

The Health Supply Chain

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The shift to value-based reimbursement from volume-based reimbursement puts great pressure on organizations to obtain a detailed understanding of how they deliver care and what resources they use. Without a deep understanding of these issues, providers are unable to effectively manage care delivery and survive an environment of declining reimbursement.

Other industries focus on the supply chain to efficiently manage production and the delivery of products to customers. Although healthcare organizations similarly focus on the supply chain, they focus solely on tangible products utilized to deliver care to patients. The supply chain is generally defined as:

a system of organizations, people, activities, information, and resources involved in moving a product or service from supplier to customer (http://en.wikipedia.org/wiki/Supply_chain).

The supply chain in healthcare can be expanded to the concept of the “Health Supply Chain,” a focus on all factors influencing the delivery of products and services that generate a particular clinical and financial outcome for a patient care experience. The end-to-end Health Supply Chain is defined by the following components:

Inputs – all the people, skills, supplies, and information necessary to provide care

Focus – the patient-centered services with their requisite workflows and processes

Management – approaches that facilitate efficient communication among caregivers that allows effective dissemination of information and the effective coordination of care

Delivery – point-of-care data effectively provided to influence care delivery in

addition to clinical decision support and a roadmap of best practices information

Analytics – sophisticated review of all available data to understand the impact of these other aspects of the health supply chain on clinical, financial, and safety outcomes

The Health Supply Chain model provides a broad, all-encompassing view of care delivery that links both administrative and clinical processes and workflows in the “manufacture” of patient care. This analytical approach assigns responsibility for the clinical and financial outcomes of patient care to all members of a provider organization, rather than dividing responsibility between administrative and clinical functional units.

Although administrative staff historically has focused on processes that impact their functional silo, they now must understand how their policies, processes, and workflows impact clinical care delivery. In turn, clinical staff members must now comprehend how their standards, guidelines, and workflows impact financial outcomes.

For example, ineffective purchasing by administrative staff may delay specific surgeries, leading to increased morbidity in patients (e.g., insufficient operating room supplies) and underutilized facilities (e.g., MRI scanner improperly maintained). In turn, failure to follow best practices by the clinical staff may extend length of stay, generate non-reimbursed readmissions, and increase costs of care.

The Health Supply Chain attempts to capture details about everything that potentially impacts care delivery and to understand the influence each factor has in isolation or combination on outcomes. The interactions between and

among the factors provide valuable evidence on what provides benefit and what is harmful in providing care. Constant evaluation and re-evaluation is required to identify better practices while also ensuring that a decline in care does not go unnoticed. Optimizing each part of the Health Supply Chain with knowledge gained through analytics—statistical evaluation of the processes within the health supply chain—will incrementally improve care delivery processes and enhance clinical and financial performance.

The Health Supply Chain model affords a valuable framework for organizations to begin to understand their care delivery process and the costs of care. By expanding beyond the commonly utilized supply chain model, it leverages proven approaches and cost-accounting techniques and applies them to the specifics of healthcare delivery. Organizations hoping to survive in the current competitive phase of healthcare delivery and declining reimbursements must embrace this detailed model to best understand how they deliver care, the cost of that care, and the steps necessary to reformulate the care they provide to be safe and high quality while delivered at a lower cost. ■

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