

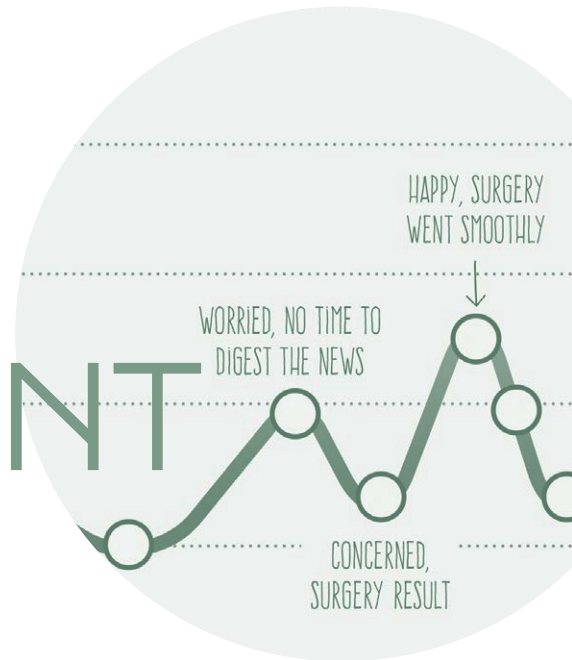
**CANCER
CARE
REPORT**

PROVING THE POWER OF ONE'S ENVIRONMENT IN CANCER CARE

Architects focus on the environmental touch points that support hope and resolve. So, we mapped the process to learn more about the benefits patients and their family members perceived.”

Kirk Rose

Healthcare Practice Leader
HMC Architects



For over three-quarters of a century, HMC Architects has provided innovative, sustainable, and progressive solutions to our clients' challenges. This dynamic thinking is central to the way we work. When you partner with HMC, you will see the difference in the HMC Experience. These examples demonstrate how Design for Good has positively impacted our clients and communities.

**design
for
good.**
HMC
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Methodology

HMC Architects implemented a unique methodology to understand and visualize a cancer patient's journey. Our process included the following:

Discovery

We explored emerging cancer care and delivery models, trends and innovations in cancer treatments, and empirical evidence on facility design for cancer patients.

Research

We gathered data and detailed stories of cancer survivors, including a parent of a pediatric patient.

Mapping

We mapped these stories based on stages, touchpoints, actors, and artifacts to understand patients' feelings, thoughts, and behaviors.

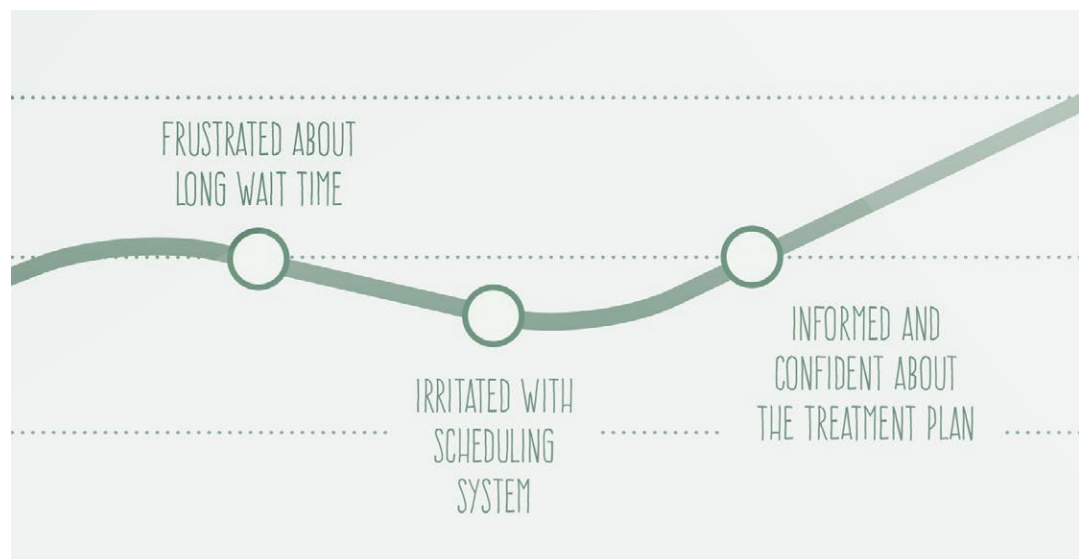
Communication

We used graphics to visualize patient pain points and needs.

Opportunities

We used the map to identify gaps and generate new solutions to enhance the patient experience.

Design for Empathy: How the Environment Impacts a Cancer Patient's Journey



Cancer Care Report



According to the World Health Organization (WHO), cancer is a leading cause of death and was responsible for an estimated 10 million deaths in 2020. That is a lot of people spending significant time in cancer centers. While medical advancements are improving patient outcomes, we, as healthcare architects, are also responsible for doing everything we can to improve these patients' journeys from day one.

HMC Architects conducted a cancer care study to understand the patients' journey by identifying opportunities to enhance their experiences and implement lessons learned into the care facility design and delivery process. The study implemented user experience mapping, a methodology to visualize the entire user experience to understand a cancer patient's journey. Utilizing a snowball sampling method, a non-probability sampling technique commonly used in qualitative research, HMC colleagues who underwent cancer treatment themselves or with their family members were invited to participate and tell their stories. Twelve individuals agreed to participate in the study, including a cancer care provider who went through this journey twice himself and a cancer care researcher who formerly worked at Cleveland Clinic.

The survey questions were organized into five major stages of care, including diagnosis, treatment decision, active treatment, and management and follow-up/end-of-life. Questions were asked about participants' feelings, assessments, and actions during each stage of care, along with their perspectives on how different touchpoints, including people, places, and technology, impacted their experiences. Participants were also asked about any changes that could have improved their experiences and made their journeys smoother and more bearable. Narrative analysis was used as one of the qualitative data analysis methods to organize the stories and experiences shared by participants in the sequence of different stages of care.

Project Information

RESEARCH STUDY:
[Design for Empathy](#)
[How the Environment](#)
[Impacts a Cancer](#)
[Patient's Journey](#)

YEAR:
2020

A Cancer Patient

1

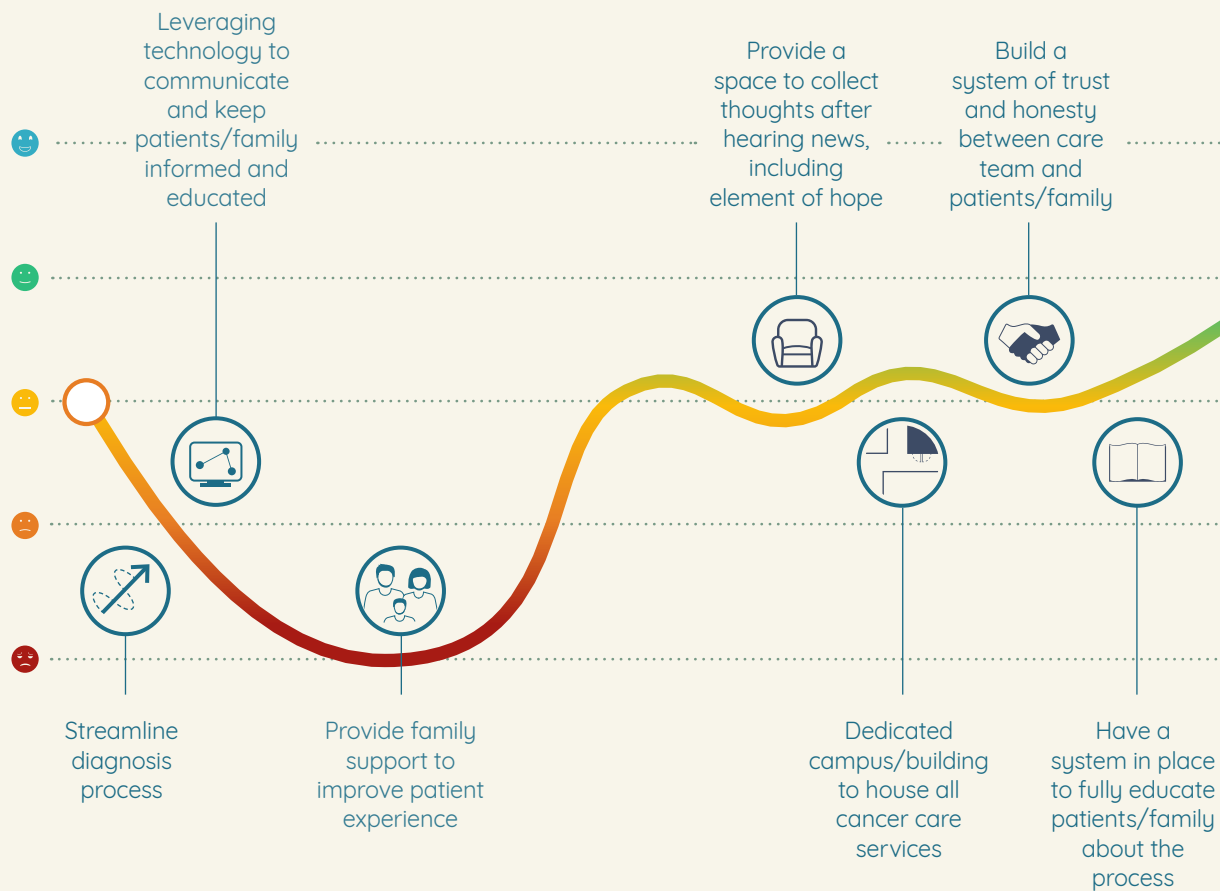
DIAGNOSIS

**Shocked
Scared
Concerned**

2

TREATMENT DECISION

**Embraced
Informed
Assured**



t's Ideal Journey

3

ACTIVE TREATMENT

**Welcomed
Supported
Recovered**

Design for flexibility to accommodate quiet time and privacy as well as socialization and connecting with others

Design spa-like environment for patient sensory comfort

Design for family accommodation and amenities to improve their experience at patient side

Design for team-based and coordinated care models

Design for holistic model of care (mental and physical health) with elements of hope

Design for infection control to protect immuno-compromised cancer patients

Staff-centered design, support staff mental and physical health by providing health promoting work and respite areas

Start from valet parking, easy wayfinding, and even attention to material management

Design for personalization to give patients control over the environment, especially for treatments happening on a routine basis

4

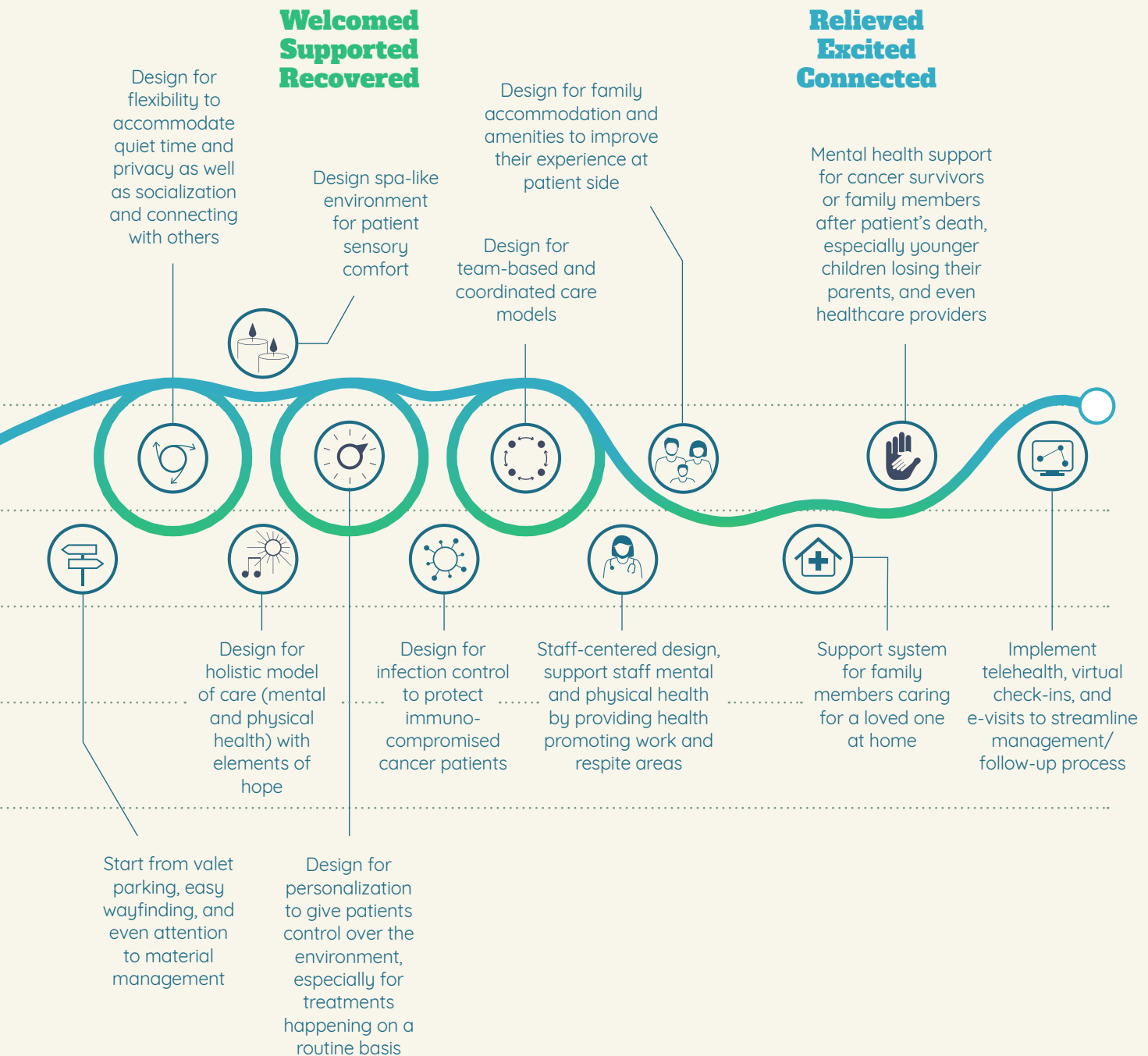
MANAGEMENT/FOLLOW UP

**Relieved
Excited
Connected**

Mental health support for cancer survivors or family members after patient's death, especially younger children losing their parents, and even healthcare providers

Support system for family members caring for a loved one at home

Implement telehealth, virtual check-ins, and e-visits to streamline management/follow-up process



“At HMC, we are committed to delivering human-centric design. Research can help guide our process and measure our success.”

George Vangelatos

Director of Healthcare Design
HMC Architects

Findings from the study showed that cancer care is a long-term process with a series of phases. The components of care patients need to access at a particular time will differ based on their stages and the treatment protocols and strategies they must undertake. The study showed that it's crucial to locate resources in a way that makes them easily accessible over the continuum of care, but also easily accessible in the moment when they're needed. For instance, a case manager's office should be placed by the facility entrance to assist new patients in starting their journeys, educate them about the process, and work as a liaison between patients and their providers. Services should present themselves to the patient or be easily accessible for anybody at any point in the continuum of care.

A cancer diagnosis can turn lives upside down, so understanding the complexity of the emotional and physiological changes that a patient goes through during their treatment is also crucial to designing a successful project. This study revealed that space should be designed to be intuitively changed to meet patient needs and preferences at different stages of care, and using these strategies can help build a cancer center with a comprehensive experience.

Ideal patient journey

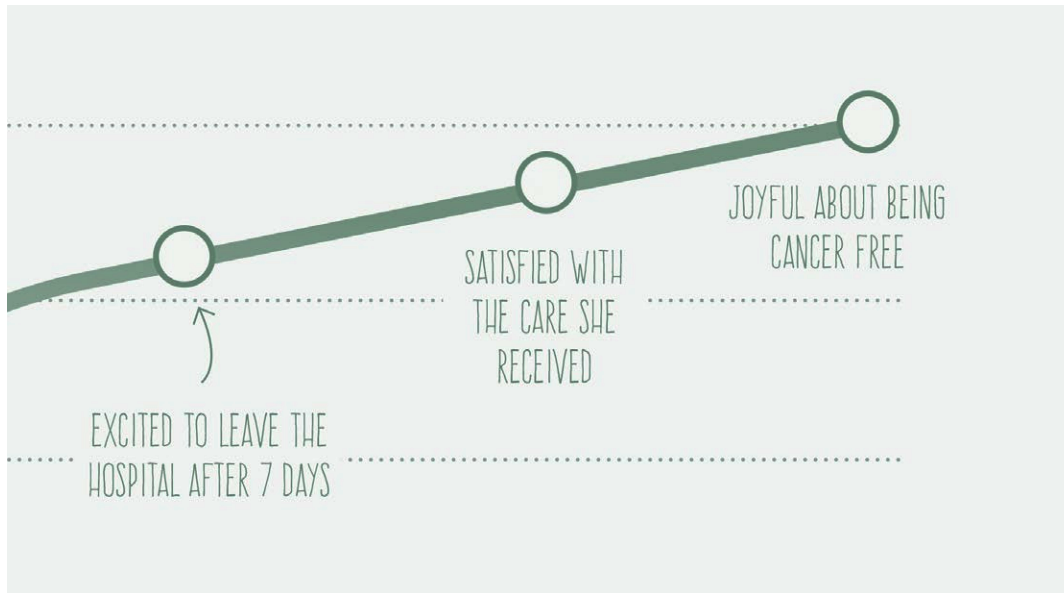
Study findings, in the forms of lessons learned and opportunities to create an ideal patient journey, have been categorized in the sequence of different stages of care, including:

Diagnosis

Diagnosis is usually a long process, with many steps in between. Providing spaces equipped with large screens and comfortable furniture to support consultation and education for patients and families about each step of the process can help alleviate stress and frustration. Sometimes patients are more afraid of the consequences of cancer on their families, especially young children, so providing mental health support to families to give patients the mental space they need to focus on themselves is a key factor in improving their experience.

Treatment decision

Patients need the most direction and guidance in this phase to decide on their best treatment plan. They need to have a space to gather their thoughts after hearing difficult news before leaving the facility. This setting can be an enclosed room inside the clinic or a private outdoor space, ideally with uplifting features such as access to natural light, nature, and music.



Active treatment

To improve the patient experience at this stage, it's important to look at the journey on various levels. On a macro level, patients prefer a dedicated building to receive all their cancer care services. On a micro level, designing for personalization, such as the ability to adjust lighting, temperature, and privacy, gives patients a sense of control over their environment, especially for treatments happening on a routine basis. Making spaces flexible through adjustable partitions and movable furniture can address needs for quiet time, privacy, socialization, and connecting with others. Amenities for patients' families are also essential.

Management and follow-up/end-of-life

This phase considers how treatment fades over time after survival or how families and friends cope after the death of a loved one. Families go through every step of the journey alongside patients and need to be supported with mental health services. Cancer care facilities should be designed as resource centers with spaces to support private and group counseling for families providing end-of-life care or enduring the death of a loved one.

Surviving cancer doesn't mean the end of a patient's journey.

Survivors shared that one of their biggest fears is that cancer will return. To help alleviate some of that stress, cancer facilities must provide survivors with a sense of connection with a system and technologies to track their future follow-up visits, check-ups, and diagnostic work. The ideal patient journey requires designing cancer care facilities that foster physical and emotional wellness within the building and beyond its walls. ●

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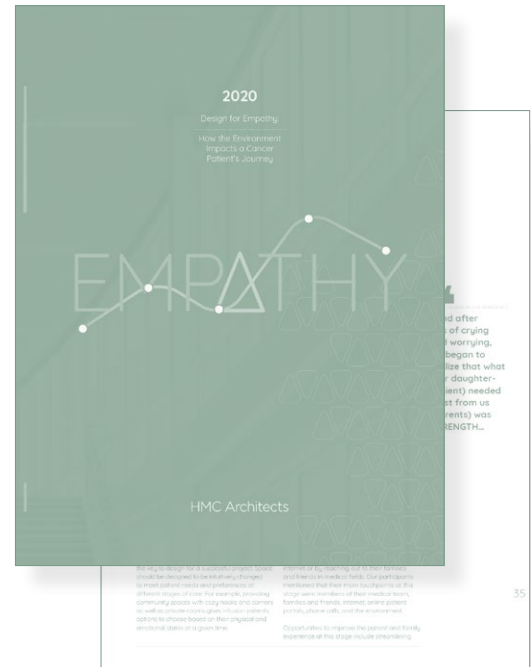
Founded with the purpose of anticipating community needs, HMC aims to create designs that have a positive impact, now and into the future.

As a 100 percent employee-owned firm, we focus primarily on opportunities to have the most direct contribution to communities — through healthcare, education, and civic spaces.

Learn more at
hmcarchitects.com



DESIGN FOR EMPATHY



The patient stories outlined in HMC Architects' Design for Empathy Cancer Care Report have become our lessons. Their journeys will inform how we design the cancer care facilities of tomorrow. Learn more about what we uncovered by downloading the report at hmcarchitects.com.