



**MetTel**<sup>®</sup>



# MetTel Telehealth

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The Rare Occurrence of  
Saving Lives & Saving Money

## Introduction

### Delivering on the Promise of True Connected Health

The cost of healthcare services in the U.S. is disproportionately higher than in other countries. In an attempt to gain control over this problem, healthcare providers have been tasked to lower costs where possible, while also being pressured to lessen hospital wait-times, assign staff to attend to more patients (clinician/patient ratios), and lower readmissions rates (for same symptoms).

To find a way to both lower costs and thus increase profitability, and to reach more patients, healthcare facility organizations are looking to technology. The primary goal is and will always be improving overall health care results. But, secondarily, technology has been proven to reduce clinical overhead; help ease admission pressures on hospitals; increase patient comfort levels; improve patient knowledge; and, most importantly, improve overall patient outcome. One form of this new technology is known as telehealth, and its latest emergence is Telehealth as a Service (TaaS), which utilizes app-based solutions (Google Play & Apple Store) developed specifically for and to unite the patient, the clinician and patient support groups.

### Telehealth Works

Over the past decade, telehealth technology has evolved into a reliable means for healthcare providers to regularly monitor patients' vital signs and to expedite clinical intervention when required. In addition, recent studies have demonstrated that the use of remote patient monitoring can reduce readmission rates because of more optimally managing chronic disease states through ongoing vitals monitoring.

According to The American Journal of Accountable Care, "A randomized clinical study was performed by Hackensack Hospital and Holy Name Medical Center to evaluate the effectiveness of using HRS' solution to increase patient engagement and lower 30-day hospital readmissions. The results of the study indicated that there was a statistically significant drop in readmissions for the group of patients using HRS' tablet compared with those who did not, 8% versus 28%, respectively."<sup>1</sup>

This is one of hundreds of studies that come to the same conclusion: Telehealth works, and it works well.

Remote patient monitoring (RPM) is a technology to enable monitoring of patients outside of conventional clinical settings (e.g. in the home), which may increase access to care and decrease healthcare delivery costs. It allows patients to maintain independence, prevent complications, and minimize personal costs. Most types of diseases best suited for RPM include diabetes, congestive heart failure, chronic obstructive pulmonary disease, asthma, and hypertension as these involve frequent monitoring of vital signs, coordination among care providers, and effective and sustained self-care.

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1 Judith Kutzleb, DNP & Joan Shea, MBA, JD. Study: Health Recovery Solutions Uses Tablets to Reduce Cardiac Readmissions, The American Journal of Accountable Care. June 20, 2014.

Long-term benefits of telehealth, in general, can be seen from three perspectives: improved health outcomes, reduced hospitalizations and readmissions, and reduced costs for both the payer and care provider. With this trifecta, telehealth has become widely integrated, especially among organizations that manage chronic disease patients. Due to the fines that Medicare has recently implemented on hospitals with same-symptom patient readmission (within 30 days), the industry-wide interest in telehealth has become an absolute need.

According to the Harvard Business Review, “Americans are both undertreated and ‘over-treated’ in a health care system that wastes up to \$1 trillion a year and delivers profoundly uneven quality: Current estimates indicate that preventable medical errors are the third leading cause of death in the United States.”<sup>2</sup>

## Telehealth: Early Adopters

Telehealth is a rapidly evolving field where, unlike many other trends, tomorrow’s potential is probably greater than today’s promises. One benefit of telehealth is giving the patients the option of receiving care in their own homes—for the patient’s better results, improved comfort, convenience and lowered cost. It is this option that has led to a new philosophy in rescuing an already overtaxed and overstretched healthcare system in the U.S. Early adopters of telehealth have seen success in deploying remote patient monitoring, but these adopters have been faced with problems when it comes to scalability.

One early adopter has been FirstHealth of the Carolinas. By introducing telehealth, Heath Recovery Solutions’ remote patient-monitoring platform has allowed FirstHealth to reduce the number of costly home nursing visits while improving the quality of care. FirstHealth’s home visits per 60 days in 2015 was 4.8 visits, 40% lower than the national average. Of the 175 heart failure patients monitored to date for Community Care, there has been a 40% reduction in the number of hospitalizations as compared to the six months prior to enrollment in the Center for Telehealth. That represents over 80 avoided hospitalizations and a \$560,000 savings to the State’s Medicaid Program.

Another association to take an early interest and find success in telehealth has been the Visiting Nurses Association (VNA). The VNA implemented remote patient monitoring in many areas across the U.S. The VNA then analyzed readmission rates year-over-year and found that readmission rates (for same symptoms) dropped each year as more patients participated the program, dropping well below the national average.<sup>3</sup>

The VNA example illustrates how telehealth can be successful in lessening hospital readmission rates, which is one very important indicator of the success of telehealth. But, there are other success factors they discovered, such as improved patient comfort, decreased patient hospital visits, and real-time monitor alerts that increased caretaker involvement, each of which can be considered a basic goal of any good telehealth program.

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2 A. James Bender & Robert S. Mecklenburg, “How the EMR Is Increasing Innovation and Creativity in Health Care.” HBR, Oct 10, 2017.

3 Patent Study, VNA of Rockford, Illinois. 2016 [https://www.mobilehelp.com/core/fileparse.php/297/urllt/MH\\_Whitepaper\\_RPMMadeEasy\\_NoBleed.pdf](https://www.mobilehelp.com/core/fileparse.php/297/urllt/MH_Whitepaper_RPMMadeEasy_NoBleed.pdf)

## VNA Telehealth Success Improving Readmission Rates

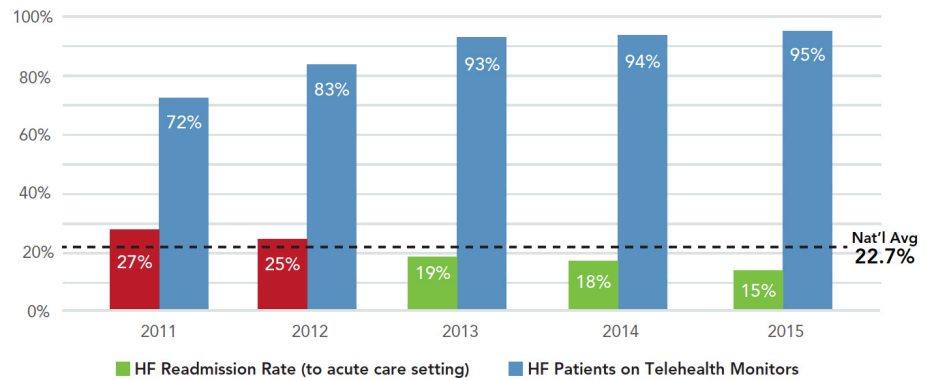


Figure 1. This graph indicates the year-to-year increase of patients on telehealth monitors and the corresponding decrease in hospital readmission.

*The serious need for better patient results and reducing hospital wait-times have pushed for the development of remote patient care solutions across a primed U.S. market.*

## RPM: No Longer Limited

The serious need for better patient results and reducing hospital wait-times have pushed for the development of remote patient care solutions across a primed U.S. market. To date, existing RPM technology has been separated into two arenas: The devices (the hardware) and the apps (the software), with little concern for—or power over—the networks that sends and receives the monitoring records, tests and updates. Until now, RPM tools have used what is available or what they are tied to.

This means that most RPM devices and software are faced with two problems, which contribute to the past inability to scale successfully.

1. They often fall behind the latest technology available because they are tied to the devices for which they were designed and not the new devices and technology that become available.
2. Many patients who live in secluded areas are perfect candidates for RPM success, as it alleviates their burden of coming into the hospital for ongoing tests; however, living in remote areas often means the patients cannot connect to the required network and simply cannot reach of one or more tier-one carrier.

The research in telehealth technology and its ability to impact patients long-term is sound. Its biggest issue, however, has been its inability to scale to much larger patient populations, and its inability to have a larger geographic reach. Scalability is key to making telehealth economically viable and therefore successful for patients. Most technology solutions have been too expensive to maintain in the long-term across

broad patient populations. This underscores the need for a telehealth solution that can deliver long-term clinical components and monitor vital signs to the widest range of locations, from urban to remote, with the ability to economically scale to any size patient population.

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## **RPM: Enhanced by MetTel & HRS**

**MetTel and Health Recovery Solutions (HRS)** have partnered to create the industry's strongest, best-in-breed telehealth solution. This union connects and binds the best devices, the most content-rich clinical apps, and the network to deploy, deliver and collect the lifesaving and life-enriching data.

MetTel is a leading communications solution provider that bundles the widest selection of technologies into innovative and customized solutions. MetTel offers a complete host of telecom and IT products and specializes in mobility, proprietary telecom management software, broadband, SD-WAN, and VoIP network solutions. With facilities-based network in the U.S., Canada and Puerto Rico, MetTel's coverage rivals and beats many tier-one providers. MetTel differentiates itself from the other aggregators by having core network nodes and PoPs in New York, Boston, Atlanta, Chicago, Dallas, Salt Lake City, Ashburn and Silicon Valley.

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*The MetTel-HRS partnership lowers the cost of delivery because of MetTel's massive purchasing power and negotiated pricing.*

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The MetTel-HRS partnership has created an unprecedented combination of the award-winning HRS PatientConnect system matched with MetTel's IoT platform, which provides the maximum connectivity, highest reliability and unlimited scalability. The MetTel-HRS partnership lowers the cost of delivery because of MetTel's massive purchasing power and negotiated pricing. Therefore, MetTel Telehealth decreases scalable costs and offers the best connectivity, while HRS' solutions improve patient outcomes, which means more patients can be reached.

### **The Power Behind the Monitoring**

HRS, founded at Johns Hopkins University in 2012, focuses on changing patient behavior with advanced patient monitoring devices and disease-specific education. Together, MetTel and HRS' remote patient monitoring solutions provide patients with the tools required to address the most common drivers of readmission: medication noncompliance, dietary noncompliance, lack of health literacy, and lack of caregiver support. MetTel provides 4G-enabled tablets that are linked to a range of wireless

integrated devices: blood pressure monitor, pulse oximeter, scale, glucometer and more. Using patient familiar tools such as tablets and smartphones eases patients' reluctance to use the tools.

Patients are monitored by clinicians and caregivers through a HRS web portal or smartphone application. HRS utilizes management by exception which streamlines workflow and reduces overall cost of the program. Automated clinical workflow and notifications flag problems in the monitoring process through advanced dashboards, reporting and communication.

MetTel and its capabilities sit as the foundation that make HRS tools and clinical content work at optimum levels. Patients tap into a stronger network, HRS' tools work more efficiently when they are delivered with the latest technology, and friends, families, and caretakers all have real-time access to the latest conditions and results through a wide variety of channels.

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Figure 2. MetTel and HRS deliver on the promise of Connected Health; driving better clinical intelligence through better connected devices for better outcomes.

### The Game Changer for Telehealth & RPM

Until January, 2018, physicians were limited in their ability to bill for their time spent monitoring, utilizing and engaging in telehealth and RPM services. And, in many cases, they were not permitted to bill at all. Now, reimbursement is available for physician's time spent using RPM technology for chronic disease patients. Physicians can be compensated for their time spent on RPM services (paid by Medicare). The new physician guidelines can be condensed into four separate requirements that must be met in order to be compensated by Medicare, however.

These four are as follows:

1. Clinicians should use digital tools in such a way that allows them to provide ongoing guidance and assessments for patients outside of the in-office visit. This includes the collection and use of patient generated health data.
2. Clinicians must use health technology platforms and devices that collect patient data as part of an “active feedback loop” which CMS defines as “providing PGHD in real or near-real time to the care team, or generating clinically endorsed real or real-time automated feedback to the patient.”
3. Platforms and devices used for this improvement activity must be, at a minimum, “endorsed and offered clinically by care teams to patients to automatically send ongoing guidance (one way).”
4. CMS makes a distinction between technologies covered by this activity, versus “passive platforms or devices” that collect but do not transmit PGHD in real-time. The latter is not eligible technology under this activity.

According to C&M Health Law: “The code includes time spent accessing the data, reviewing or interpreting the data, and any necessary modifications to the care plan that result, include communication with the patient and/or her caregiver and any associated documentation.”<sup>4</sup>

So, telehealth is not just the best means to avoid readmission penalties. It is a legitimate and recognizable source of income for physicians, clinicians, and healthcare facilities alike. MetTel and HRS telehealth systems not only meet but exceed each and all of the aforementioned requirements.

By permitting physicians to bill for their time when using RPM tools, and by further utilizing RPM tools to reduce the Medicare fines, healthcare professional and facilities can use telehealth in new, expanding ways. The Medicare penalties for patient readmission are not always that easy to understand. The following section addresses the fines directly and will shed new light on how they are assessed and how they can be reimbursed.

Of course, as with any healthcare program, we recommend that anyone using this information consult his/her reimbursement specialist for the specifics on how to qualify and submit claims.

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4 <https://www.cmhealthlaw.com/2017/11/new-reimbursement-for-remote-patient-monitoring-and-telemedicine/>

## Medicare Fines: Described, Defined & Understood

According to KHN, “Medicare said the penalties are expected to total \$528 million, about \$108 million more than last year, because of changes in how readmissions are measured.”<sup>5</sup>

Section 3025 of the 2010 Affordable Care Act (Public Law 111-148) requires the Secretary of the Department of Health and Human Services (HHS) to establish the Hospital Readmissions Reduction Program (HRRP). Beginning with Fiscal Year (FY) 2013, the legislation mandates the Secretary reduce Inpatient Prospective Payment System (IPPS) payments to hospitals for excess readmissions on or after October 1, 2012.

The Hospital Readmissions Reduction Program (HRRP) is an important part of CMS’s continued efforts to link payment to the quality of hospital care. HRRP provides a strong financial incentive for hospitals that improve communication and care coordination efforts, and better engage patients and caregivers in post-discharge planning.

### Fiscal Year 2018 Hospital Readmissions Reduction Program

The FY 2018 Hospital Readmissions Reduction Program calculates Excess Readmission Ratios (ERR) for six measures (i.e., AMI, HF, Pneumonia, COPD, CABG, and THA/TKA) to determine the payment adjustment factors for eligible hospitals. Hospitals can review their data to ensure CMS calculated the Excess Readmission Ratios correctly. Refer to the Review and Corrections page for more information on this process.

CMS releases hospitals’ Excess Readmission Ratios in the Inpatient Prospective Payment System/ Long-Term Care Hospital Prospective Payment System (IPPS/LTCH PPS) Final Rule, typically published in early August. CMS will report the Excess Readmission Ratios for the risk-standardized readmission measures for the Hospital Readmissions Reduction Program on Hospital Compare later this year.

### Scoring Methodology

#### Hospital Readmissions Reduction Program

The Centers for Medicare & Medicaid Services (CMS) calculates an excess readmission ratio (ERR) for each of the measures in the FY 2018 Hospital Readmissions Reduction Program (HRRP) to measure hospital performance. CMS then uses the ERRs to determine hospitals’ payment adjustment factors. ERRs are the ratio of predicted-to-expected readmissions for each measure in the Hospital Readmissions Reduction Program:

1. Predicted readmissions are the number of unplanned readmissions CMS predicted based on a hospital’s performance with its case mix and the estimated effect on readmissions (i.e., the hospital-specific effect). Section 3025 of the Affordable Care Act refers to predicted readmissions as “Adjusted Actual Readmissions”.
2. Expected readmissions are the number of unplanned readmissions CMS expected based on a hospital’s average performance with its case mix and the average hospital effect.

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5 Rou, Jordan, Medicare’s Readmission Penalties Hit New High, KHN, August 16, 2016



## **Payment Adjustment**

### **Hospital Readmissions Reduction Program**

The Centers for Medicare & Medicaid Services (CMS) calculates an excess readmission ratio (ERR) for each of the measures in the FY 2018 Hospital Readmissions Reduction Program (HRRP). CMS uses the ERRs to determine payment adjustment. CMS calculates the payment adjustment factor from historical data for Medicare fee-for-service (FFS) patients discharged with one or more conditions specified under the program.

Hospitals can calculate their payment adjustment percentages using the payment adjustment factor. CMS posts the payment adjustment factors for all hospitals each year in August with the Inpatient Prospective Payment System/Long-Term Care Hospital Prospective Payment System (IPPS/LTCH PPS) Final Rule. CMS does not include this information in Hospital-Specific Reports (HSRs). Users can download a supplemental data file to find the payment adjustment factor for their hospital. CMS will notify hospitals when the IPPS/LTCH PPS Final Rule is published.

### **It is the HRRP that Directly Links Payments to Outcomes**

The HRRP was established under the Affordable Care Act with the goal of improving healthcare for Americans by linking payment to the quality of hospital care. It provides a strong financial incentive for hospitals to improve communication and care coordination efforts, and to better engage patients and caregivers, with respect to post-discharge planning. CMS includes measures of conditions and procedures that significantly affect the lives of large numbers of Medicare patients. Prior research has shown that hospital readmission rates for these patients vary across the nation, indicating an opportunity to improve the quality of care and save taxpayer dollars by incentivizing providers to reduce excess readmissions.

### **Hospitals: Included/Excluded**

As defined in section 1886(q)(5)(C) of the Social Security Act, “applicable hospitals” with respect to HRRP include subsection (d) hospitals (defined in section 1886(d)(1)(B) of the Social Security Act). Specific to HRRP, as finalized in the FY 2013 IPPS/LTCH PPS Final Rule (77 FR 53397), subsection (d) hospitals do not include the following types of hospitals and hospital units:

- Long-term care hospitals
- Critical access hospitals
- Rehabilitation hospitals and units
- Psychiatric hospitals and units
- Children’s hospitals
- PPS-exempt cancer hospitals

## **MetTel Telehealth: Making It Easier to Avoid the Fines**

MetTel-HRS solutions supply leading home care agencies with the most advanced remote monitoring platform focused on monitoring vitals and changing patient behavior to reduce readmissions and improve clinical outcomes. HRS' disease-specific engagement kits are customized with educational videos, care plans, medication reminders, patient surveys while integrated with Bluetooth peripherals to engage patients. For clinicians, HRS' software is delivered via MetTel's inclusive network that allows for the management of high-risk patients and provides seamless communication with them through video chat, wound imaging, voice and text messaging. For family members and caregivers, HRS' software gives them the ability to be fully involved in their family member's care and well-being.

The MetTel-HRS partnership increases patient engagement by empowering patients in their own recovery and wellness through alerts, medical education, video chat with a clinician and multiple digital tools. The partnership cut costs by, among other ways, reducing skilled nursing visits for healthcare staff and cuts telemonitoring FTEs through video visits and wound imaging. And, most vital to reducing readmissions and thus lowering the Medicare imposed fines, our remote care platform is clinically proven to help reduce hospital readmissions and reduce clinician overhead, a direct strain on profitability. With MetTel's management by exception approach to Telehealth, clinicians can visualize, at a glance, patients that are at high risk for readmission alongside those who are on track with their recovery plan.

## **MetTel & HRS: Delivering on the Promise**

MetTel's core capabilities directly match the much-needed back-end of the telehealth needs. With its complete offering in Enterprise Mobility Management, MetTel has developed a total package to deliver state-of-the-art RPM. MetTel deploys, monitors, manages and maintains HRS RPM devices.

MetTel offers:

- Kitting and deployment
- Cross-platform wireless data plans (unique in the industry)
- Global connectivity where necessary
- Vital sensors and wearables
- Android and iOS tablets and smart phones
- Procurement and financing
- Mobile device management
- Project management and level-1 support

## HRS Capabilities: The Best in RPM Tools & Content

### PatientConnect® Features

- Disease specific educational videos
- Teach back quizzes
- Video visits
- Daily health questions
- Clinician chat messaging
- Medication reminders
- Biometric schedule reminders
- Dietary guidance
- Daily performance tracking
- Audible and visual reminders
- FDA Biometric Bluetooth devices
- Family/caregiver invitation control
- Portable to bring to physician/hospital

### ClinicianConnect® Features

- Disease specific care plan presets
- Care plan goal setting and tracking
- Risk alert controls
- Risk alert notifications
- Video visits
- Voice calls
- Chat messaging
- Wound imaging capture
- Access from smartphones, tablets or portal

### CaregiverConnect® Features

- Access from smartphones and tablets
- Patient performance tracking
- Video visits
- Voice calls
- Chat messaging
- Communication with clinician and patient



Figure 3. MetTel provides familiar devices connected to HRS' platform for ease-of-use and cost savings.

## MetTel & HRS in Action

Current customers include Catholic Health, Sutter Health, Penn Medicine, First Health of the Carolinas, MaineHealth, and Johns Hopkins.

FirstHealth of the Carolinas, widely applauded for creating the nationally renowned Chronic Disease Pathways evidence-based standards of care, partnered with HRS to transform their telehealth remote monitoring program in 2014. What began as a 25-unit trial of the HRS system has grown to a full-scale partnership that utilizes over 160 units and serves high risk patients with chronic disease across eight North Carolina counties.

HomeHealth Visiting Nurses of Southern Maine (HHVN) launched HRS PatientConnect Platform in 2015 to support the care of their most fragile and at-risk patients. HHVN achieved a dramatic 75% reduction in overall 30-day hospital readmissions for chronic disease patients within a 12-month period.<sup>6</sup>

McAuley Seton Home Care, a 4.5-star rated home care division of Catholic Health, partnered with HRS in November 2015 to monitor over 400 patients with HRS' advanced remote monitoring platform. While New York's average for 30-day home care hospital readmissions is 16.4%, Catholic Health and HRS were able to achieve a 6% readmission rate for its CHF patients last quarter. The low 6% 30-day readmission rate is mostly contributed to extremely high daily compliance rates.

## Conclusion

Utilizing MetTel's deployment resources and IoT Single SIM technology, the MetTel-HRS partnership means better patient care and outcomes. HRS is not just a delivery system. It is the combination of software and content that has made HRS unmatched in the industry. It is the combination of HRS' products delivered by MetTel that together serves all three aspects of the RPM requirements: **The patients and what they need; the clinicians and what they use; and the caretaker (or third-party) and the tools they need to interact and educate themselves during the care process.**

The MetTel-HRS partnership provides the devices, the apps, the content for the apps and the network to more efficiently receive and deliver information. And MetTel's infrastructure and abilities can provide any number of devices no matter how large, and at a lower cost.

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### *The Power of the Two, MetTel and HRS: What the Industry Needs*

- 1. Better Patient Care and Outcomes*
  - 2. MetTel Scalability*
  - 3. Lower Cost of Delivery*
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<sup>6</sup> The 30-day readmission rate for 474 patients placed on the HRS PatientConnect Platform was 4.2% between April 2015 to April 2016. The state average for 30-day readmissions in Maine is 16.6%.

## **MetTel Telehealth Benefits the Patient, the Healthcare Provider & the Caregiver**

The MetTel-HRS model combines innovative patient engagement software with biometric monitoring and mobile apps. This approach delivers the confidence and support patients need to improve their behavior and actively participate in managing their care.

The software features disease-specific educational videos, teach-back quizzes, health surveys, video visits, medication reminders, wound imaging, and texting. The mobile apps assist clinicians in providing real-time case management and allow families to stay connected.

There can be no more impressive result than improving patient outcomes, but improving patient comfort level and lifestyle is a close second. MetTel Telehealth solutions are designed with the patient's needs in mind in conjunction with the requirements of the healthcare provider. MetTel's Telehealth focuses on the aforementioned trifecta, the true measure of any telehealth program: 1) improved health **outcomes**, 2) reduced hospitalizations and **readmissions**, and 3) **reduced costs** for both the payer and care provider.

## **MetTel Telehealth Overall Benefits: Reducing Costs & Improving Results**

- Improves patient outcomes
- Gives immediate access to vital information
- Healthcare provider can make necessary and appropriate patient interventions quicker and more accurately
- Reduces the frequency and necessity for homecare nursing visits
- Better outpatient care increases overall patient results and lowers readmissions
- Reduces the healthcare provider's IT burden
- Lowers cost of care delivery
- Reduces readmission penalties
- Offers a consistent and predictable deployment process
- Faster and easier telehealth program startup
- CAPEX and OPEX models for hardware

There can be no doubt that the MetTel-HRS partnership creates a telehealth powerhouse that delivers on the promise of Connected Health. Together, they are driving better clinical intelligence through better connected devices for better outcomes.

## **For More Information**

Contact your MetTel agent

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