

# Breaking the Transportation Barrier: Enhancing Access to Cancer Treatment through Technology and Philanthropy

Rebecca Cammy, MSW, LCSW, Jodi Sandos, MSW, LCSW, Stephanie Chapman, BS

Sidney Kimmel Cancer Center, Thomas Jefferson University Hospital

## Abstract

Cancer patients face many obstacles and challenges after being diagnosed with cancer. Thomas Jefferson University Hospitals' Sidney Kimmel Cancer Center (SKCC) has effectively eliminated transportation as a barrier to care for patients receiving cancer treatments such as chemotherapy and radiation. SKCC dedicates a full-time patient navigator to assess and connect patients with appropriate transportation resources based on location, insurance coverage, and mobility. The utilization of patient-focused transportation platforms, such as Uber Health, RoundTrip, and Ride Health have streamlined the process, while SKCC philanthropic funds have assisted with associated financial costs. As a result of these resources, oncology patients who would have ordinarily missed appointments due to lack of transportation are now more independent and compliant with cancer treatment

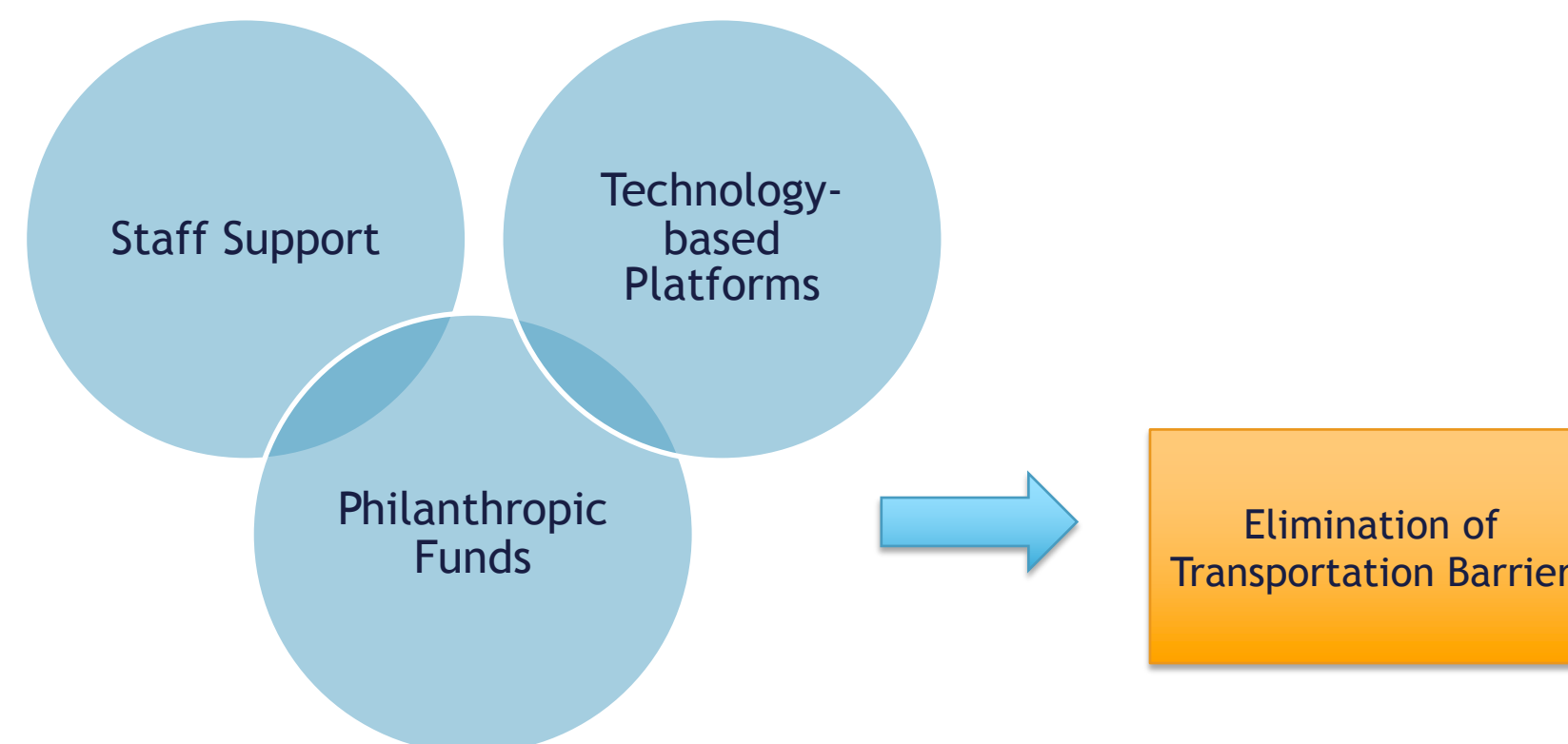
## Introduction

Transportation has been identified as a significant barrier for patients needing cancer treatment such as chemotherapy or radiation. Access to transportation resources is especially challenging for individuals traveling far distances for treatments that require repeat visits (Guidry, Aday, Zhang & Winn, 1997). Furthermore, elderly, racial and ethnic minorities, as well as patients with lower socioeconomic status and less social support have increased transportation needs (Zullig et al., 2012). As a result, patients with limited resources are often forced to pursue treatment centers based on geographic proximity and accessibility, regardless of the quality and effectiveness of care (Finlayson, Birkmeyer, Tosteson & Nease, 1999).

## Method

The American Cancer Society (ACS) and the NCI-designated Sidney Kimmel Cancer Center (SKCC) at Thomas Jefferson University Hospital in Philadelphia, Pennsylvania have focused efforts on increasing patient access to care. A full-time ACS patient navigator connects patients with appropriate resources including ACS volunteer drivers and Lyft transportation grant, medical assistance transportation programs, community-based shared rides services for seniors and persons with disabilities, and private car services. SKCC has also collaborated with technology-based companies including Uber Health, RoundTrip, and Ride Health to ensure that all patients have access to transportation in order to be fully compliant with treatment regimens. In 2017, the Barbara A. Colameco's Cancer Transportation Fund awarded SKCC a \$52,000 philanthropic donation to completely eliminate the transportation disparity and promote access for all oncology patients.

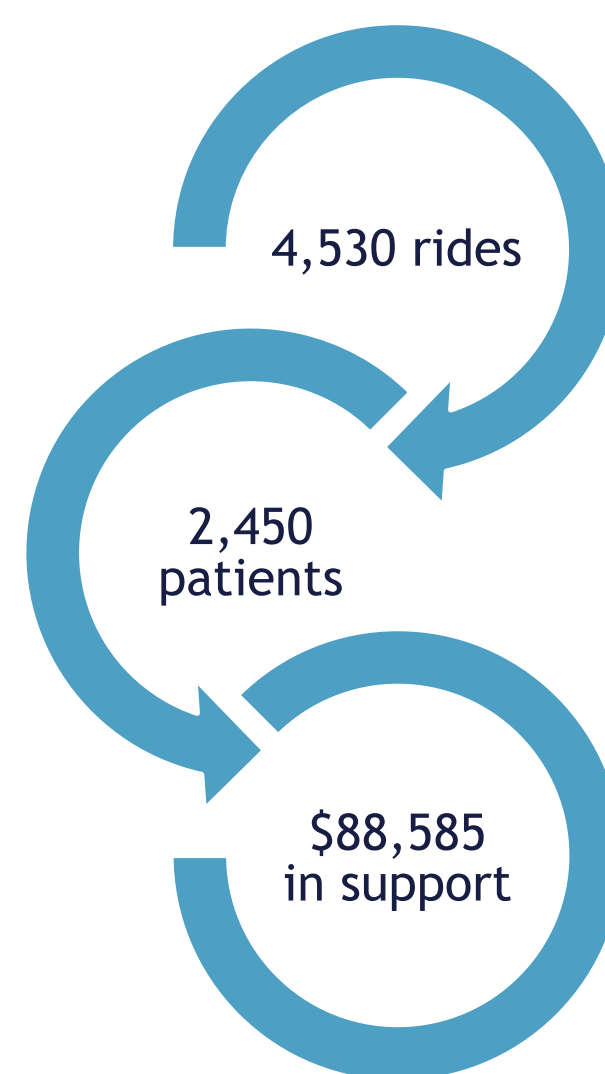
Graphic 1: SKCC Transportation Model



## Results

SKCC at Jefferson, a large urban health system, provides care to a diverse patient population including a large number of underserved and underinsured individuals. Philadelphia represents a diverse population: 42% African American, 13% Hispanic or Latino, and almost 7% non-Hispanic Asian (US Census Bureau, 2010). Many patients experience financial toxicity stemming from treatment-related costs where the annual patient household income is \$16,500.

Graphic 2: Transportation Impact



From July 2017 - December 2018, SKCC provided 4,530 rides to approximately 2,450 patients, which is equivalent to \$88,588 in support. These rides accommodated patients for medical oncology, radiation oncology, surgical oncology, and other cancer-related appointments.

Graphic 3: Roundtrip Snapshot, 2018

Number of Rides	776
Miles Traveled	10647.00
Average Miles/Ride	14.00
Average Time of Ride (in Min.)	34
Total Cost	\$ 28,766.49

Graphic 4: ACS Snapshot, 2018

SR Referral Category	#Ref	#SRs
Transportation	284	297

## Conclusion

Through the utilization of patient-focused transportation platforms, oncology patients are more compliant with treatment regimens. Patients with a variety of physical limitations can also connect with wheelchair vans and stretcher support vehicles to get to and from appointments. Patients are empowered to act autonomously through:

- Instant pick-ups and reduced wait times
- Texting updates on ride arrival
- Options for will-call returns

The ACS patient navigator is able to track rides in real-time and receive regular reports on ride usage. With support from philanthropy, the institution no longer has to bear the cost of the transportation burden.

## Practice Implications

With an increasingly competitive market for technology-based platforms, institutions are looking for more cost-effective options to decrease missed appointments and ultimately increase patient compliance. Having one less stressor in the cancer journey is a powerful reliever of anxiety and worry for patients and families who are already overwhelmed and stretched so thinly.

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