



Focusing on What's Vital: Automating Vitals to Improve Patient Care at Oshawa Clinic

Overview

Customer
Oshawa Clinic

Location
Oshawa, ON

EMR Partner
Telus Health

Customer Profile
With more than 130 physicians, Oshawa Clinic is Canada's largest multidisciplinary medical group practice. In addition to the clinic, the practice also includes the Taunton Health Centre, Taunton Surgical Centre and the Courtice Health Centre.

Key Business Outcomes
Oshawa Clinic set out to test the hypothesis that automating vitals documentation would not only save time, but would also lead to a better experience for patients and clinicians alike.

In a busy urgent care environment, time is more than important— it's vital.

Introduction

When clinicians spend time manually documenting patient vital signs, they lose time that could be spent caring for and communicating with patients—and risk recording inaccurate or incomplete data.

That's why, in partnership with Dr. Jennifer Percival from the University of Ontario Institute of Technology, the Oshawa Clinic (Oshawa, Ontario) undertook a study to determine the value of implementing automated vital signs devices into clinicians' standard workflows, both in terms of time savings and clinician satisfaction.



Research Objectives

Primary objective: Determine whether automated data collection and entry decreases the average time from when a patient's vital signs are measured until the results are available for viewing in the EMR

Secondary objective: Determine clinician satisfaction with Welch Allyn Connex® vital signs devices and automated processes

Following the time study, participating clinicians completed a survey to record their impressions of manual vs. automated methods, including their impressions and comfort levels with each process.



Quantitative Results:

Significant Time Savings

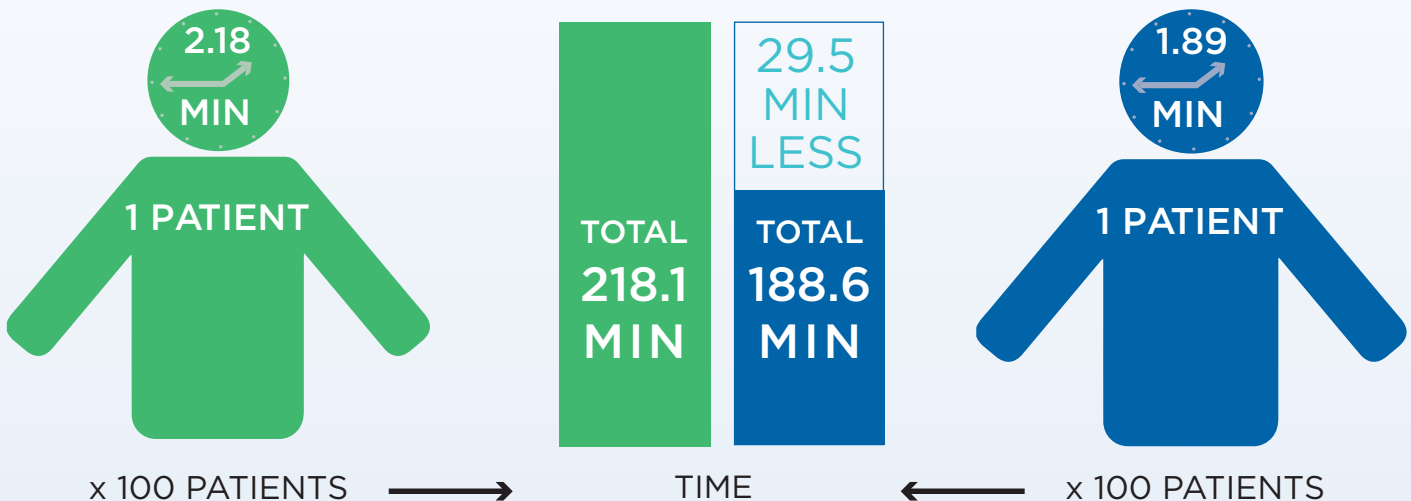
During the study, clinicians manually documented vital signs for 100 patients and used a Connex monitor to automatically document vitals for another 100 patients ¹.

The automated process saved clinicians 29.5 minutes on vitals documentation. That's a 13% faster process than manual—and it delivered 100% accurate information to the EMR.

Extrapolating out for an urgent care facility seeing 150 patients a day (24 hours), the study found the practice could save 43.5 minutes of staff time per day—or 21.8 minutes of staff time in a facility seeing 75 patients per day.



MANUAL VS. AUTOMATED



“Our group has always focused on patient care first and foremost. We strive to deliver the best quality of care in a timely fashion for all of our patients. Devices such as the Welch Allyn Connex Vital Signs Monitor (CVSM) 6000 improve our efficiencies and in turn, help to make our care for patients more effective as detailed in this paper.”

Qualitative Results:

Better Experience for Clinicians and Patients

Keith White, Oshawa Clinic Chief Operations Officer commented, “Our group has always focused on patient care first and foremost. We strive to deliver the best quality of care in a timely fashion for all of our patients. Devices such as the Welch Allyn Connex Vital Signs Monitor (CVSM) 6000 improve our efficiencies and in turn, help to make our care for patients more effective as detailed in this paper.”

Other participants commented on:

EMR connectivity:

The Connex device automatically sends vitals to Oshawa’s EMR for accurate documentation without requiring human intervention. With this information, the EMR can automatically generate an accurate, historical patient health record which can be revisited to help predict, monitor and maintain patient health statuses.

Patient focus:

The automated process allowed clinicians to focus on the patient and other aspects of care. This included thoroughly explaining procedures while vitals were being automatically recorded and focusing on the patient instead of typing vitals into the EMR. Clinicians also felt the automated system enhanced patients’ experiences, allowing them to relax.

More efficient triage processes:

Having all components of vitals collection in one monitor was seen as a powerful tool for triaging patients—for both its accuracy and efficiency.

In surveys conducted after the study’s completion, 100% of clinicians involved in the study requested a Connex vital signs device be put into place full-time in their respective locations.

Conclusions

Oshawa Clinic set out to test the hypothesis that automating vitals documentation would not only save time, but would also lead to a better experience for patients and clinicians alike. The automated process proved capable of improving workflows in ways that can help the practice see more patients and improve the bottom line, and gave Oshawa’s clinicians back time to focus on what’s truly vital—their patients.

¹ For both manual and automated cases, vitals were collected as follows: three blood pressure readings, one temperature reading, one blood oxygen saturation reading, and one heart rate reading. The blood pressure average protocol used by the Connex monitor was configured to take three readings automatically with zero delay to start and an 18-second delay between each reading. The first reading was then eliminated and the second and third readings were averaged. It was the averaged reading that was sent to the EMR. This follows newly released guidelines by Hypertension Canada January 2015.