

# Baxter

## Welch Allyn

### Spot Vital Signs

MONITOR

## A PREFERENCE FOR ACCURATE & SIMPLE

Faster, Simpler, Easier to Use: How the **Welch Allyn Spot Vital Signs 4400** Device Compares to Legacy Solutions and Manual Workflows

### INTRODUCTION

Switching to newer technology may seem overwhelming. But when that change can save you time and help improve clinical workflows, it's well worth the upgrade.

While developing the new **Spot Vital Signs 4400** Device, researchers wanted to understand how this solution compared to the predicate device and manual vital signs workflows. Researchers gathered feedback from clinicians on the new solution's acceptance rate and perceptions of ease-of-use and overall device usefulness. For authentic clinical feedback, the new solution was studied in local and regional multidisciplinary outpatient facilities.<sup>1</sup>



## RESEARCH OBJECTIVES

This upgraded vital signs device is purpose-built to meet clinical needs, enhance efficiency and fit within a practice's existing workflow. The design features are carefully balanced with cost and quality to deliver clear clinical and economic value. To determine if the design was successful, researchers tested the **Spot Vital Signs 4400 Device** in clinical settings for six months.

## METHODOLOGY

Research was conducted in active practices, with study participants falling into two groups. The first group used an automated/semi-automated multi-parameter vitals collection workflow with the predicate **Spot Vital Signs 4200 Device**. The second group had a completely manual workflow, and often used a number of different, independent devices to collect a full set of patient vital signs.

Surveys collected quantitative feedback and calculated results based on a System Usability Scale (SUS) and Technology Acceptance Model (TAM). The surveys measured device usefulness, ease of use and intent to use the device compared to the user's current vitals capture method(s).

An additional positive and negative word association questionnaire collected qualitative feedback on device themes. Participants completed the questionnaire based on their experience using the device in their clinical setting.

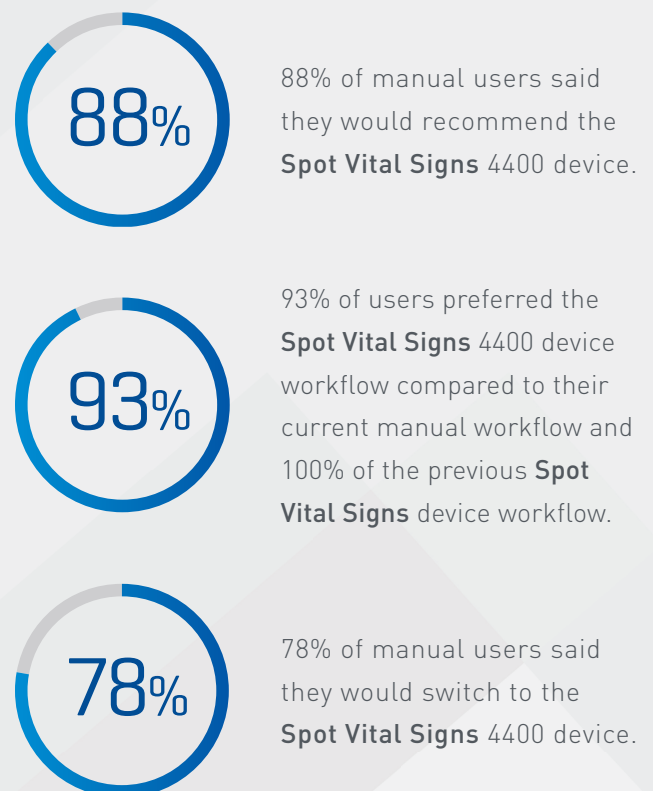
## COMPARING MANUAL WORKFLOWS AND THE LEGACY DEVICE



## STUDY PARAMETERS



## KEY TAKEAWAYS<sup>1</sup>





## DATA ANALYSIS

Originally designed for a wide range of technologies, the SUS scoring system received minor modifications to fit this study. A positive and negative question format remained to avoid response bias.

Researchers adapted the TAM framework to develop relevant research questions, measured by a 7-point Likert scale. TAM suggests that a person's intent to use new technology (IU) is directly and indirectly influenced by how they perceive something's usefulness (PU) and its ease of use (PEU). Because this study compared various vitals capture workflows, a specific theoretical domain (DC) helped researchers measure workflow perceptions when comparing existing workflows to the new device's workflow.

A computer program was used to collect additional data about the new device's operation and impact on clinical workflows. The program generated random positive and negative words for participants to select based on their experience using the device.

## RESULTS

Among both user groups studied, the new **Spot Vital Signs 4400 Device** scored well for user experience with an average SUS score of 88.37. This score was even higher, at 90.27, for clinicians who currently have a manual vital signs workflow.

The group of manual workflow users showed a strong correlation between workflow

## POSITIVE THEMES COMMONLY SELECTED TO DESCRIBE THE **SPOT VITAL SIGNS 4400 DEVICE**<sup>1</sup>

**Convenient & Accessible** | 51%

**Time Saving** | 65%

**Easy to Use** | 79%

**Efficient** | 67%

**Fast & Helpful** | 49%

**High Quality** | 46%

## AND THE RESULTS ARE IN...

**Clinicians Describe What They Like About the **Spot Vital Signs 4400 Device****<sup>1</sup>



Everything is in one place; it makes exams simple.



The new device is so much faster than current workflows.



With blood pressure averaging built into a solution that can also capture a full set of vitals, we no longer need two separate machines.

comparisons and their intent to use the newer device. Perceived usefulness was strongly linked to intended use, though ease of use and improved workflow perceptions also had a strong correlation in this group. When compared to existing manual workflows, the **Spot Vital Signs 4400 Device** made a strong positive impact on clinicians.

Study participants also reacted positively to the new device, showing a strong link between their intent to use the device and its perceived usefulness.

## CONCLUSION

The result? Clinicians said the new solution was much faster than their current vitals capture workflow. They also found the **Spot Vital Signs 4400 Device** to be simple and easy to use, with everything in one place. In fact, when compared to manual vital signs capture and documentation, 93% of clinicians said they would recommend the **Spot Vital Signs 4400 Device**.<sup>1</sup> This solution offers a simple touchscreen workflow, one-tap blood pressure averaging and a user-friendly interface for added efficiencies.



## THE WELCH ALLYN SPOT VITAL SIGNS 4400 DEVICE

This simple, easy-to-use solution offers an efficient way to capture, access and document patient vitals. Blood pressure averaging is now part of the main workflow, helping you take and average multiple readings for improved hypertension detection.

Users agree, the **Spot Vital Signs** device can help make exams simple. Visit [hillrom.com/spot4400](http://hillrom.com/spot4400) to see how this solution can help streamline vitals capture so you can spend more time focused on providing quality patient care.

See the difference for yourself. Contact your Baxter representative and schedule a demo.

### References

1. Data on File: To maintain study participant confidentiality, exact participant quotes have been paraphrased here. Exact quotes and quote attributions remain on file with Hillrom researchers who facilitated the study.

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