

# Lean and the perfect patient experience

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The term Lean means different things to different people. At Virginia Mason, it is applied to the management system based on the systematic identification and elimination of waste, defined as any activity that does not add value from the standpoint of the customer. First developed in manufacturing, and championed by the Toyota Motor Corporation, efforts to introduce Lean into healthcare have been met with some scepticism. 'People are not cars' has been the refrain of those unwilling to view healthcare as made up of processes that produce products and services, and that is thus amenable to improvement.

Healthcare, of course, is different from manufacturing, in that it is not simply the final product that is important to the customers, but also the patient and family experience of care. Also adding complexity in healthcare is the presence of multiple customers, the patient most importantly, and the healthcare providers and staff, and the healthcare institution itself. In addition, in most healthcare systems, there is a disconnect between those who pay for healthcare and the patients who receive it, thus generating an additional healthcare customer or stakeholder, the source of funding, whether it be the government, employer or insurance company. Clearly, the application of Lean in the healthcare setting is complex.

Successful application of Lean to healthcare requires avoidance of several pitfalls. The first of these is the misinterpretation of Lean merely as a set of tools targeted at short-term gains. The tools of Lean are well known and include value stream maps, 5S and rapid quality improvement workshops. These tools are effective in the short term, but true transformation and sustainability require, in addition, aligned leadership, a supportive institutional culture and integrating the Lean tools as part of a comprehensive

management system.<sup>1</sup> Absent these latter elements, expectations for Lean improvement should be limited to small-scale targeted gains.

Second, in the hierarchy of customers in healthcare, priority must be assigned first to the patient. Fundamentally, healthcare exists to serve patients. It, then, is foundational that waste must first be defined from the perspective of the patient. For example, much of the value to a patient in a primary care visit lies in the direct interaction between the provider and patient. Therefore, Lean improvements in the primary care visit should first focus on maximising this interaction, increasing its length, eliminating distractions and delegating simple tasks (ie, data entry, blood pressure measurement) to others. The needs of the other customers in healthcare are important, but must be secondary to those of the patient. For example, though increasing throughput may be important to some of the customers in healthcare, this is a secondary goal and should not be addressed at the expense of the provider-patient interaction.

Third, Lean enables systematic improvement towards specific targets, with the choice of targets therefore determining the improvement plan and overall impact of the work. From the patient perspective, quality, safety, access and the care experience are most important, and these then must be the primary targets for the Lean approach. Too often, Lean is treated simply as a cost-cutting or efficiency approach, mitigating the opportunity to improve overall care. Furthermore, cost control may not be the top priority for frontline staff who are motivated to work in healthcare by a desire to focus on patient needs. A primary focus on cost may alienate these key participants in the patient care process and limit improvements. Conversely, using Lean to address quality



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and the patient experience first may enhance adoption of the methodology through increased staff buy-in.

Despite these application challenges, Lean can be effective in healthcare as well as in manufacturing, with a growing literature supporting improved patient experience, quality, safety and efficiency. The existing research is far from complete but there are at least abundant examples as proof of concept that, under many circumstances, Lean can be effective.<sup>2-4</sup> However, in this issue, Poksinska *et al* report that implementation of Lean management in 23 primary care centres in Sweden was not associated with improvements in the patient experience.<sup>5</sup>

Why did the patient experience not improve? Our tools to measure the patient experience are imperfect, and as the authors acknowledge, measurement error may contribute to the lack of positive results. However, more important is the qualitative information that the authors provide from the case study of two primary care centres that successfully adopted Lean. In both cases, interviews from the sites confirmed success in improving value from the standpoint of the customers. Unfortunately, the primary customers were not patients, but rather were the managers and providers. We do not question the value of improvement from the perspective of providers and staff or of improving the efficiency of the healthcare system. However, fundamentally, unless value from the standpoint of the patient is understood and prioritised, improvement in the patient experience cannot be expected. Thus, lack of improvement in patient satisfaction should not be seen as a failure of the Lean management system, but rather as the expected outcome when patient values and experience are not prioritised.

Nonetheless, the results of the study are provocative. No doubt all healthcare institutions identify patients as the first priority. However, do the needs of the patient truly come first? The results presented

should provoke us all to re-evaluate our own priorities and, if we are applying Lean, to understand from which perspective waste is defined. In a sense, we would view the Lean implementation described in the Poksinska paper as a lost opportunity. The time and resources devoted to applying Lean to address the needs of the health system could be better used to improve value for the patients primarily, as well as all providers and staff. Cost-saving may then be expected to accrue from improved patient outcomes, and from better workforce engagement, productivity and efficiency.

Lean can form the foundation to address the complex challenge of improving quality and patient experience in healthcare. However, to reach its potential, Lean must be deployed systematically, with waste being defined primary from the patient perspective, and with quality, safety and the patient experience prioritised as targets. People are not cars, but neither is Lean simply a methodology to reduce costs.

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