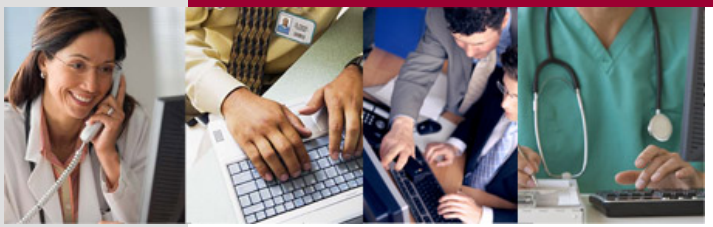
PHAROS INNOVATIONS

Better care coordination should be this simple.

Assessing Technologies Against Key Patient Segments



Reducing readmissions and improving care coordination for patients with chronic conditions using simple, ubiquitous telephony technologies

Randall Williams, MD, FACC

CEO, Pharos Innovations

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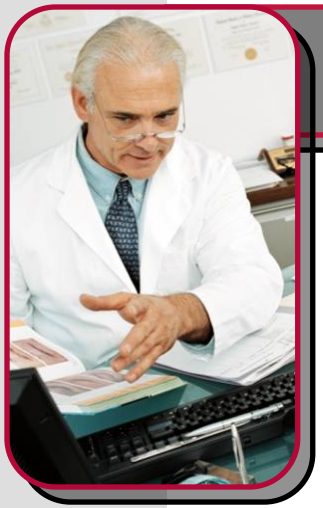
Better care coordination should be this simple.

The Gordian Knot of Chronic Disease



Physician unaware

Early symptoms

Frequent readmissions

Avoidable admission

PHAROS INNOVATIONS

Better care coordination should be this simple.

The Gordian Knot of Chronic Disease

Patient

Care Manager

Physician

PHAROS INNOVATIONS

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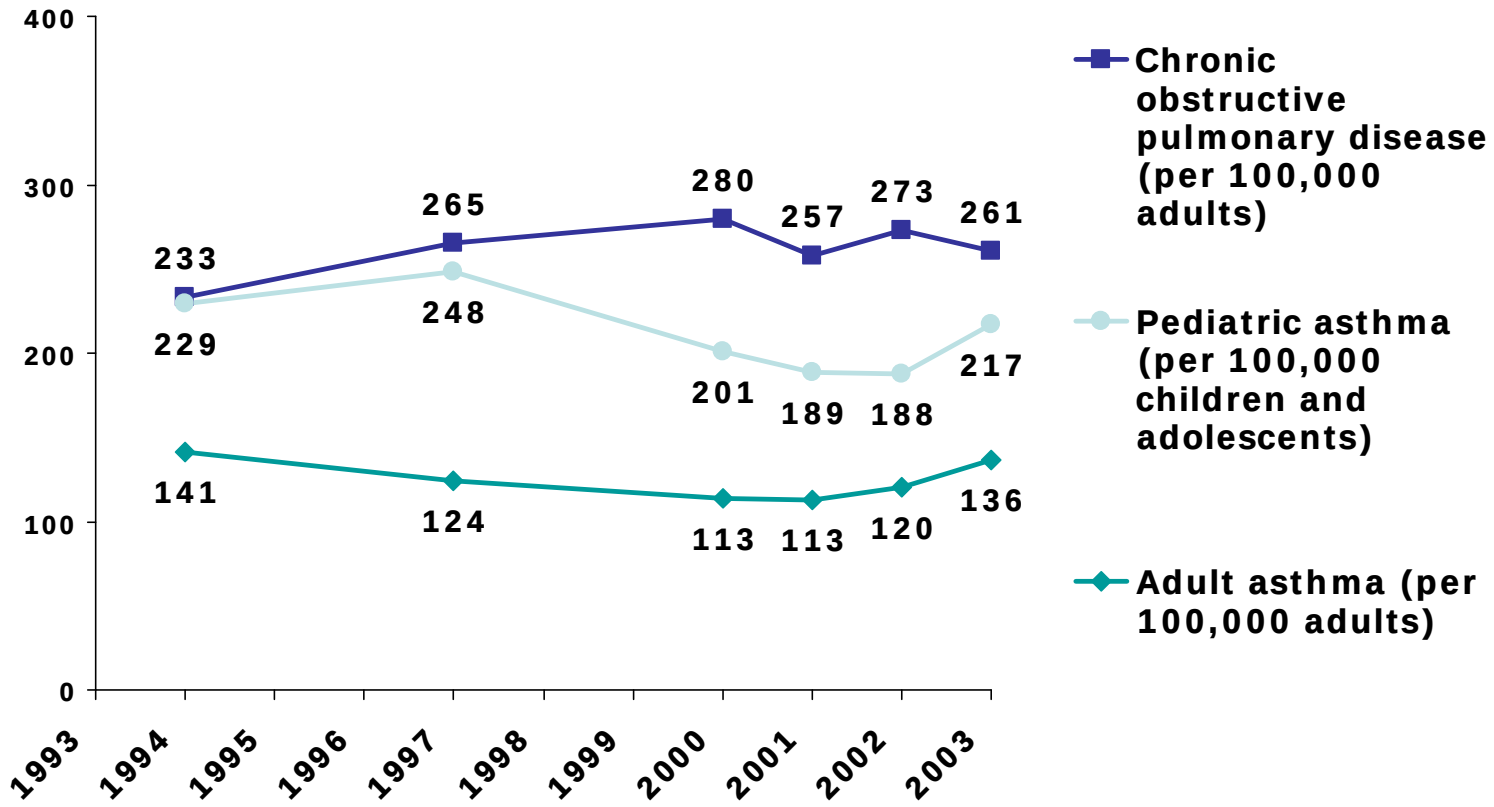
Hospital Admission Rates for Chronic Respiratory Ambulatory Care–Sensitive Conditions, 1994–2003



Data: Healthcare Cost and Utilization Project, Nationwide Inpatient Sample (Agency for Healthcare Research and Quality 2006). Rates were age- and sex-adjusted to the 2000 U.S. standard population. Adults mean the U.S. population ages 18 and older.

Source: McCarthy and Leatherman, Performance Snapshots, 2006. www.cmwf.org/snapshots

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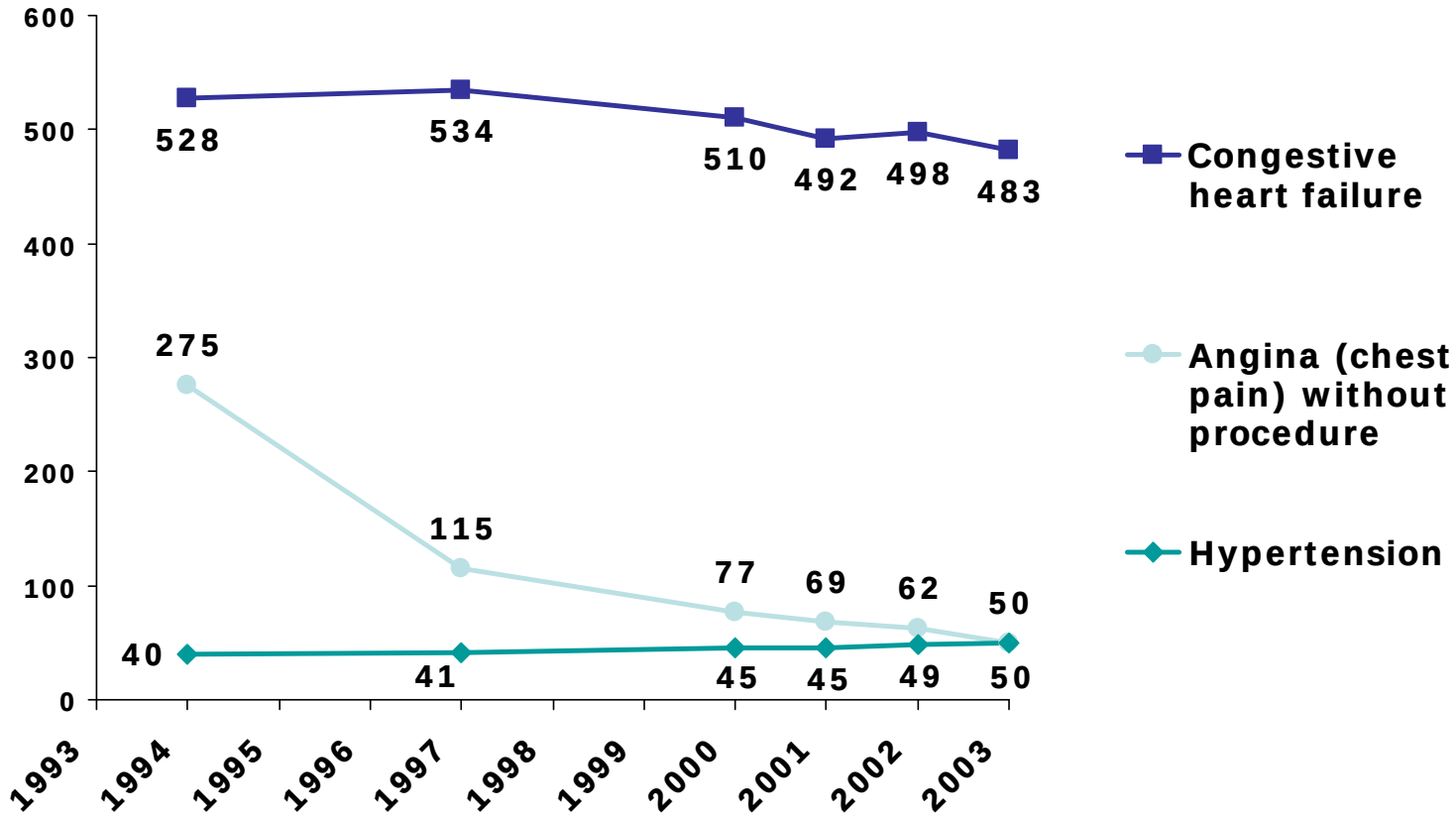
Hospital Admission Rates for Cardiovascular Ambulatory Care–Sensitive Conditions per 100,000 Adults, 1994–2003



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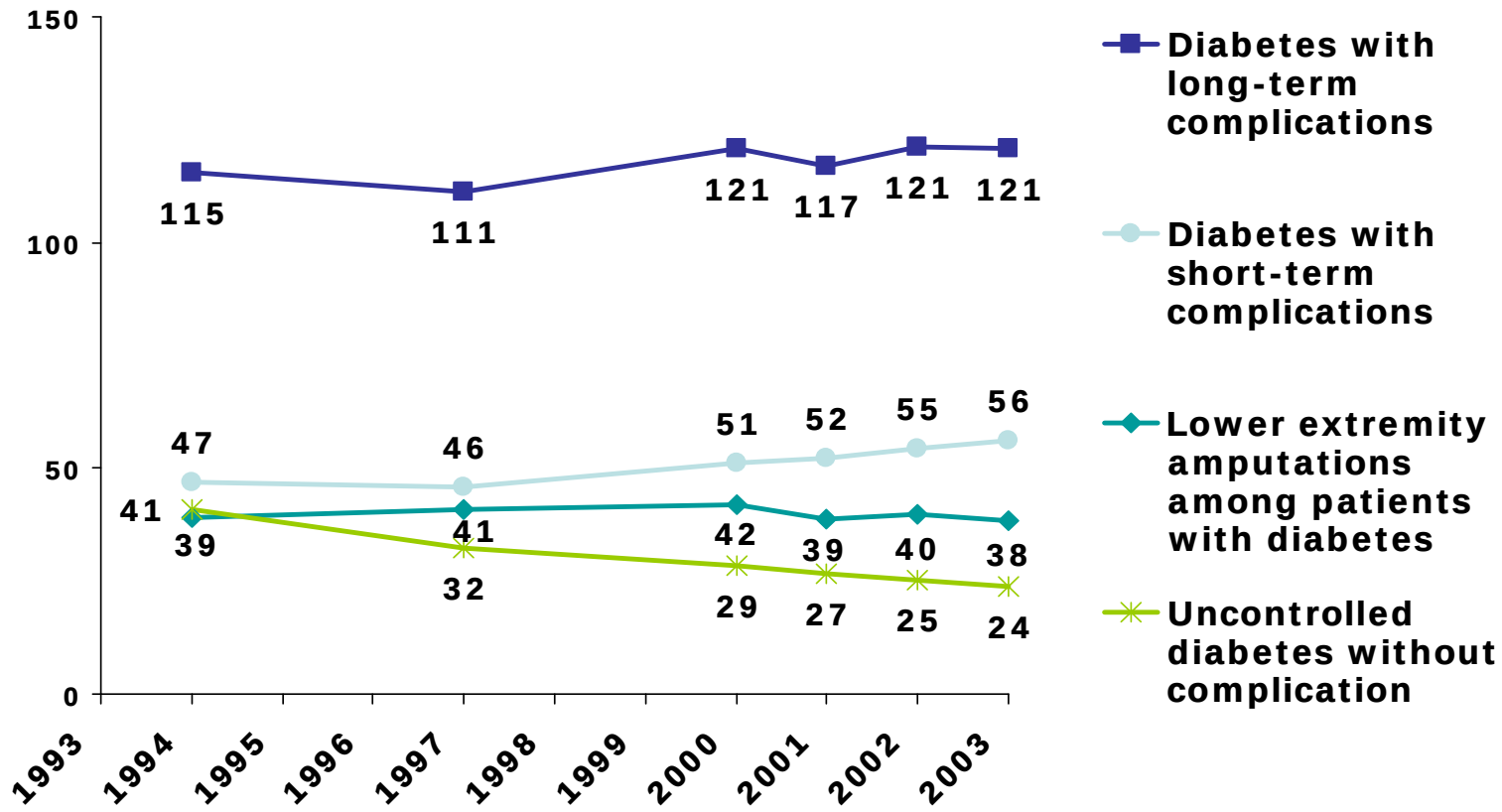
Source: McCarthy and Leatherman, Performance Snapshots, 2006. www.cmwf.org/snapshots

PHAROS INNOVATIONS

Better care coordination should be this simple.

Hospital Admission Rates for Diabetes-Related Ambulatory Care–Sensitive Conditions per 100,000 Adults, 1994–2003



Data: Healthcare Cost and Utilization Project, Nationwide Inpatient Sample (Agency for Healthcare Research and Quality 2006). Rates were age- and sex-adjusted to the 2000 U.S. standard population. Adults mean the U.S. population ages 18 and older.

Source: McCarthy and Leatherman, Performance Snapshots, 2006. www.cmwf.org/snapshots

PHAROS INNOVATIONS

Better care coordination should be this simple.

Premier Hospital Health Care Quality Initiative – CMS Demonstration

- 260 hospitals, 5 conditions: Acute MI, Hip/ knee replacement, pneumonia, CABG and Heart Failure
- CMS paid 1-2% bonus to hospitals per DRG if they ranked in top 10-20% of the cohort, and in final year penalized 1-2% of payment if in bottom 10%
- JHACO core measures for heart failure
  - Composite Measure = % having all 4 core measures documented

PHAROS INNOVATIONS

Better care coordination should be this simple.

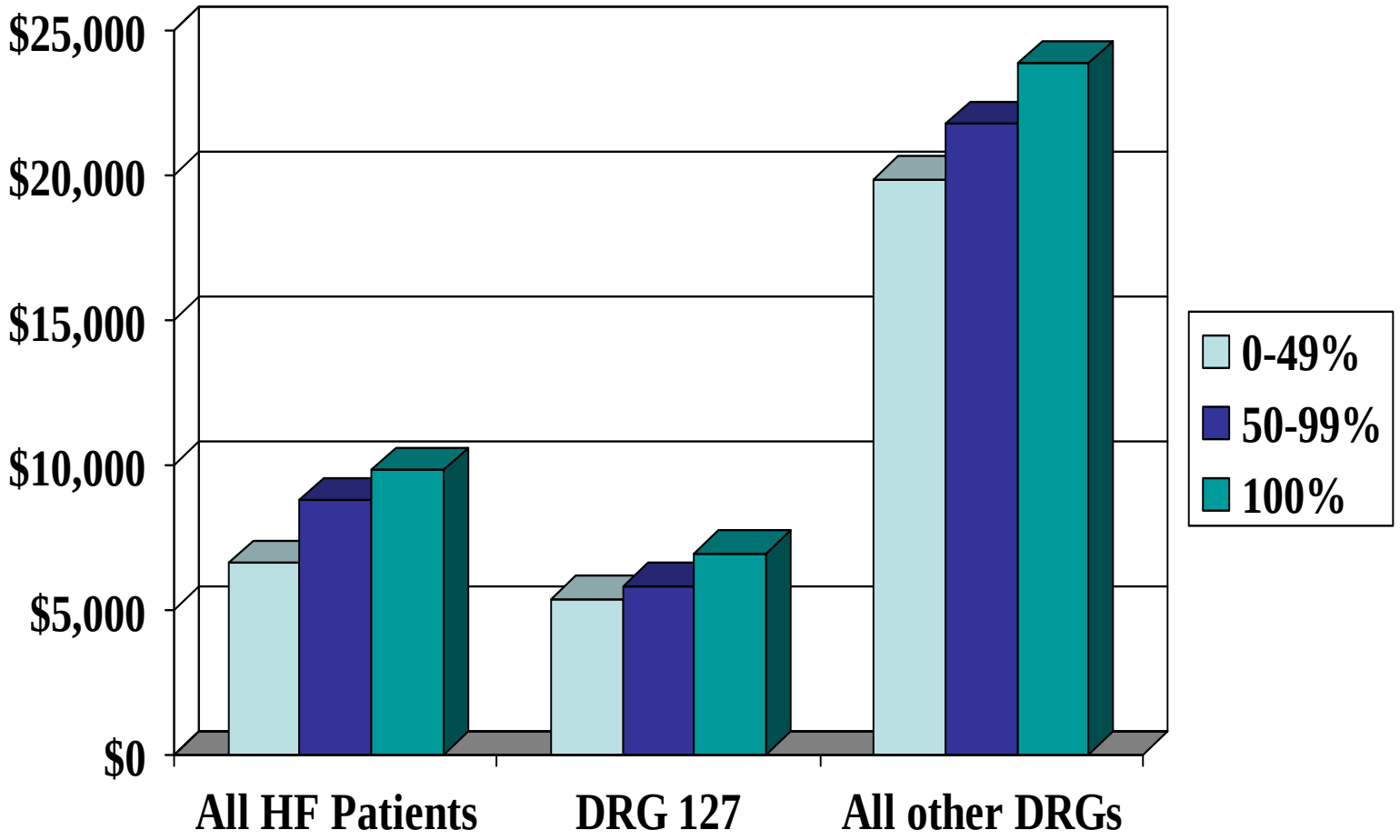
Premier HQI National Results

- Total patients reviewed: 223,727
  - Largest quality measure cohort published
  - 74,000 Heart Failure admissions
- Over all conditions EXCEPT heart failure
  - The better the quality, the lower the ALOS
  - The better the quality, the lower the mortality
  - The better the quality, the lower the 30 day readmission rates
  - The better the quality, the lower the hospital costs of care
  - The better the quality, the lower the complication rates

PHAROS INNOVATIONS

Better care coordination should be this simple.

Premier HQI Heart Failure Results – Hospital Costs



PHAROS INNOVATIONS

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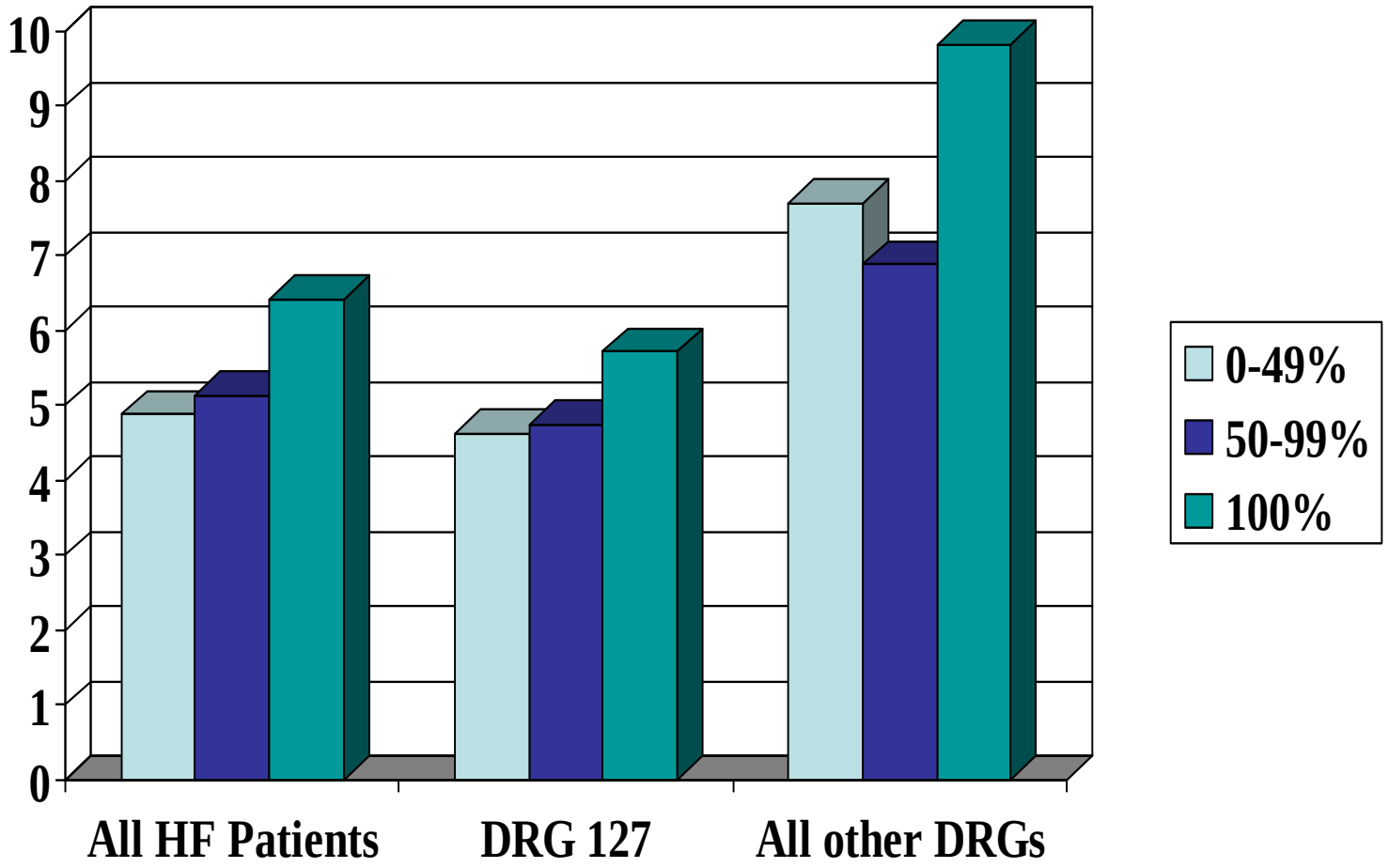
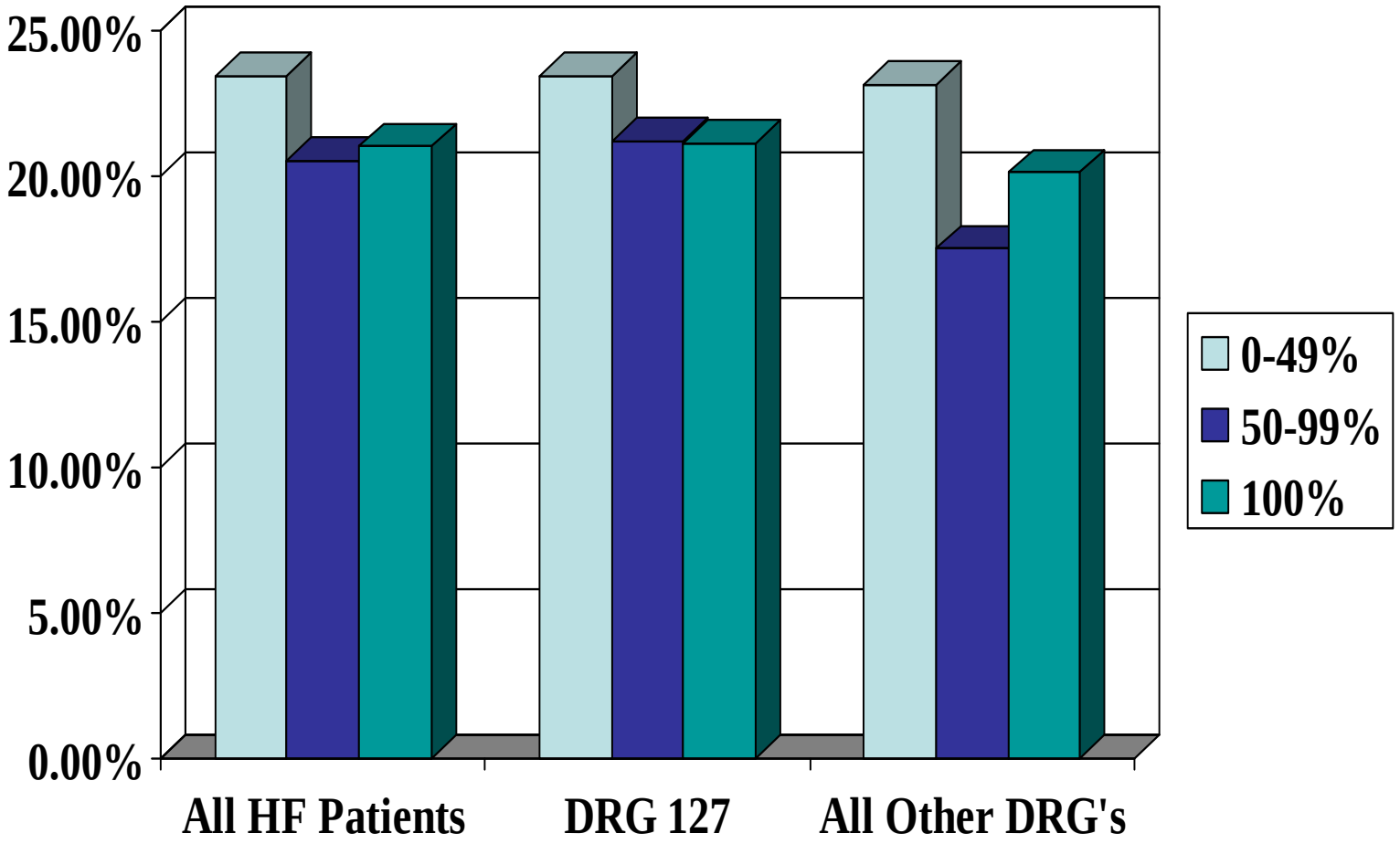
Premier HQI Heart Failure Results – Length of Stay



PHAROS INNOVATIONS

Better care coordination should be this simple.

Premier HQI Heart Failure Results – 30 day readmissions



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Opportunity/Challenge

New England HC Institute

Research Update on Remote Monitoring

RPM can reduce hospital admits by 60%

Resulting in $6.4 billion/year in savings

Slow adoption due to device issues

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Value of simple technologies

AHRQ

Evidence Report/Technology Assessment: Barriers and Drivers of Health Information Technology

Systems must fit seamlessly in daily routines

Must provide a perceived health benefit and be delivered on familiar devices

And provide complete feedback loop

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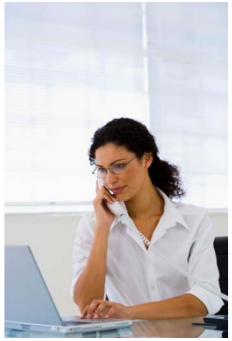
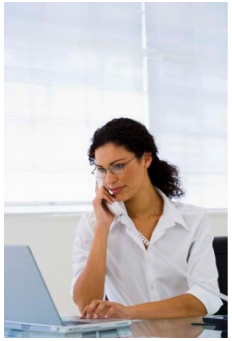
The Pharos Solution



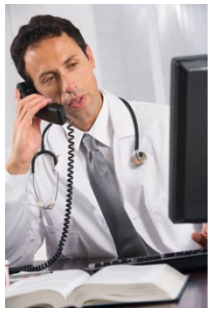
Tel-Enrollment

Daily Participant Engagement

Care Manager Access & Review



Retention Services



TREATMENT PLAN REINFORCEMENT

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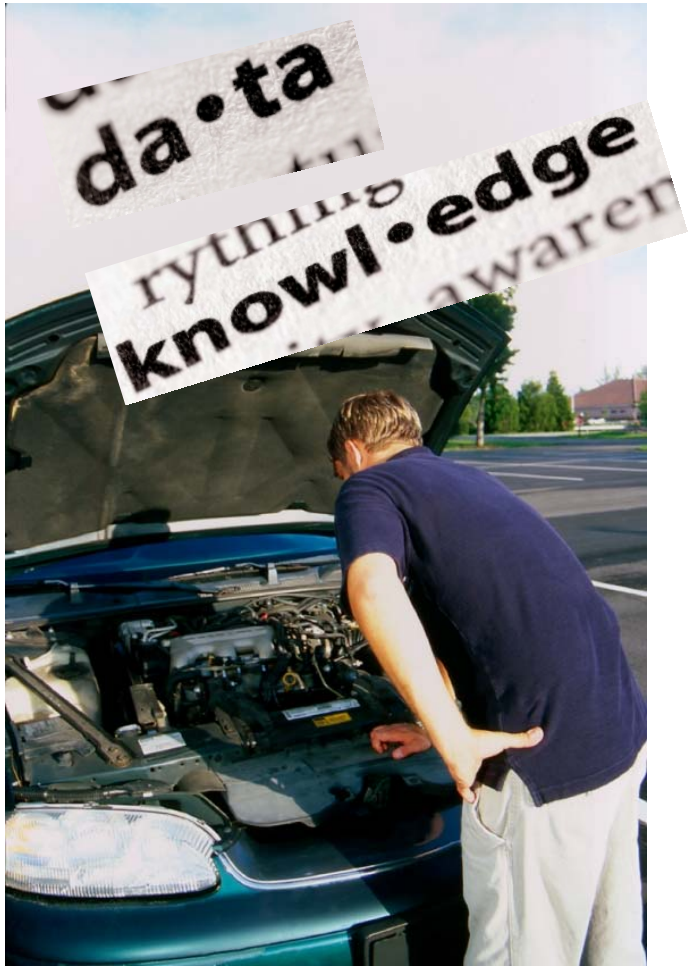
Underneath the Covers



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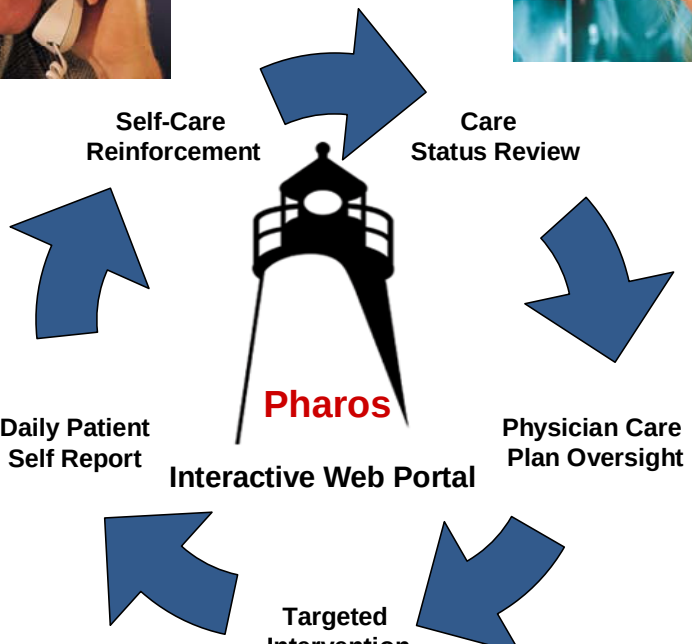
The Care Process



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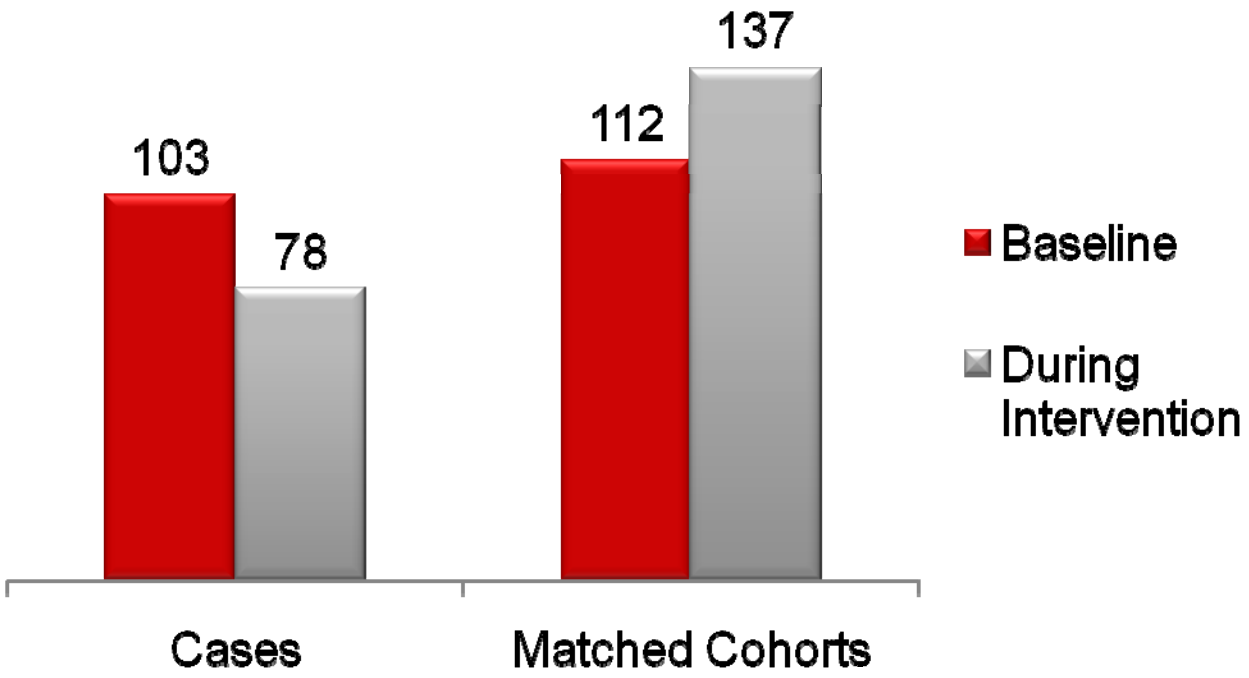
Iowa Medicaid Demonstration

24% Reduction **in hospital admissions**

22% Increase **for matched**



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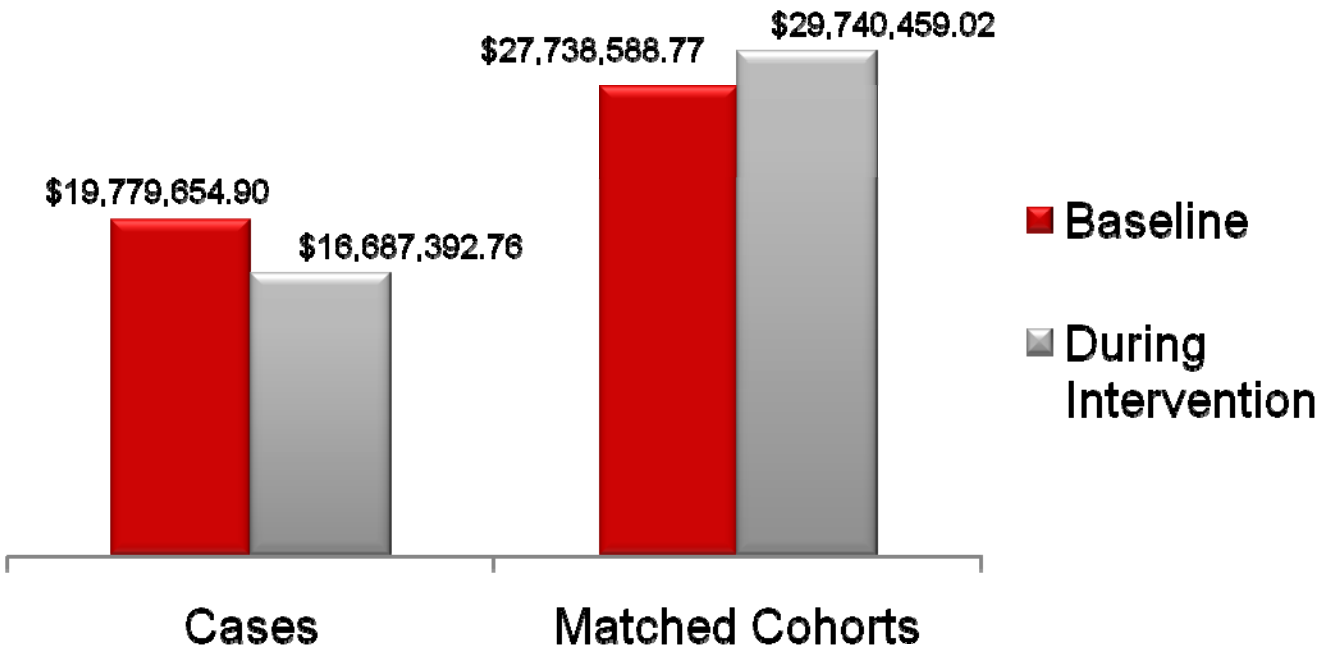
Iowa Medicaid Demonstration

Results

~ $1,300 savings per member



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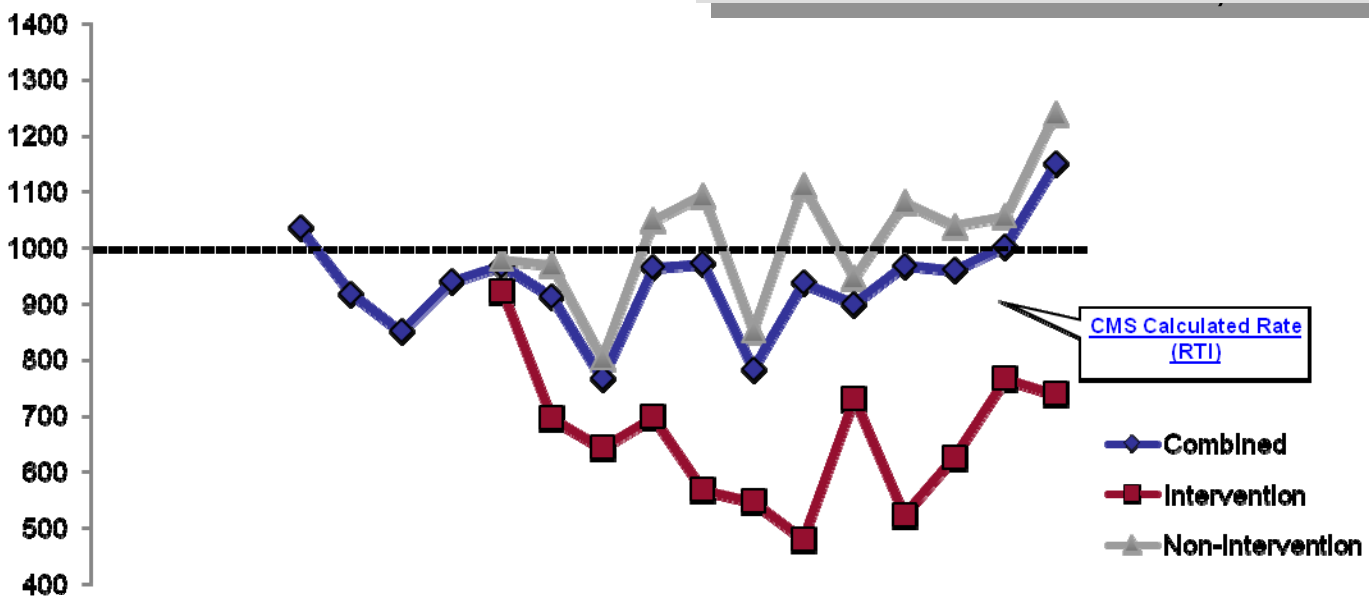
CMS PGP Demo – Billings Clinic

Results

All cause hospitalizations dropped from 1.05 per year to 0.5 per year – from March 1, 2004 to December 1, 2008



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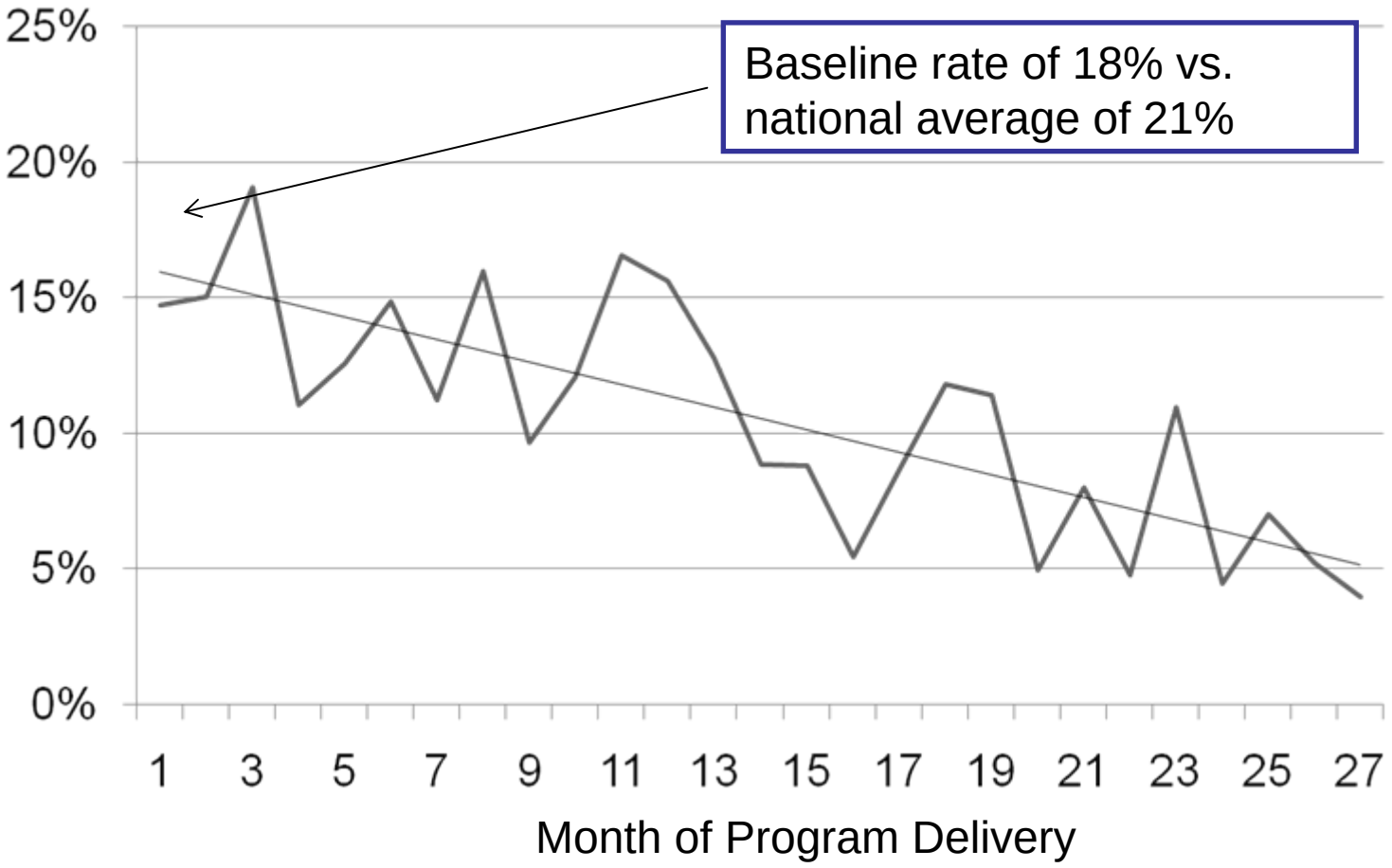
Better care coordination should be this simple.

Impact on Readmissions at the Organizational Level

All Cause 30-Day Readmission Rate Following Hospitalization for Heart Failure



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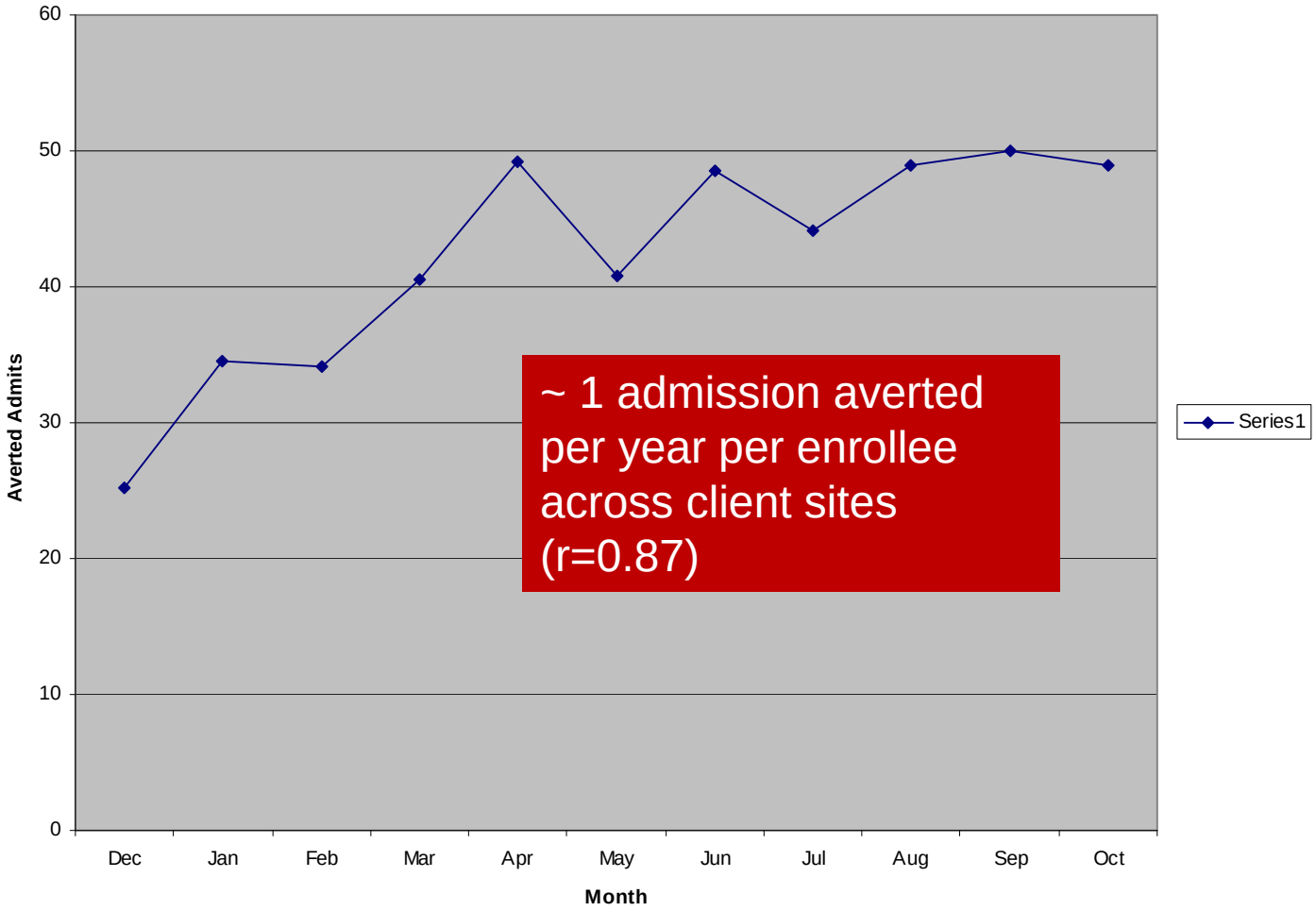
Averted "All Cause" Admissions



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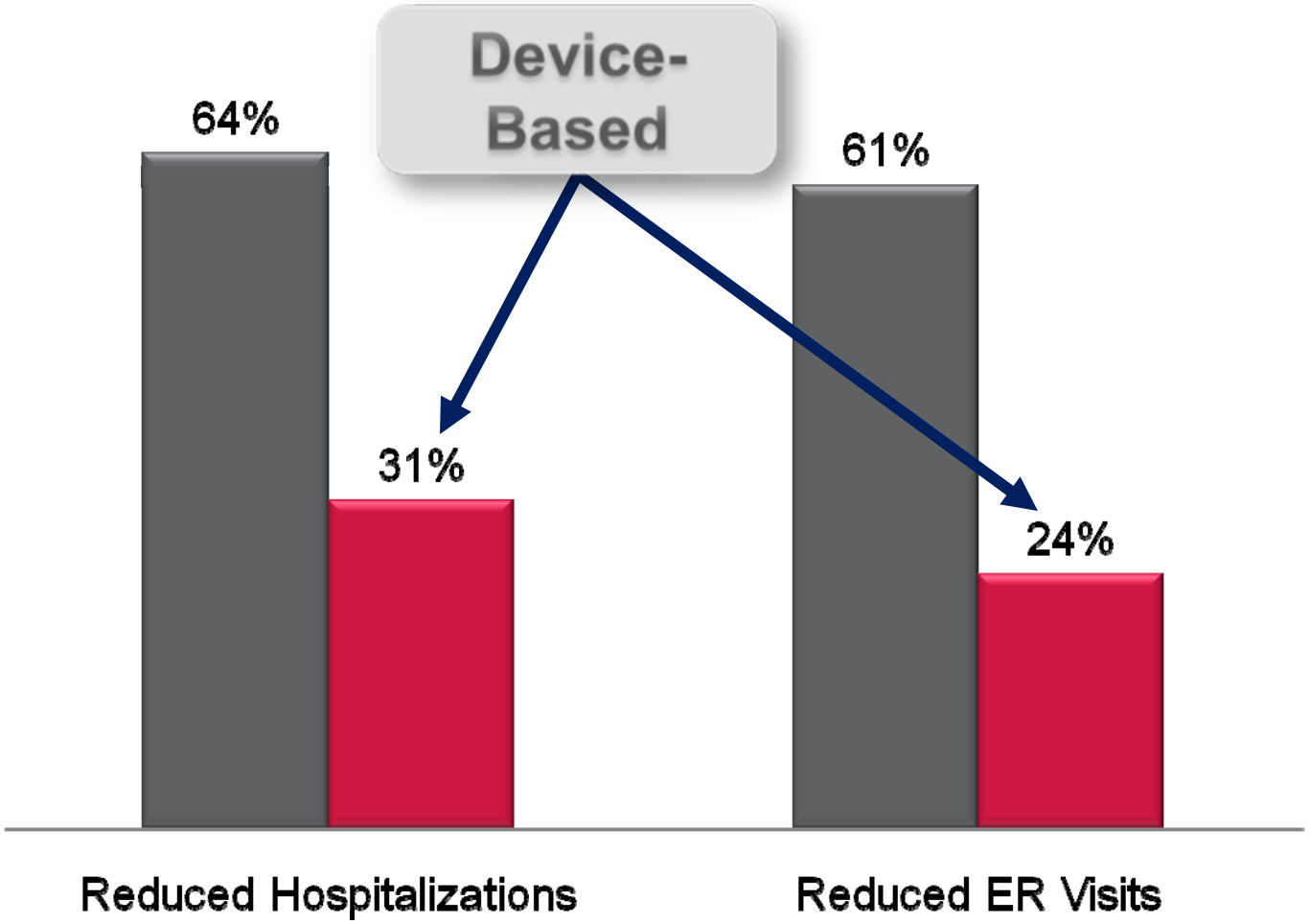
Value of Device-Free



Device-free can double effectiveness

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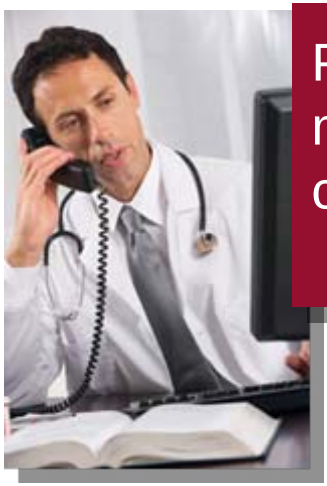
Who Benefits?

Patients are healthier, out of hospitals



Physicians are more engaged, care is improved

Hospitals ease capacity, limit losses

Payers reduce costs for admits, ER visits

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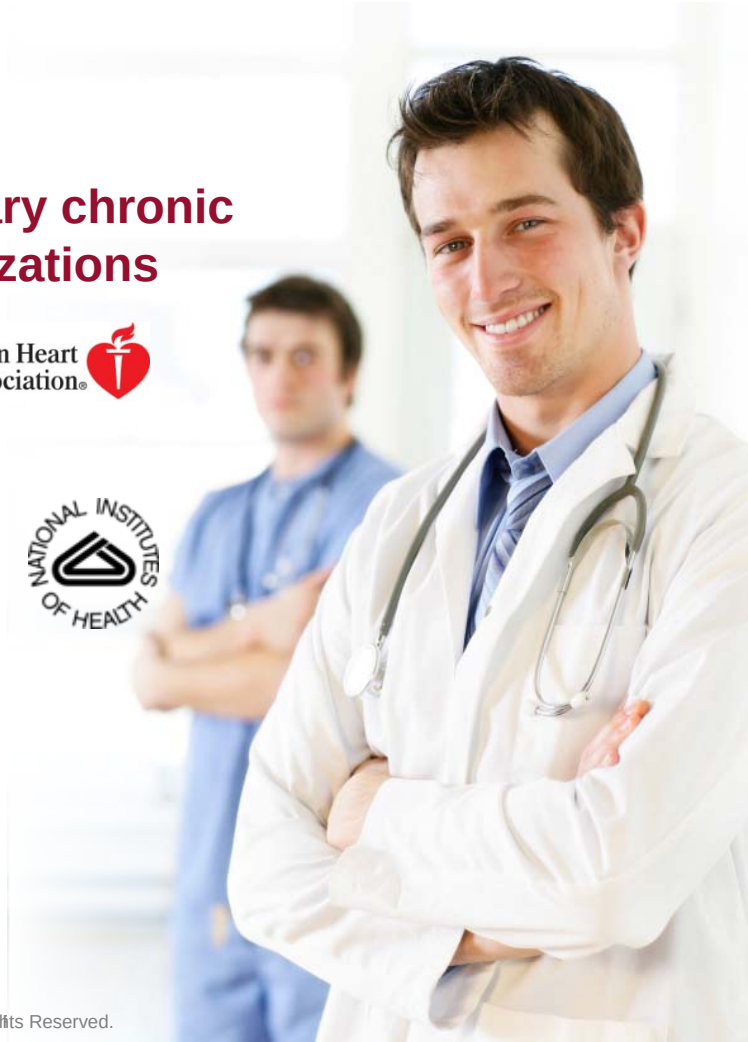
About Us

Founded	1995
Goal	**Reduce unnecessary chronic condition hospitalizations**
Awarded	**National Outcomes Award** (American Heart Association)
Selected	**Evaluation of remote monitoring** (National Institutes of Health)



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California Healthcare Foundation

Chronic Disease in California: Facts and Figures

Gerard F. Anderson, Ph.D., and Katherine B. Wilson, October 2006

- Of the 38% of Californians with chronic disease, over 1/2 have one of 4 chronic conditions: heart disease, COPD/ Asthma, Diabetes, Hypertension
- Average annual per capita cost of $6600 vs. $2400 for average Californian, and approach $40,000 annually if all four conditions are present
  - http://www.chcf.org/topics/chronicdisease/index.cfm?itemID=125683

Challenging the Status Quo in Chronic Disease Care: Seven Case Studies

Robert A. Berenson, M.D., The Urban Institute, September 2006

- Features case studies of seven strategies for managing and improving chronic disease care.
- Examines unique, provider-based strategies that fall outside the prototypical models of disease management and clinic-based chronic care.
- Looks at the benefits, limitations, and policy implications of these alternative approaches.
- Notably, Pharos Innovations technology is featured in two of the seven case studies.
  - http://www.chcf.org/topics/chronicdisease/index.cfm?itemID=125226