

CASE STUDY

BLENDED LEARNING IN HEALTHCARE

COMBINING THE POWER OF ONLINE INSTRUCTION,
ACTION-LEARNING, AND COACHING TO IMPLEMENT LEAN CULTURE
AT VON CANADA¹

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SUMMARY

VON Canada, like many healthcare organizations, has been implementing lean management to reduce waste, and improve customer service, productivity and financial performance. It has employed a combination of a) process redesign; b) online learning to provide team leaders with knowledge of lean practices; c) action-learning to develop new habits and skills; and d) internal coaching to assure continuous improvement. None of these elements alone would have been successful; however, the blended combination of these elements has produced significant improvements in performance.

VON has reported a very significant change in their culture, as well as increases in productivity of between 25% and 37% varying by district. These changes also resulted in reductions in downtime, reduced overtime and travel expenses.

VON referred to their new lean culture as the “VON Way.” The “VON Way” has changed the way VON engages staff members and provides services to clients. VON service delivery team members are now engaged in greater self-management and continuous improvement. The “VON Way” has created a new social system and a strong team culture.

BACKGROUND

VON Canada (formerly Victorian Order of Nurses) is a charitable organization which has been providing home and community care services since 1897. These services include Nursing, Home Support Services, a variety of clinics and community support programs. This case study focuses on the District in Nova Scotia, although the methods and results have been similar throughout all of Canada. VON employs approximately five thousand care providers and approximately 250 management and line staff. Home care delivery is

¹ This case study is based on the use of the *Udemy* course *Team Leadership – The Kata of Lean Culture* by Lawrence M. Miller. VON Canada has had all 250 managers taking this course and receiving coaching as they engage in action-learning to implementing lean practices.

funded by the Canadian government, through a network of local Community Care Access Centres (CCAC).

Until recently, VON was the sole provider for home health care in Nova Scotia with little concern about competition. This changed recently. Over the past decade VON has faced increasing financial pressures, competition, a declining health care workforce and rising client demands.

While all of VON Canada's Districts are following the same model, this case study focuses on one District in the eastern province of Nova Scotia with two sites - Cape Breton and Antigonish. These sites employ two hundred Nurses, the Site Management team (four Nurse Managers and a District Executive Director), schedulers, and an administrative staff. On average the two sites have been providing over 23,000 homecare visits per month.

WHAT WAS THE CONDITION PRIOR TO LEAN IMPLEMENTATION?

A major factor in the productivity of home care service is how nurses and home support workers are scheduled. This determines the efficiency of travel times and the number of visits a service provider makes per day. This in turn, determines financial results.

Prior to lean implementation, the scheduling process was centralized, five hours away from the two sites. It was cumbersome and there was no accountability on the part of those doing the scheduling since there was no visibility of scheduler's work. The structure did not support team work. There was a wall, a siloed structure, separating the work of those who scheduled home visits and those who provided the service. This resulted in a culture of blaming and denial of responsibility. The cost of service delivery was high due to too many steps in the scheduling process. For example, the data entry of clients and the scheduling of these clients were completed by two different people. This resulted in high unscheduled time 10% to 20%, and waste of 10% to 20% of nurse's time during which they were not visiting clients. High overtime of 10%, high travel time and distance were regular occurrences which added to the inefficiencies. This also led to delay accepting new clients.

There was little discussion about performance measures or targets during staff meetings. When there was a new target introduced, Site management would meet with the Nurses to advise them of the new goals; however, the Site Management team was not involved in the creation of these goals. Neither the Site Management team, nor the nurses, felt ownership for the goals.

Site management team was in "fire-fighting mode." There was no disciplined problem-solving. When Site Management attempted to make improvements, they were difficult to implement and changes were short lived.

VON's structure and culture were resistant to change. The Cape Breton and Antigonish sites had high retention rates since Nurses were used to following their own preferences.

Site Management had minimal control over the scheduling practices and felt helpless to improve any of the core work processes.

CHANGING THE SYSTEM

VON Canada made a commitment to lean management principles, and began by following the consultant's *Whole-System Redesign* model.² This involved local design teams re-mapping their work flow to eliminate waste, and speed cycle times. It also involved designing a team structure to move toward increasing self-management as teams took responsibility for their own performance. In Spring of 2015, Cape Breton and Antigonish had redesigned their client service delivery system to include the following:

1. While the principles of redesign were common to the larger organization, it was important that the local design team included both managers and service providers at the local level. This gave them ownership and enabled implementation.
2. The entire work-flow, from the time the local referral agency contacted the VON office with a need for service, to the completed service and billing, was completely remapped to eliminate waste in the form of unnecessary steps, delays and hand-offs. Approximately 50% of the steps in the original process were eliminated.
3. Silos, walls between functions, were eliminated by introducing a new scheduling role within the local site called the Client Service Associate (CSA).
4. The CSA were co-located with the sites they support and now play a key role in supporting service delivery teams. This allows for team work to occur. Both service providers and the CSA are now on the same team, reporting to the same manager, and responsible for the same results.

² See *Getting to Lean – Transformational Change Management* by Lawrence M. Miller.

CHANGING HABITS

VON leadership recognized that changing the system alone would not result in a sustainable change in long established habits. This would require a learning model that could be applied over an extended period of time. To accomplish this they adopted a model of self-paced online instruction, action-learning to practice and apply the new skills, and one-on-one coaching to encourage and reinforce the adoption of the new skills.

SELF-PACED ONLINE INSTRUCTION

VON leadership recognized that all managers, who would now become team leaders, would need to receive training in team leadership, problem-solving, and the principles of lean management. Because VON Canada has sites spread over all of the Central and Eastern Provinces of Canada, and very little money to devote to training, the ability to bring people together for training in the traditional workshop method was not possible. The external consultant developed an online course (*Team Leadership – aka, Team Kata*) with seventy-one lectures covering the topics of lean principles, team formation, problem-solving, process improvement, communication and facilitation.

The curriculum of this course included the following sections and topics:

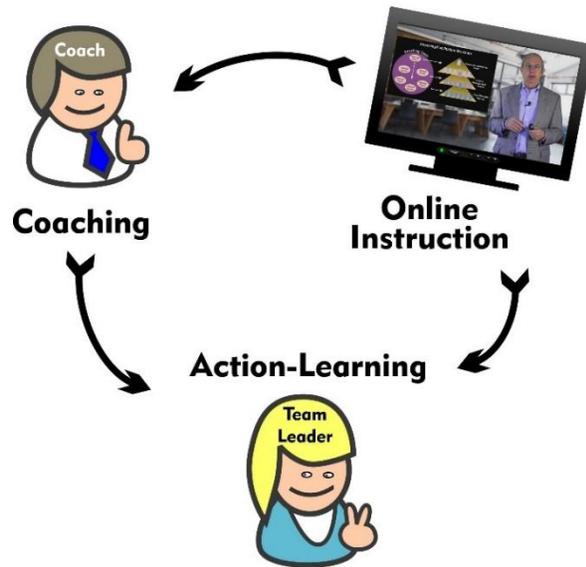
1. Organizing Your Team

- a. Developing a Team Charter.
- b. Clarifying roles and responsibilities.
- c. Developing a Team Agenda.
- d. Developing a Team Scorecard and Display

2. Solving Problems and Improving Performance

- a. Root Cause Analysis
- b. Brainstorming
- c. Plan-Do-Check (or Study)- Act Problem-solving.
- d. Action Planning
- e. The A3 Problem-solving Process
- f. Mapping Your Value Stream and Eliminating Waste
- g. Improving Motivation and Human Performance Problems
- h. Developing Standard Work and Leader Standard Work

The Blended Learning Model



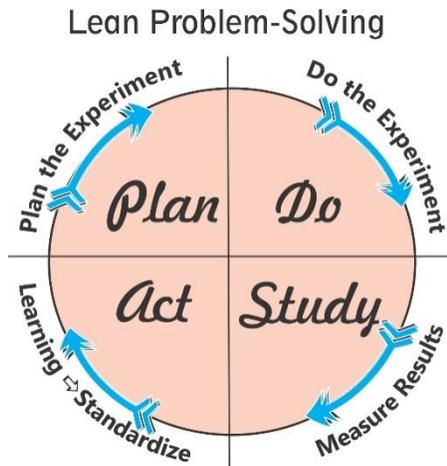
3. Personal Effectiveness Skills

- a. Team Facilitation Skills
- b. Effective Listening
- c. Giving and Receiving Feedback

VON leadership also formed a small cadre of internal coaches who would meet with teams after they had viewed a section of the course to assist the teams in applying the lessons to their situation. This began to encourage Site Management to change their approach to problem-solving by using the lean problem-solving models of Plan-Do-Study-Act and the more comprehensive A3 model.

Although the Site management was challenged with demanding day-to-day tasks, the Site embraced the training from the beginning and made it part of their daily routine. Site Management would often complete the *Team Leadership* course on their own time. They could do this at home, on a tablet, or their work computer. Some used the Udeemy app on the cell phone to listen to the lectures as they drove in their car.

The online *Team Leadership* course made acquiring the knowledge of lean practices relatively easy. However, we wanted more than knowledge – we wanted action and results!

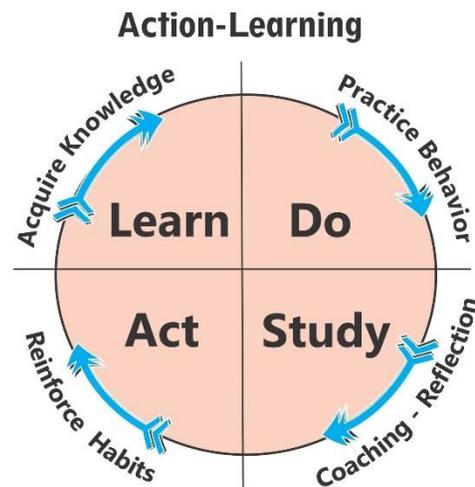


ACTION-LEARNING

We learn with all of our senses and at VON Canada we realized that we had to employ all of these senses in the learning process. Blended learning assumes that no one mode of learning will result in the adoption of new patterns of thought or behavior. It assumes a *learning system* that employs multiple forms of learning over an extended period of time.

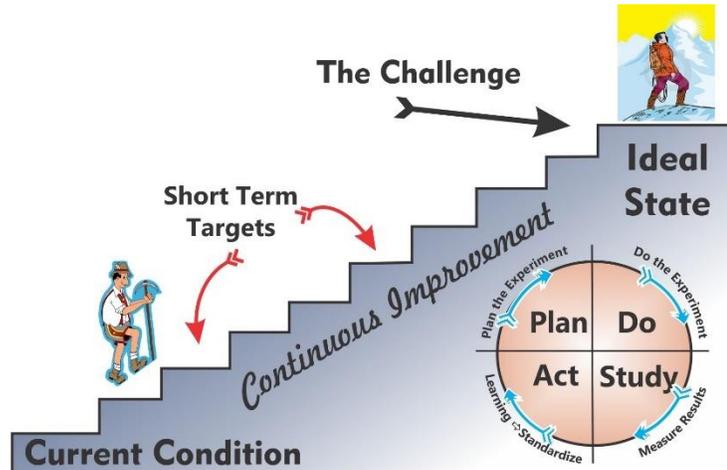
The *action-learning* process at VON involves demonstrating new skills by every leader along with his or her team. It is very much like the PDSA problem-solving model in that it is a cycle of learning through experimentation.

The more critical stage of learning - and this is where coaching was most helpful, is when the Nurse Managers and Team Leaders practice the new behavior and received feedback and encouragement. They learned and then practiced their new skills with their team. For



example, the team practiced problem-solving skills, led by their team leader. They went through a sequence of continuous improvement steps, repeating the Plan-Do-Study-Act cycle, developing their skills each time. The Team Leader gave feedback to the team and the Coach gave feedback to the Team Leader.

Lean management, which is derived from the Toyota Production System, is founded on the very simple idea of continuous improvement. Rather than assuming that there is one right way, it assumes a continuous process of learning through experimentation. There is always a current state of performance; a desired target for improvement; and an ideal state which can never be completely achieved. There is an acceptance of the experimentation, or trial-and-error improvement. This acceptance of experimentation reduces the fear of failure and promotes an understanding that we can always strive for a better way. Establishing this mindset has been a major accomplishment of the lean effort at VON Canada.



COACHING

In order to sustain the changes in behavior VON recognized the need to develop competent internal coaches. To continue to provide quality service to their clients VON established the Lean Centre of Excellence with 4 Lean Coaches (2 in Nova Scotia and 2 in



Team Coaches at VON Canada

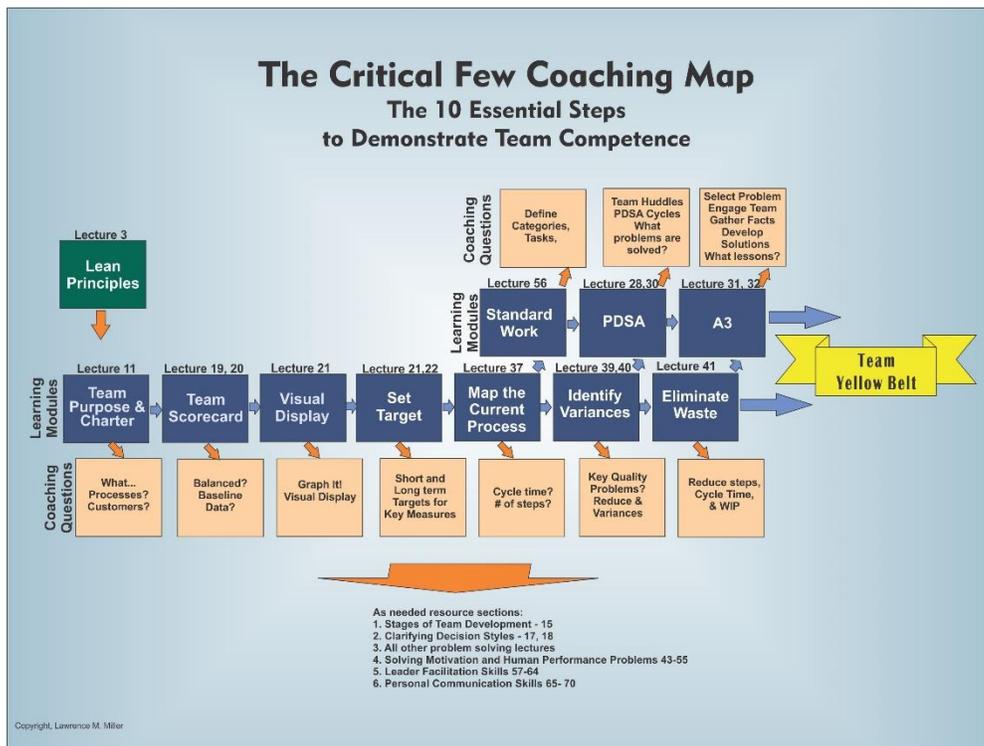
Ontario) and a Director. The Lean Centre of Excellence supported the development of the “VON Way” by providing coaching to every level of management.

The important element is that VON is striving to provide every manager with a coach. This is the practice at Toyota and VON adopted the same model. This can only be accomplished by adopting a peer-to-peer coaching model supported by the more experienced fulltime coaches.

The learning and coaching process was facilitated by the fact that every level of management, including the Senior Management Team, was participating in the same training and coaching. Senior managers could then model behavior, and reinforce that behavior at the next level.

The online course is accompanied by a Coaching Map. This map defines the sections of the course, the action steps the leader and team should take based on that lesson, and coaching questions the coach should ask the leader or team. Because the course is very comprehensive, the author was asked to identify the “critical few” lessons and actions on which the teams should focus. These critical steps included defining the team charter, their scorecard, creating visual display, and mapping their process. The additional sections of the course are important skills for leaders, communication and facilitation skills, etc., but not the most essential for improving performance in the short term. This map became the focus for both coaches and teams.

While Site Management continued with the online course, the new service delivery system went live in Nova Scotia in July 2015.



IMPLEMENTATION

The Site Management team and the redesign project team had daily meetings after the implementation of the redesigned process and captured all problems on an issue log. The Site leadership team, along with Project team, conducted root cause analysis to determine how to resolve the issues. At first, Site managers wanted to quickly jump to the solution prior to understanding the problem. This was the old cultural habits. The lean coach got them to state the problem, the impact, and by asking them the “five why’s” to determine the root of the issue. Once these items were completed, the team worked on a possible solution. By Sept 2015, all forty issues that had been logged were solved and there was an action plan for each.

Site Management and lean coaches began coaching Nurses on the new processes and the new device technology, and coaching Client Service Associates on enhancing their scheduling practices.

In the fall of 2015 the following changes had been implemented:

- With the support of the lean coach, the Site Management team developed a team charter, a scorecard and standard work for all levels including the leadership team.
- The District Executive Director (DED) coached the Nurse Managers to apply the “VON Way” which included team problem-solving, a scorecard and visual display, and recognition for improvements.
- The Site leaders created a LEAN room in which there was visual display of the site’s data and illustration of the latest process maps.
- Site leaders established weekly regular leadership meetings which included the DED, Nurse Managers, CSA Team Leads and Lean coach. These meetings included review of performance data and problem-solving any issues that had surfaced. In some cases, sub-groups were formed to solve more complex problems that could not be solved in that meeting.
- Site leaders also started a weekly Productivity meeting separately for Cape Breton and Antigonish. These included the Nurse Managers, DED, Nurses, CSAs, CSA Team Leads, and Site Administrators.
- In all meetings, when there is a problem that cannot be solved quickly, the A3 format, which is taught in the *Team Kata* course is used.

The District Executive Director made the online *Team Leadership* course a priority to her Site Management team. She also “modeled the VON Way” by going to the Gemba (where the work gets done), visiting the CSA room regularly to ask questions and learn from their own problem-solving.

Using positive reinforcement to develop the new habits of teamwork was encouraged by the lean coaches. This included encouraging the District Executive Director to follow-up

with the Customer Service Associates (CSAs), who do the scheduling, when there was a new productivity improvement. This both provided encouragement and reinforced following the new standard work that had been defined. Previously, there was little in the way of personal relationship between the DED or site leaders and those who did the scheduling. Now, a personal caring relationship was being created that enabled the managers to provide more direct coaching to both the CSAs and the service providers.

RESULTS:

All of the important indicators of performance improved significantly. It is impossible to separate the results caused by the redesigned process versus the results of training and coaching. The improved measures included the key productivity measure of weekly home visits per nurse, a significant reduction in over-time hours and a reduction of travel expenses.

- The most critical measure that impacted productivity was visits per full-time nurse equivalent (FTEs). It increased from approximately 36 per week to 43 per week in the district highlighted in this case study. Throughout the larger organization, on average, visits increased from 35 to 48 visits per FTE, or 37% employing the same blended learning model.
- Over-time decreased from 10% of total hours to under 1%,
- Unscheduled time, a clear form of waste, decreased time from 10 to 20% to below 2% of total time.

There have been many changes in the social system and behavior. One obvious example of this is the daily huddles, a brief team meeting of local nurse teams. In these huddles the nurses and CSAs review any scheduling problems, and solve them on-the-spot. Despite the fact that the nurses are in the field and huddling virtually, there is an 80% attendance rate at the daily huddles.

The Site experienced some turnover with Nurses due to the culture change. Under the new system, there is visibility to everyone's work which made everyone more accountable. The majority of the nurses enjoyed the new streamlined processes and team environment

The Site continues to institute Lean practices in their everyday activities.

VON leadership felt that some form of recognition for completing the Team Leadership course, and implementing all of the required action steps, deserved some positive reinforcement. Rather than rely on external certification, they created their own Yellow Belt award. In May 2015, the Site Management team had started the Team Leadership course and they completed this in the winter of 2015. They received their Yellow Belt award presented to them in person by VON's CEO, Jo-Anne Poirier.



Nurse Managers Laurie Clark, Frances Magliaro, and District Manager Elizabeth MacDonald with their Yellow Belt Award