

The Impact of Supply Chain Transformation in Health Systems

Case Study:
Mercy Health, U.S. 

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Introduction

The Mercy Health (Mercy) in the U.S. case study provides emerging empirical evidence of the health system level impact of implementing supply chain transformation to improve safety, quality and fiscal sustainability. An overview of the progress achieved to date, leadership strategy, outcomes and impacts of supply chain transformation in the Mercy health system is examined.

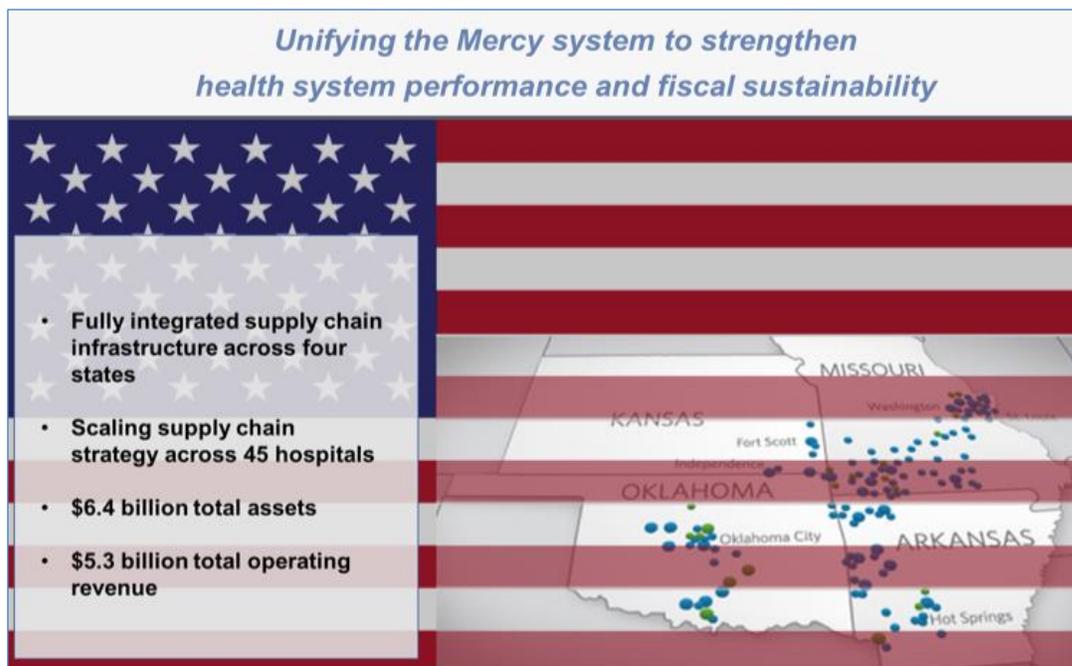
The World Health Innovation Network (WIN) conducts research on the impact and models for scalable health system supply chain innovation to track and trace products from bench to bedside, to patients, based on global standards. WIN's goal is to generate empirical knowledge and key learnings about the value of supply chain implementation in health systems across global jurisdictions.



Mercy Health, U.S.

Mercy is a privately funded health system comprised of 33 acute care and 11 specialty hospitals with over 40,000 staff providing services to a population of over 15 million with over 9 million patient visits annually. In 2016, the Mercy total operating revenue was \$5.3 billion. In 2017, Mercy was named one of the top 15 health systems in the U.S., recognized for their expertise in health system supply chain. Mercy has a strong leadership mandate to transform supply chain infrastructure to advance clinical productivity and operational efficiencies to enhance return on investment.

Supply Chain Strategy



A changing business model of the American health care system led Mercy leadership to focus on traceability to unify the system as a strategy to improve operational, clinical and financial performance. In the early 2000s, leadership created a spin off corporate entity, ROi (Resource Optimization & Innovation) Inc., to manage all supply chain services. Mercy became the first U.S. health system to achieve a supply chain industry standard “the perfect order” with end-to-end integration, which consists of GLN (global location number) and GTIN (global trade item number) tracking numbers, and GS1 global standards for traceability from manufacturer to point of care.

This strategy focuses on three pillars: connecting supply chain to the operational strategy, control over information and data, and control of relationships. Four goals to achieve this supply chain strategy are: engage clinicians, align systems to focus on entire organization, minimize waste and release provider time for patient care. The outcomes of this case reflect the early implementation of the program infrastructure in a highly specialized, high performing system informed and driven by real world evidence of value.

Supply Chain Transformation—Mercy



Findings

The evidence of impact and return on investment demonstrated in this case study reveal remarkable progress toward achieving the vision of unifying the health system to strengthen performance and fiscal sustainability.

1. *Leadership—A Driver of System Transparency*



- The Mercy mandate for an integrated health system supply chain strategy is an accelerator.
- Investment, clear process and deliverables enable adoption and scale.
- Leveraging supply chain transformation to create transparency enables learning, accountability, evidence informed decision-making and performance.

2. *Information and data—Benefit Clinicians, Supply Chain Teams and Suppliers*



- Traceability from manufacturer to point of care provides real world evidence of product and process performance linked to patient outcomes, with a 71 percent reduction of serious reportable adverse events.

3. *Relationships—Achieving Clinician Engagement*



- Integrates supply chain and clinician teams to enhance accountability and decision making to improve safety, quality and cost.
- Release clinician time back to patient care by introducing efficient, seamless supply chain processes.

4. *Return on Investment (ROI)—the Impact of Supply Chain Strategy*



- Achieves \$1 billion savings as a direct outcome of optimizing and transforming supply chain processes.
- Financial outcomes include a 29.5 percent decline in labour costs and a 33 percent decline in supply costs due to enhanced efficiencies.

Conclusion

This seminal research demonstrates the value and impact of embedding and scaling supply chain based on GLN, GTIN and GS1 global standards in health systems. This case documents impressive findings about the importance of transparency in creating the foundation for health system accountability informed by data and evidence. As the program scales, further evidence of the impact and the value of health system transparency and accountability and patient safety can be examined empirically.

Transparency may be the new currency that achieves an accountable, safe and sustainable health system.

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