

Fundamentals of Health Care Improvement

Review of QI 101: Introduction to Health Care Improvement

Lecture Objectives

1. Describe common challenges for health care systems around the world
2. List the six dimensions of health care, and the aims for each, outlined by the Institute of Medicine (IOM) in 2001
3. Explain the value of improvement science in health care

Lecture Outline

- Health and health care today
- The Institute of Medicine's aims for improvement
- Changing systems with the science of improvement



The State of Health Care Today

- Providers are becoming more specialized, leading to gaps in communication and care
- Populations are aging, with disease burden shifting toward chronic conditions
- Patients and families are better informed, wanting more personalized care
- Complicated procedures and expensive treatments are more available and desired



Two IOM Reports

1999: *To Err Is Human: Building a Safer Health Care System*







- 44,000 to 98,000 Americans dying due to medical errors each year
 - Equivalent to three jumbo jets crashing every other day; statistics widely reported by the media

2001: *Crossing the Quality Chasm: Health Care in the 21st Century*

- Six dimensions of US health care that need improvement



Six Dimensions of Health Care Quality

	Safe: Avoiding injuries to patients from the care that is intended to help them
	Timely: Reducing waits and sometimes harmful delays for patients and providers
	Effective: Providing the appropriate level of services based on scientific knowledge
	Efficient: Avoiding waste, including waste of equipment, supplies, ideas, and energy
	Equitable: Providing care that does not vary in quality because of personal characteristics
	Patient-Centered: Providing care that is respectful of and responsive to individual patients



How Can We Improve?

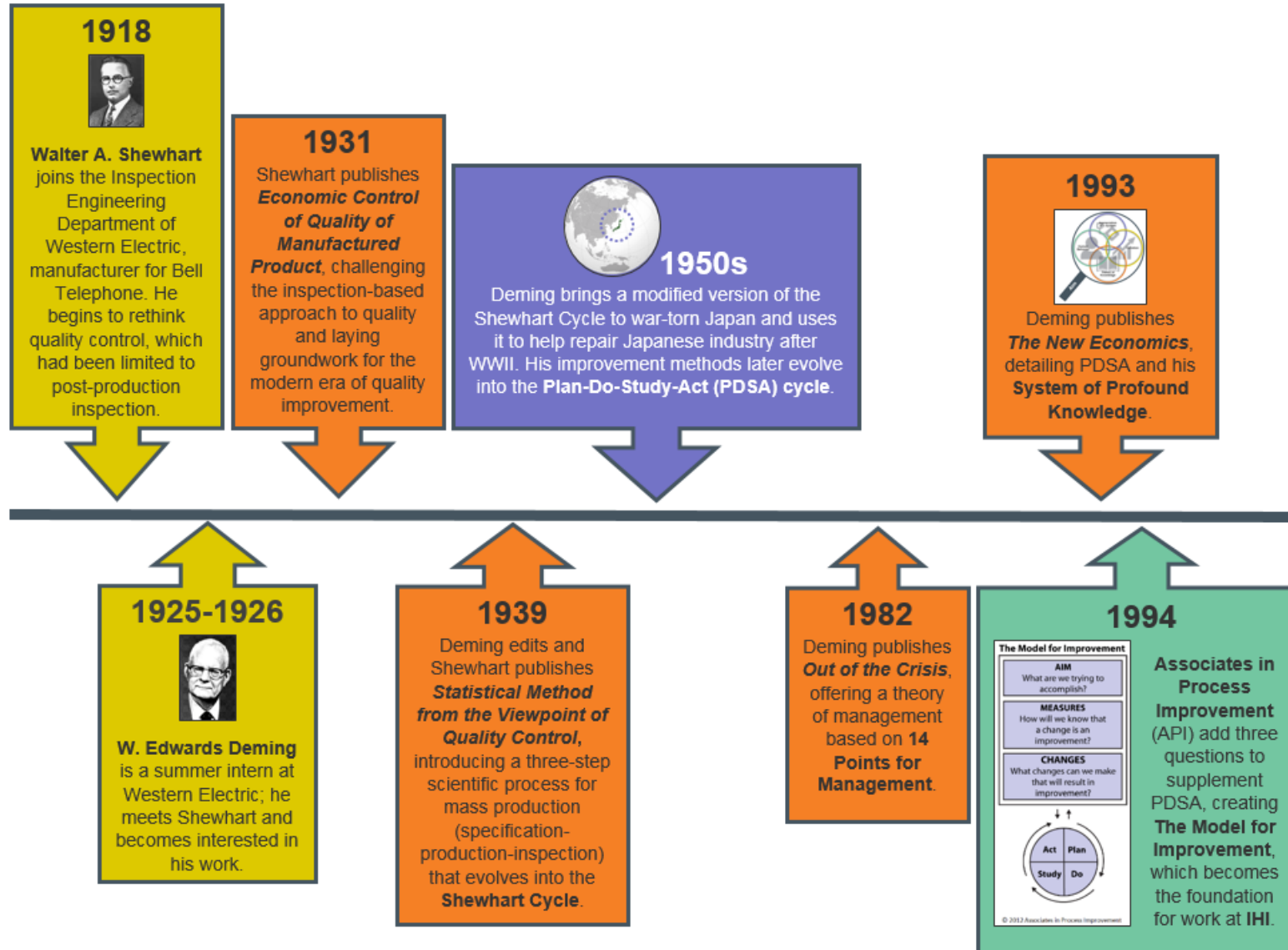
“Every system is perfectly designed to get the results it gets.”

The “science of improvement” (however we label it) focuses on changing systems — not people

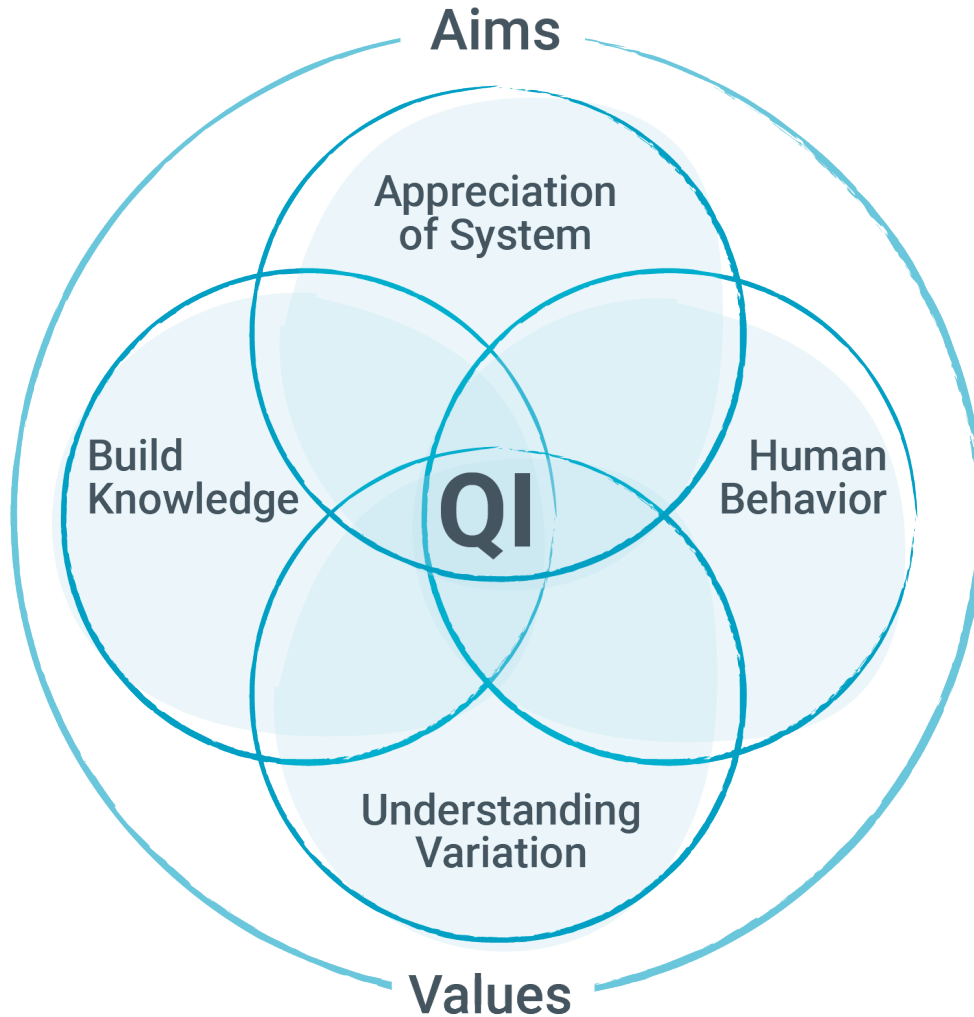
- “Science of improvement”
- “Health care delivery science”
- “Implementation science”
- “Systems strengthening”
- “Systems engineering”



The Evolution of Improvement Science



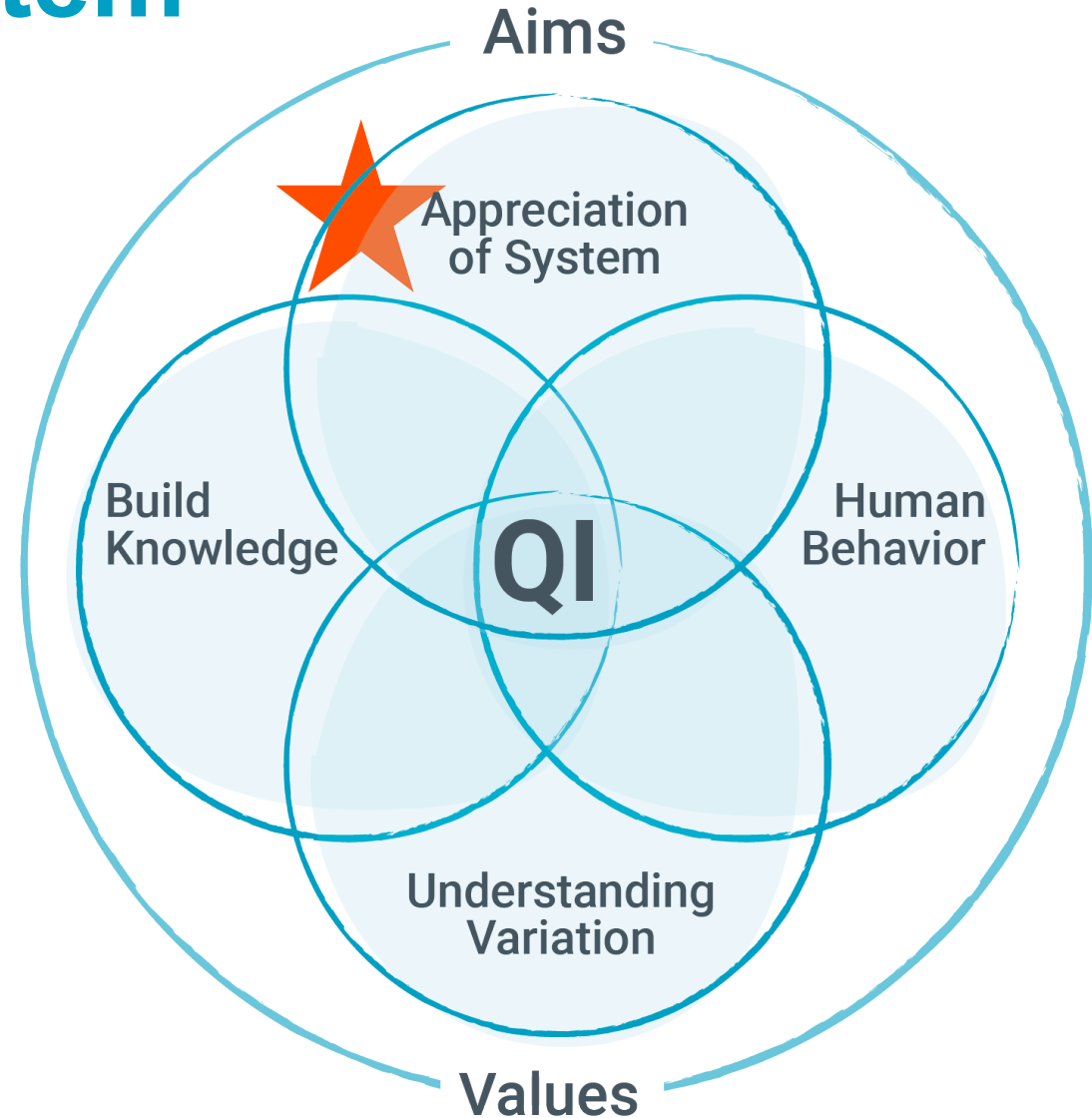
System of Profound Knowledge



- Theory of improvement from W. Edwards Deming
- Framework for understanding key aspects of systems
- Predecessor of the Model for Improvement

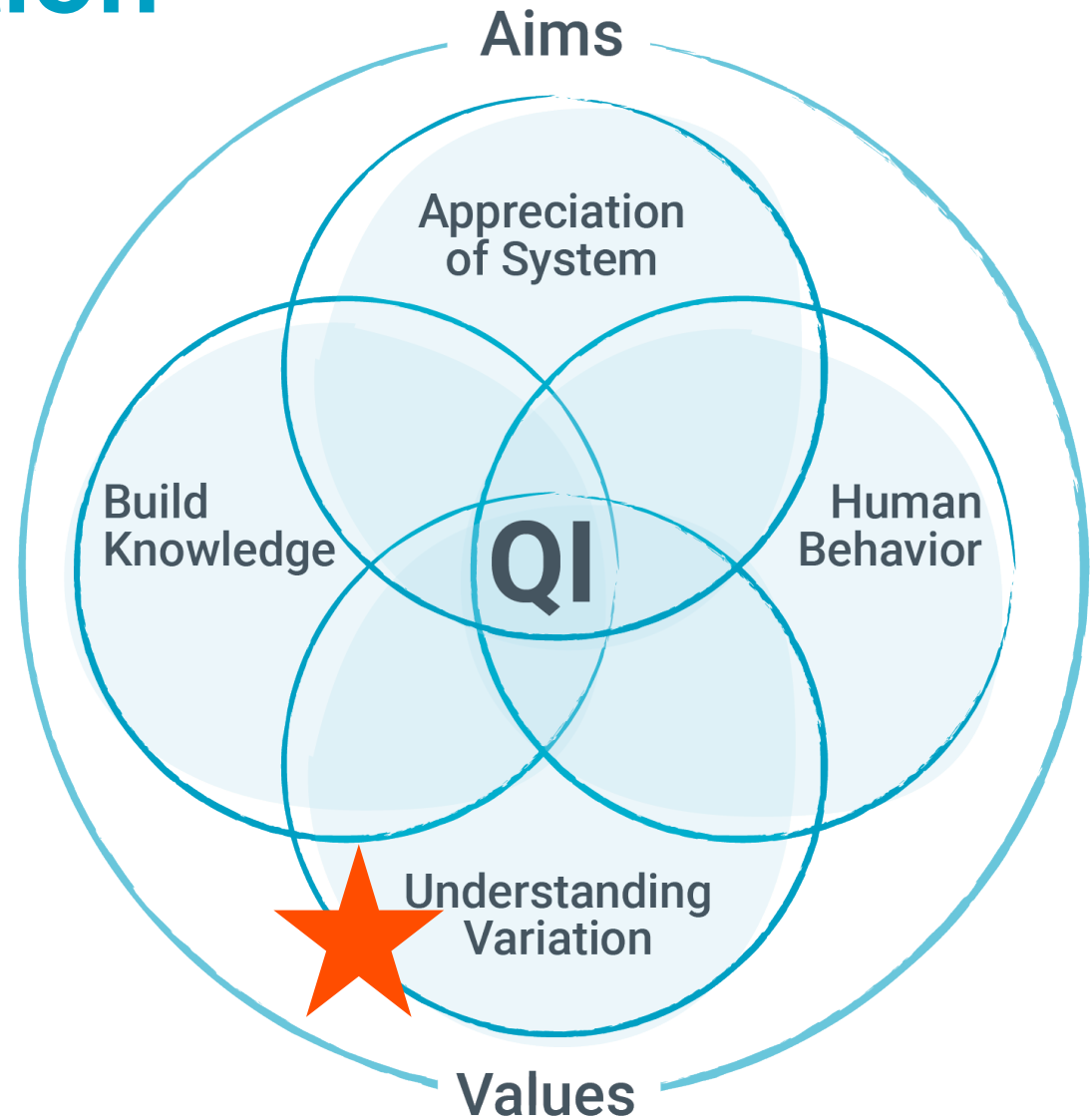
Appreciation of a System

What is the whole system that you're trying to manage?



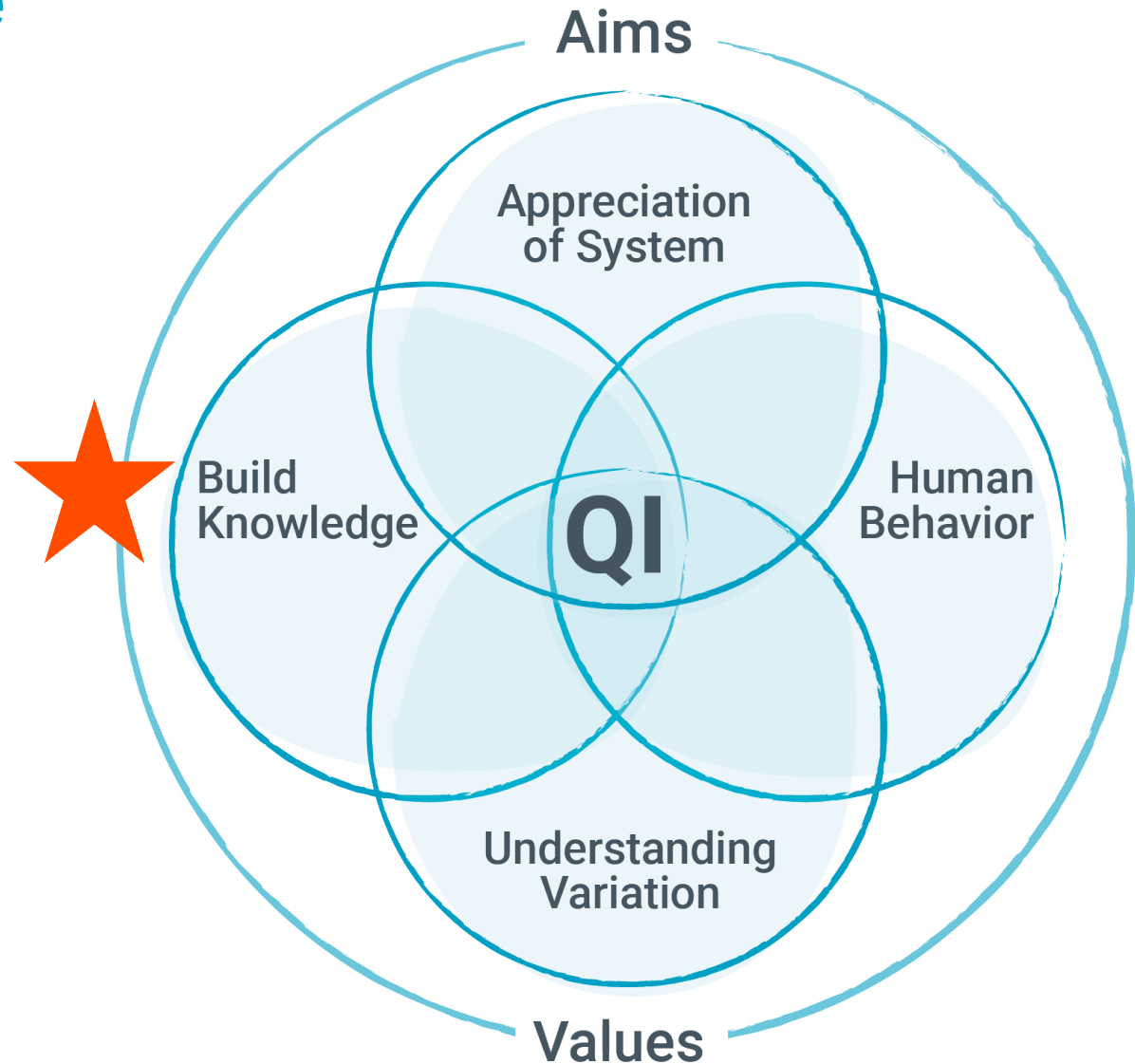
Understanding Variation

What is the variation in results trying to tell you about the system?



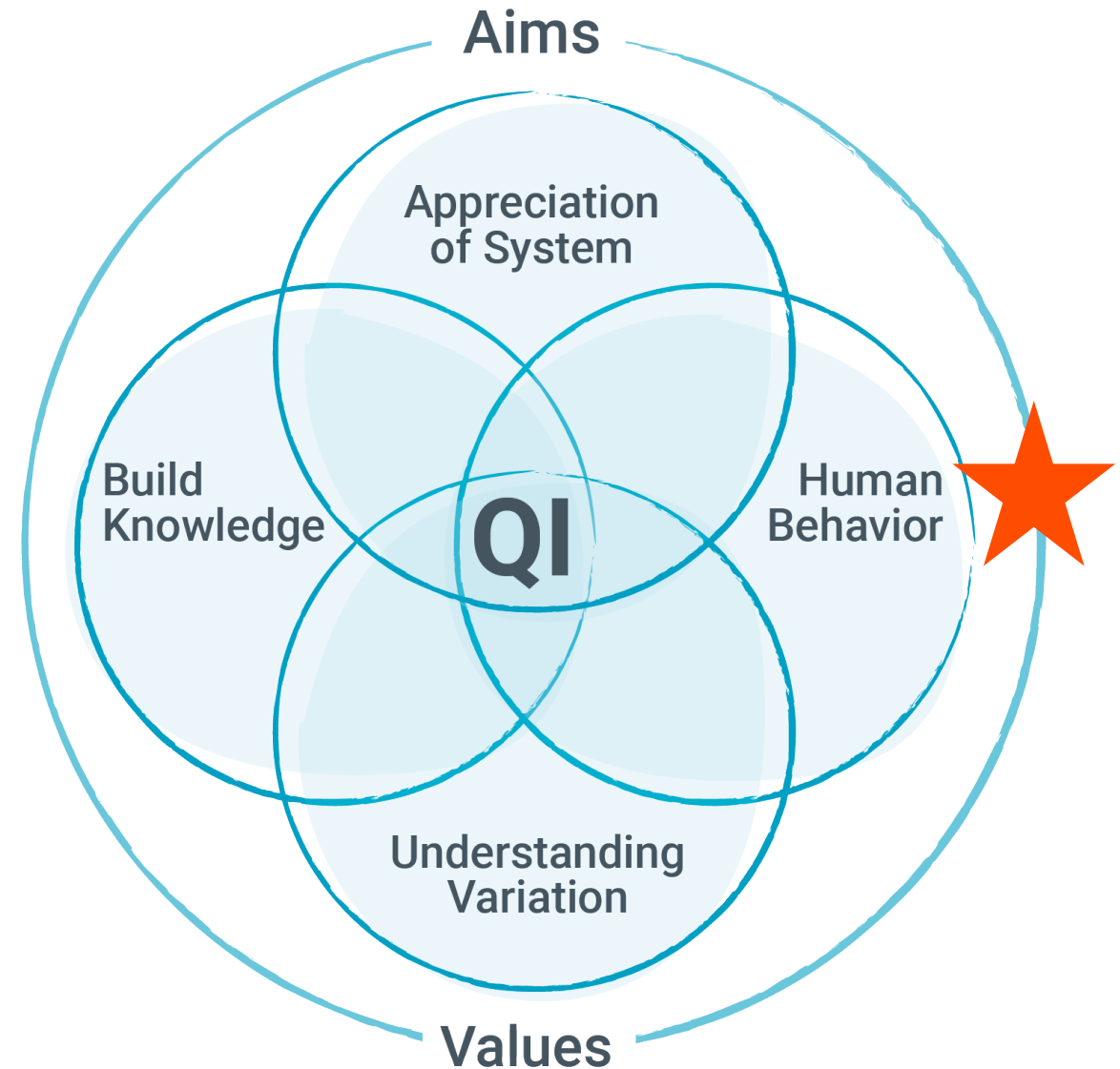
Theory of Knowledge

What are your predictions about the system's performance?



Theory of Psychology

What are the important interactions among people in the system?



Video

<http://www.ihl.org/education/IHIOpenSchool/resources/Pages/Activities/williamsNeedImprovementScience.aspx>

https://youtu.be/XSQr9_VwMCg

Why Does Health Care Need Improvement Science?

David M. Williams, PhD, Improvement Advisor, TrueSimple Improvement



Discussion

- Do you agree that clinicians need improvement methodology to help them change how they work? Why or why not?
- When you think about a process in your life (at work or at home) that needs improvement, what's the first thing that comes to mind? Why?
- How can data be helpful in identifying opportunities for improvement?
- Have you used improvement science to make changes in your work or home life? What was your experience?



Exercise

Go to <https://www.medicare.gov/hospitalcompare/search.html>

Research your local hospitals or the hospitals in an area of your choice.

Discuss what you learned, referring to the discussion questions at http://www.ihl.org/education/IHIOpenSchool/resources/Documents/QI101_exercise.pdf

