration	Review of clinic slate
Follow up HF education	Receiving lab/diagnostic results & triaging need for follow up	Ensuring smooth clinic flow
Medication education	Request tests/diagnostics	Handover to MDs
Group teaching session	Refill requests	Ensure proper follow up
	Tele-medicine	Allocation of clinic staff
	New Referral management	



HEART CENTRE  
PROVIDENCE HEALTH CARE

*Providence*  
HEALTH CARE

How you want to be treated.

# NP / CNS

NP (FTE 1.0)	CNS (FTE 1.0 shared with Transplant/MCS program)
<p>Practices independently with own clinic times and sees a sub-special group of HF patients with:</p> <ul style="list-style-type: none"> <li>• complex care needs</li> <li>• +/- substance use disorder and</li> <li>• +/- mental health conditions</li> </ul>	<p>Decision on workflows to ensure efficiency &amp; that it meets clinic benchmarks and follows mandates/guidelines</p>
Offers home visits	Creation & implementation of protocols/policies
Provides tailored HF care outside the clinic's typical "pathway"	Aid in creation of education material – for RNs & pts
Off loads influx of new referrals as needed	Case management support/ Clinical recommendation for complex patients
RN education	Implementation of new practice / medications
	Education for RNs – research, QI projects



HEART CENTRE  
PROVIDENCE HEALTH CARE



How you want to be treated.

# Evidence-based-care

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- Clinic “pathway” to ensure pts are seen and meds/diagnostics are initiated timely and per guidelines
- EMR order sets for medication initiation & uptitration
- Nursing policies that supports nursing uptitration of HF medications
- QI/Research projects that reviews status/quality of uptitration in the clinic
- Dedicated diagnostics spots with the departments to ensure timely scheduling of cardiac function evaluation



HEART CENTRE

PROVIDENCE HEALTH CARE



How you want to be treated.



# What am I most proud of?

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- Multidisciplinary team that provides patient-centered care
  - Flexibility of team members to adapt to change quickly (esp during covid!)
  - Team members knowledge/involvement in guidelines creation thereby ensuring knowledge translation
  - Regular education (HF education rounds) that keeps members up to date with the latest research
  - NP that has specialty knowledge in caring for vulnerable population
- 



HEART CENTRE  
PROVIDENCE HEALTH CARE



How you want to be treated.

# Opportunity for improvement

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- Need for additional allied health support, namely:
  - Social worker
  - Dietician
  - Psychology
- Union designation of the nursing role – currently nursing positions in the clinic are equivocal to bedside RN, which opens position up to “bumping”. Job security is a concern, which has led to turnover of staff
- Better EMR functionality:
  - to allow patient direct information input
  - Triggering clinicians to ensure guideline directed therapy
  - Remote monitoring
- More resources!



HEART CENTRE

PROVIDENCE HEALTH CARE



How you want to be treated.

# Nurse Clinician Role in Saskatoon, Saskatchewan

- As a Nurse Clinician (NC) working in the Saskatoon Heart Function Clinic I am committed to help grow and improve heart failure care locally and in the province.
- We are 1 of 2 heart function clinics in the province, providing care to ~ 500 patients and their caregivers. We have a team based approach which includes physicians, 2 RNs, a clinic pharmacist, dietician, social worker, and exercise therapist.
- We aim to optimize patients with guideline directed medical therapy as well as provide supportive resources to help engage in effective self care and self management. These lifestyle modifications include heart healthy diet, regular physical activity, and access to social and mental health supports.
- The role of the nurse clinician strives to coordinate care and act as a liaison between the multi-disciplinary team.
- Patients are seen in clinic with both in-person and virtual options. Between clinic visits the NC will monitor the patient response to treatment and arrange/review all labs, tests, and procedures. We are an integral part of developing and implementing an action plan for each patient. The first step is the triage and intake of new referrals.
- In order to make the most of each clinic visit, the NC will prepare a patient care plan with relevant history, consults, and current lab values. I work collaboratively with our clinic pharmacist who will complete a medication reconciliation for each patient. We structure our care plan with goals of care targeting quadruple therapy/medication optimization, device therapy optimization, improved quality of life, and a clear plan for next steps. We highlight the need for extended team support to make sure the patient is cared for holistically.
- Patients and caregivers can call the clinic directly between Monday-Friday and be offered clinical support and/or appropriate triage to other members of the health care team. The NC will use tools such as diuretic dose adjustment and lifestyle modification to help manage changing clinical status. At each patient contact, we look for opportunities to optimize heart failure medical therapy utilizing the CCS guidelines.
- We are working to grow our clinic to include a pharmacy optimization clinic and an advanced heart failure program to allow patients to be optimized sooner and receive advanced therapies in a timely manner. We recognize that our resource limitations do prevent us from providing access to a larger heart failure population.
- We are very proud of our commitment to provide patients with guideline directed care in a supportive team environment. We provide care to a large geographical area and are engaged in using virtual care and remote monitoring to help break down barriers to accessing care. We are motivated to help heart failure patients feel better, live longer, and enjoy a high quality of life!

