

LAB-CARES: Equitable Access to Diagnostic Resources

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INTRODUCTION

Laboratories have traditionally been undervalued in terms of their clinical impact.¹ Commonly referred to as a hidden profession working in the shadows of healthcare, the COVID-19 pandemic shed light on the value of laboratory medicine in patient care and its integral role across the healthcare ecosystem. The clinical laboratory remains the most cost-effective, least invasive source of objective health information in disease prevention, diagnosis, improving patient outcomes, and fulfilling essential public health surveillance.² Despite holding a crucial place in the diagnostic process, laboratorians and their contributions to the healthcare landscape are excluded from value-based healthcare initiatives. Thus, the authors drew on the successful approaches of similar health professions (Nursing, Pharmacy, etc.) to develop a patient-centered care model to define their unique, clinical impact and springboard visibility and conversation regarding greater laboratory integration into patient care teams. We present a laboratory care delivery model entitled LAB-CARES, designed to generate discussions regarding how clinical laboratory initiatives and discoveries can strengthen the pillars of value-based healthcare. (Figure 2)

METHODS

A comprehensive search in PubMed was performed using the following search string: 'value-based' AND 'laboratory medicine'. We applied filters to include only peer-reviewed articles published between January 2014 through December 2023. The initial search yielded 6 articles, which were reviewed for applicability to the laboratory medicine profession.

We also included relevant literature and existing value-based theories from other areas of healthcare (e.g., Safety, Quality Assurance, Equity, Multidisciplinary Collaboration, Operational Effectiveness) that were identified through prior knowledge and expert recommendations. All literature was reviewed and evaluated for its rigor. Gap analysis was performed to create the LAB-CARES framework and position statement. From the position statement, a visual representation of the laboratory care delivery model was created. (Figure 1)

REFERENCES

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Figure 1. A proposed visual representation of the LAB-CARES professional practice model.³

PRACTICE INTERVENTION

The integration of comprehensive value-based practice initiatives in laboratory medicine requires the following key incremental steps:

1. Selection of partner locations and advocacy groups that can elevate the vision and embrace pilot change projects.
2. Multidisciplinary stakeholder identification and collaboration for value-based pilot programs, outcome research, and longitudinal studies.
3. Establish a community in which knowledge sharing is promoted and role clarity is enhanced to foster interdisciplinary collaborative practice, including laboratorians, on the interprofessional healthcare team.

After establishing a unified community that recognizes the vital role of laboratory medicine within the healthcare continuum, the next steps toward broader adoption include, but are not limited to:

- Determination of healthcare settings, departments, and first wave of clinical tests to be included in the pilot
- Establishment of benchmarks for selected tests based on current literature and regulations
- Creation of a standardized data collection plan
- Development of training materials for all identified stakeholders
- Development of engagement and retention plan for stakeholders
- Rollout of LAB-CARES to pilot sites to monitor gaps to ensure the model supports long-term efficiency and resource management.
- Integrating a LAB-CARES practice into communities and patient advocacy groups, extending the crucial perspective and role of the laboratory in longevity and patient outcomes.

KEY CONSIDERATIONS

Embracing laboratory medicine in value-based healthcare systems can improve patient care in a historically unseen, yet vital capacity. Such efforts could include, but are not limited to:

- Implementation of a decision support systems to reduce bias and improper test utilization
- Integrate research and diagnostic humility as standard of practice in clinical laboratory testing
- Needs analysis to support implementation strategies for providing equitable diagnostic support services to clinical laboratories and organizations operating in historically underserved populations.
- Policy regarding significant diversity representation in research validations of new in-vitro diagnostic assays to ensure equity and fairness of an assay in clinical practice.⁴
- Creating avenues for stronger, localized laboratory resources and education in limited access settings.⁵
- Assess the utilization of laboratory diagnostic testing in advancing health equity while addressing healthcare disparities impacted by social determinants of health.

INTEGRATION ROAD MAP FOR LAB-CARES IN HEALTHCARE

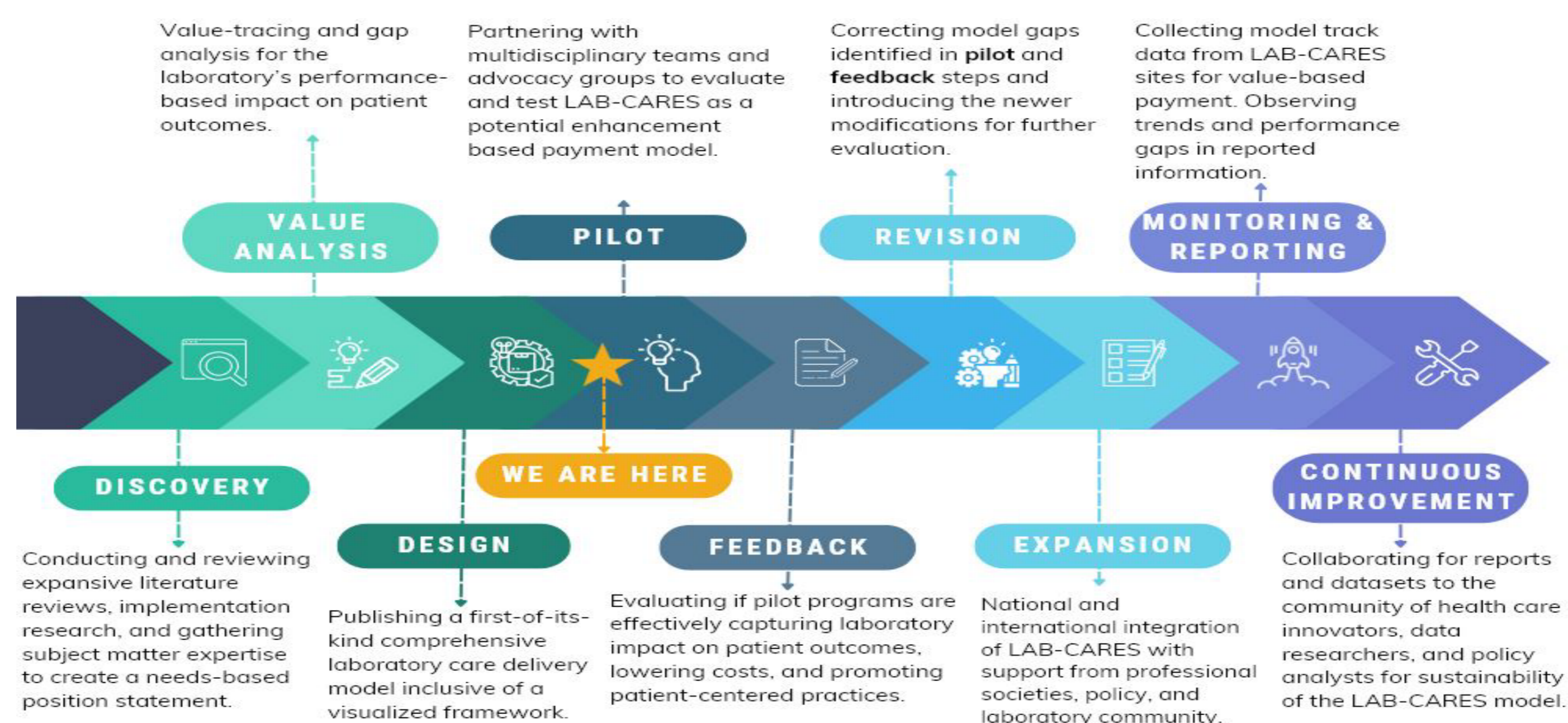


Figure 2. A proposed integration roadmap for the inclusivity of laboratory medicine within the value-based care landscape.