

THE LOGISTICS CRISIS IN PROTECTIVE EQUIPMENT: HOW COULD QUEBEC HAVE DONE BETTER?

Montréal, April 15, 2021 – To say that the supply of personal protective equipment (PPE) – masks, visors, gloves, gowns, etc. – was one of the most important factors in the first wave of the COVID-19 pandemic is an understatement. In that race against the clock, all the industrialized countries grabbed for the same products, to meet increasingly desperate needs. But one year later, with hindsight, what lessons can we learn from this logistics crisis? Could Quebec have done things differently? It is precisely to better understand the decisions by the different logistics players in Quebec that the Centre for Productivity and Prosperity – Walter J. Somers Foundation asked researchers Jacques Roy and Martin Beaulieu to conduct a study on the management of PPE in the Quebec healthcare system.

“Through interviews with logistics decision-makers in the healthcare sector, we first retraced the series of events and actions during the first wave, at a time when it was most challenging to procure PPE,” explains HEC Montréal Professor Jacques Roy, a supply chain expert. “Then we analyzed these data to come up with conclusions and recommendations to help public decision-makers adopt better supply chain management practices.”

A crisis before the crisis

The timeline of events shows that long before the COVID-19 pandemic struck Quebec, there was a logistics crisis in the supply of personal protective equipment. Because of the characteristics of the PPE supply chain (low-cost strategy, production offshored to Asia) and specific circumstances (Chinese New Year, Wuhan being the primary industrial zone for PPE production as well as the epicentre of the pandemic), the window of opportunity for securing the inventory of PPE had become very narrow. Even had it been possible to squeeze through this window, it would have been impossible to obtain enough inventory to meet the demand that was about to skyrocket in all Quebec healthcare institutions. By February, it was obvious that the usual suppliers of the healthcare system could not keep up with demand.

More specifically, the researchers identified four shortcomings that apparently undermined the efficiency of the PPE procurement process during the pandemic: management by consensus that was ill-suited to a crisis; information systems unfit for logistics operations; relations with suppliers limited to transactions; and embryonic performance management systems.

Some recommendations

In the light of these conclusions, the researchers offered some recommendations based on best practices.

- 1) **Identify predictors to anticipate the emergence of future pandemics:** This would make it possible to propose preventive measures such as stocking up on products and launching an operational pandemic management team.
- 2) **Diversify expertise in purchasing management:** So as to make purchases that take account of the particular features of international markets and to analyze the risks associated with supply sources.
- 3) **Define a centralized logistics-management structure for a pandemic or other crisis and allocation policies:** A centralized structure would simplify communications between suppliers and healthcare institutions, thereby reducing competition within the system. PPE allocation policies must be regularly updated to reflect the current situation.
- 4) **Ensure that key information for a demand-management system indispensable during a pandemic is kept up to date:** It is simpler to maintain this basic information from day to day than to try to update it in the midst of a crisis.
- 5) **Maintain close collaboration between logistics decision-makers and the infection prevention and control departments in healthcare institutions:** This kind of collaboration would give logistics managers more legitimacy when it comes to ensuring respect for PPE user protocols, and expertise for quality control in purchasing.
- 6) **Develop collaborative formulas between healthcare institutions and suppliers:** Such collaboration can give suppliers more insight into demand, so that they can suggest solutions in the event of shortages. In return, suppliers could share strategic information on markets and their constraints with healthcare institutions.

“These recommendations are part of developing a management system intended to mitigate the impacts of a pandemic, but also to improve the day-to-day performance of the healthcare sector supply chain, so as to ensure that institutions can cope in a future crisis,” conclude authors Jacques Roy and Martin Beaulieu.

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For more information:

- Consult the report (in French), entitled [*Gestion des équipements de protection dans le réseau québécois de la santé : Chronologie des évènements et premiers constats.*](#)
- Téléchargez le communiqué [en français.](#)

About the Centre for Productivity and Prosperity – Walter J. Somers Foundation

The Centre for Productivity and Prosperity – Walter J. Somers Foundation has a twofold mission. First of all, it is devoted to research on productivity and prosperity, mainly in Quebec. The Centre then shares its research findings through knowledge transfer and educational activities.
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About the Walter J. Somers Foundation

The Somers family established the Walter J. Somers Foundation in tribute to the founder of Walter Surface Technologies. Through different donations, the Foundation pursues the family heritage of commitment to the community and contributes to the prosperity of Quebec society, firstly by helping to enhance its productivity but also by supporting excellence in youth education.

Source:

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