

How did they do that?

# From Last to First in One Year

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ThedaCare Oshkosh

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## Introduction

ThedaCare (TC), an integrated delivery system in northeastern Wisconsin, hosts visitors from around the world who come to learn about ThedaCare's culture of improvement, based on Toyota Production System's lean methodology. Enter one of ThedaCare's 22 ambulatory clinics and one is immediately aware that things are different here, there is a group spirit, a camaraderie focused on fixing problems and improving processes that others may speak to but in this organization are palpable. How do they do this?

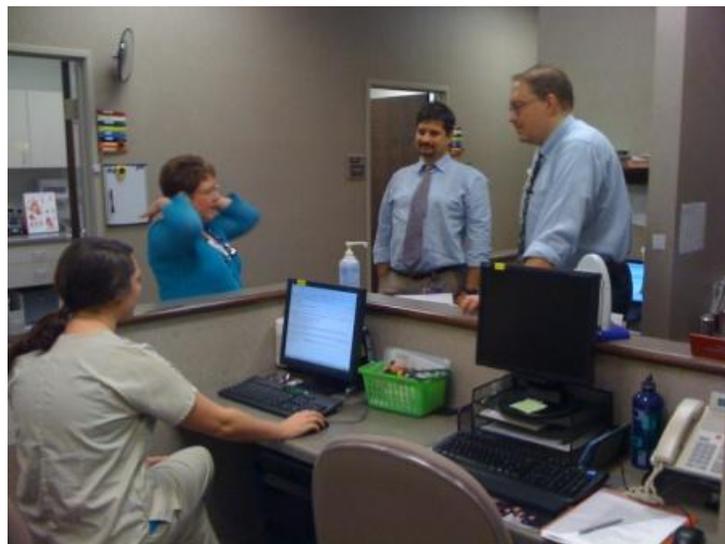


ThedaCare Oshkosh Clinic has moved its performance on the organization's quality metrics for prevention and chronic illness care from last place to first in one year. How did they do this?

## Delivery Model

### Physical Space

ThedaCare's Oshkosh clinic's six providers, six MAs, cell lead and clinic administrator are co-located in a central workspace, a "bull-pen", with small workstation carrels, offering line of sight and close communication between workers. The clinic administrator's workstation is here as well, rather than off in a distant office, allowing her to assess daily workflows, be accessible to staff, and help out with



patient care needs.

### Morning Huddle

The day starts with a 2-3 minute stand-up morning huddle with the MAs, physicians, cell leads and clinic manager, getting everyone up to speed. Using a white board with color-coded information the cell lead reviews who is in that day, who is out, who is visiting the clinic, who is on call, and who has room in their schedule.

Visual cues represent the situation at a glance: for example, the doctor's name is in green if they have >5 openings on their schedule, yellow if < 5, and red if no openings. The huddle is also a moment for staff communication. One member offers that she is close to overtime. "Thanks, we'll watch that."



### Rooming: 15 minutes from phlebotomy to results

The patient checks in at the front desk, as in most clinics. From there the process deviates. The MA determines what labs the patient is due for by reading the prior note and from information the cell lead has obtained by "scrubbing the chart" the day before. She brings the patient back to the room, draws the bloods, with extra blood in case the provider later needs additional tests run, and then dials for a pick up. A distinctive ring sounds in the central "bull pen" where all of the staff workstations are arranged in pods. Anyone who is free jumps up and transports the blood to the lab. The goal: 15 minutes to get blood to lab and results back to the exam room.



Meanwhile the MA remains in the room to obtain vitals, perform medication reconciliation, and collect an initial history. She pulls up the relevant templates (i.e back pain, chronic disease follow up, asthma) and begins filling in the initial history. When finished she uses a flag system



to notify the physician that the next patient is ready.

### Physician visit

The physician briefly reviews the developing note before entering the exam room. He types much of the history, does the exam and electronically prescribes medications. The physician is responsible for creating an after visit summary (AVS), typing in his recommendations ("return to clinic in 6 months" or "appointments with Dr Lee and Dr Smith for second opinions on spinal stenosis"), importing any patient

education material from a separate application, and then printing and reviewing with the patient. He then clips the AVS outside the door. The MA returns and schedules any referrals and next appointments. Between visits he will finish typing the visit note.



ThedaCare has worked diligently on many of its processes, and yet, like most clinics, devotes considerable physician resources to visit note documentation. During my observation there was seldom a time when the physician was not multi-tasking (listening to the history while recording data or looking for information in the record), and again, as in many clinics, there were multiple visits where the time focused on the computer was as much or more than the time focused with undivided attention on the patient.

### Technology

As in many organizations technology was a two-edged sword. I observed patient care both negatively and positively impacted by the EHR. For example, on entering the exam room the physician's initial focus was routinely oriented to the computer screen, signing in and typing notes. For one patient the physician entered, sat down at the computer, and had to immediately get up and leave the room to go out to his workstation to sign out of the EHR on that computer so that he could return to the exam room and sign in there. As the person responsible for typing the visit note, keyboarding orders and typing the after visit summary the physician performed many non-physician level tasks. This can be seen as waste within the system, as it represents physician effort not available for other higher level activities.

On the other hand, technology was also put to good use for patient communication. For a patient with a rash the physician said: "Let me know if the cream doesn't work—you can send me an iChart message," which the patient was happy to do. For another patient the physician asked "Do you want me to print a copy of the lab, or will you go to iChart?" to which the patient responded "Oh I'll get it in iChart, my wife likes to do that". Patients knew they had access to their results, and were often invited to communicate by email with their physician between appointments.

### Nurse Roles

All incoming patient calls are routed to an on-site call center, manned by three RNs, who perform triage and prescription refill by protocol for the 4 physicians and 2 mid-level providers. Each week nursing and clerical staff review data and problem-solve to improve the metrics. The

goal is to answer 85% of phone calls within 20 seconds. Two additional nurses manage a Coumadin clinic for Oshkosh and another clinic. Data reflecting the percentage of patients receiving monthly INRs and INRs within therapeutic range is displayed on the walls. Nurses are not currently employed in a care coordination or case management role.

### MA Cell Lead

Each area (lab, MA, phone triage) has a cell lead. The MA cell lead is the daily flow manager, making sure everyone has what they need. She can be summoned by the MAs for a question or a problem (“the printer isn’t working,” “I can’t pull up the OB template”). She scrubs the charts for the next day, identifying health maintenance gaps to be filled, which assists the MA in the rooming process. If a practice is running behind she notifies the patient and offers a magazine. She may also transport blood to the lab. If an MA needs help she can step in and complete the post visit work of scheduling appointment and reviewing the after visit summary. Role flexibility and pitching in was observed at all levels.



### Flow stoppers

The staff is on the lookout for “flow-stoppers,” any activity that impedes patient flow. As an example, pre-registration errors are tracked, recognizing that if all of the needed information isn’t obtained over the phone when a new patient first schedules the appointment this will back up the check-in process on appointment day.

## **ThedaCare Oshkosh’s Improvement Journey**

### Improvement Events

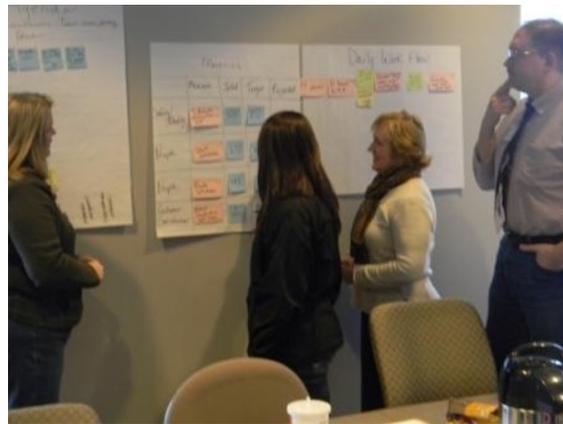
TC began its “New Delivery Model” in its Kimberly Clinic in 2007 and it has spread throughout the organization, yet each site must make it their own. This is TC Oshkosh’s story. Planning began in 2009, and in the first four months of 2010 a series of improvement events were held to gird up the infrastructure of care. The change methodology: analyze the process, collect and review data, problem solve, and re-measure.

First up was a “lab event.” The goal: develop a 15 minute turnaround time for labs, so that the patient has the result while with the physician. During a four month period the team studied the space and processes for the lab, creating a mock up room, and mapping out each element of work. Once refined, the real lab was built.

Next a “phone event” streamlined call management, creating two tiers for calls, tier 1 for schedulers and tier 2 for calls to the RN, with the goal of answering each call within 20 seconds. A wall was knocked down so the nurse and scheduler are co-located for quick communication. During a “check-in” event, the goal was to reduce the waiting line. The solution: collect all payment and demographic information at the time of appointment scheduling rather than at the time of check-in. The fourth event was a “transport event” to develop a process to get the blood to the lab and the results to the patient within 15 minutes. The result: a ring alerts staff that bloods need to be transported, and whoever is free transports the blood. Kathy Markofski, clinic manager says: “It’s very fun. It is like a competition. Everyone wants to be at part of it, like a sporting event. We all love this process.”

### Middle Flow

During the next four months a series of “Middle Flow” events was held for each provider, with the goal of improving all the MA-physician components of care. Baseline measurements provision of an after visit summary (which reduces the number of call backs), completion of health maintenance tasks, and pre-scheduling of future appointments/labs were obtained. Other metrics included: turnaround time for chart completion (goal: two hours after appointment), patient satisfaction, staff satisfaction, provider satisfaction, cycle time (time between patient check-in and check-out), and total wait time. The goal is for the patient to wait a total of less than fifteen minutes. This includes waiting after checking in at the front desk, and any subsequent time they are in the room without the doctor or the MA.



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Operational data was collected to determine time to room a patient (10-15 minutes) and documenting the visit (2-4 minutes beyond that done in the room with patient). Kathy Markofski, Clinic Director of ThedaCare Oshkosh reports “The team flowed out Dr J’s current state of a patient visit. We identified gaps in the process that caused increased patient wait times. Once we identify the gaps we root cause them and then develop

countermeasures to experiment to see it improves our metrics.”

Every two weeks the physician and MA met with the clinic administrator, an EHR optimization specialist and a lean facilitator to strategize and problem solve. The EHR specialist gave tips on how to develop dot phrases to simplify documentation. The MA was taught how to close some of the health maintenance gaps and how to schedule the patient for future appointments. One physician was able to improve his chart completion time by using Dragon voice recognition, rather than typing his notes.

After the first 4 months the “Middle Flow” meetings were stretched to every six weeks. In the provider meeting I observed wait times had improved, but were still not at goal. The MA suggested changing the scheduling template to include only 30 minute appointments. The physician was reluctant, concerned he may not be busy enough. Another option considered was to schedule a 15 minute catch-up break in mid-morning. The group decided to reassess after obtaining a two-week sample of data, rather than rely on the earlier 3 day sample, to have a firmer basis on which to make improvements.

The learning here is that the physician is not left on his own to somehow improve performance measures. There is collective ownership of the results, and there are organizational resources to assist in improvement.

### Outcomes

A multi-disciplinary team, composed of an MA, cell lead, front desk person, triage nurse and physician meet every month to strategize on improving clinical outcome measures for the entire clinic. A disease management expert from the larger organization periodically attends these meetings as does a change facilitator. After one year TC Oshkosh’s composite score for breast and colon cancer screening, cardiovascular risk reduction, diabetic metrics, and immunizations has improved from 15 to 92, moving it from last place to first within ThedaCare’s primary care clinics.



### De-selection Events

Markofski is attuned to the possibility of measurement overload. The goal is focused analysis and improvement and then move on. “We want to keep our vim and vigor, and not let measurement impede the flow.” As a consequence, not every aspect of care is consistently under measurement. Performance is periodically assessed and more intensive measurement reinstated from time to time. “We wanted to give the providers a break from room timings so we stopped

this during the summer. There was some fall back in performance, so we are now measuring wait times one week per month.”

## How is Culture Maintained?

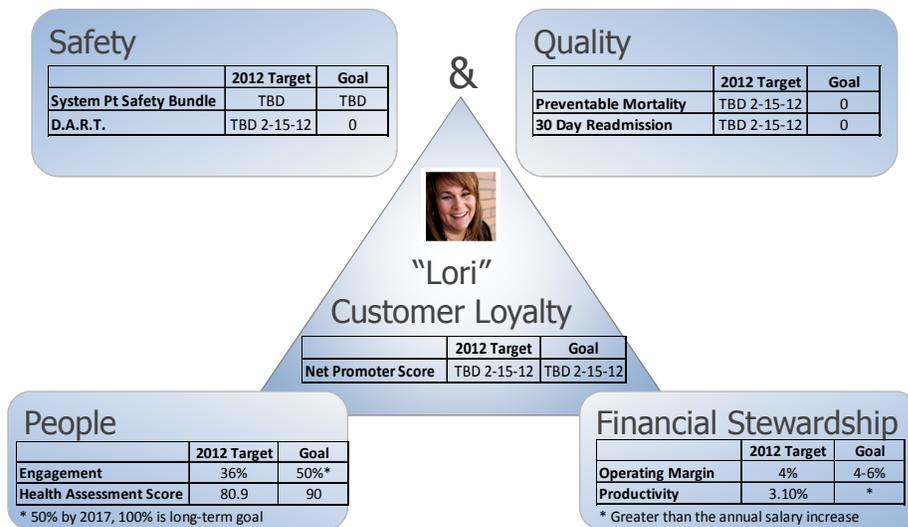
### Guiding Story

All improvement work at ThedaCare is designed for a fictional patient “Lorie” who is a middle aged woman, caring for her elderly mother, her husband and children. “Lorie’s” story and needs focus the work of the organization around a tangible narrative.

### Guiding Framework

True North is the organization’s guiding compass, and is centered around the core values of quality, people (staff satisfaction) and financial stewardship. A triangular graphic with the patient at the center and the three core values at each point conveys the concept and is part of each area’s data display.

## ThedaCare True North Metrics



### Lean as the Improvement Vehicle

Thirty-seven quality improvement specialists within the organization lead and facilitate change. At one time or another all staff members will work on one or more Kaizen events, 5-day activities during which staff are taken off of their daily work to study their work and make

suggestions as to how to improve. These improvements are then rapidly implemented over the next week.

### Data is Coin of the Realm

Walk into any clinic in the ThedaCare system and you will see the walls lined with data, organized around the True North compass. Quality, satisfaction and productivity metrics are followed at every level, from the particular area (lab, call center, provider) to the clinic, division and then up to the corporate level. Each zone of the clinic has its own 6 x 6 foot data board on



which run charts of a series of metrics pertinent to the area, under each category of True North are displayed.

Once a week the clinic leadership team does walking rounds where they review metrics and discuss improvement strategies. Each data set is rolled up to the clinic manager who reports summative data

to regional leadership along the True North framework.

Once a month MAs, RNS, MDs, cell leads, external quality improvement specialists, and as needed content experts, such as endocrinologists, meet to review quality data and strategize on improvement techniques. Performance on quality metric goals determines 10% of physician salary.

Even patients are part of the measurement focus. The percentage of no-shows and patients who arrive on time are tracked and reported on graphs in the waiting area.

### One-Piece Flow

ThedaCare has focused on eliminating waste and increasing efficiency and reliability with standard work and one piece flow. An example of one-piece flow is for the provider to make only one trip into the room, to close the loop of care during the visit. When the physician decides

to perform a joint injection, for example, he dials a hot line, says briefly “SI joint injection” and a few minutes later the door opens and he is handed a syringe and alcohol wipes on a small tray.

### Role Flexibility and Relational Coordination

While role expectations are clear and work is standardized, staff are not siloed operationally or physically. Co-location ensures good working relationships. Role flexibility means people pitch in where needed. The attitude is not “we vs them” but “us”. The MA cell lead will help room a patient if needed, the clinic administrator’s workstation is in the main “bullpen” and she will transport bloods to lab if needed. The x-ray technician helps stock rooms and scan documents when she has free time.

The Oshkosh clinic has more x-ray capacity than demand, so there is down time for the technologists. Markofski: “As a consequence we asked the staff what other skills they would like to learn. The technologists have learned the check out process, the CT and MR staff has learned phlebotomy, the mammogram and ultrasound staff learned to perform EKGs and Holters. Our xray techs like their jobs better now. They used to sit in the x-ray office all of the time. They are now more in the patient flow.”

### **Commentary**

The downside of measurement is if the wrong things are being measured, or if some of the most important aspects of care are not being measured, then care can be shaped in a negative way.

Eliminating waste and allowing each staff member to do more productive, value-added work is a core tenet at ThedaCare, and the result is evident in the out-of-the-exam room elements of care: phone calls, lab turnaround time, Coumadin management. There is an opportunity to apply that same degree of analysis and problem solving to eliminating waste of physician effort in the exam room. Providing the patient with undivided attention and facilitating the physician performing mostly work that only a physician can do would lead to further achievement of the True North objectives: better quality, experience and financial performance.

### **Conclusion**

Measurement drives performance at ThedaCare. All employees understand the organizational purpose, as illustrated by True North, to achieve excellence in clinical quality of care, financial stewardship and staff satisfaction. There is transparency around performance metrics at all levels within the organization and this openness contributes to a sense of buy in and can-do spirit. Individual physicians are not left to try to solve workflow and clinical issues on their own. Data is not used for “shame and blame” but rather for collective, non-judgmental problem solving. The Oshkosh clinic has demonstrated the improvement in performance metrics that can be achieved with a structured approach to change. And the larger ThedaCare organization has made

it is clear why visitors from across the world come to northern Wisconsin for guidance and inspiration.