Telemedicine and Business Efficiency: Improving Patient Outcomes

White Paper
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Clinicians, Business Efficiency and Patient Outcomes

As a healthcare professional, you must efficiently and consistently provide the highest possible level of patient care. Optimal care requires patient visits and continual communication with the patient and the patient's family. Running your practice successfully requires scheduling yourself and your resources, managing issues of compliance and liability, and achieving patient satisfaction.

The need to improve patient outcomes threatens the viability of your existing workflow

But the need to improve patient outcomes threatens the viability of your existing workflow. Patients will become increasingly involved in their own care, and this will place more demands on your time. To meet this challenge, you have two options. You can invest further in your legacy workflow, hiring administrative staff and nurses. Or you can scale your business: augment your workflow with affordable tools that enhance asynchronous communication to increase your efficiency and improve patient care.

To meet the needs of both the patient and the clinic, you need to avoid unnecessary patient visits, yet still improve patient care. Optimizing patient visits requires scheduling each visit carefully and knowing in advance what care to provide. If you can know more about a patient's condition, you can schedule fewer visits, reduce travel, and create a more appropriate plan of care.

Four Essential Needs

This paper discusses the tools available to the healthcare professional to meet four essential needs:

- to allow your practice to increase its efficiency
- to achieve increasingly successful patient outcomes
- to provide timely, accurate information to the patient's family
- to reduce liability through centralized documentation

The Challenges of Efficiently Providing Patient Care

Several factors make it difficult to provide patient care efficiently. Minimizing inefficiencies will allow you to cost-effectively provide consistent care.

Distance Near or far, bringing a physician and a patient together always has logistical costs. These costs—time, fuel, and convenience—burden the patient who must travel to a clinic, and the physician who visits patients in nursing homes or other care facilities. The burden of travel means patient visits are precious, and if not properly timed can be costly and ineffective.

Communication With patients at a distance, communication problems—phone tag, incomplete or inaccurate information—can be a detriment to patient care. Regular and rich communication with nurses, specialists, patients, and families allows you to know when to see the patient and what care to provide.

Coordination You need to work as a team: consulting with specialists, instructing nurses, coordinating with colleagues to care for patients when you're unavailable. Any weakness in this coordination can hinder patient progress.

The Effects of These Inefficiencies

Beyond creating friction in your business process, obstacles of distance, communication, and coordination can have a negative impact on your ability to provide patient care.

Impeding Patient Care Delays in care and adjustments to care plans threaten patient outcomes. Mitigating these factors—through accurate, asynchronous communication—is key in providing the best patient care possible.

The Threat To Your Bottom Line To overcome distance and use time effectively is key in succeeding as a business. Regular and rich communication can allow you to provide a consistent level of care while scheduling your time and facilities wisely. Anything less puts you at a disadvantage, introducing waste into your schedule and losing opportunities to see new patients.

Addressing the Problem

To communicate and manage patient information efficiently, you rely on some important tools. To increase that efficiency, you need to improve those tools.

The Tools You Have

Healthcare professionals use established tools and processes for working effectively and efficiently. You've invested in technology and built your operation around a workflow based on those tools.

Your clinical team The network of nurses, specialists, and partners you work with is essential in providing patient care.

Your communication tools Phone, email, and personal communication are central to your ability to deliver and receive the information you need.

EHR / EMR Electronic health records and electronic medical records store and organize the information you need.

The Missing Pieces

Although you have a reliable system of people and tools to help you provide care, the effectiveness of this system is limited. Improved efficiency is key in increasing patient volume and quality of patient outcome, but the industry in general is not achieving that efficiency. "The health care industry lags behind others in its use of technologies that promote high quality of service and efficient organizational processes." (DesRoches et al., 2010, p. 639).

Tools that provide the following improvements in your communication process can help you achieve increased quality and efficiency.

Enhanced point-of-care information Nursing staff at a clinic or long-term care center need to send and receive detailed information easily while caring for a patient.

Enhanced communication Your tools need to work synchronously and asynchronously to accommodate irregular schedules. They need to facilitate and document detailed communication. And they need to store information centrally and securely to maintain

HIPAA compliance and reduce your liability.

Detailed updates between visits Rich communication between visits—text, pictures, and video—can help you provide continual care with fewer patient visits.

Enhancing Collaboration and Enriching Communication: The Conex Solution

Despite the health care industry's technological lag, telemedicine is being increasingly adopted by healthcare professionals, with solid success. Recent research shows telemedicine to be effective and suggests that broader use would improve outcomes and lower costs: "Perhaps most compelling is that over 60% of all teleconsultation resulted in resolution of the referring provider's question. This suggests that a network of physicians with fast, reliable, and convenient access to subspecialists would be able to achieve much greater quality of care delivered at a significant cost savings" (Mahnke, Jordan, Bergvall, Person, & Pinsker, 2011, p. 38).

The Conex telemedicine system leverages technology already in use—widespread, inexpensive and simple—to enhance patient care and increase efficiency. Conex is based on the software as a service model: physicians send and receive detailed patient information—pictures, video, audio and text—with no need to replace existing hardware or software.

Conex Features

Features of the Conex system include:

- works with laptops and mobile devices
- works with your existing back office software
- complies with HIPAA regulations
- requires no upfront cost, and low monthly cost
- includes video conferencing capabilities

Conex Benefits

Introducing Conex can bring the following benefits to your workflow:

1. Increased efficiency

- Conex facilitates clinical collaboration.
- Evaluating patients remotely reduces travel.
- Complete and accurate communication leads to an effective care plan.

2. Improved patient care

- Conex bridges the gap between face-to-face engagements.
- Quick, accurate communication helps avoid unnecessary procedures.
- More frequent communication increases patient accountability.
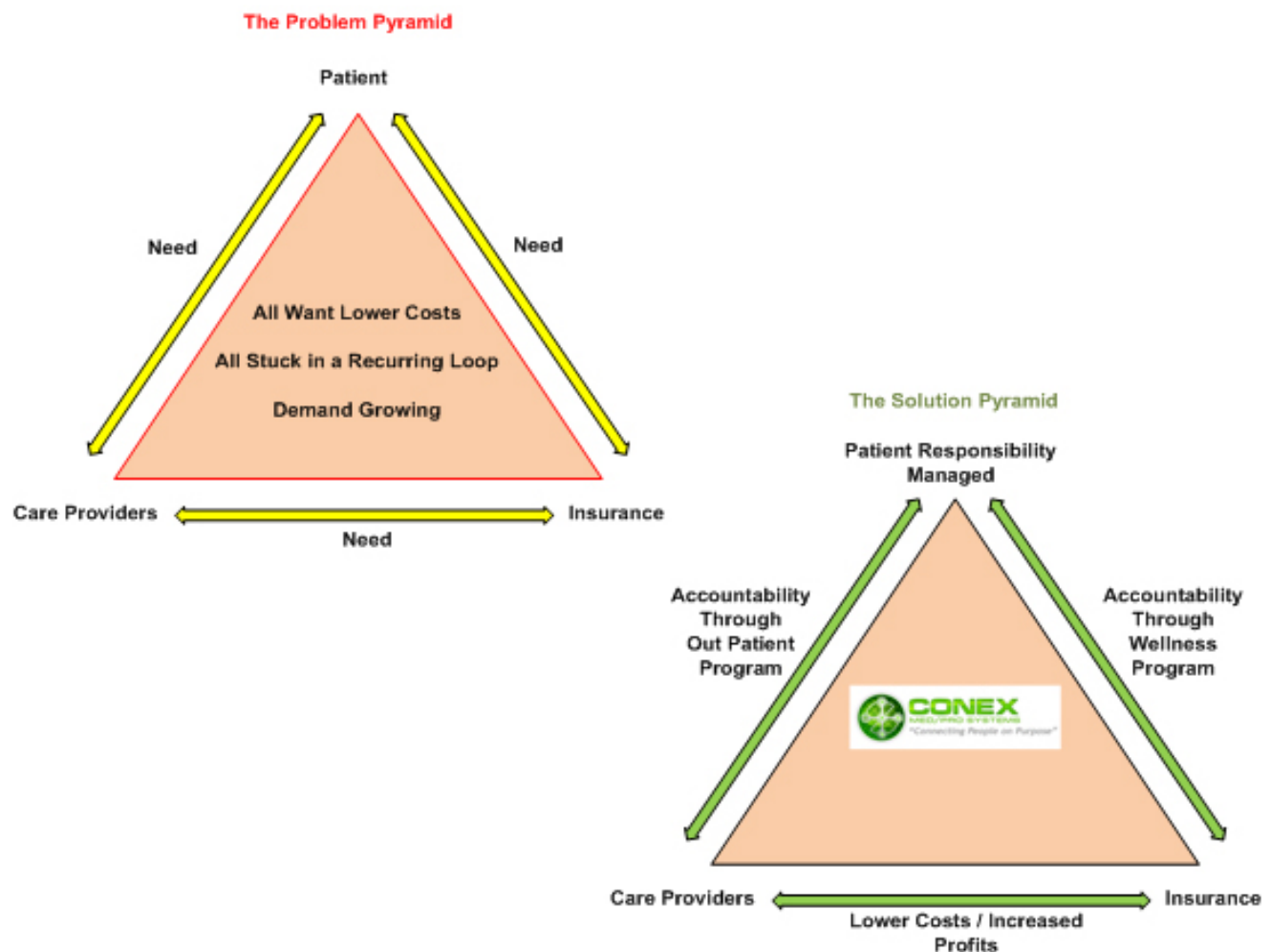
3. Enriched communication

- Video and images deliver detailed information.
- Updates from medical team can be made available to patients' families.
- Web-based communication promotes frequent patient contact.

4. Reduced Liability

- Conex's images and text provide records of your communication.
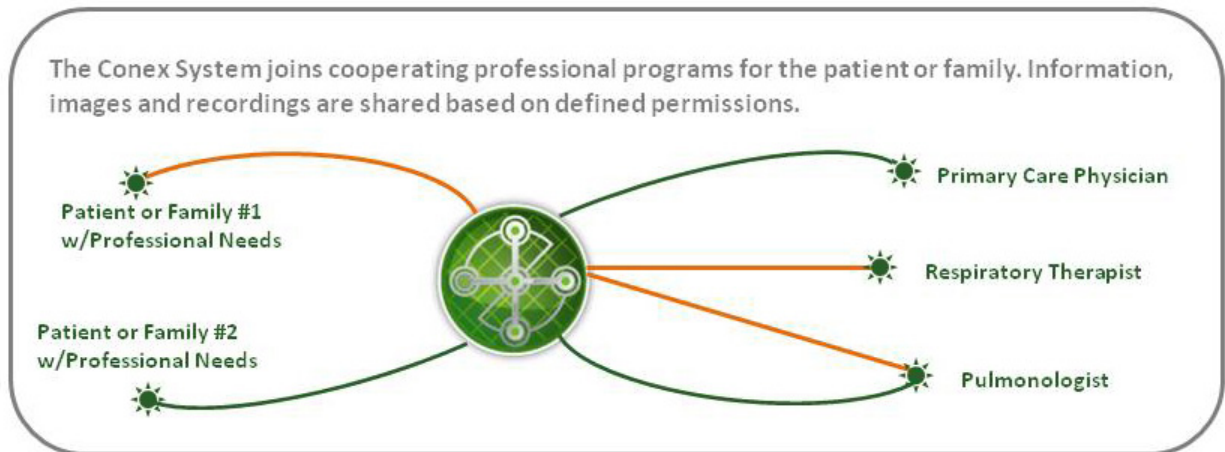- Data is stored securely to meet HIPAA requirements.

Continual Communication Promotes Patient Accountability

Communication between visits and after hospital discharge encourages patients to adhere to a care plan, increasing the likelihood of a positive outcome. As a result, care providers and insurers benefit from increased efficiency. The figure below illustrates how Conex contributes to these advantages.

The Problem Pyramid

Patient

Need   Need

All Want Lower Costs

All Stuck in a Recurring Loop

Demand Growing

Care Providers ⟷ Insurance
Need

The Solution Pyramid

Patient Responsibility
Managed

Accountability   Accountability
Through   Through
Out Patient   Wellness
Program   Program

CONEX
"Connecting People on Purpose"

Care Providers ⟷ Insurance
Lower Costs / Increased
Profits

Collaborating via Conex

Collaboration benefits the patient by applying the expertise of physicians and specialists. Conex facilitates this collaboration by providing a channel for communication among the medical team, and with the patient and family.

The Conex System joins cooperating professional programs for the patient or family. Information, images and recordings are shared based on defined permissions.

Patient or Family #1 w/Professional Needs

Patient or Family #2 w/Professional Needs

Primary Care Physician

Respiratory Therapist

Pulmonologist

Real-World Examples

For these health care professionals, implementing Conex has led to real improvements in efficiency and patient care.

Virtual Presence at West Valley Medical Center

Dr. Steven Fuller is the only pulmonary specialist at West Valley Medical Center, and he relies on Conex to keep him connected when he can't be present in the intensive care unit. "The whole advantage is that it allows me to have a virtual presence," Fuller says. Since June of 2010, Conex has helped to extend Fuller's availability to evaluate patients.

Using Conex to view images, Fuller can more efficiently and effectively care for ICU patients. After he first sees a patient and creates a Conex record, Fuller receives images and video updates from ICU nurses as the patient's condition evolves. Before using Conex, Fuller often had to rely on phone calls from ICU nurses, presenting verbal descriptions of a change in a patient's condition. But relying on ICU staff's description—non-standardized and subjective—was often a problem. The main Conex advantage, according to Fuller, is that it provides images on which to base his decisions. "It makes all the difference in the world," according to Fuller.

By expanding Fuller's ability to evaluate a patient accurately, Conex has improved patient care and lowered costs. He tells the story of a patient with an apparently infected IV site. A nurse posted a photo to Conex and asked to remove the IV. The patient was attached to a respirator and would have required ambulance transport to and from a radiologist for a special IV treatment. But on seeing the photo, Fuller determined it was a skin irritation, not an infection, and that there was no need to remove the IV. By examining a picture in Conex, Fuller spared the patient a risky—and expensive—transport to another facility.

In the future, Fuller imagines West Valley expanding their use of Conex to allow him to quickly, remotely make an initial evaluation of a new patient. Upon seeing a new patient, a nurse will send a video—including the patient, monitors, and respirators—via Conex so Fuller can make an evaluation from wherever he may be.

Enhanced Communication at The Elks Wound Center

"From a wound care perspective, if somebody can show me a photograph, I can guide care so much easier than if someone tries to describe it."

The Wound Clinic at Elks Wound Center has used Conex since November of 2010. Physicians and staff at the clinic work with nurses at four remote locations, using Conex to review information on new patients and ongoing cases. Dr. Raymond Otto, Medical Director of Hyperbaric Medicine, explains that telephone communication is insufficient in the wound care process, which requires the visual capacity provided by telemedicine technology. "From a wound care perspective, if somebody can show me a photograph, I can guide care so much easier than if someone tries to describe it." Using Conex, Dr. Otto is able to quickly determine a plan of care based on images, not words. "There's no simple way to describe what somebody's looking at and get an accurate image in mind, " says Otto.

Physicians at the clinic normally see remote patients monthly, during scheduled rounds. Nurses making weekly rounds use Conex to keep physicians updated. Administrative Assistant RaeAnna Carlson explains that in cases where "a patient is declining or a wound is getting worse," physicians view a Conex record to help determine "if it is necessary to round on the patient at an unscheduled time." With updated photos of a wound, a physician can better decide when to see a patient next, and how best to be prepared for the visit.

The clinic also works with home health agencies, relying on Conex when conditions make patient visits prohibitive. "During the winter months the patients cannot always get to the clinic and so updates can be made with the Conex system," Carlson explains. Previously, a patient or home health care worker had only the telephone in lieu of a face-to-face visit with a physician. "It is very difficult to actually get a busy physician on the phone to give an update," says Carlson, and the asynchronous, multimedia capabilities of the Conex system excel in place of the telephone.

Collaboration at the clinic also benefits from Conex. Physicians with changing schedules rely on Conex to share information about a patient who may temporarily be in the care of a colleague. "The physicians all round at the different facilities. So if one physician is filling in for the other they can look up the outside patients on the Conex system and know what has and has not been done," Carlson explains.

Family Contact at Complex Care Hospital of Idaho

At Complex Care Hospital of Idaho, an update to a patient's Conex record provides value to the medical team, but also to the patient's family. Here, Conex helps the hospital communicate with the loved ones of a patient. CEO Michael Fenello describes the process as Conex helping a concerned family member to keep other loved ones up to date.

Updates are entered into Conex by the physicians and nurses caring for a patient. With the patient's permission, a password to view those updates is given to a designated family member, who may share the password with any other loved ones. This way,

Conex helps the hospital provide "meaningful communication to a family member."

Fenello says, Conex helps the hospital provide "meaningful communication to a family member." He explains that this is a valuable addition to the hospital's communication, not a replacement for phone calls or meetings. Conex helps the hospital help the patient "to be able to facilitate communication within your family" during a difficult time.

Conclusion

Your primary goals as a healthcare professional are to care for patients and to run a successful business. But these goals are not at odds: increased efficiency does not come at the cost of quality of care. Tools that enhance your communication— by synchronously and asynchronously providing detailed, accurate, multimedia messages—will allow you to achieve greater efficiency *and* improved patient outcomes.

For More Information

For more information, please visit www.conexmps.com or contact Paul Unger, Founder, at punger@conexmps.com or 1-888-884-5331

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