Top Ten Things to Know
The Learning Healthcare System and Cardiovascular Care

1. The learning healthcare system (LHS) uses health information technology and the health data infrastructure to apply scientific evidence at the point of clinical care.

2. LHS requires a redesign of 4 domains:
   - science and informatics;
   - patient-clinician partnerships;
   - incentives; and
   - development of a continuous learning culture.

3. This statement addresses the application of these LHS domains to cardiovascular disease (CVD) care, providing a current “snapshot” of the LHS development in CVD care and suggests the next steps needed.

4. As clinicians integrate an evolving scientific evidence base and individual data points to make complex decisions, LHS facilitates their ability to learn from their care and potentially optimize the delivery of care.

5. Applying LHS to cardiovascular care represents a ‘learning laboratory’ environment since
   - CVD significantly impacts the population;
   - CVD is a costly disease to manage; and
   - CVD care touches on multiple areas of healthcare delivery.

6. The data structure needed for real-time access will require comprehensive data sources, thoughtful data oversight, and appropriate data uses. Three examples are: electronic health records (EHRs), clinical registries, and administrative claims data.

7. LHS supports clinical decisions by
   - providing predictive risk model information at the point of care;
   - point-of-order feedback and guidance regarding appropriateness of diagnostic testing, treatments, and other clinical care decisions; and
   - tailoring clinical information to specific patient needs at the point of care.

8. LHS allows for efficient implementation and evaluation of quality improvement.

9. LHS enables rapid, iterative learning – where “evidence informs practice, and practice informs evidence”.1

10. Next action steps and a description of what success looks like are included as a roadmap for continued movement in cardiovascular care and hopefully to other areas of healthcare.
