Are You taking costs out of the system or adding them? Part 2 - How Connected Medical Devices can take costs out of the system

Part 1 of this series examines reasons underlying the historically cost-additive nature of healthcare over the decades, plus the emergence of an evolving value-based service and contracts model. The newer model is essentially redirecting those within the healthcare space, in innovative ways, to seek reimbursement via means that can assist in keeping costs limited.

We went on to speak to the subject of value in the space as well as the necessity for the procuring of patient data. Part 2 addresses the latter two subjects in some detail.

Medical devices have been shown to impact patient outcomes for the better, and in many cases, better than drugs.

Connected systems are *key* to discovering how to take costs out of the system and to reversing the trend toward being cost-additive. However, companies seeking to be a part of the solution must be forward-looking and forward-thinking.

First of all, providing for lower costs while bettering outcomes mandates the need for the availability of enough machinery to allow every patient access to needed monitoring and therapies. That should also be part of the formula for value-based incentives when undertaking measures that help take costs out of the system. Improved patient outcomes with connected care can translate directly to improved bottom lines, with cheaper ways to providing therapies and keeping a relationship vital between doctor and patient.

Data acquisition is a crucial part of the key

The path to freeing up medical staff by providing automatic patient monitoring and maintenance via connected care begins with the acquisition of patient data.

Data speaks to healthcare professionals through monitoring, alerts, early detection and, when applicable, dosage administration. Data is derived from these factors and correlated with therapeutic data. With that in mind, they are delivering therapies or diagnostics, or both. They are doing it more frequently, cheaper, easier, and with lower barriers to being done with efficacy.

One way to begin the process might look like this

As medical device companies commence their shared risk/value-based contracts, they begin collecting two sets of data. One set involves the technological aspects of the device, its connectivity and the protocols to be considered for its use.

Two, cost data is obtained which will impact every aspect of development, clearance, production, use and treatment.

One way of gathering medical data is to connect the medical devices to their respective systems and, through the delivery of monitoring and/or therapies, gain feedback— then combine that with available data from the aggregate systems within the network.

All collected data will then need to be measured and correlated with data from *other* therapies and protocols. From this compilation and its attendant analyses come evidence. Next will be to demonstrate use cases from the measurements and analyses.

Once the data has been examined, other facts may be brought in and correlated with that aggregate of extant data. With companion software and connective protocols, the systems can subsequently be networked together to form a unified system that provides all the correlated information, measurements, analyses and evidences needed to then ask the question: "Can this system actually be used to change or modulate a therapy and change outcomes based on the data gathered, the correlations made and the measurements performed?"

Whenever a device company can perform these operations in diagnostics, monitoring or therapies with a resultant substitution of a more effective therapy for a less-effective one—and wherever they can reveal the improvements derived from such therapies, a major milestone has been achieved.

If, after this juncture, medical device companies can consistently show how their product will be a better solution economically, therapeutically and as to usability, it will become normative for medical device firms to take costs out of the healthcare system.

In Closing

The heart of this topic is value-based care, and if the medical device firms seeking to develop efficacious therapies through connected care want to add value, they should be collecting patient data.

What they do and gain from data will help them ultimately add value into the system and take less money out.

Hospitals are becoming busier and more crowded, and medical professionals have to see more patients than ever while trying to make and articulate hundreds of decisions in the average day. Connected devices are not a fix-all for the issues facing the healthcare community, but they are a great start. And, if research and development is done correctly at the beginning, a clearly defined market will have access to less expensive alternatives to the old, cost-additive model of healthcare.

Remembering that data is the most important component of the medical picture will help companies seeking to be a greater part of the change component in healthcare, because it provides an avenue to the knowledge needed for accurate diagnoses and optimal therapies. Data also provides greater efficiency in delivery of therapies over molecular medicines in many ways.

If medical device manufacturers are not pulling the data out with their technology, and if they are ignoring the data, they are simply not able to add much value into the healthcare system. If this is the case, it would serve such companies well to consider redirecting their efforts toward developing their medical device with data capture and retrieval in mind.