

# An Innovative Approach to ROI

The methodology that captures the true cost and accounts for the complexity in specialty care

## Summus Return on Investment

### Executive summary

- ▶ Specialty care is where the cost and complexity in healthcare live today, and drives significant costs.
- ▶ The Summus methodology delivers a dependable, evergreen, episodic, and condition-specific ROI across the leading 15 claims drivers for large organizations.
- ▶ Medical cost savings from Summus are demonstrated through changes to diagnosis and treatment, replacement of in person physician visits, and avoided visits to emergency departments.
- ▶ Using Summus member information and data from a national claims database of more than 340M individual patient records, treatment and control cohorts are created to match the member based on their demographic and medical information.
- ▶ Our ROI methodology allows us to provide industry-specific as well as condition-specific medical cost savings and opportunities to improve member experience.

## The importance of ROI in virtual care

Calculating ROI is imperative across all industries and sectors. In healthcare, ROI methodologies that use a systematic approach and proven measurement process support organizations and benefits

### Benefit leaders looking to identify the impact of employee benefits should consider the following questions:

- ▶ Is the methodology for ROI reliable, replicable and validated by an independent party?
- ▶ Does the program or service deliver the intended return?
- ▶ Are medical cost savings reported based on episodes of care that can be directly attributed to the program or service?
- ▶ Does the medical cost impact account for different types of health conditions and interventions or is it narrowly focused on a specific condition or procedure?
- ▶ Are cost estimates based on national averages or specific to your employee locations?
- ▶ Is the ROI calculation based on a chosen single point in time or is the data updated to reflect current costs and medical advancements?

leaders to invest in the most impactful solutions that will improve health outcomes and reduce healthcare costs.

Specialty care is where the cost and complexity in healthcare live today, and drives significant costs for employers and health plans. Summus addresses rising costs by bringing convenience, speed, and quality to the process of identifying and connecting patients with appropriate specialists, using virtual care technology, for leading medical expertise across all conditions. Specialists provide expert clinical guidance to support members in making well-informed health decisions, big or small, that are right for them and their families. Summus clients benefit from access to a curated network of 5,100+ leading specialists from the top US health systems to inform better decision making and better outcomes.

In virtual specialty care, delivering a dependable ROI with rigorous measurement leads to reliable medical

cost savings for employers and health plans. Medical cost savings is particularly noteworthy in today's landscape of inflation where consumer prices continue to rise, including the cost of healthcare. Healthcare cost growth will likely persist due to staffing shortages and greater demand for medical services.<sup>1</sup>

<sup>1</sup> [Transformative impact of inflation on the healthcare sector | McKinsey](#)

## The Summus approach to ROI

Summus takes a market-leading approach to quantifying ROI impact of services on clients' medical costs. Our approach:

- ▶ Assures the most accurate measurement of ROI savings originate from our program.
- ▶ Analyzes episodes of care instead of overall trends, providing evidence that savings are directly attributed to Summus services.
- ▶ Produces condition-specific savings, instead of aggregate savings that disguise unique population tendencies.
- ▶ Adjusts for geographic access and medical cost differences.
- ▶ Measures the impact of Summus on avoided in-person visits and surgeries, and changes to treatment paths using control and treatment cohorts (similar groups of people) that account for broader populations of people.

Understanding where a person is on this spectrum, how their time and effort can be better directed, and where to avoid unnecessary cost requires clinical expertise.

## Summus ROI methodology

Engaging the healthcare system for any health journey across the continuum of care will generate many instances of medical cost, the degree to which will vary widely. For example, the cost of spinal surgery can exceed \$100,000 while a new allergy diagnosis can range from \$30 to \$14,000. Understanding where a person is on this spectrum, how their time and effort can be better directed, and where to avoid unnecessary cost requires clinical expertise. This is what Summus does.

Summus identifies medical cost impact resulting from changes to diagnosis and treatment paths. This can range from recommendations on current medication to unnecessary surgeries and treatments. Medical cost savings also accrue from replacement of in-person physician visits with a Summus MD consultation or a Summus Expert MD, which do not generate medical claims. Each of these savings are described below.

### Summus MD

- ▶ board-certified in internal or emergency medicine
- ▶ specialize in clinical navigation across all medical concerns
- ▶ answer questions and provide clinical guidance
- ▶ connect members with Expert MDs

### Expert MD

- ▶ curated network of 5,100+ leading specialists
- ▶ all recognized specialties and subspecialties
- ▶ doctors from top academic medical centers

In our analysis, we include all commercially insured, allowed patient costs 15 days prior and 30 days post the target procedure, improving the accuracy of actual patient costs.

## Change to diagnosis, treatment path, or both

To determine cost impact we use information captured in the Summus platform as well as Monocle Insights, a national claims database of more than 10 billion encounters.<sup>2</sup> In our analysis, we include all commercially insured, allowed patient costs 15 days prior and 30 days post the target procedure, improving the accuracy of actual patient costs.

1. Members enter relevant demographic information along with their diagnosis.
2. Based on treatment plans and diagnoses recorded by physicians, medical coders assign the appropriate ICD-10 or CPT® diagnosis code before and after each consultation with a member. Member cases are categorized into one of the 15 leading specialty condition pathways (**Figure 1**), such as neurology, oncology, spine.
3. The “original” and “revised” treatment plans are used to create cohorts to represent the member before and after Summus MD consultations.
4. Cohorts are matched to the member based on age, gender, location, ICD-10, and CPT® (**Figure 2**). Cohorts are created with third-party claims data from Monocle Insights to reflect the individual member.

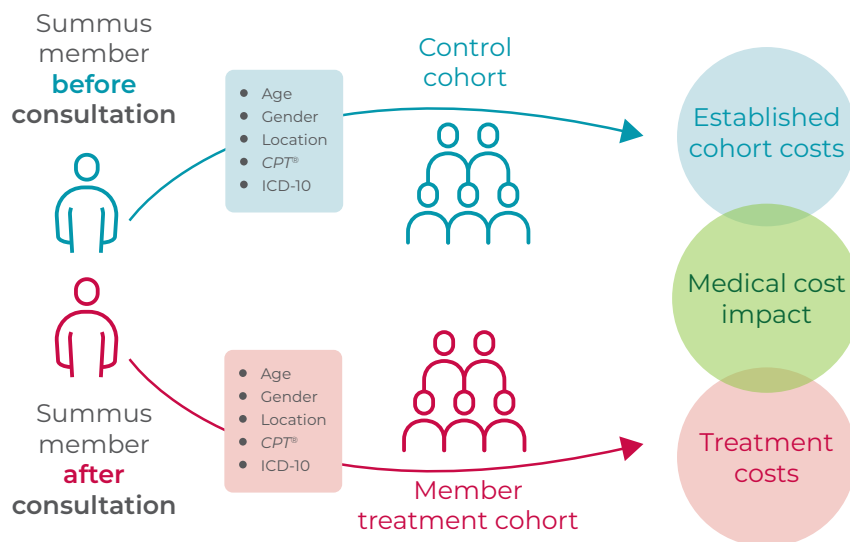
### Figure 1 15 leading specialty condition pathways

- |                          |                         |   |
|--------------------------|-------------------------|---|
| ▶ Oncology               | ▶ Eye, head, and neck   | ▶ Complex pediatrics                      |
| ▶ Central nervous system | ▶ OB-GYN/women's health | ▶ Endocrinology, diabetes, and metabolism |
| ▶ Musculoskeletal        | ▶ Urology/men's health  | ▶ Dermatology                             |
| ▶ Spine/back             | ▶ Rheumatology          | ▶ Mental health                           |
| ▶ Cardiovascular         | ▶ Gastroenterology      |   |
| ▶ Infectious disease     |                         |   |

<sup>2</sup> [Monocle Health Data](#)

5. Medical cost impact is determined based on changes to diagnosis or treatment paths using the difference between the original and revised treatment path groups. The median, or middle cost point, is used for calculating impact, providing a conservative savings number.

**Figure 2** Summus cohort cost estimation process



Medical cost savings from Summus are demonstrated through changes to diagnosis and treatment, replacement of in person physician visits, and avoided visits to emergency departments.

### Matched cohorts support a reliable Summus ROI

By using a large national dataset and average costs of a large group of patients, our cost estimates are more reliable than others that are based on a single member.

### Avoided in-person visits

Summus MDs and Expert MDs assist members with everything from reviewing medical records to recommending tests for members to discuss with their primary care or treating physician. These consultations can replace in-person medical visits to a physician and are individually counted and calculated against the cost of an in-person visit.

### Avoided visits to emergency rooms or urgent care facilities

Summus provides access to leading specialists in hours or days, which may avoid expensive and unnecessary visits to emergency departments or urgent care centers.

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Summus is able to calculate an average savings per case by pathway, and constantly refresh as more information is available.

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## Ongoing determination of condition-specific ROI

Each member issue is assigned to a condition pathway category, case cost impact for each condition is aggregated for overall pathway savings for each employer and health plan. Because the workflows in the Summus platform capture key data such as diagnosis and procedures, Summus is able to calculate an average savings per case by pathway, and constantly refresh as more information is available.

## Third party validation of ROI methodology

To ensure rigorous measurement, Summus engaged Milliman, a renowned third party actuarial services company, to evaluate our ROI methodology for analyzing medical cost savings. As part of their analysis, Milliman reviewed the actuarial appropriateness of our methodology to analyzing client savings. Milliman reproduced our findings using their own proprietary data set and determined the methodology and data were reasonable.<sup>3</sup>

## The impact of ROI for employers and health plans

As the cost of healthcare and employee benefits continues to increase, and the number of health solutions continues to proliferate, benefits managers need to be increasingly selective in the benefits they offer. A strong ROI proposition with a proven methodology can separate solutions that deliver true value to your organization.

With more than 350,000 available health apps—90,000 released last year alone—to consumers and employers and health plans, making decisions about what apps or health solutions and programs to offer employees and members is overwhelming.<sup>4</sup> As costs continue to rise, it is imperative that employers and health plans understand the value delivered by each solution. Return-on-investment is a fundamental component of value measurement.

<sup>3</sup> <https://www.milliman.com/en/insight/independent-review-Summus-Global-client-savings-estimation-methodology>

<sup>4</sup> [Digital health apps balloon to more than 350,000 available on the market, according to IQVIA report | MobiHealthNews](#)

By focusing on the drivers of healthcare cost and complexity and accelerating access to the nation's best medical advice, Summus is able to consistently achieve medical cost savings for our clients across all health diagnoses and conditions. Our advanced ROI methodology, validated by Milliman, allows us to measure cost impact on a replicable basis, and provide evidence to our clients of the value and benefit that they are providing to their employees or members.

#### Definitions

**Current Procedural Terminology (CPT®):** Medical code set, maintained by the American Medical Association (AMA), that is used to report medical, surgical, and diagnostic procedures.

**Internal Classification of Diseases, 10th Revision (ICD-10):** A disease or condition diagnostic coding system. Maintained by the World Health Organization (WHO).

**National Drug Code (NDC):** Numerical codes to identify drug products.



## Case study: Breast cancer



### Member Information

**Member:** Miriam, female  
**Age:** 65  
**Location:** New York  
**Diagnosis:** DCIS Breast Cancer  
(ICD-10: D05.10)

### Member issue

After noticing a lump in her breast and having a biopsy, Miriam was diagnosed with early stage breast cancer.

### Summus consultation

Miriam wanted to better understand her treatment options as she was considering a total mastectomy with reconstruction. After speaking with a nationally renowned oncologist versed in her specific type of breast cancer and discussion about Miriam's medical history, including multiple existing medical conditions, the specialist discussed the pros and cons of all her options.

### Member decision & outcome

Miriam made the decision to pursue a lumpectomy with hormone therapy.

*"I recovered quickly from surgery and I'm enjoying time with friends and family. So grateful for the help with this decision."*

### COST SAVINGS ANALYSIS

**\$34,997**

cost of original  
treatment plan

CPT® 19303 (Mastectomy, simple,  
complete) with 1506 matches

**\$21,351**

cost of amended  
treatment plan

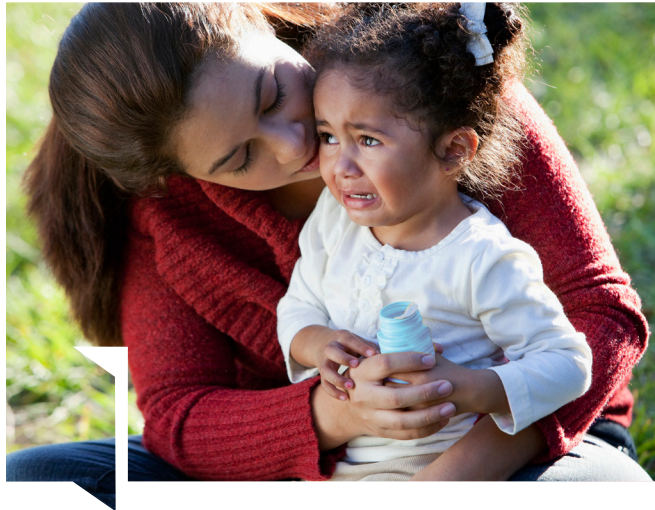
CPT® 19301 (Oncologic resection  
with attention to margins)  
with 7179 matches

**\$13,645**

savings from  
change of surgical  
treatment plan



# Case study: Pediatric infectious gastroenteritis



## Member Information

**Member:** Ellie, female  
**Age:** 14 months  
**Location:** Texas  
**Diagnosis:** Infectious gastroenteritis (ICD-10: A09)



## Member issue

Ellie, 14 months, had not been drinking for a full week after having a stomach bug. Her mother consulted Summus, concerned about dehydration and how to care for her.



## Summus consultation

A Summus MD spoke to Ellie's mother and provided guidance on food and drink options to try, and discussed how to add other food and fluids back into her diet. The Summus MD also provided education on what children may experience post-infection.



## Member decision & outcome

Ellie's mother determined that a trip to the local emergency room was not necessary after speaking with Summus. She was able to get her daughter to drink using tips from her Summus MD.

*"Ellie is back to daycare and I now know what to look for and how to handle it. Thank you, Summus!"*

## COST SAVINGS ANALYSIS

**\$142**

avoided primary care visit

CPT® 99211-99215  
with 63M matches

**\$275**

avoided urgent care/  
emergency department visit

CPT® 99283 (ED level 3 visit)  
with 657 matches

**\$417**

savings from  
avoided visits

## About Summus

Summus is the leading virtual specialty care company, founded with a mission to restore human connection in healthcare. Our proprietary marketplace model attracts leading specialists who support better insights and decision making across all health questions. With a curated network of more than 5,100 renowned specialists from top academic medical centers, and more than 2.1 million members around the world, Summus serves as the clinical front door to access trusted, high quality healthcare expertise, and to support people in the moments that matter most.

Please contact us at [info@summusglobal.com](mailto:info@summusglobal.com) for additional information on virtual specialty care and our ROI methodology, or visit our website [www.summusglobal.com](http://www.summusglobal.com).