

## Closer to Home: Streamlining Remote Care Coordination

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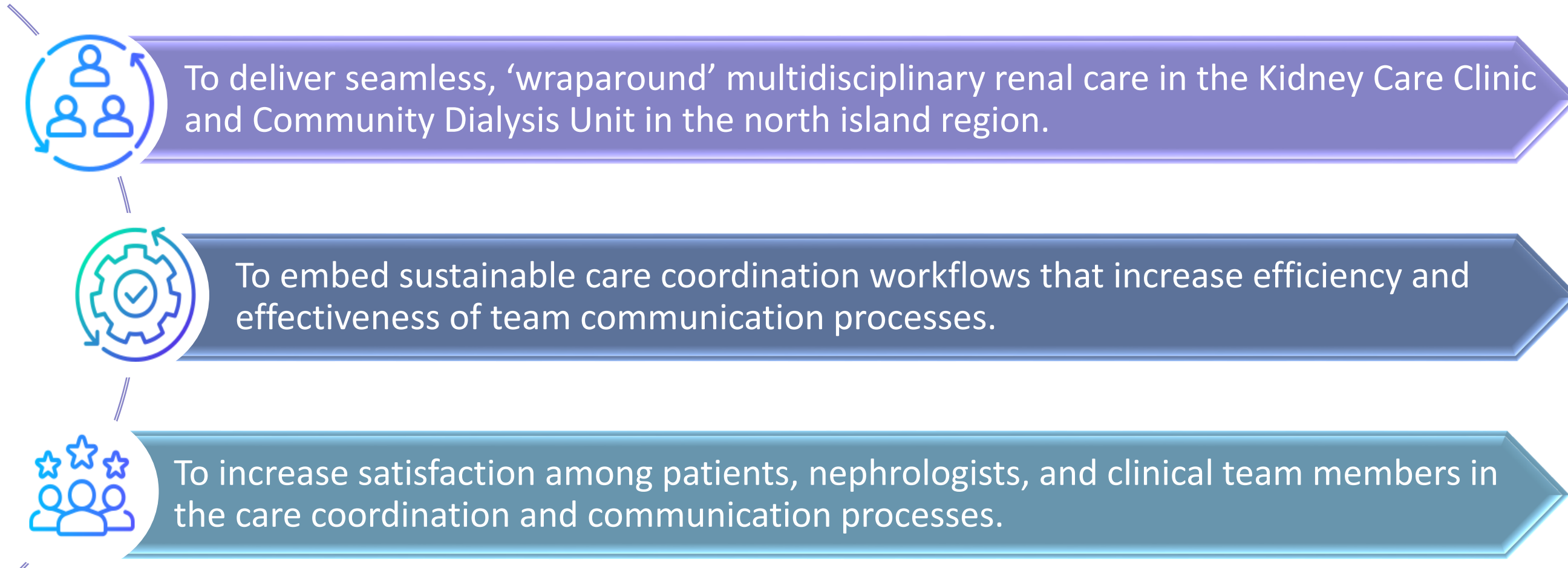


### BACKGROUND

- The geographic spread between renal care teams in north Vancouver Island and the centralized location of nephrologists in Nanaimo has created some challenges regarding how the broader multidisciplinary team works together, the ability to have effective and timely transfer of information, and the frequency of in-person nephrology visits.
- These issues not only impact the services provided by the team but also the service providers themselves. Nephrologists and multidisciplinary care team members have experienced considerable dissatisfaction and frustration around coordination of care, workflows and communication, and how these impact the ability to provide optimal care that is closer to home for north island based patients.
- With the significant growth in the kidney patient population in the north island region over the last 10 years, and the projected growth over the coming years, an alternative model of care is required that supports equity, continuity, and sustainability in the delivery of high quality renal care for kidney patients living in north Vancouver Island.

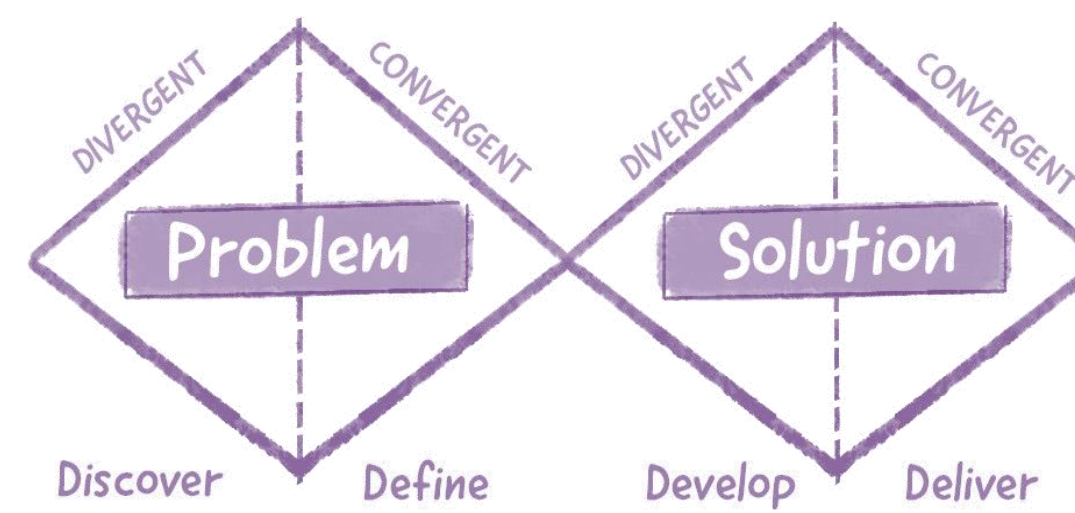
### AIM

- To develop and implement a sustainable model for multidisciplinary renal care in the north island region.
- The overarching goals are:



### METHOD

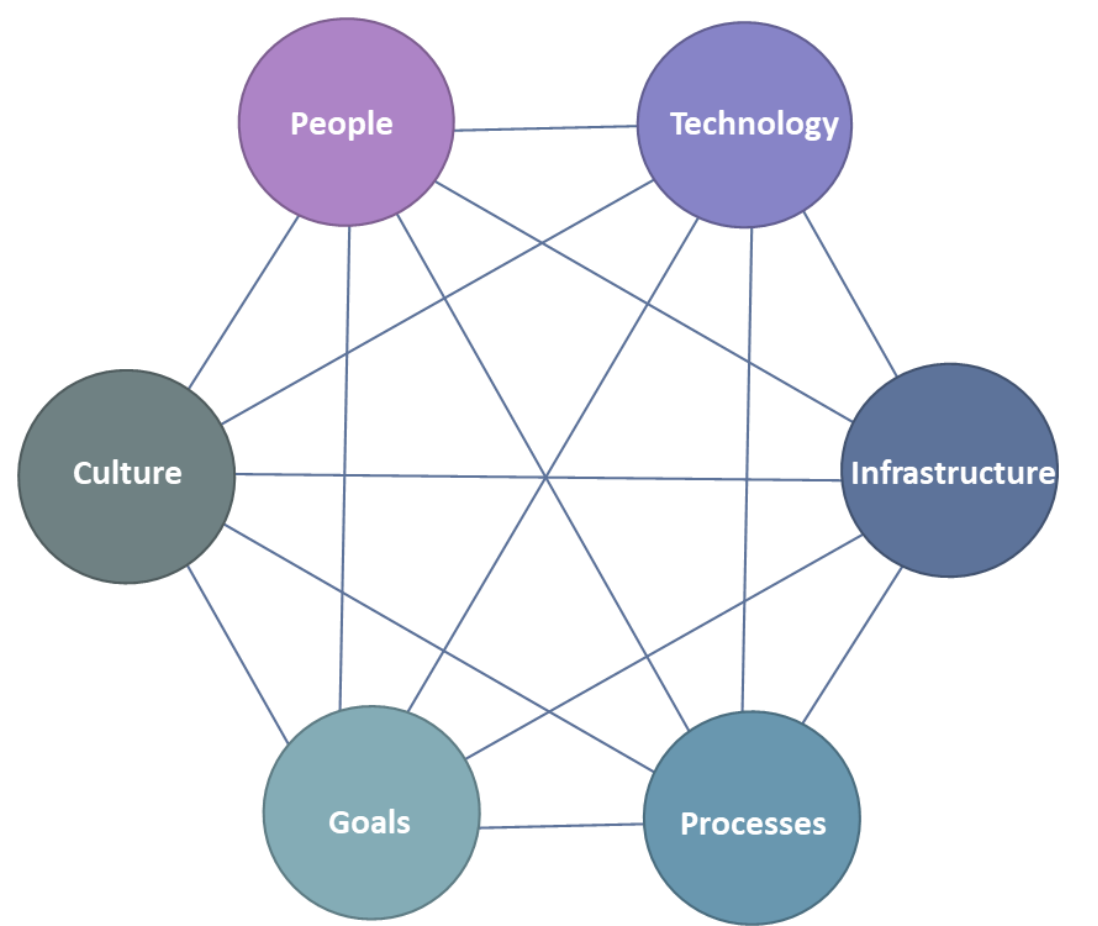
- The goals of phase 1 of this project were to create shared awareness and understanding of the issues and their impacts among the teams, as well as to build shared commitment to system improvement and desired outcomes. The objectives for Phase 1 of this project were:
  - To conduct a current state analysis to clearly define issues impacting the north island kidney care clinic and Cumberland dialysis unit that included
    - Comprehensive engagement processes with care team stakeholders
    - Review of alternate care models for remote multidisciplinary renal care
  - To collectively generate change ideas for system-based improvement
- An 'external' consultant from the corporate Strategic Quality Improvement team was appointed to lead the engagement and information gathering activities during this stage of the project.
- The approach drew on methods from Participatory Action Research incorporating participant reflection, inclusion of popular knowledge, a focus on power and empowerment, and consciousness raising among participants. In addition, the approach sought to integrate a human-centred co-design framework with the direct care staff, clinical leadership, and nephrologists to effectively move the team through the process in a meaningful way.
- Tools used in this phase included individual interviews with care team partners, site observations, consultation with other Health Authorities, data reviews, and group sessions for process mapping, brainstorming and generating ideas for change and improvement.



### RESULTS

Viewed from the sociotechnical system perspective, it was clear that there are a constellation of challenges rooted in the domains of environment, people, culture, technology and processes, and recognition of the interconnectedness and interdependencies that exist between them. These findings are summarized in the table below.

System Factor	Kidney Care Clinic	Community Dialysis Unit
<b>Environment</b>	<ul style="list-style-type: none"> <li>Physical space at capacity with inability to expand further.</li> </ul>	
<b>People</b>	<ul style="list-style-type: none"> <li>Staff feel strong sense of isolation due to geographic remoteness.</li> <li>Novice multidisciplinary renal team established immediately prior to COVID pandemic.</li> <li>No onsite leadership and minimal opportunities to connect with the broader renal network.</li> <li>Ongoing education and training needs not effectively met.</li> <li>Lack of familiarity between nephrologists and onsite care team members.</li> </ul>	<ul style="list-style-type: none"> <li>Lack of familiarity between nephrologists and onsite care team members.</li> </ul>
<b>Technology</b>	<ul style="list-style-type: none"> <li>Paper based charting environment, heavily reliant on faxes for communication between nephrologists and onsite care staff.</li> <li>Patient chart not readily accessible to nephrologists creating time lag in obtaining clinical information.</li> <li>Current workflows limit use of telehealth.</li> </ul>	<ul style="list-style-type: none"> <li>Paper based charting environment, heavily reliant on faxes for communication with nephrologists.</li> <li>Access to telehealth limited as only one nurse trained to use.</li> <li>Reliant on fax for communication and information sharing with nephrologists.</li> </ul>
<b>Culture</b>	<ul style="list-style-type: none"> <li>Disconnection between onsite care team members and nephrologists; "us vs them" mindset.</li> </ul>	<ul style="list-style-type: none"> <li>Disconnection between onsite care staff and nephrologists; "us vs them" mindset.</li> <li>Best practices for continuous quality improvement culture not embedded in regular operations.</li> </ul>
<b>Processes</b>	<ul style="list-style-type: none"> <li>Variation in processes, driven by provider preference rather than standard practice.</li> <li>Suboptimal communication between nephrologists and onsite care team.</li> <li>Lack of structured communication mechanisms to optimize multidisciplinary dialogue</li> <li>Time lag on access to information for nephrologists due to paper based charting system.</li> </ul>	<ul style="list-style-type: none"> <li>Variation in processes, driven by provider preference rather than standard practice.</li> <li>Lack of clarity and understanding between nephrologists and onsite care team of decision-making process and protocols regarding admissions and assessment of urgent vs non-urgent issues.</li> <li>Lack of structured communication mechanisms that support effective multidisciplinary team dialogue.</li> <li>Lack of multidisciplinary input in the prioritization of patients for in-person visits with nephrologist.</li> </ul>



#### Nephrology Service Delivery Model

- Looking specifically at the Nephrology Service Delivery Model, it was identified that inequity in patient case load distribution and lack of patient cohorting by nephrologist created barriers to the sustainability of onsite nephrology presence for patient visits.
- It was challenging to draw meaningful conclusions about nephrology service delivery models in remote facilities from the review that was conducted. The availability of data was limited and there can be significant variation in factors such as geography, funding model, population demographics, and available resources. The conclusion drawn was that a tailored solution was required to address the specific needs of the north island region.

### CONCLUSIONS & NEXT STEPS

Opportunities for system-level improvement were identified within workflow standardization, team communication, education and relationship-building, infrastructure, and nephrology patient case load distribution.

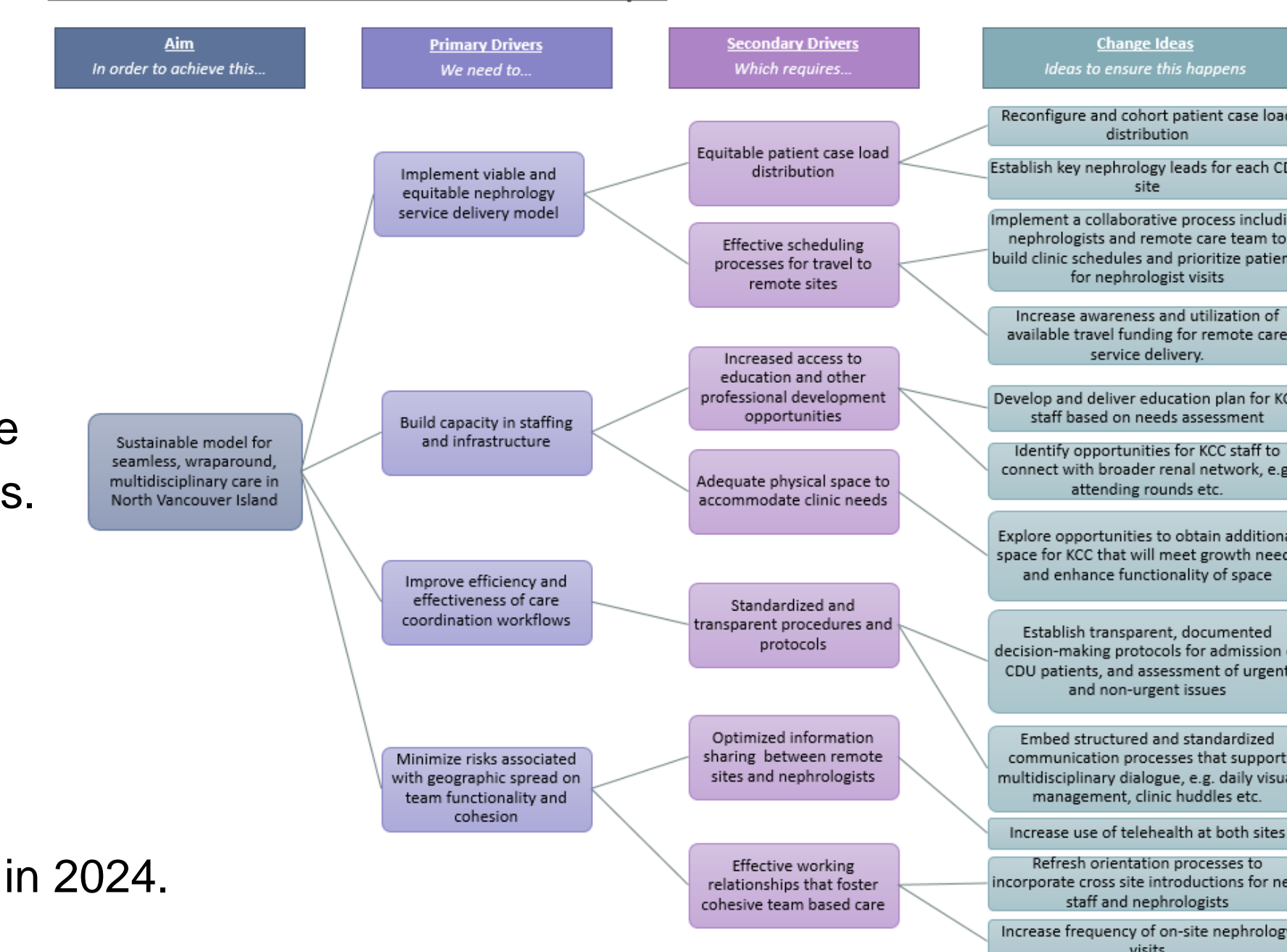
#### What will we do?

- The following improvements have been prioritized for implementation in phase 2.
  - Re-configure and cohort patient case load distribution at all centre and north island CDUs to establish a core nephrologist group for the north island CDU. The goals are to address patient load inequity that may limit remote site visits, drive improvement work, and improve relationships and communication between staff and nephrologists.
  - Embed structured and standardized communication processes that support multidisciplinary dialogue, e.g. daily visual management, clinic huddles etc.
  - Establish transparent, multidisciplinary, and documented process/protocols for decision-making regarding the admission of CDU patients, and assessment of urgent and non-urgent issues.
  - Implement a standardized and collaborative process to build clinic schedules and prioritize patients for nephrologist visits.
  - Optimize use of telehealth at both sites.
  - Leverage existing technology for communication between staff and nephrologists, and create solutions using electronic workflow with EHR Ambulatory "iHealth" rollout in 2024.
  - Conduct learning needs assessment of KCC staff; plan and deliver education sessions to support ongoing training and development.
  - Identify opportunities for KCC staff to connect with broader renal network across the island to address challenges of geographic remoteness.
  - Explore options to increase capacity and functionality of KCC office space.

#### How will we do it?

- Based on lessons learned in phase 1 of the project, the following principles and practices will be key to achieving success and desired results in phase 2:
  - Transparency and ongoing engagement with all team members impacted by these changes.
  - Consistent, standardized and accessible documentation of decisions, actions and progress.
  - Ongoing collaboration and communication between onsite staff and nephrologists as changes are refined and implemented.
  - Maintaining a clear systems-focus as solutions are implemented, with effective monitoring and evaluation of impact to assess outcomes.
  - Ensuring effective feedback loops are in place to facilitate ongoing learning through the change process.
  - Clarity of roles, responsibilities and accountabilities for change processes.

DRIVER DIAGRAM: North Island Care Coordination Project



### ACKNOWLEDGEMENTS

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