

# Building Multidisciplinary Care Capacity for People Impacted by Hepatocellular Carcinoma

According to the American Cancer Society, in 2023 there will be 41,210 people diagnosed with new cases of liver cancer, and, of this total number, 29,380 people will die from their disease. Further, the American Cancer Society notes that both incidence and mortality rates have significantly increased in the last 40+ years.<sup>1</sup>

Hepatocellular carcinoma is the most common primary liver cancer<sup>2</sup> and requires highly coordinated cross-specialty screening, diagnosis, treatment, and management. Patients with hepatocellular carcinoma often present with chronic liver disease, underlying comorbidities, and complex psychosocial needs. This patient population is increasingly being diagnosed and treated in the community setting, yet few resources exist to support the multidisciplinary management of hepatocellular carcinoma in this setting. Therefore, the Association of Community Cancer Centers (ACCC), launched a multi-year program (2018 to 2022) to support multidisciplinary providers in the care of patients with hepatocellular carcinoma. This article highlights key program components, lessons learned, and available resources.

## Data to Inform Interventions

Race, ethnicity, socio-economic status, and geography disproportionately impact access to treatment and health outcomes for people with hepatocellular carcinoma.<sup>3,4</sup> To help identify which areas of the country are facing higher access challenges and mortality rates, ACCC developed a Liver Cancer Heat Map,<sup>6</sup> utilizing 2012 to 2016 data from the United States Cancer Statistics,<sup>5</sup> which includes data from the Surveillance, Epidemiology, and End Results Program (SEER) and National Program of Cancer Registries. The map is searchable by age-adjusted incidence rate, crude incidence rate, number of cases, mortality, and mortality-to-incidence

ratio. In addition, National Cancer Institute-designated cancer centers and ACCC Cancer Program members are overlaid to show where these treatment facilities exist within each state.

Lastly, data capture and outcomes reporting are important to assess the success of oral oncolytic programs. Concrete outcomes data are needed to gauge the impact of specific interventions and process changes, as well as to identify areas of opportunity. Cancer programs and practices should continuously consider how they can measure outcomes when implementing oral oncolytic programs into their operations.

### There are multiple ways to use the data from the heatmap, including:

- States with high incidence might consider interventions to decrease risk of hepatocellular carcinoma, such as broad public awareness campaigns and developing education materials for use with higher risk patients being seen by their primary care and/or gastroenterology provider(s).
- States with high mortality rates may look at interventions that result in earlier diagnosis or better access to treatment. The number of cases can help users understand resource allocation needs, and the mortality to incidence ratio can indicate disparities in access to care.

However, when reviewing state-level data, it is important to remember that barriers to accessible care can be related to several factors, including race, socio-economic status, and geography. More research is needed to understand disparities and their causes, while ensuring that community cancer programs and practices can provide access to hepatocellular carcinoma specialists may help bridge the gap between incidence and mortality rates.

## Effective Practices in Multidisciplinary Hepatocellular Carcinoma Care

To further support cancer programs and practices in the care of patients with hepatocellular carcinoma, ACCC collaborated with its advisory committee and partner organizations to develop an effective practices guide.<sup>7</sup> The guide was informed by an environmental scan,<sup>8</sup> expert recommendations, and practical insights from three programs: Emory Healthcare, Atlanta, Ga.; Mercy Medical Center, Baltimore, Md.; and Sharp HealthCare, San Diego, California.

### The six effective practices that emerged were:

1. Follow national hepatocellular carcinoma guidelines for testing, staging, and treatment.
2. Work with a dedicated hepatobiliary and transplant multidisciplinary team or collaborate with an external, expert tumor board.
3. Conduct regular multidisciplinary evaluations of hepatocellular carcinoma cases.
4. Establish operational pathways to document adherence to guidelines and quality of care metrics.
5. Promote and support screening through communication and education with community clinicians.

In addition, the guide offers extensive practical insights and strategies to address disparities, screening, disease management, navigation/coordination, care models, and patient-centered communication.

## Resources to Support Patients with Hepatocellular Carcinoma

As part of providing patient-centered care, it is critical to connect patients and their loved ones to education and support resources. Blue Faery ([bluefaery.org](http://bluefaery.org)) and the Cancer Support Community ([cancersupportcommunity.org/liver-cancer](http://cancersupportcommunity.org/liver-cancer)) offer a number of free services, including education, peer support, and a helpline. In addition, the Global Liver Institute ([globalliver.org](http://globalliver.org)) is

open to anyone who is interested in advocating for policy changes to improve access to care, increasing research to expand prevention and treatment options, and ending disparities.

## Peer-to-Peer Insights

To help build capacity for multidisciplinary care, ACCC delivered a Hepatocellular Carcinoma Visiting Experts Workshop to Ascension SE Wisconsin - Cancer Care in 2022.

### The goals of the workshop were to:

- Educate multidisciplinary providers through an interactive, virtual discussion on effective practices for supporting, treating, and managing patients with hepatocellular carcinoma
- Support the cancer program in identifying a barrier to care for patients with hepatocellular carcinoma, which could be addressed through a tailored action plan.

Faculty for the workshop included: Debashish Bose, MD, PhD, FACS, surgical oncologist, Mercy Medical Center; Angela Majied, RN, CCRN, nurse coordinator, Tumor Clinic, Emory University Hospital; and Philip A. Philip, MD, PhD, medical oncologist, Gastrointestinal and Neuroendocrine Oncology, Henry Ford Cancer Institute, Wayne State University.

## Ascension SE Wisconsin - Cancer Care

This private healthcare company with a network of cancer specialists provides care to people throughout southeast Wisconsin (i.e., Milwaukee and surrounding areas). Ascension has a strong commitment to improving outcomes for patients with hepatocellular carcinoma. They treated 30 patients with hepatocellular carcinoma from October 2020 through September 2021. Of the 30 patients with hepatocellular carcinoma cared for, 3.2 percent are Asian, 10 percent are Hispanic, 42 percent are Black, and 45.2 percent are White. More than half of patients (55 percent)

presented to the emergency department, while the remainder (45 percent) presented to a facility in the outpatient setting.

### Key Takeaways

The Ascension team was interested in learning best practices for establishing a multidisciplinary clinic to optimize care.

#### Faculty shared that the goals of a multidisciplinary clinic are to:

- Optimize the patient experience with seamless access to and discussions with specialists
- Balance discussion of the case among various disciplines (e.g., interventional radiologist, surgeon, and medical oncologist)
- Accelerate care delivery.

Based on these goals, the faculty provided recommendations from their experience and offered suggestions on how to tailor these recommendations to fit within Ascension SE Wisconsin – Cancer Care system.

#### To accelerate patient identification and intake, faculty offered the below recommendations:

- Create pathways to identify hepatocellular carcinoma earlier in patients. For example, breast, lung, pancreatic, and gastrointestinal screenings could trigger further assessments for hepatocellular carcinoma
- Obtain and review as much information as possible (e.g., imaging and lab results) before seeing the patient for their initial multidisciplinary clinic consultation. Faculty members and participants also identified the value of a 15-minute. “huddle” among multidisciplinary team members to review materials together
- The multidisciplinary team should meet patients within a week to accelerate care. Consider sched-

uling patients on days/times when all specialists are in the same setting.

#### To improve ongoing management of patients with hepatocellular carcinoma, faculty offered the below recommendations:

- Convene at tumor boards to discuss treatment options
- Meet virtually to overcome hurdles, such as specialists being in different locations and challenges with scheduling
- Develop mutually beneficial relationships and agreements with external providers (e.g., transplant centers) to retain patients after referrals.

#### To improve ongoing management of patients with hepatocellular carcinoma, faculty offered the below recommendations:

- Confirm all imaging and lab results are available and have been reviewed prior to the first consult to ensure smooth intake
- Provide continuity of care through involvement from the time of referral to the creation of the treatment plan and/or through the transplant process
- Equip the care team with information needed for decision making, empowering them to perform at the top of their license(s)
- Identify a main point of contact for the care team.

### Workshop Outcomes

Participants rated the workshop highly and valued its candid multidisciplinary discussions and practical guidance from other successful settings. As one participant described the workshop, “It brings us together as a team....It helps us look at our program differently and provides an outside perspective.” This convening benefit was echoed by another participant who expressed that “participation of the other

departments allows us to share a common understanding of where our gaps are.” Post-event survey results indicate practical hepatocellular carcinoma knowledge gains, increases in skills and self-efficacy for care improvement, and strong commitment to advancing multidisciplinary care.

### *From Opportunities to Action*

**The Ascension team identified opportunities to improve care, and then created an action plan with the following goals:**

- Create an institutional guideline or algorithm for which patients are a candidate for surgery vs. liver-directed therapy
- Establish a referral framework for mutual patients receiving services within the institution and transplant services outside the institution to ensure continuity of care
- Increase early identification of high-risk patients requiring intervention
- Define management of patients with cirrhosis within the organization.

**At the three-month follow-up, the team made the following strides toward their identified goals:**

- Drafted a treatment algorithm for potentially curable hepatocellular cancer
- Identified next steps for opening channels of communication with a local transplant center
- Conducted initial outreach to gastrointestinal physicians in the catchment area to discuss clinic services and referral pathways
- Audited patient charts and identified pain points and opportunities to potentially leverage software for patient identification.

In addition, the team planned to vet the treatment algorithm with other specialties for further refinement and to obtain

buy-in, while continuing to explore software solutions and marketing to and building relationships with external organizations. Finally, the team felt they had a clear vision and understanding of gaps, strengths, and next steps and are poised to elevate care for their patients with hepatocellular carcinoma.

### **Call to Action**

To address the substantial disparities in access to quality care faced by people with hepatocellular carcinoma, cancer programs and practices must urgently assess and build their capacity to coordinate the many clinical and supportive care services that are key to hepatocellular carcinoma prevention, screening, diagnosis, treatment, and survivorship.

**Using ACCC’s resources outlined above, multidisciplinary care team members can:**

- Use state- or region-specific gaps in access to care, as evidenced by high mortality-to-incidence ratios to identify at-risk patients and opportunities to improve care
- Identify local hepatocellular carcinoma experts to coordinate care with
- Apply effective practices in multidisciplinary care coordination and patient engagement to build program capacity.

**Thank you to our patient advocacy partners: the American Cancer Society, Blue Faery, Cancer Support Community, and Global Liver Institute. This program is made possible in thanks to funding from Bristol Myers Squibb and Eisai.**

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Association of Community Cancer Centers

The Association of Community Cancer Centers (ACCC) is the leading education and advocacy organization for the cancer care community. For more information, visit [accc-cancer.org](https://www.accc-cancer.org).

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## This project is supported by:

