**The importance of data and analytics in driving value-based healthcare within the health system supply chain**

Today's hospital executives and health system leaders are laser-focused on patient outcomes. To achieve these outcomes, they must make efficient, informed decisions while keeping a constant eye on financial health. Healthcare organization leaders live in a world in which poor or delayed decisions have dire consequences such as crippling costs or patient dissatisfaction or, worse, loss of life. This is especially true for federal government agencies such as the Department of Veterans Affairs (VA), which faces internal and external pressures to make time-sensitive decisions that impact thousands of lives. The VA's most complex problem—human bodies that may fail in mysterious ways—makes other lofty goals look simple. In the end, though, achieving strong patient outcomes means using analytical tools that lead to improved outcomes and lower costs. For agencies such as the VA, this requires effectively harnessing the vast amounts of health data already collected and using it to make more strategic decisions.

In his 1980s book, *Competitive Strategy*, Michael Porter provided an approach to breaking down and understanding the alchemy that is critical to our current analytical revolution, especially in healthcare. Porter said that value is defined as benefit divided by cost, a concept now adapted in our industry as "value-based healthcare." In healthcare today, value-based healthcare entails using data and analytics tools to provide the best care possible while simultaneously lowering costs to the patient, health system, and hospital system.

The importance of using analytics to derive value-based healthcare is especially notable within the health system supply chain. Using analytics to understand data, trends, and the cost of delaying decisions allows healthcare leaders to recoup funds lost earlier in the supply chain trail. Health systems can use this money to provide greater value to patients at a lower cost.

From our experience, one requires two essential components to promote value-based healthcare through the use of analytics in the health system supply chain:

1. **Good data is essential.** As any analytics expert will tell you, cleaning, verifying, and organizing data often takes 50-70% of any analytics effort. Clean data is the first step in the analytics journey, and is especially important when considering all the moving parts within a health system supply chain. There are simply too many moving components for the data used to be incorrect or unclean. Accuracy is key.
2. **Understand what questions need answers**. Unlike other industries, analytics in healthcare is quickly becoming the solution for supply chain operational issues. Before solutions can be implemented, organizations first need to know what questions need to be answered. One can glean useful analytical insights within an individual health system supply chain when health systems understand how to harness and interpret data at the right point in the supply chain. A better understanding of the organization's drivers, needs and pain points is essential.

Once these two components are incorporated, executives and health system leaders can leverage analytic tools and techniques in various parts of the supply chain to successfully drive value-based healthcare. This can be seen in all areas of an organization's operations, from supply management to patient risk analysis to effectively monitoring, evaluating, and predicting areas of rising demand. Additionally, inventory costs can be cut; surgical material, pharmaceutical, and equipment shortages can

be reduced or outright eliminated; practitioner performance can be reviewed and predicted; and potential issues can be alleviated before a patient faces any degradation of care. By using analytics within the health system supply chain, health systems such as the VA have the potential to help patients and their own organization alike.

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For more information on data and analytics within the health system supply chain, please visit supplychainvisions.com or rbmanagementconsultants.com.