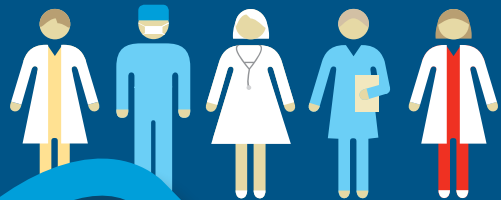


Management
models to
know:

**Lean,
Six Sigma and
Lean Six Sigma**



This brochure is for the FIQ local teams.
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Lean, Six Sigma and Lean Six Sigma

Constant research for the improvement in the performance of organizations, both public and private, is not new. Over the last thirty years, numerous management models in the production of goods and services have succeeded each other in order to improve this performance: the Toyota production system, the *approche 5 Zéro* (*zéro panne, zéro délai, zéro papier, zéro stock, zéro défaut*) (5 Zero Approach-zero breakdowns, zero delay, zero paper, zero stock, zero default), Reengineering, the ISO 9000 standard, Toyota Total Quality Management-TQM), the Lean, Six Sigma and Lean Six Sigma Approaches...

How did organizations get to a point where they must constantly adapt to changes driven by an external and internal context in perpetual motion? Confronted with repeated budget deficits, the Government of Québec decided to promote and support the deployment of some of these management models likely, according to the government, to improve the performance of the healthcare system in Québec. This is the case in particular for the Lean and Lean Healthcare Six Sigma Approaches which are currently implemented in some of the network institutions.

The introduction and deployment of these models in the healthcare sector risk having a significant impact on the quality of the health care and services, on the organization of work of the healthcare professionals, on their professional practice, on their working conditions and on the democratic representativeness within these institutions.

It is important to have better knowledge of these approaches in order to identify the issues and the challenges that they raise, stimulate the reflection and orient the interventions.

A glance at Lean, Six Sigma and Lean Six Sigma

Lean

The Lean approach is a western adaption of Toyotism, a Japanese model on organization of work. First tried in the goods production plants (automobile, manufacture, etc.), this approach is being used more and more in the services sector, including that of health care. It strives for a systematic improvement in work processes.

Six Sigma

Six Sigma is also an approach for improving the processes developed in the 1990's by Motorola in the United States. The Greek letter "*sigma*" is used in statistics to represent the level of variations seen in a process (sigma = standard deviation, six sigma = six times the standard deviation). It is a method or a technique based essentially on the concept of statistical measurement and analysis of data which make it possible to compare the distribution of the results obtained to those of the desired results.

Lean Six Sigma

Lean Six Sigma is putting the Lean and Six Sigma complementary approaches together. This combination makes it possible to include the processes, methods and tools of everyone. While Lean tackles more the speed of the processes and anything that may impede it, Lean Six Sigma is mainly interested in variations and the complexity of the processes likely to impede the offer of efficient and quality services.

The characteristics of Lean

Several names are associated with the Lean approach such as the “lean and mean plan”, “downsizing”; the most current is “lean production”. In the healthcare sector, Lean is defined as being “a way to render the **patient management process more fluid** thanks to its **standardization**, to help the personnel to **eliminate all waste**, to make it possible to **better care for the patients with existing resources**”¹. (our translation)

One goal

Improving the performance of the organization and satisfying the clients by providing them service of better quality, more quickly.

One objective

Perfect the work processes by improving the flow and the speed to minimize the resources used for the production of large quantities of quality goods or services at a lower cost.

A process is an implicit or explicit manner to organize, coordinate, execute a series of work activities or steps. The processes are grouped in three large families (achievement, backing or support, management or coaching) which subdivide into several sub-processes. Several sub-processes are interrelated and interact together (clinical, administrative, clinical-administrative, logistics, technology, etc.) in a health-care institution.

1. PHILIPPE, Marianne and Elisabeth RAYMAKERS, “Lean & Six Sigma dans le secteur de la santé, Des concepts... à la mise en œuvre”, p. 22.

A means

To accelerate the speed of the processes by the elimination of tasks with no added value, the elimination of losses, the simplification of the processes and the increase in their fluidity and flexibility. To do this, the Lean approach examines three sources of inefficiency in the processes:

- The **waste** (anything that adds to the costs and has no value to the client).
- The **variability** (all differences in the quality of a product or of a service in relation to a standard level).
- The **flexibility** (any obstacle which prevents a response to the evolving demand).

A central demand

Track all forms of waste to better serve the needs of the client with less effort, less time, less resources and less cost. From this idea, comes the slogans with the image: “do more and better with less”, “do otherwise” “do only what is required, when it is necessary and in the quantity needed”, “the right intervention at the right time by the right person in the right place”.

The basic principles

- Only do what is necessary.
- Permanent questioning of the processes (continuous improvement).
- Appeal to collective intelligence to reduce all waste.

A five-step process

1. Define what is of value to the client.
2. Identify the value chain corresponding to each service, each product, each activity.
3. Install constant streams of value.
4. Implement pull-flow production based on the client.
5. Aim for perfection.

The methods and tools most used

The objectives pursued by an organization will determine its choice of methods and tools used to successfully complete a Lean approach. Some however, are inherent to this approach:

- **Create a work environment conducive to carrying out the tasks:** the Lean approach calls on the 5S method (*Seiri*: sort; *Seiton*: straighten or set in order; *Seiso*: sweep and shine; *Seiketsu*: standardize; *Shitsuke*: sustain (formalize and ensure good order and the organization of the physical setting)). The objectives of this method are to avoid cluttering of spaces, to guarantee proper management of locations and a clear location for work equipment, to prevent disorder in the workplace, to avoid orders of useless equipment, to prevent work accidents and to optimize the working and the time conditions.
- **Identify those activities to keep and to eliminate:** the Lean approach uses value stream mapping. All activities must be identified, evaluated and classed according to three categories: the added-value activities, that is, essential, type 1 without added value activities, that is, non essential, but necessary and type 2 without added value activities, that is, neither essential nor necessary.

- **Ensure a continual flow of the process:** the Lean approach uses visual control (direct observation, video clips, etc.) to produce a report on the time allotted for expectations and the most significant delays in the progress of the process.
- **Identify the serious disturbances in the path of the process:** the Lean approach uses such methods as: the 5 Whys, the Kaizen, the cause and effect diagram, etc.
- **Eliminate all forms of waste:** the Lean approach addresses eight categories of waste: the non-conformity of products, useless stock-piling, over production, unnecessary waiting, unnecessary transportation and handling, redundant tasks, unnecessary movement and travel, the underutilization of personnel (downtime and untapped knowledge). Eliminate, reduce, simplify, computerize, automation are potential solutions to consider in avoiding waste.
- **Make the processes more fluid:** to permanently maintain a regular flow of the work process, the Lean approach uses the “just in time” (JIT) system, which consists of producing only the good or service wanted, at the time wanted, in the quality and quantity wanted. The needs and the activities must be synchronized between the steps of the process to avoid waiting times, surpluses or shortages and to ensure that production is “driven” by the demand and not “pushed” by the offer.
- **Reduce the variability in the production process of goods or services:** the Lean approach uses standardization of procedures and methods of work. A standard aims to determine the best method and sequence to perform work. Performance indicators are associated with it and must be strictly followed. The standards make it possible to ensure that the tasks are always performed in the same way; they also serve as a basis to determine the manpower needs (numerical flexibility), to eliminate barriers between professions, to distribute the work among the different categories of care-giving and non

care-giving personnel, to expand the versatility over a broader set of tasks and to increase mobility (functional flexibility).

The characteristics of Six Sigma

One goal

Drastically reduce or eliminate all forms of variation in conducting the processes in order to make them reliable, render them stable and predictable, to ensure their “perfect” productivity in achieving zero defects and thus satisfy the clients.

One objective

To improve the performance of the processes by reducing the rate of defects to under 3.4 defects per million opportunities (DPMO). A defect corresponds to any value which does not meet specifications or the clients’ expectations. (faulty work, defective product, accident/incident, delay, etc.)

One means

Use a structured, strict methodology based on a well-defined sequence of steps: define, measure, analyze, improve/innovate, control (DMAIC).

One central idea

Too much complexity in a process amplifies the possibility of variations and only increases the danger of increasing costs, time and the number of defects while giving little or nothing in return: therefore, the processes must be simplified.

The methods and tools most often used

Use of an array of statistical tools, graphics, analyses, interpretations of data, statistics, etc.

A critical analysis

All management models for the production of goods and services have their strengths, their weaknesses, their limits, their shortcomings and their pitfalls. The Lean and Lean Six Sigma models are no different.

In theory, the lean production models (Lean and Lean Six Sigma) seem to be promising. However, in practice, these models are subject to criticisms which call for caution and vigilance. These criticisms focus, in particular, on:

- The fact that the main objective of these approaches is not an improvement in the quality of care, but has more to do with a reduction in costs.
- The obsessive desire to develop a “culture of measurement” in the workplaces where health care is the “product”, the “service”.
- The higher costs associated with these approaches (money/time/energy) and the low return on the investment.
- The low rate of sustainability for the improvements made.
- The little (Lean) or the too much (Six Sigma) importance given to the statistical analyzes, graphics, simulations, etc.
- The lack of knowledge in collecting and analyzing the data of some of the project managers, which threatens to distort the organizational diagnosis.
- The questions on the relevance, validity, and limits in the choices made for the methods and tools used.
- The lack of precision in the application of the implementation process (DMAIC).

- The credibility attributed to certain outside consultants, the main promoters of such management models, and the importance of the role given them and that they play in how these approaches are conducted.
- The methodological flaws noticed in certain identified studies on the results associated with the implementation of such approaches.
- The human aspect and professionalism too often overlooked or ignored.
- The introduction of managerial techniques from industry in the health-care sector without taking into account the specific nature of care settings.

For a long time, healthcare professionals have deplored and denounced the malfunctions in the processes or the way of doing things that they notice every day in the care settings and have demanded appropriate and lasting corrective action. Will the corrective measures brought following the use of the Lean or Lean Six Sigma approaches have these two characteristics? Doubts remain.

First, during the initial stage in the implementation of such managerial approaches, the improvements usually and mainly involve the work environment (the arrangement of the physical surroundings, work spaces, tools and work equipment, service corridors, etc.); it is therefore not surprising that the interest and satisfaction of the personnel involved may then increase. However, over the long run, it is sometimes noticed that not only is there a deterioration in the organization of the production, but also on the level of the quality of services, working conditions and work life conditions, professionalism and representative democracy. In such a context, caution and vigilance are required to avoid that such production management models have these negative effects.

The potential impacts

More specifically, the dangers, fears and concerns associated with the use of such production management models relate to:

The quality of the care and services

- Increased tension between the standardization and the customization of the care in the relationship between the patient and the healthcare professional.
- Undue emphasis given to the patient's satisfaction, which becomes the single most important criterion, if not the only, to evaluate the quality of care and services thus overlooking the necessary and inevitable integration of the three factors to take into account in evaluating the quality of care: the structure, the processes and the results.
- Non-consideration of the multidimensional and multi-factorial character of the quality of care, thus risking distorting the results attributed to these approaches.

The professional practices

- Obscuring of the intrinsic dimensions of the healthcare professionals' work: the educational, preventive, humanitarian, ethical and reflexive relational dimensions.
- Inability to measure the invisible, the intangible, the hidden side of professional practice.
- Greater segmentation of the work within a profession and between the professions.
- Trivialization and inappropriate use of professional competencies (deskilling/reclassification).

- Controlled autonomy and greater accountability due to more structured and more standardized work methods.
- Undermining professional identity, values and the requirements inherent to the professions focused on the delivery of care.
- Simplistic approach strongly focused on tasks, relegating the roles, duties and responsibilities of healthcare professionals to a secondary position.

The working and work life conditions

- Higher concentration of tasks.
- Higher work intensity and stress.
- Pressure to increase productivity (absence of time stamps), performance.
- Continuous pressure for commitment, involvement, accountability for production.
- Close fit of staff to the immediate needs and the schedule flow of the clients.
- Challenging of the stability of positions, the contribution of each job title (greater internal mobility).

Representative democracy

- Marginalization of the unions and the non respect of the roles and responsibilities assigned to them in the collective agreement in matters of organization of work and care.

Collective action in organization of work

The documentation consulted is unanimous on the conditions for success for such models; it stresses the need to create a climate of confidence with the people and the personnel involved, to ensure transparent continuous and full disclosure and to involve all the people and structures represented.

Considering the possible impacts of the implementation of these management models, it is important and necessary for the local teams, the unions and the healthcare professionals to set out guidelines for all proposed or implemented major changes to organization of work, care and services in the health-care institutions. More than ever, it is crucial to remember, strengthen and use the mechanisms and the locations for interventions in the collective agreement to ensure an organization of work in every institution that makes it possible to have an accountable, full and satisfying professional practice, respect for the working conditions and a better quality of life at work.

Union responsibilities and roles to practise

At the local level

Any setting up or establishing of proposed management models in the care settings requires the implementation of a union action plan by the local team or the union. Here are the key steps:

- Demand to be the only spokesperson with the employer for its members during all steps in the reorganization of work processes, care or services.
- Inform the employer that any project or exercise in progress aimed at modifying the work processes, care or services in which the healthcare professionals are directly involved be the subject of employer-union exchanges and discussions within the scope stipulated in the collective agreement.

- Develop and support the information exchange and discussion mechanisms with the members sitting on the parity committees in the collective agreement directly concerned by any major change in organization of work (committee on care, labour relations committee, occupational health and safety committee, etc.).
- Demand participation in any ongoing project or exercise dealing with organization of work, care or services in the institution from the employer in order to counter all steps likely to harm or harming the quality and the safety of health care, working conditions and the quality of life of healthcare professionals.
- Inform the members of the potential risks associated with using the Lean approach or similar approaches in organization of work, and the importance of informing the local team or the union of any employer approach that directly concerns them with the goal that they personally get involved in such projects or exercises in progress.

At the national level

- Continue to take steps with the government bodies involved so that the models, approaches or steps in organization of work, care or services that are proposed or implemented in the health network institutions be the subject of continuous parity exchanges and discussions, in particular at the *Comité paritaire provincial sur la tâche et l'organisation du travail* in accordance with the provisions stipulated in the collective agreement.

For quality professional care

For more than forty years, the mission of the Québec health-care system has been to ensure quality, safe, accessible and the continuity of health care and services. Since 2010, the Government of Québec has added to that mission “to ensure the fluidity of care and services”: this addition is not insignificant.

In a context where the needs for care and services are growing, the political choices in health care are guided by the general economy. It is being said that the performance, productivity, efficiency and effectiveness of the health-care system must be improved. Thus, the “production” processes in health care and services must, just like in the industrial sector, strive to reduce the time in the production cycle, eliminate everything that is considered to not add value, standardize the different steps in the value chain, calculate “as accurately as possible” the “tasks” to perform, the staff and the competences considered necessary to meet the demand and be oriented to the satisfaction of the client as the priority”.

Thus, it should come as no surprise that there is confrontation between the different logics in place in the care settings: market, organizational, managerial, personal, individual, collective, societal logics.

When the healthcare professionals are with a patient, they first enhance, care about and promote the health status of the patient and human relationships: they ignore or pay little attention to performance indicators, accounting or budgetary issues. However, despite this apparent disinterest, real or fictional, the healthcare professionals have always actively cooperated in improving the efficiency and effectiveness of the network. They have never hesitated to question their way of doing things and, if needed, to modify them if it is in the patient’s interest.

In light of the establishment of management models for the production of goods or services, approaches or steps focused on an “*optimisation des processus générateurs de gains de performance*” (optimization of the processes that generate performance gains - our translation), “*sur l’ajustement des rôles et responsabilités et des tâches qui en découlent de toutes catégories de personnel visées par l’optimisation des processus*” (on the adjustment of the roles and responsibilities and tasks stemming from all classes of personnel covered by the optimization process - our translation) and on the “*révision de l’organisation du travail, des soins et des services*”² (revision of the organization of work, care and services - our translation) delivered in the health-care institutions, it is important to get involved, question and, if necessary, denounce and oppose individually and collectively.

Union involvement and participation in all major changes, real or anticipated, in organization of work, care and services does not in any way seek to legitimize or sanction whichever managerial and employer model, approach or step in organization of work. They set out to make it easier for the local teams, unions and the Federation to play a determining role in the organization of work of the healthcare professional members of the FIQ so that they can work in a work environment that is healthy, respectful of their professional practice and their working and their work life conditions, and this, with the ultimate objective of ensuring quality professional care for the patients.

2. Gouvernement du Québec, « *Projet d’implantation de l’approche de performance Lean health care six sigma dans les établissements du réseau de la santé et des services sociaux - Appel d’offres* », p. 11, 12 and 15.

ACTUALITÉS CHALLENGES COULISSSES. *La vérité sur... les dérives du toyotisme*, [Online]. [www.challenges.fr/magazine/coulisses/0207.30272/], (Consulted May 31, 2011).

AGENCE NATIONALE POUR L'AMÉLIORATION DES CONDITIONS DE TRAVAIL (ANACT). *Lean et conditions du travail : une initiative en Lorraine*, [Online]. [www.anact.fr/portal/page/portal/web/actualite/essentiel?pthingldToSHow=19629575], (Consulted July 6, 2011).

ASKENAZY, Philippe. *Les désordres du travail – Enquête sur le nouveau productivisme*, France, Éditions du Seuil et La République des idées, 2004.

BARIL, Chantal. *Les philosophies manufacturières : bilan et recommandations pour leurs transferts dans les services de santé*, 8^e Congrès International de Génie Industriel, Bagnères-de-Bigorre, Tarbes, France, June 2009 (article).

BLAIS, Marie-Claude, Denis LAGACÉ et Liette ST-PIERRE. *Le Lean au centre Parents-Enfants du CHRTR : un début prometteur*, 8^e Congrès International de Génie Industriel, Bagnères-de-Bigorre, Tarbes, France, June 2009 (article).

BOUZEKOUK, Salim. *Produire vraiment sans gaspiller L'après juste à temps*, Paris, Éditions d'Organisation, 2002.

CHAKRAVORTY, Safia, S. "Six Sigma programs: An implementation model", *International Journal of Production Economics*, 119, 2009, p. 1-16.

CHEVRIER, Madeleine, Gilles LE BEAU et Joanne LESSARD. *L'optimisation en santé : les projets Lean, une avenue à privilégier*, Midi-conférence, Direction générale de la planification de la performance et de la qualité, Ministère de la Santé et des Services sociaux, October 4, 2011.

CHIFFELLE, Xavier. *La production au plus juste. Le fruit de l'évolution de l'organisation industrielle*, Suisse, Éditions Universitaires Fribourg Suisse, 1995.

DRAGHICI, Mihai, and Andreea Jenica PETCU. "TQM and Six Sigma - the Role and Impact on Service Organization", *The Romanian Economic Journal*, N° 36, June 2010, p. 123-135.

DREW John, Blair MC CALLUM and Stephan ROGGENHOFER. *Objectif Lean Réussir l'entreprise au plus juste: enjeux techniques et structurels*, Paris, Éditions d'Organisation, 2004.

DUJARIER, Marie-Anne. *L'idéal au travail*, France, Presses Universitaires de France (PFU), 2006, coll. "Partage du savoir".

FÉDÉRATION INTERPROFESSIONNELLE DE LA SANTÉ DU QUÉBEC – FIQ. *The Lean approach, The importance of acting collectively on the organization of work*, Task and Organization of Work Sector, PowerPoint presentation to the Federal Council on March 29, 30 and 31, 2011.

FÉDÉRATION INTERPROFESSIONNELLE DE LA SANTÉ DU QUÉBEC – FIQ. *The Lean approach: The importance of collective action on the organization of work*, Task and Organization of Work Sector, Document A11-CF-I-D10, presented to the Federal Council on March 29, 30 and 31, 2011.

GADREY, Jean, and Philippe ZARIFIAN. *L'émergence d'un modèle du service : enjeux et réalités*, Paris, Édition Liaisons, 2002.

GEORGE, Michael L. *Lean Six Sigma pour les services : Comment utiliser la vitesse Lean & la qualité Six Sigma pour améliorer vos services et transactions*, Paris, Édition Maxima, 2005 and 2006.

GEORGE, Michael L., Bill KASTLE and Dave ROWLANDS. *Qu'est-ce que le Six Sigma*, Paris, Édition Maxima, 2010.

GOUVERNEMENT DU QUÉBEC. MINISTÈRE DE LA SANTÉ ET DES SERVICES SOCIAUX (MSSS). *Projet d'implantation de l'approche Lean Healthcare Six Sigma Appel de candidatures*, July 28, 2011.

GOUVERNEMENT DU QUÉBEC. CENTRE DE SERVICES PARTAGÉS DU QUÉBEC - *Projet d'implantation de l'approche de performance Lean Healthcare Six Sigma dans les établissements du réseau de la santé et des services sociaux 999104040 Appel d'offres fondé sur le rapport qualité prix, Document d'appel d'offres à l'intention des organismes publics*, February 2011. 66 p.

KUMARAVADIVEL, A., and NATARAJAN, U., "Empirical study on employee job satisfaction upon implementing six sigma DMAIC methodology in Indian foundry - A case study", *International Journal of Engineering, Science and Technology*, Vol. 3, n° 4, 2011, p. 164-184.

LAMPRECHT, James. *Démystifier Six Sigma Comment améliorer vos processus*, France, Éditions AFNOR, 2003.

LANDRY, Sylvain et Martin BEAULIEU. « Achieving Lean Healthcare by combining The Two-Bin Kanban Replenishment System with RFID technology » *International Journal of Health Management and Information (IJHMI)*, vol. 1, n° 1, 2010, p. 85-98.

LAPOINTE, Paul-André. *Cercles de qualité ISO 9001-2-3, Qualité totale, Réingénierie et... quoi encore ?*, Conference presented at the 50th Congrès des Relations industrielles, Université Laval, Québec, May 1 and 2, 1995.

LEPROHON, Judith. *Vers une culture d'amélioration continue*, "L'infirmière du Québec", May-June 2000, p. 25-38.

LIKER, Jeffrey. *Le modèle Toyota 14 principes qui feront la réussite de votre entreprise*, Paris, Pearson Éducation France, 2009.

LIKER, Jeffrey, and David MEIER. *Talent Toyota Les hommes au cœur de la réussite*, Paris, Pearson Éducation France, 2008.

MANUFACTURIERS et EXPORTATEURS DU QUÉBEC (MEQ). *Guide des bonnes pratiques en amélioration continue au Québec*, Partage de succès et pièges à éviter, Montréal, MEQ, 2009.

PHILIPPE, Marianne and Elisabeth RAYMAKERS. *Lean & Six Sigma dans le secteur de la santé, Des concepts... à la mise en œuvre*, PowerPoint, Charleroi, Belgique, December 17, 2009.

PULAKANAM, Venkateswarlu, and Kevin E. VOGES. "Adoption of Six Sigma by Organizations: What has Empirical Research Discovered?", *International Review of Business Research Papers*, Vol. 6, N° 5, p. 149-163. [Online]. [<http://bizresearchpapers.com/12%20Kevin%20Voges-FINAL.pdfarticle>].

RAVEYRE, Marie, and Pascal UGHETTO. *Le travail, part oubliée des restructurations hospitalières*, Revue Française des affaires sociales, N° 3, July-September 2003, p.95-119.

ROBELET, Magalie, Marina SERRÉ and Yann BOURGUEIL. "La coordination dans les réseaux de santé : entre logiques gestionnaires et dynamiques professionnelles", Revue française des Affaires sociales, N° 1, 2005, p. 233-260.

VALEYRE, Antoine. *Conditions de travail et santé au travail des salariés de l'Union Européenne: des situations contrastées selon les formes d'organisation*, document de travail, Direction de l'animation de la recherche, des études et des statistiques (Dares), N° 73, November 2006.

VEST, Joshua R. and Larry GAMB. "A critical review of the research literature on Six Sigma Lean and StuderGroup's Hardwiring Excellence in the United States: the need to demonstrate and communicate the effectiveness of transformation strategies in healthcare", *Implementation Science*, 2009, 4: 35, [Online]. [www.implementation.com/content/4/1/35].

WOMACK, James and Daniel JONES. *Système Lean Penser l'entreprise au plus juste*, Paris, Pearson Éducation France, 2009, (2nd edition).



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