

SPECTRUM HEALTH



## Spectrum Health: Decreasing Transfer Costs and Improving Care Delivery Through Specialty Telehealth

At a Glance: Spectrum Health's Specialty Telehealth Program:



**90+ Use Cases**



**\$1.1k** SAVED PER AVOIDED TRANSFER



**25,000+**  
REMOTE SPECIALTY VISITS



**\$5,000,000**  
SAVINGS TO HEALTH PLAN

### Specialty Telehealth Program Results:



#### INFECTIOUS DISEASE

**Telehealth Drove:**

- **314** Avoided Transfers
- **\$345,400** Cost Savings



#### SLEEP STUDY

**Wait Time:**

- **4.5** Months Without Telehealth
- **2.5** Weeks With Telehealth



#### WOUND CARE

**Telehealth Drove:**

- **76%** Fewer Readmissions
- **830** Remote Consults

## The Client: Spectrum Health

Spectrum Health is a not-for-profit, integrated health system headquartered in Grand Rapids, Michigan. The health system is comprised of 15 hospitals; its insurance subsidiary, Priority Health, which is the second largest payer in the state covering more than one million lives; and a medical group with more than 2,000 providers.



15 HOSPITALS



SECOND-LARGEST  
PAYER IN MICHIGAN



2,000-PROVIDER  
MEDICAL GROUP

## The Challenge: Connect Specialists with Patients—No Matter the Location

Spectrum Health has a system-wide vision of becoming a national leader in healthcare by 2020. Part of its vision is to improve care delivery by connecting patients with Spectrum Health providers when and where they need care. To achieve this patient-centric vision, Spectrum Health needed to deliver specialty care—historically only available at its flagship hospital in Grand Rapids—to local communities in need.

## The Journey: Creating a Scalable Specialty Care Telehealth Program

To help improve care delivery for specialty care, Spectrum Health turned to telehealth. The health system formed a telehealth program called MedNow, which was comprised of two separate initiatives—direct-to-consumer and specialty care. The specialty care initiative, called Specialty MedNow, was focused on connecting specialists with patients at distant clinical sites for consults and treatments. To ensure the long-term success of Specialty MedNow, Spectrum Health first needed to incorporate the right team structure and technology, and then determine how best to engage providers for a strong launch and sustainable expansion.

### Telehealth Team Structure:

The right telehealth team structure was critical to build and scale the Specialty MedNow program. Spectrum Health implemented the following telehealth team structure:



- **Team Leads:** Joe Brennan, senior director of MedNow, and Mandy Reed, director of MedNow operations, are the telehealth team leads. Together, they are responsible for the overall strategy of the program and outlining where the program should expand to in the future. They also work with executive leadership to align MedNow's strategy with the overall health system strategy.
- **MedNow Specialists:** The MedNow specialists play a product manager role, helping each specialty group take a concept from an idea to a sustainable telehealth program. After launching the program with a service line, the specialists become a resource for the providers and medical staff to use to help sustain the use case.

- **Data Analyst:** Spectrum Health has a data analyst that is focused solely on MedNow use case data and analytics. This analyst helps navigate data dashboards and pull information, allowing the MedNow team to make strategic, informed decisions on expansion and use cases. The analyst also works with service line teams to help identify where the best opportunities for telehealth are, and what type of results they can expect to see after implementation.
- **Telehealth Educators:** The telehealth educator moves from site to site helping train providers, nurses and medical assistants on the technology—including the hardware and workflows of the carts.

## Selecting a Telehealth Technology Partner:

Spectrum Health was in search of a reliable telemedicine cart for the Specialty MedNow program. They were looking for a cart that was easy to use, could be used in rural locations, and had a long lifespan. Spectrum Health ultimately chose to use American Well's 750 Telemedicine Cart and peripherals.

"Making the decision to go with the American Well carts was one of the major contributing factors to our success," says Brennan. "The ease of use of the technology; the functionality of the wireless antennas in rural hospitals where Wi-Fi is not the best solution offered; and the durability and robust stature of the carts have allowed them to have a lifespan of over three years—which most other equipment does not. And at the end of the day, when training requires walking through four steps, adoption is much greater because the product is so easy to use. Today we have over 90 use cases utilizing these carts."

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— JOE BRENNAN, SENIOR DIRECTOR OF MEDNOW, SPECTRUM HEALTH

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**American Well 750  
Telemedicine Cart**

## Engaging Providers and Scaling for Success

Early on, Spectrum Health's telehealth team presented Specialty MedNow to the entire medical group, informing them of the program and seeing if they could spark provider interest and usage.

"Anyone willing to put in the effort and stand behind something that could be sustainable we worked with," says Brennan. This approach of working with all engaged providers allowed Spectrum Health to quickly scale use cases and build a telehealth program with depth and breadth.




The MedNow team went by the philosophy of "crawl, walk, run" when implementing Specialty MedNow into service lines. "We set out reasonable goals, had quick wins and measured successes in small chunks to gain momentum," says Reed. For each service line, the MedNow team has a standard process they followed for intake and development. "We then set up milestones along the way—for example a 50% reduction in transports by a certain date—to measure each service line's unique successes," says Reed. Starting with multiple early adopters allowed the MedNow team to critique operations and strategically decide how to move forward.

## The Results: 90+ Use Cases with Meaningful Impact

Since launching Specialty MedNow in 2015, Spectrum Health has conducted more than 25,000 remote consults across more than 90 use cases. By strategically embedding telehealth into the physicians' day-to-day practice and making it part of the way they deliver care, the health system grew monthly remote consults from 90 to more than 1,000 in three years.

**Below are three examples of how Specialty MedNow addressed problems within service lines and produced meaningful and measurable results:**

### Infectious Disease

-  **Problem:** Spectrum Health had limited resources for Infectious Disease, which often resulted in patients being transferred from skilled nursing facilities and regional emergency departments to Spectrum Health's flagship hospital in Grand Rapids, Michigan.
-  **Solution:** MedNow worked with the Infectious Disease team to virtually assess and treat diseases utilizing telemedicine carts.
-  **Results:** The MedNow team quickly scaled the program, expanding access to all its locations, including regional ED departments, skilled nursing facilities, and in- and out-patient facilities. To date, the Infectious Disease telehealth program has seen 401 remote consults, of which 314 resulted in an avoided transfer.






**410 REMOTE CONSULTS**






**314 AVOIDED TRANSFERS**

### Sleep Study Clinic

-  **Problem:** Spectrum Health's sleep specialist approached the Specialty MedNow team because the department was experiencing a huge bottleneck in sleep consultations. The sleep specialist was traveling three to four hours a day to evaluate patients, which took valuable time away from patient consults. This windshield time resulted in a four-and-a-half month wait time for consults—a bottleneck that left sleep study beds unfilled.
-  **Solution:** Specialty MedNow helped set up a virtual sleep study clinic, allowing the sleep specialist to have remote consultations with patients in rural communities and eliminate windshield time. The virtual sleep clinic was set up with a two-exam-room workflow to maximize efficiency. Once the remote specialist was done consulting with a patient in the first exam room via a telemedicine cart, he could quickly connect with a patient in the second exam room via another cart.
-  **Results:** Through the virtual sleep study clinic, Spectrum Health has dramatically decreased the bottleneck and reduced the wait time for consults from 4.5 months to 2.5 weeks. They were able to do this by replacing driving time with appointment time, thus increasing the number of consult slots that were available, and ultimately, increasing the number of beds filled in the study.

**REDUCED  
WAIT TIME  
FROM  
4.5 MONTHS  
TO  
2.5 WEEKS**

## Wound Care

-  **Problem:** Spectrum Health was looking for a way to reduce hospital readmissions for wound care patients within skilled nursing facilities and rehab clinics.
-  **Solution:** The Specialty MedNow team placed telemedicine carts on each floor of all skilled nursing facilities and rehab clinics to provide remote exams for wound care.
-  **Results:** Spectrum Health's goal was to reduce readmissions by 50 percent. After one year, the health system reduced readmissions by 76 percent. To date, there have been more than 820 remote wound consults to skilled nursing facilities and rehab clinics.

 **76% FEWER**  
READMISSIONS

 **830 REMOTE**  
CONSULTS

## The Cost: Health System, Health Plan and Patient Savings

The MedNow team's data-driven approach has allowed Spectrum Health to easily analyze and understand cost savings associated with any Specialty MedNow program.

To date, MedNow has calculated the total cost savings for Priority Health, its insurance arm, to be more than \$5 million. The health system has also calculated cost savings for the health system and the patient:

### Avoiding Transfers

Through remote specialty consults, Spectrum Health has seen a significant cost savings in reduced transfer rates. The health system estimates that the average transfer cost from a regional hospital to Spectrum's flagship hospital is roughly \$1,100. In the case of the infectious disease telehealth use case—which helped avoid 314 transfers—telehealth saved the health system over \$345,400.

"Every time we can wheel a specialist to the bedside of a patient and the specialist says the patient does not need to be transferred we are saving \$1,100," says Brennan. "As use cases continue to grow so will the savings, and it will just become the standard of care expected."



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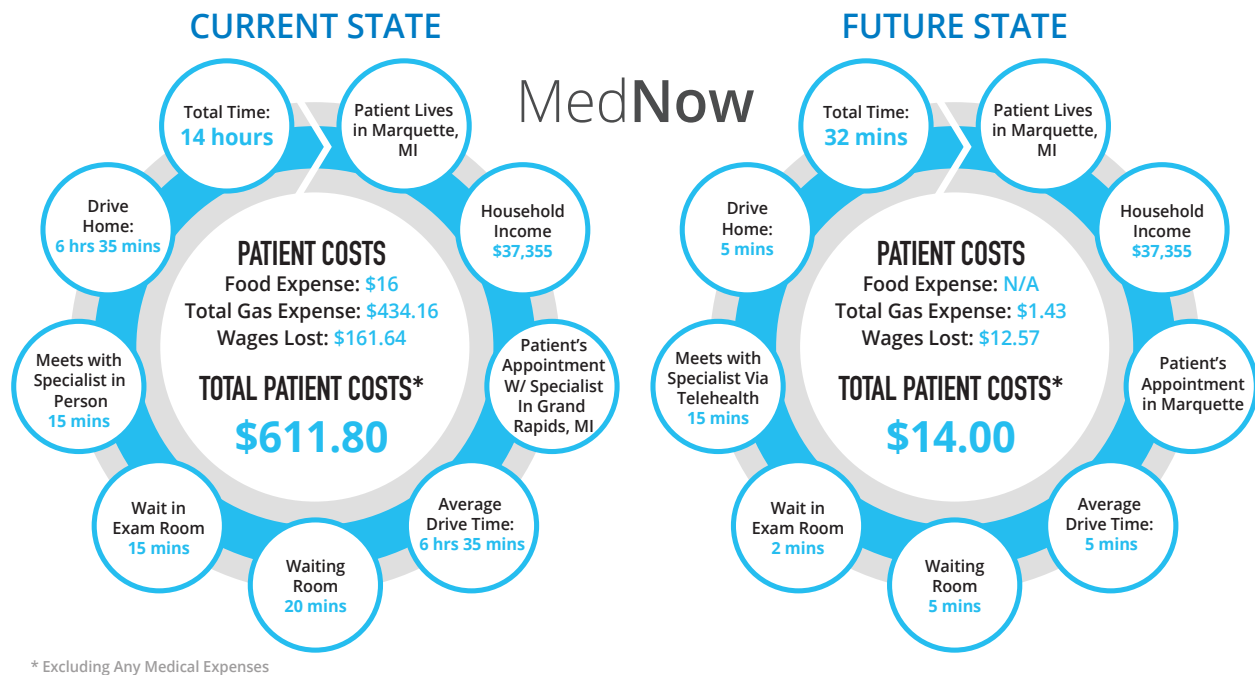
— JOE BRENNAN, SENIOR DIRECTOR OF MEDNOW, SPECTRUM HEALTH



## Patient Savings

To better understand the patient experience and cost, the MedNow team compared the patient experience for an in-person specialty follow-up visit versus doing that visit via telehealth.

The example shows the experience of a blood and marrow transplant patient driving from Marquette, Michigan to the Lemmen-Holton Cancer Pavilion in Grand Rapids—a six-hour drive one way. The MedNow team estimated that before any medical expenses, a trip for an in-person visit would cost the patient \$611.80. If this follow-up visit was done via telehealth, Spectrum estimates the cost to be \$14.



“A transplant patient is required to come down 23 times. The average household income in Marquette is \$38,000 so that \$611 is half of the patient’s two-week paycheck—just to come for one appointment,” says Brennan. “This demonstrates how specialty telehealth improves efficiency, lowers the cost of care, and opens up access, all of which have a tremendous impact on the patient.”

## The Future: Scaling while Standardizing Telehealth

The Specialty MedNow program is helping Spectrum Health achieve its vision of becoming a national leader in healthcare by expanding access, improving care delivery and lowering healthcare costs.

“Based on the results we’ve seen thus far, we believe we’re going to accomplish that vision,” says Brennan. “We also feel that we are not an acute project or start up, but an established program within the health system.” Telehealth has become an expectation of Spectrum Health patients, who now count on easy access to specialty care from their own communities.

As a leader in the specialty telehealth space, Spectrum is now focused on finding standard metrics that all health systems can use to measure success. “If we can find common benchmarks, we can say this is where our programs are today, and this is where we want them to be in the future.”



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