

# STUDY: FINANCIAL IMPACT OF VIRTUAL CARE PATIENT ACQUISITION STRATEGY FOR HEALTH SYSTEMS

## ABSTRACT:

Health systems are increasingly using virtual care technology to meet patient demand for convenience and as part of a patient acquisition strategy. Historically, there has been limited evidence measuring the impact of virtual care on health system patient acquisition and the incremental revenue associated with these new patients. In this paper, we analyze the efficacy of virtual care as a patient acquisition vehicle for a leading health system customer of Zipnosis and Carrot Health. We used health system-collected data to track care received by a cohort of 974 virtual care users new to the health system, with new patients defined by the health system as those not having received care within the previous 24 months. Of this population, approximately 25% converted to a health system patient by receiving in-person care within 12 months of their virtual visit, resulting in an average annual revenue increase of close to \$3,000 per converted patient.

## METHODOLOGY:

### Studied Cohort:

Carrot Health identified 974 virtual care users for the study that met the following criteria:

- Males and females over 18 years old that had engaged in a virtual encounter
- Patients had not received outpatient care by the health system in the 24 months prior to their online virtual encounter

### Analysis:

The study tracked each cohort member's conversion to in-person care over the 12 months following their online experience. This was accomplished by reviewing the health system's electronic medical record system. The data collected included the number of visits each patient had and revenue associated with services the patient used.

### Cohort Experience:

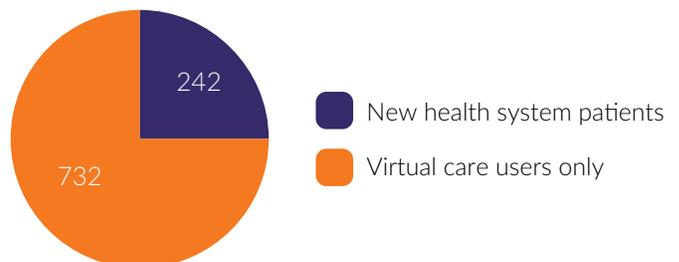
The health system in this study uses virtual care to treat low-acuity conditions (e.g., influenza, pink eye, etc.). Patients access the service via any internet-enabled device, choose from a list of health concerns, and provide symptom and health history information through a process called the online adaptive interview, which asks the same relevant questions as a provider in a clinic setting. The system aggregates this data into a clinical note. Health system providers use this clinical note in conjunction with built-in clinical decision support to make a diagnosis and treatment recommendation, including a prescription if clinically appropriate. This information is securely sent back to patients, and any prescription is routed to a pharmacy of their choice. All visit information is uploaded to the patient's electronic medical record.

## FINDINGS:

Virtual care offerings add patients to health systems:

### Patient Acquisition via Virtual Care:

Of the 974 virtual care users who started a virtual visit, 242 had at least 1 in-person visit within 12 months of their virtual encounter, producing a conversion rate of 24.8%.



974 virtual care users

### Financial Impact on Health System:

On average, the virtual care users who converted to health system patients had 3 subsequent in-person visits, generating \$2,927 of additional revenue, within 12 months of their online encounter. The conversion of 242 patients (24.8%) translated to more than \$708,000 in incremental annualized revenue.

### 3rd Party Validation:

The findings of this study are consistent with data from the Advisory Board Company,<sup>1</sup> which found an average annual revenue per patient of \$3,095, based on meta-analysis of their population risk management platform.

## CONCLUSIONS:

While further study is needed, this data strongly suggests that health systems can use virtual care to promote patient acquisition and conversion, driving incremental value and increasing revenues. Based on the information collected, specifically identifying the average 12-month revenue per patient, it is possible to extrapolate the revenue potential of virtual care as an acquisition strategy through the following equation and table:

### EXHIBIT 1:



### New Patients from Virtual Care

		1,000	2,000	3,500	10,000	20,000	35,000
Conversion Percentage	10%	\$300,000	\$600,000	\$1,050,000	\$3,000,000	\$6,000,000	\$10,500,000
	15%	\$450,000	\$900,000	\$1,575,000	\$4,500,000	\$9,000,000	\$15,750,000
	20%	\$600,000	\$1,200,000	\$2,100,000	\$6,000,000	\$12,000,000	\$21,000,000
	30%	\$900,000	\$1,800,000	\$3,150,000	\$9,000,000	\$18,000,000	\$31,500,000
	40%	\$1,200,000	\$2,400,000	\$4,200,000	\$12,000,000	\$24,000,000	\$42,000,000



*This study demonstrates that virtual care has a measurable, positive impact on patient acquisition, thereby producing significant financial returns for health systems that use this care delivery channel.*



#### About Carrot Health

Carrot Health is a healthcare solutions company based in Minneapolis, Minnesota. Carrot Health's MarketView™ software-as-a-service platform delivers actionable business insights based on social, behavioral, and clinical data, driving profitable customer engagement and revenue growth for health systems and payers.



#### About Zipnosis

Zipnosis is a virtual care software and technology company based in Minneapolis, Minnesota. Using a software-as-a-service model, Zipnosis provides health systems with virtual care solutions that connect patients with providers for online diagnosis and treatment of common conditions.

#### Authors:

**Kurt Waltenbaugh - Founder & CEO, Carrot Health**

Kurt has built successful analytic solutions, products, and companies in the healthcare, retail, manufacturing, education/credentialing, and fundraising industries. His previous companies were sold to Oracle and Pearson Education. Most recently, Kurt was responsible for Product Strategy at Optum, Inc. (UnitedHealth), building data analytic businesses for the Provider, Payer, and Employer markets.

**Jon Pearce - Co-Founder & CEO, Zipnosis, Inc.**

Jon is a healthcare entrepreneur with experience in med-tech start-ups and as a venture analyst. He is focused on leveraging the power of technology to improve the way health systems engage with and treat their patients.

<sup>1</sup>Daugherty, A., & Hollander, J., (2016, September). *Fulfilling the potential of integrating cross-continuum telehealth in health systems*. Presented at SHSMD Connections, Chicago, IL.