

# MedSolutions

Presentation to:  
Senate and House Appropriations  
Committee on Health and Human  
Services

# Current NC Programs

## ■ Advanced Imaging

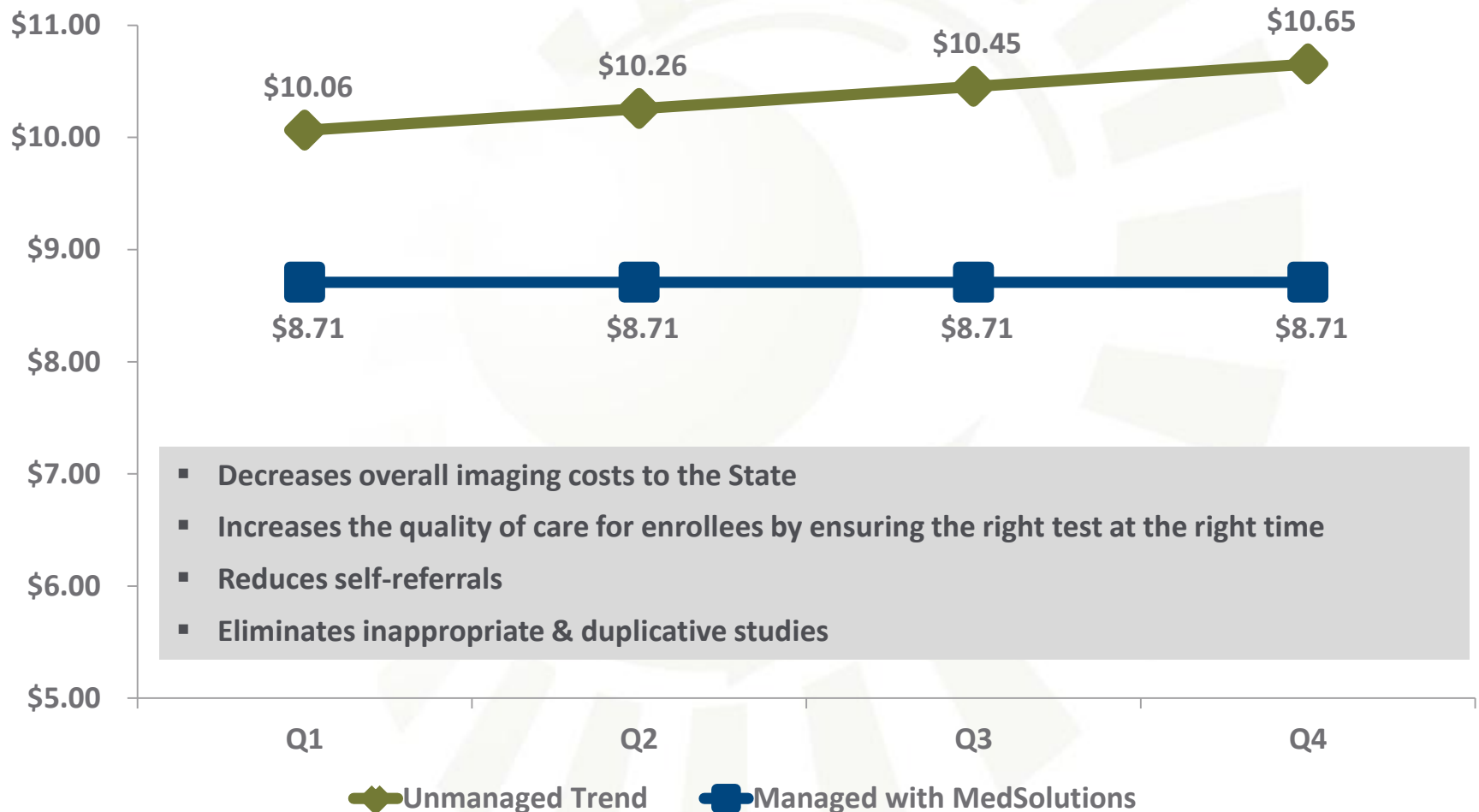
- Prior Authorization for high-tech radiology services
- Includes:
  - CT, CTA
  - MR, MRA
  - PET & PET/CT
  - Outpatient imaging services

## ■ Ultrasound

- Prior Authorization for Obstetrical and Non-Obstetrical Ultrasounds
- Includes:
  - Obstetrical Related
  - Breast
  - Fetal Echo
  - Non-cardiac transesophageal
  - Pediatric
  - Non-pediatric General
  - Gynecological
  - Vascular and/or Urovascular
  - Intravascular
  - Echocardiography
  - Ultrasound-Guided Procedures

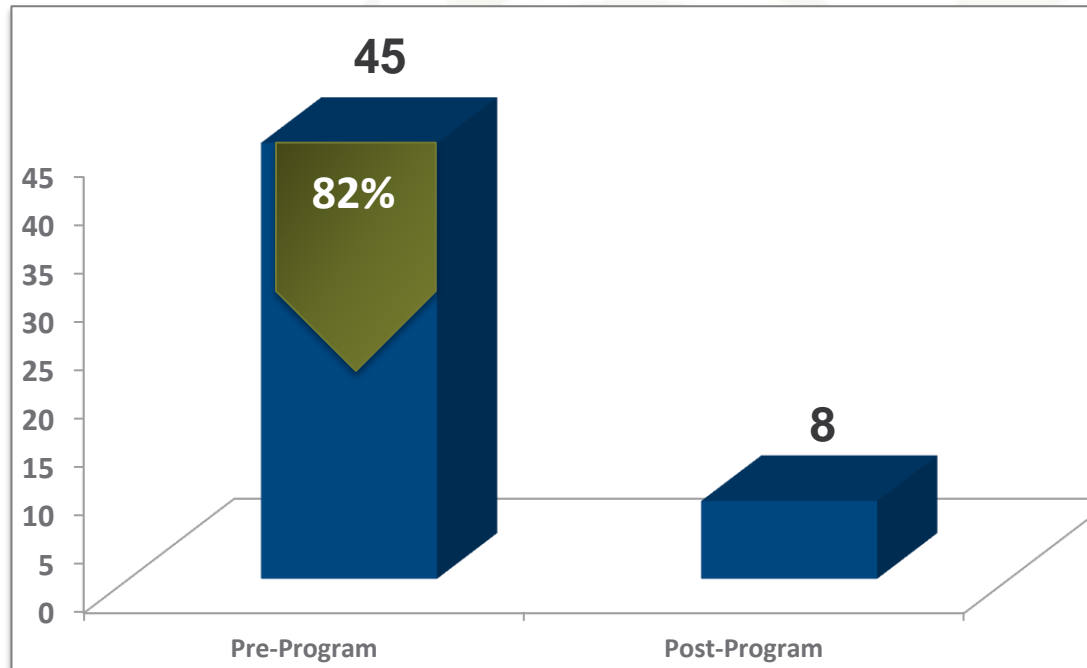
# 2010 North Carolina Program Results

Saved the State **\$21.5 MM** in 2010 (MR, CT, PET and Ultrasound)



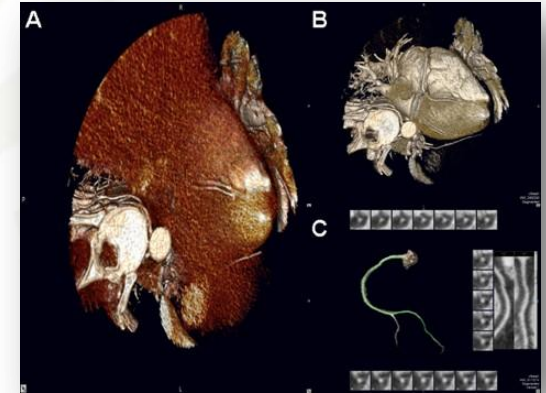
# Increased Patient Safety

## Pregnant Women Aid Category - CT



# Increase in the Use of Cardiology Imaging

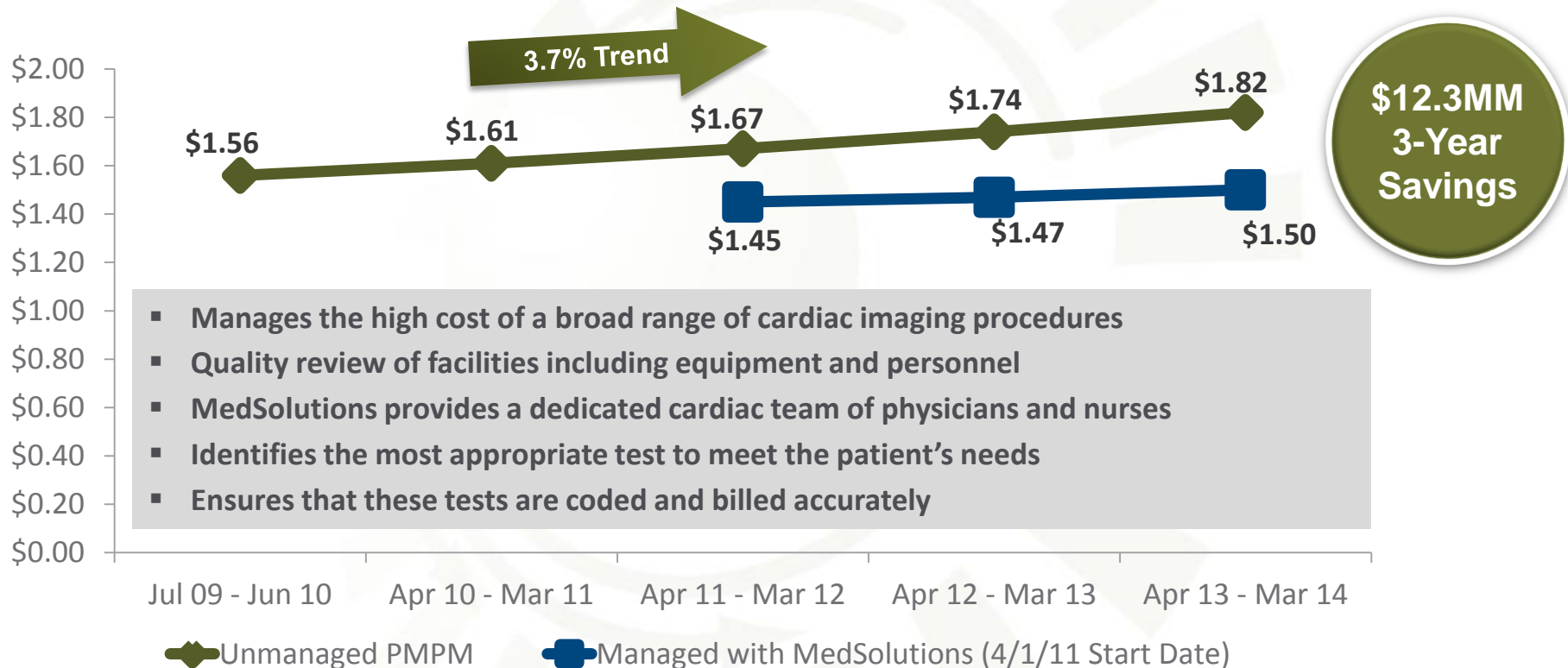
- Cardiovascular imaging was found to represent approximately 30% of all diagnostic imaging, growing more than twice as rapidly as other imaging<sup>1</sup>
- Approximately 75% of nuclear stress tests (MPI) and cardiac CT studies were performed in physician offices<sup>2</sup>
- This increase in cardiovascular imaging procedures is not related to changes in disease prevalence or severity<sup>3</sup>
- It has been difficult to tie the increase in cardiovascular imaging to improved health outcomes<sup>3</sup>



1. Levin, D.C., Rao, V.M. Recent Trends in Utilization of Cardiovascular Imaging: How Important Are They For Radiology. Journal of American College of Radiology. September 2005
2. Chen, Jersey; Einstein AJ. Cumulative Exposure to Ionizing Radiation from Diagnostic and Therapeutic Cardiac Imaging Procedures. Journal of the American College of Cardiology. July 7, 2010
3. Bonow, R.O., Is Appropriateness Appropriate? J Am Coll Cardiol, 2008; 51:1290-1291, doi:10.1016/j.jacc.2007.12.022

# Projected Savings for Cardiology Program

## State of North Carolina Cardiology Savings (1,268,757 Members)



**Year 1**  
\$3,410,000

**Year 2**  
\$4,059,000

**Year 3**  
\$4,847,000

**Total 3-year Savings**  
\$12,316,000

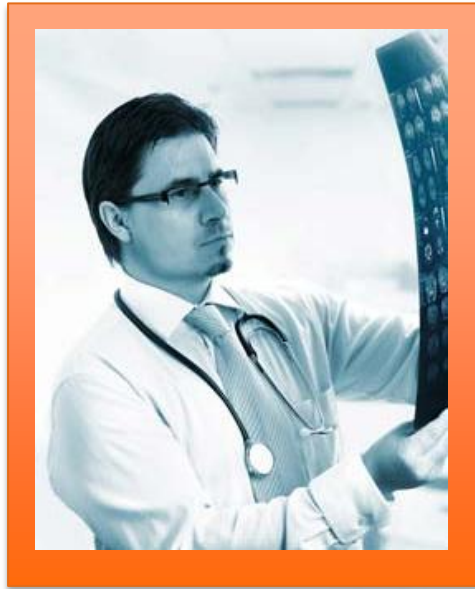


# Misdiagnosis: A Critical Concern

- *Journal of the American Medical Association (JAMA)*:
  - Lethal diagnostic errors in 5% of autopsies
- *Mayo Clinic Proceedings*:
  - Misdiagnosis in 26% of Medical ICU deaths
- 1999 *Journal Radiology*:
  - Diagnostic error rates of 25% - 32%
- 2010 Radiological Society of North America (RSNA).
  - Misdiagnosis rates of 33%
- *Wall Street Journal*
  - Diagnostic errors drive 40% of malpractice cases



# Whom would you choose to *read your brain scan*?



**Radiology Specialist  
(Neuroradiologist)**  
*"a clear patient benefit"*



**Specialist:  
34% Greater  
Accuracy**



**General Radiologist**

*Clinical Radiology 2008, 63(7), 791-5*

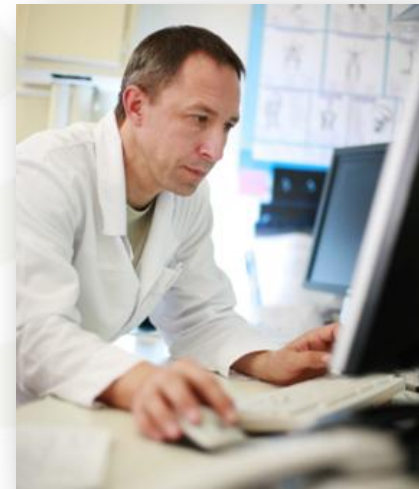
... But specialists are underutilized in radiology



# Premerus Diagnostic Accuracy

- The only comprehensive, proven solution to the problem of misdiagnosis

Premerus utilizes technology and certified radiology subspecialists to ensure every image is read by the appropriate specialist, therefore, delivering a more accurate diagnosis to improve quality of care and outcomes, while reducing costs



- Patients benefit from the use of radiology specialists
- Certified Premerus Expert specialists always read within their areas of expertise assuring a reduction in misdiagnosis as well as associated costs & risks

# Projected Savings with Premierus



Example 1<sup>st</sup> Year Savings\*  
**\$17,584,000**

\*Depending on the Regions Involved