Standardization of the BC Cancer Referral Process for Multidisciplinary Review of Hepatocellular Cancer Patients

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Background

Patients with hepatocellular cancer (HCC) require multidisciplinary care given its complexity in terms of diagnosis, concurrent illness, treatment, and ongoing monitoring. These patients have better outcomes when they have access to multidisciplinary care.

BC Cancer provides specialized cancer diagnosis and treatment to all British Columbians referred by healthcare providers; however, multidisciplinary care required for HCC patients is provided at few centres.

The Provincial Liver Tumor Rounds (LTR) group is comprised of a multidisciplinary group of physicians (hepatologists, hepatobiliary surgeons, radiologists, interventional radiologists, medical and radiation oncologists), nurses, and research assistants, that meets weekly to discuss HCC cases and determine the most appropriate treatment strategy(ies). Currently, referrals to the LTR come from oncologists at BC Cancer and also directly from liver specialists.

Project Aim

The global goal was to streamline the referral process for BC Cancer HCC patients to the Provincial LTR to ensure all patients can be evaluated for the best treatment option(s), regardless of geography. Easier access to LTR will decrease wait time for treatment decisions, increase provider satisfaction, and improve outcomes for patients with HCC.

By June 2019, we aimed to decrease turnaround time (TAT) from medical oncologist referral to LTR review by 20%.

Project Design

- The current referral process was mapped out through case reviews (Figure 1). These case reviews highlighted complexity of referral pathways as well as suboptimal turnaround time (TAT) from referral to presentation at the LTR.
- A provider survey was conducted in May 2018. The survey results identified several barriers to accessing multidisciplinary care for HCC patients, including unclear referral process and delayed review at (Figure 2).
- Interviewing LTR stakeholders identified that often information provided on referral forms was incomplete, limiting review at LTR.

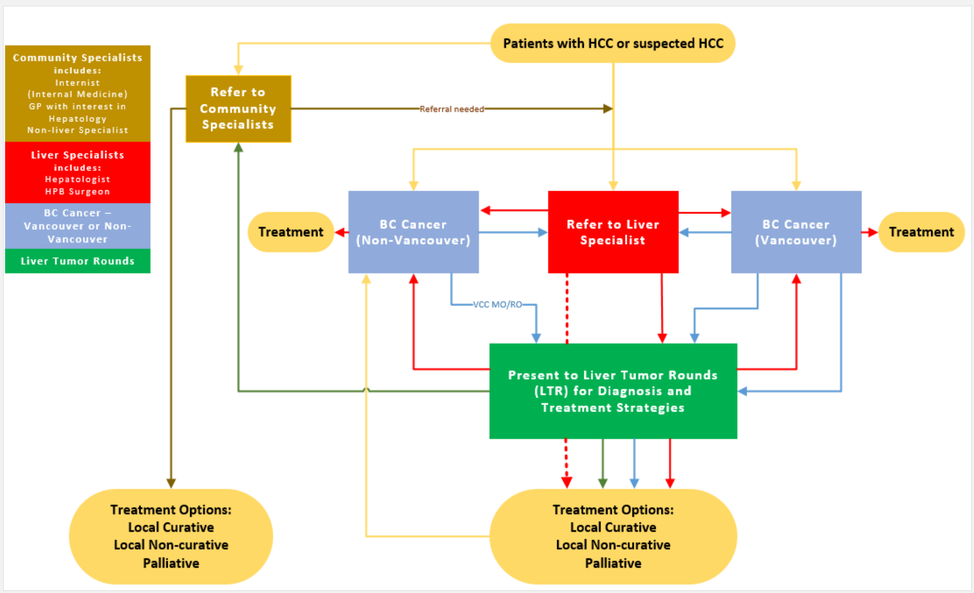


Figure 1. Referral Process to BC Cancer and LTR for Patients with HCC

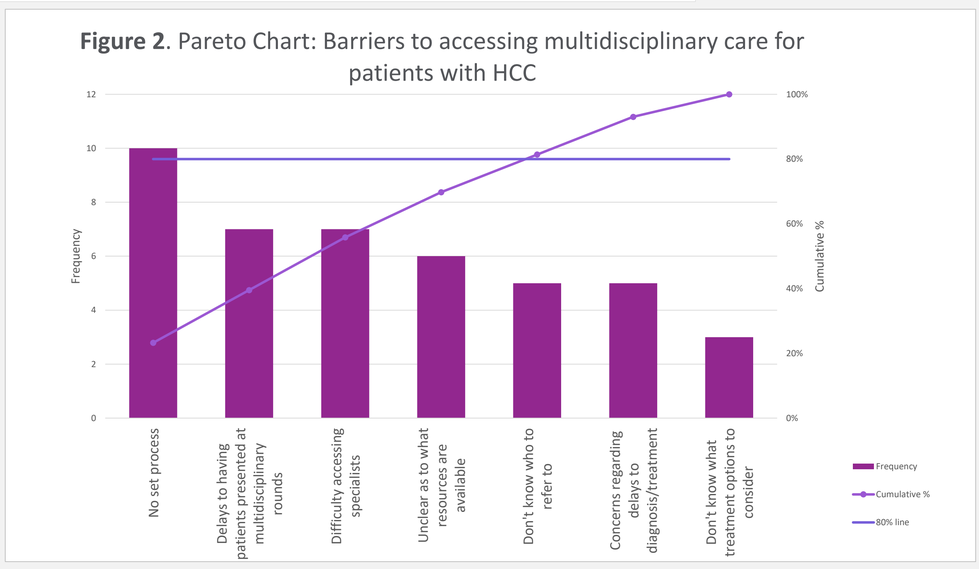


Figure 2. Pareto Chart: Barriers to accessing multidisciplinary care for patients with HCC

Changes Made

We first addressed the barriers most frequently identified in the provider survey: unclear referral process and delays in presenting cases at LTR, by streamlining the LTR referral process and increasing communication to referring physicians.

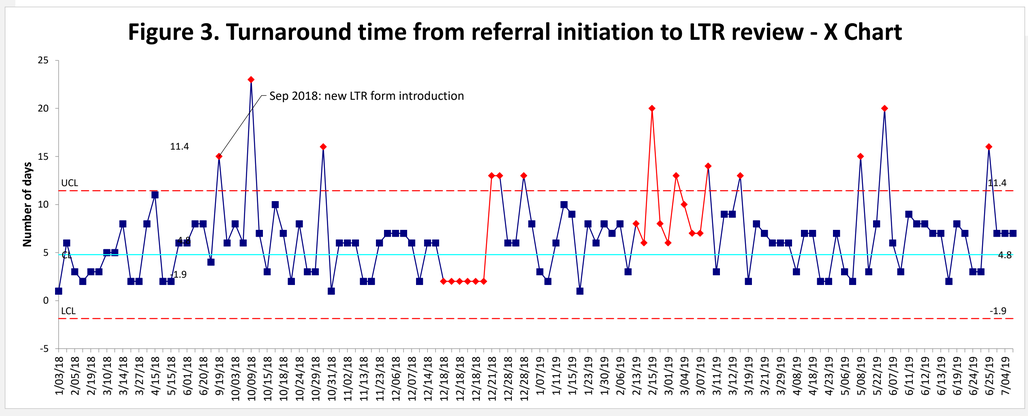
We also focused on improving completeness of information on referrals, by standardizing the referral form. The trial of the new form was initiated in September 2018.

Additionally, the LTR summary report was made available on the BC Cancer electronic medical record, which can be easily accessed by referring physicians. The referral process and forms are now available on the BC Cancer website.

Outcomes

1. The mean TAT from the initial case reviews was 14 days. Prior to PDSA cycles, simultaneous improvements in the LTR process (specifically daily review of incoming LTR referrals) had reduced TAT, limiting further significant improvement. However, during the project span the mean TAT improved to 5 days (Figure 3). There are a number of special cause variations seen, but we believe these cases are often intentional (i.e. referring physicians requested for cases to be presented on a later date.)
2. Completeness of referral forms improved from 77% (baseline Nov-Dec 2018) to 86% (post-intervention Feb-Mar 2019).
3. Refined the referral process from BC Cancer to the Provincial LTR (Figure 4) in consultation with referring physicians and the new process is well received.
4. Educated staff and raised awareness of LTR form changes and online availability of the referral and review process, and contact details.
5. Timely input of LTR review reports to EMR for BC Cancer patients.

Figure 3. Turnaround time from referral initiation to LTR review - X Chart



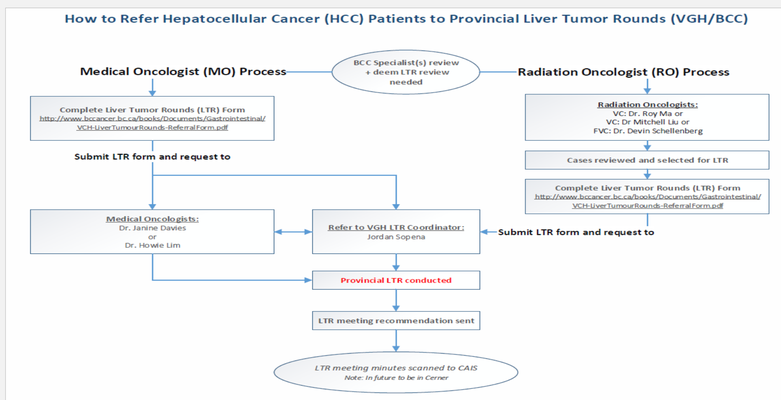


Figure 4. New Referral Process for Provincial LTR

Next Steps

Lessons learned: Awareness of a QI project/PDSA cycles can initiate early change and improvements!

1. Consider implementing further review process for LTR referrals from non-BC Cancer physicians.
2. Intermittently monitor TAT from BC Cancer referral to LTR rounds.
3. Evaluate physician and staff satisfaction with the new process in Fall 2019.

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