

SPOTLIGHT ON IMPROVEMENT

Spotlight on Improvement tells real stories of health care providers and systems improving the quality of care they deliver. Our goal is to spark ideas that will improve health care quality in Washington state.



Swedish Medical Center

Rethinking the practice of ordering daily labs to reduce waste and improve care.

BACKGROUND

Founded in 1910, Dr. Nils Johanson, a surgeon and Swedish immigrant, started Swedish Hospital to provide a modern facility in an era when even simple practices like sterilization were not commonly used. Today, [Swedish Medical Center](#) has five hospitals that are part of seven campuses located in Seattle, Edmonds, First Hill, Issaquah, Everett and Redmond. In 2011, Swedish and [Providence Health & Services](#) affiliated and Swedish is now part of Providence's 34 hospitals and 475 clinics located in California, Oregon, Washington, Alaska and Montana.

Health care costs are skyrocketing and up to a third of health care costs are believed to be unnecessary.¹ Sometimes the drivers of health care costs are big, expensive procedures where a single episode carries a big price tag. And sometimes many common, less expensive tests drive cost through volume rather than individual unit cost. Nationally, the [Choosing Wisely](#) campaign, sponsored by the [American Board of Internal Medicine \(ABIM\) Foundation](#), has asked medical societies to look within their specialty fields and provide evidence-based recommendations that address appropriate care. To date, there are over 300 recommendations from over 60 medical societies.

PROBLEM

Dr. Adam Corson is part of Swedish's team of over 50 hospitalists that currently rotate between four hospitals. Familiar with the [Society of Hospital Medicine's Choosing Wisely recommendations](#) and personally wanting to demonstrate value of hospitalists in improving care, Dr. Corson began by looking into the data to identify potential opportunities for improvement within Swedish. The preliminary results pointed to a blaring issue which had both high rates and a relatively easy solution—daily labs.

What are daily labs? During a hospital stay, a provider can either order lab tests after each evaluation of a patient or schedule tests to be automatically done every day that the patient is in the hospital. The practice of pre-ordering tests, or daily

¹ Health Policy Brief: Reducing Waste in Health Care, *Health Affairs*, December 2012.

labs, is addressed by Choosing Wisely recommendations from two specialty societies that look at how tests are *ordered*. The recommendations, suggest ordering tests that are clinically relevant versus having them automatically done every day. In fact, some facilities do not have a pre-ordered “daily” option anymore or are reconsidering the practice.^{2,3}

SOLUTION

In August 2013, Dr. Corson began by emailing the hospitalist team data about who was ordering daily labs. He then provided educational resources and two simple recommendations: 1) Don’t order a test more than 24 hours out, and 2) Don’t order labs at regular intervals, such as daily. In addition to the group email, personal emails were sent to the providers who had particularly high rates. Following the initial communications, updated data was provided regularly and was also made transparent, so everyone on the team could see each other’s results and progress.

RESULTS

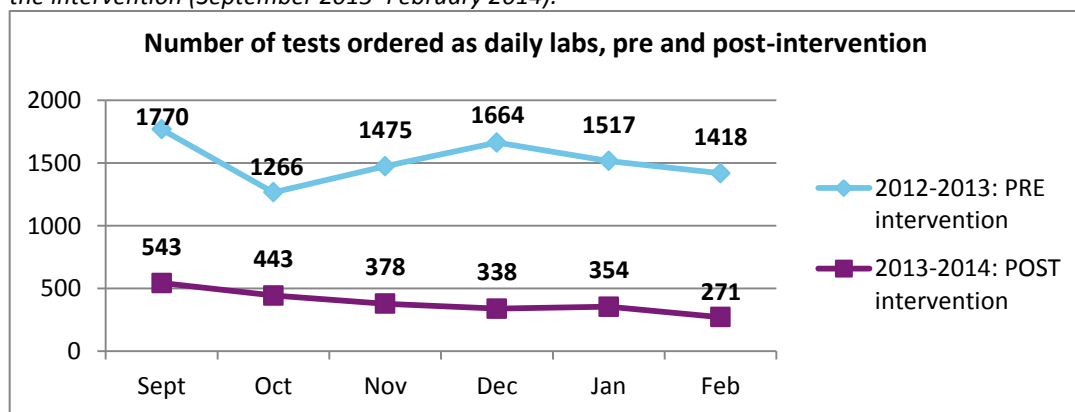
As seen in figure one, the Swedish hospitalist team’s remarkable efforts to reduce the number of daily labs ordered can be seen in the six-month timeframe *after* the August intervention, September 2013 to February 2014, compared to the same time period *before* the intervention, September 2013 to February 2014. In addition, when looking at all ordered labs, the intervention resulted in approximately **25 percent fewer labs ordered overall**, which equates to approximately **14,000 fewer tests annually**. When looking at labs ordered as daily, the results found an **80 percent decrease in daily labs ordered**, originally **30 percent** of all labs were ordered as daily and now daily labs only represent **six percent** of all labs ordered. Depending on how you calculate the costs of lab tests, this is estimated as **\$160,000–\$200,000 in annual savings**.

CHOOSING WISELY RECOMMENDATIONS

Both the Society of Hospital Medicine and Critical Care Societies recommend ordering tests only as clinically relevant:

- **Critical Care Societies Collaborative-Critical Care:** Don’t perform diagnostic tests at regular intervals (such as every day), but rather in response to specific clinical questions.
- **Society of Hospital Medicine-Adult Hospital Medicine:** Don’t perform repetitive CBC and chemistry testing in the face of clinical and lab stability.

Figure 1. Results from Swedish’s hospitalist team effort to reduce unnecessary daily lab ordering across four hospitals, comparing before the intervention (September 2012–February 2013) to after the intervention (September 2013–February 2014).



² Reducing Unnecessary Inpatient Laboratory Testing in a Teaching Hospital, American Journal of Clinical Pathology, August 2006.

³ Impact of Peer Management on Test-Ordering Behavior, Annals of Internal Medicine, August 2004.

RESULTS, CONT'D

This effort improves patient safety giving fewer opportunities for medical errors or false positives, while also improving the experience of care for the patient from less “pokes” and disruptions. It also decreases the cost of care for the patient—with approximately 12% fewer lab tests ordered per admission.

CHALLENGES

How do you learn from change and sustain it? This is something that Dr. Corson and Dr. Christopher Dale, Medical Director at Swedish and member of [Washington State Choosing Wisely Task Force](#) are grappling with. Can the same strategy be applied to other departments and to other Choosing Wisely recommendations?

Key steps in the successful process:

- 1) Let objective data guide the focus areas.
- 2) Educate providers on the clinical evidence and why it's important.
- 3) Personally communicate with outliers.
- 4) Plan regular and transparent audit and feedback steps to track progress.

KEYS TO SUCCESS

- **Culture of improvement:** The hospitalist team was used to working on improvement projects together, so bringing on another improvement initiative was readily embraced and supported.
- **Supportive IT department:** Without the timely and responsive support of the IT department, this project may not have been possible. Rather than waiting in a long queue, the IT department collaborated to get the best data to inform the project throughout the process.
- **Tenacity:** A unique feature is that Dr. Corson was not directly charged to initiate a quality improvement project but rather it came from his personal desire to demonstrate his team's value. He successfully followed through in answering his own question of “how can we improve?” and in doing so demonstrated that sometimes big impacts can come from small changes—such as rethinking *how* labs are ordered.

FOR MORE INFORMATION, CONTACT:

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ABOUT THE ALLIANCE

The Washington Health Alliance brings together those who give, get and pay for health care to create a high-quality, affordable system for the people of Washington state. The Alliance is a nonprofit, nonpartisan organization that shares the most reliable data on health care quality and value in the state to help providers, patients, employers and union trusts make better decisions about health care. Through innovative strategies and initiatives, we help the entire health care system—from exam room to board room—focus on improving quality and value. We are committed to being the catalyst for change for the health care system in Washington. The Alliance is one of 16 organizations that are part of the Robert Wood Johnson Foundation's Aligning Forces for Quality (AF4Q) initiative.

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WANT TO RECOMMEND A PROGRAM FOR AN UPCOMING SPOTLIGHT?

Contact us!

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