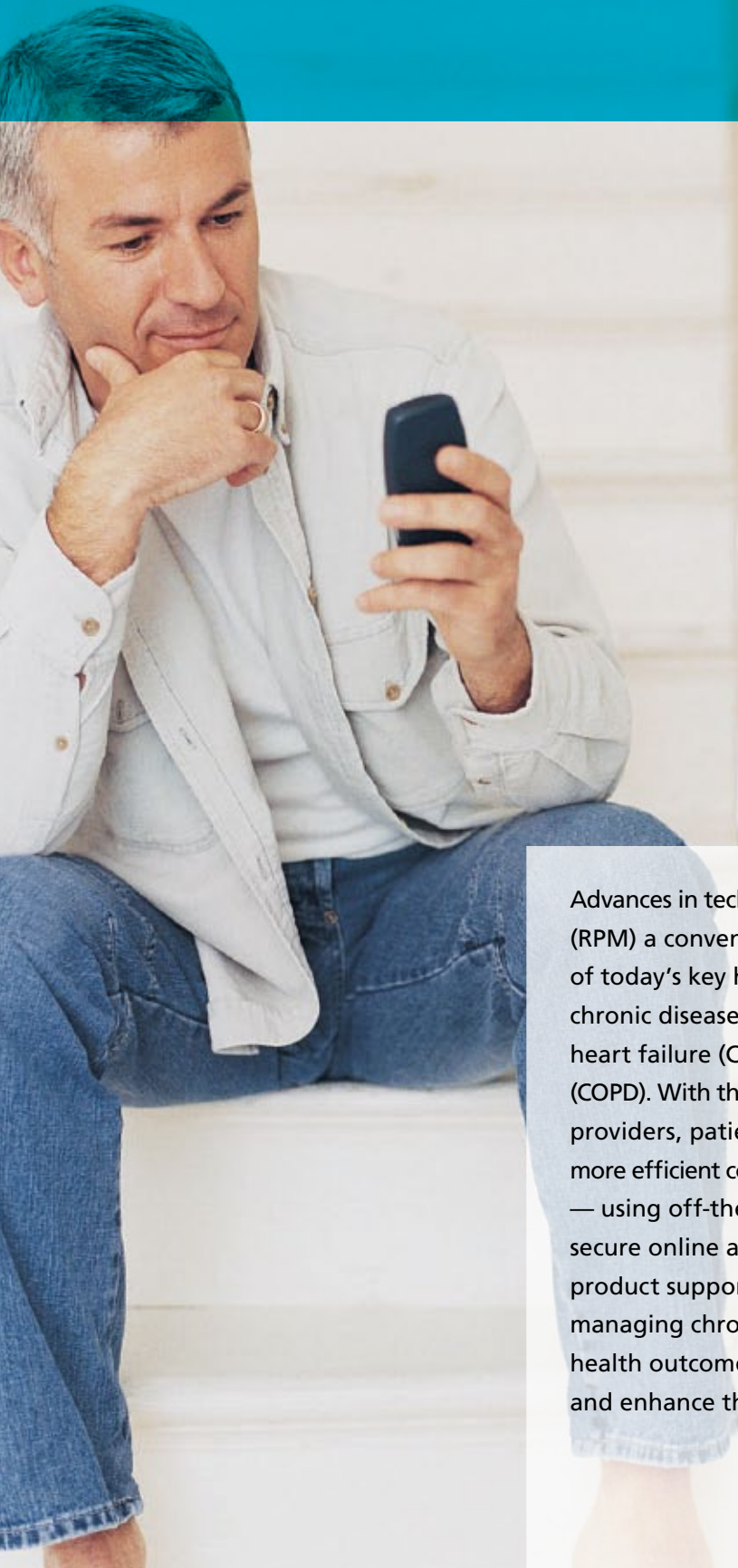


Alcatel-Lucent TeleHealth Manager

Delivering the benefits of remote patient
monitoring – To healthcare providers,
patients and third-party payers

Alcatel·Lucent 

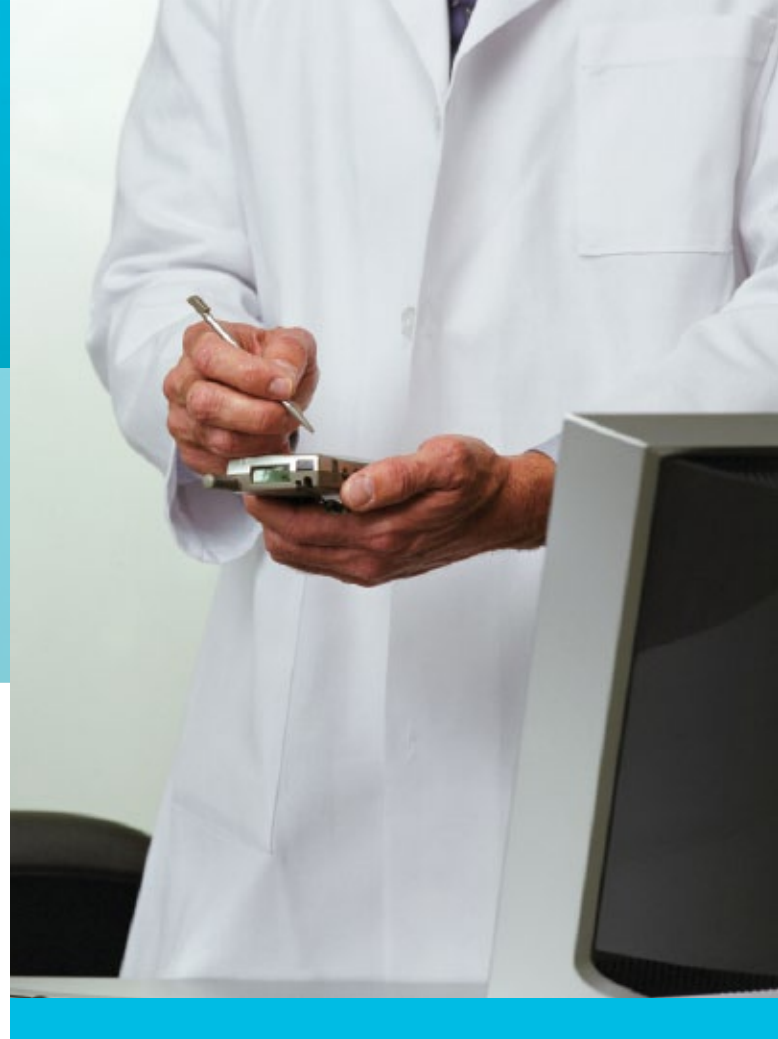




Advances in technology have made remote patient monitoring (RPM) a convenient, cost-effective tool for addressing one of today's key health care challenges — managing pervasive chronic diseases, such as diabetes, hypertension, congestive heart failure (CHF) and chronic obstructive pulmonary disease (COPD). With the Alcatel-Lucent TeleHealth Manager, healthcare providers, patients and third-party payers can all benefit from more efficient collection and analysis of health-related information — using off-the-shelf health monitoring devices and simple, secure online access to collected data. This end-to-end RPM product supports a proactive approach to monitoring and managing chronic diseases, which has been shown to improve health outcomes, reduce costs, increase clinical efficiency — and enhance the quality of patients' lives.

THE VALUE OF REMOTE PATIENT MONITORING

Healthcare systems around the world are now strained by an aging society — and an increase in chronic diseases, such as diabetes, hypertension, congestive heart failure (CHF) and chronic obstructive pulmonary disease (COPD). Remote patient monitoring (RPM) helps meet these challenges through more efficient collection and analysis of health-related information.



For healthcare providers

Increased compliance levels

A patient's compliance with prescribed therapies is never guaranteed. However, RPM delivers reliable evidence of compliance through regular, real-time physiological readings. This monitoring process helps compel patients to follow prescribed therapies, and recent studies have shown that it can increase compliance by nearly 40 percent.¹

Better informed decision making

When patient information is limited, choosing an effective treatment can be challenging. However, RPM offers a detailed picture of each patient's situation, based on weeks — or even months — of reliable data collection. This history enables more informed treatment decisions and helps increase the chances for a better health outcome.

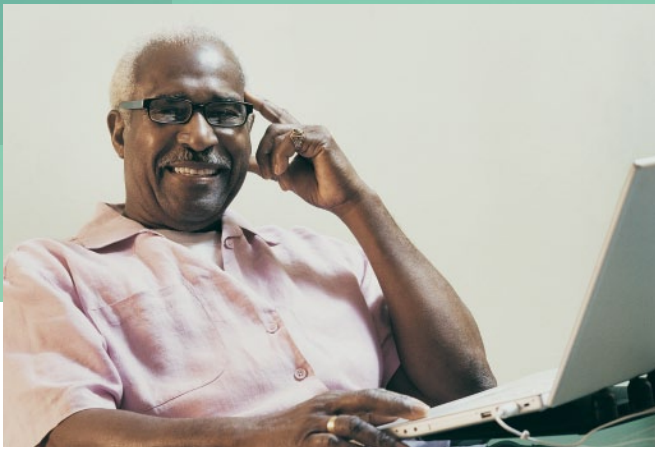
Increased clinical efficiency

RPM helps healthcare providers make better use of their time — and data resources. For example, it reduces office visits through remote monitoring of patients with mild conditions, allowing those hours to be redirected to a larger number of patients — or focused on high-risk cases. Collaboration can also be more efficient, because multiple healthcare providers can view the same online data simultaneously, helping to prevent confusion and administrative errors.

Financial benefits

In “pay-for-performance” environments, RPM helps you bring more patients through the door — by improving health outcomes, increasing clinical efficiency and providing the attraction of cutting-edge technology. In addition, a strong movement is underway for policy changes that would result in reimbursement for RPM services, from both public and private payers.

¹ Berg, Gregory D., “Diabetes Disease management in a Community-based Setting,” Managed Care, June 2002.



For patients

Today's telecommunications technologies have made RPM an affordable option for almost anyone managing a chronic medical condition. As a result, traditional institutional care can be transformed into proactive, patient-centric healthcare — which improves health outcomes, clinical efficiency and patients' quality of life.

Greater empowerment

More and more healthcare providers are recognizing that patient empowerment contributes to improved health outcomes. RPM can play a crucial role, by giving patients easy-to-use health monitoring tools. These devices enable more robust participation in their own health care — and a normal life at home, uninhibited by their condition.

Improved health outcomes

RPM has been shown to produce better health outcomes. For example, studies demonstrate that RPM helps reduce HbA1c levels in patients with diabetes by up to 15 percent after just six months². These improvements also help minimize dangerous related health issues that result in readmissions, acute care and even surgery. With a proactive RPM product, many negative outcomes can be controlled — and often eliminated.

² "Diabetes management program for an indigent population empowered by telemedicine," *Diabetes Technology and Therapeutics*, 2003, Vol. 4, No. 6.

For third-party payers

Third-party healthcare payers and insurers now face the financial consequences of an aging society — and more pervasive chronic diseases. RPM can play a valuable role in cost containment, which has become a crucial priority.

Reductions in acute and intensive care

Patients with chronic medical conditions often suffer from related health issues that require acute care and, in some cases, surgery. RPM can significantly reduce the high costs of this healthcare — by monitoring and managing chronic conditions before avoidable related health issues develop. This proactive approach reduces expensive claims, while improving the quality of patients' lives.

Lower homecare costs

Fees for homecare nurses can add up quickly, especially in an era of rising transportation costs. RPM has been shown to reduce these expenses by improving a patient's condition — which minimizes the need for homecare visits.

Improved clinical efficiency

Healthcare professionals often see patients who could be treated without trips to an office or emergency rooms. With RPM, doctors can manage these patients remotely while spending most of their time with high-risk patients. This approach can alleviate the shortage of beds and human resources for many health organizations.

Decreased costs for homecare equipment

Previously, RPM relied on expensive, cumbersome monitoring units. But today's technologies offer more affordable, convenient options. Monitoring can be customized to nearly any patient condition, anywhere, for only dollars a day.

Reduced travel claims

Consistent RPM minimizes trips to hospitals, which lowers the number of associated claims. Not all travel costs are covered by third-party payers, but RPM can significantly reduce the need to pay for ambulance claims and other travel expenses.





HOW THE TELEHEALTH MANAGER WORKS

With this interactive, server-based product, medical data can be collected and transmitted from almost anywhere using a health-monitoring device. The Alcatel-Lucent TeleHealth Manager also stores the information and allows it to be shared securely with a patient's personal and professional caregivers.

Streamlined data collection and transfer

Patients can use compatible, off-the-shelf medical devices to collect their physiological data. To provide a context for these readings, they also enter relevant lifestyle information or respond to scripted health status questions. These supplementary responses provide crucial details, such as whether a blood glucose reading came before or after a meal. Patients with mobile phones can enter this data directly into a mobile application.

Using Bluetooth technology, the patient's information is transmitted to a relay point, which can be a mobile phone — or a gateway connected to a residential phone. Signal backhaul using a PC or home server is also available, for special orders.

Then the data is securely transferred to a central database, using the existing telecommunications infrastructure. The process is completed in a matter of seconds, providing near real-time monitoring and response.

Secure data access and reporting

Collected data can be reviewed easily, using a secure online web portal with a simple user interface. A selection of online reports is also available to help patients and their caregivers gain a better understanding of various health conditions. The reports include trend graphs, pie charts and tabulated data, which can be customized, viewed, printed or exported to an existing electronic health record (EHR).

Simple, reliable alerts

The Alcatel-Lucent TeleHealth Manager can also deliver alarms, notifications and reminders to patients and their caregivers. The communications are fast and convenient, using text messaging (SMS), e-mail or telephone interactive voice response (IVR) systems.

- *Alarms* – notify caregivers when readings fall outside the acceptable target ranges established by a patient's wellness management program. They can help maintain compliance with strict medical protocols.
- *Notifications* – let caregivers know whether patients have taken a reading — or failed to take a reading — within a defined time period.
- *Reminders* – can be used to prompt patients to complete a health-related task, such as taking a test or medication.

Strict privacy and regulatory compliance

The Alcatel-Lucent TeleHealth Manager adheres to the following stringent standards to ensure that personal health information is never compromised.

- The technology has passed a strict information security audit and is compliant with Canadian health privacy legislation.
- Data can also be configured to meet regional data export requirements.

In regions where the Alcatel-Lucent TeleHealth Manager is considered to be a regulated medical device, it is ISO 13485:2003 compliant, Canadian Medical Device Conformity Assessment System (CMDCAS) compliant and has received CE marking in Europe. It is also in the process of obtaining FDA clearance in the United States.





BENEFITS OF THE TELEHEALTH MANAGER

The Alcatel-Lucent TeleHealth Manager offers key health and financial advantages to healthcare providers, patients and third-party payers. When compared to other RPM solutions, the Alcatel-Lucent TeleHealth Manager delivers leading value, simplicity and convenience.

For healthcare providers

Exceptionally low capital cost per patient

Many RPM solutions available have very high capital costs per patient — often approaching \$5,000 US dollars for original equipment. At these prices, monitoring is out of reach for most patients.

The Alcatel-Lucent TeleHealth Manager brings down these costs by using off-the-shelf medical devices. In many cases, patients already own a supported medical device. If not, one-time set-up costs are generally below \$500 (USD).

Easy access to patient information

The Alcatel-Lucent TeleHealth Manager provides easy access to accurate information, which contributes to more informed treatment decisions, improved clinical efficiency and significant financial benefits.

For patients

Proactive disease management

The Alcatel-Lucent TeleHealth Manager provides an affordable, accessible option for managing a variety of chronic medical conditions. This shift toward proactive patient-centric care empowers patients — and improves compliance levels and health outcomes.

Outstanding ease of use

The Alcatel-Lucent TeleHealth Manager combines off-the-shelf medical devices, standard mobile phones and a simple user interface. As a result, patients can easily monitor their condition — and review collected information online.

Convenience without high cost

The Alcatel-Lucent TeleHealth Manager is compatible with standard mobile phones from well-known vendors like Nokia and BlackBerry. Today's extensive cell phone coverage allows patients to take readings whenever and wherever it is convenient. And in many cases, they already own a supported cell phone, which helps reduce the cost of their healthcare.

For third-party payers

The Alcatel-Lucent TeleHealth Manager provides financial benefits by minimizing intensive and acute care visits, reducing costs for expensive homecare equipment, improving clinical efficiency and decreasing travel claims.





CHOOSING THE RIGHT RPM PARTNER

To gain the greatest benefit from remote patient monitoring, healthcare organizations should work closely with Alcatel-Lucent, who will leverage our strong relationship with service providers.

Service provider networks

Service providers have been delivering telecommunications and entertainment services for more than 100 years. As a result, they can leverage an established network infrastructure and customer relationships to ensure a successful RPM deployment. By gaining access to a shared RPM infrastructure and service process, healthcare providers can benefit from significant economies of scale. Service providers can also host a TeleHealth Manager platform, for a more cost-effective and scalable solution.



Alcatel-Lucent RPM expertise

As a worldwide leader in telecommunications, Alcatel-Lucent offers an experienced staff to help expand and customize RPM capabilities. For example, the Alcatel-Lucent TeleHealth Manager can be integrated with current billing systems and contact management systems, using the Alcatel-Lucent OmniGenesys Contact Center, which provides first-level technical and medical triage and control. Or business process automation can be incorporated with the Alcatel-Lucent 8550 Web Services Gateway (WSG) to provide information system interoperability.

For more information or to contact a member of our sales team please visit us at:
www.alcatel-lucent.com/TeleHealth.

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