# Safety: Improving Diagnosis

## **Problem**

12 million Americans suffer a diagnostic error each year. More than 1 million people each year suffer severe consequences as a result of diagnostic delays and errors.



• An estimated **12 million people** per year are affected by **diagnostic error** with approximately 4 million of these people suffering serious harm.



The cost of diagnostic error to the U.S. healthcare system may be well over \$100 billion annually.



• Vascular events, infections, and cancer—"the big three"—make up at least 50 percent of the diagnostic errors causing serious harm (including death).



• **Misdiagnosis** is the number one cause of **malpractice claims** in primary care, emergency medicine, radiology, and most medical sub-specialties; it is the number two cause of claims in surgical specialties.

## **Solution**

The application of successful patient safety strategies, predictive analytics, personalized and precision medicine, and new technologies offer opportunities for transformative improvement. AHRQ will **invest in research to improve diagnosis for the "Big 3": cancer, vascular events, infections.** Then develop, test, and disseminate tools to apply these new strategies at the point of care.

#### **Elements**



• Research to discover and synthesize new knowledge



Development of novel tools to improve diagnosis and practice





• Innovative use of data, predictive analytics, and information technology



• Coordinated dissemination and implementation to support use of new tools

# How AHRQ is Building a Foundation Today

- New grant-funded research opportunities:
  - AHRQ Patient Safety Learning Laboratories includes emphasis on improving diagnosis (R18)
  - **AHRQ HSR Project:** Partners Enabling Diagnostic Excellence (R01)
- Leading the Federal Interagency Workgroup on Diagnostic Safety and Quality
- **Question Builder app** helps patients and caregivers prepare and organize questions and other helpful information before medical visits and puts that information at their fingertips to help ensure more accurate, timely diagnoses

#### Goal

**Reduce the number of diagnostic errors** occurring each year in the U.S. medical system by 1 million per year by 2025.

# **Impact**

In addition to reducing patient and family harm, 1 million fewer diagnostic errors would potentially result in \$500 million in savings from reduced wasteful spending every year.

