

Value of Echocardiography in Heart Failure

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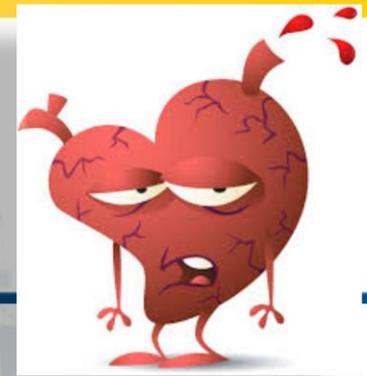
JOHNS HOPKINS

M E D I C I N E

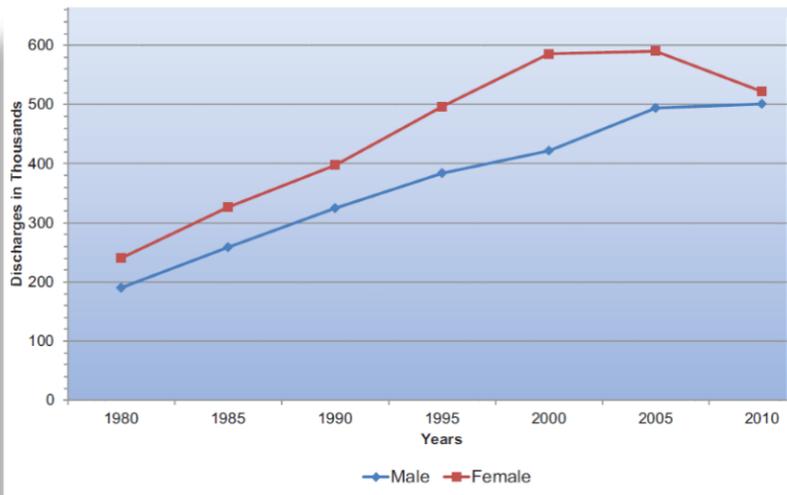
**JOHNS HOPKINS
HEALTH SYSTEM**

All graphics from various sources via Google images

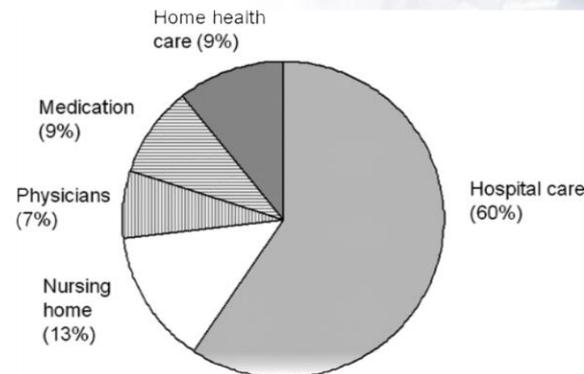
Heart Failure = A significant societal burden



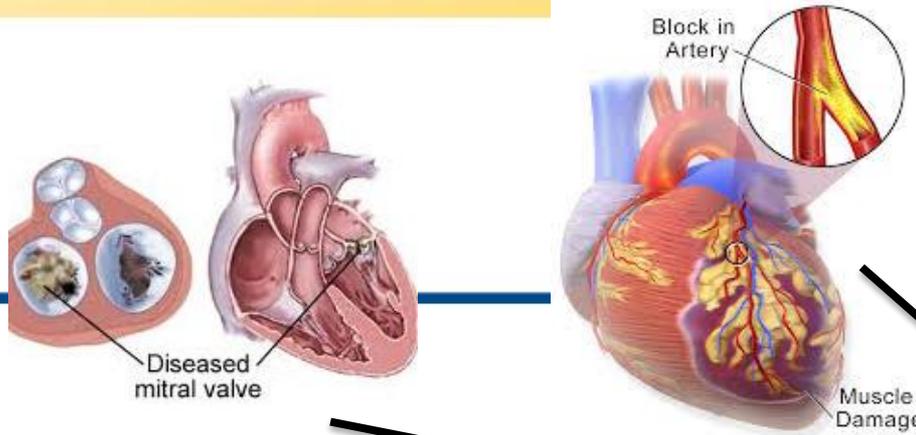
5 million cases
550,000 new cases yearly
Largest discharge Dx in elderly
Hospital stays \uparrow 150% x 20 y



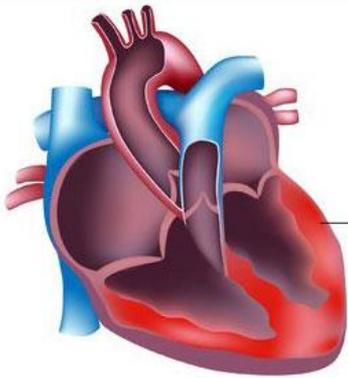
2003 - \$24.3 B
2010 - \$39.2 B
Annual cost \$8500



The HEART is a PUMP

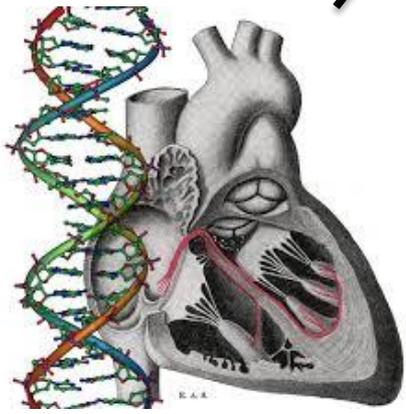


Weak muscle



Myocarditis

Heart Attack



Filling problem



Normal Heart

Normal Echo



Abnormal
Asymptomatic

Stress
New Tech



Abnormal
Symptomatic

Overt
Abn

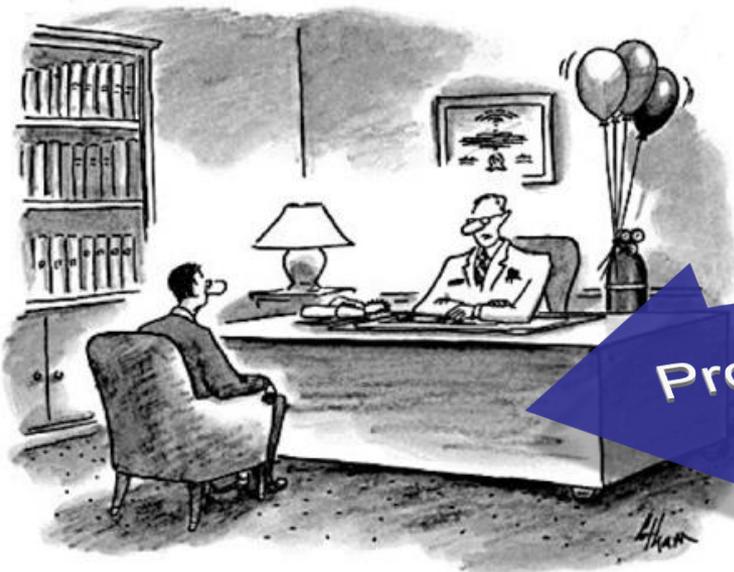


Abnormal
Seriously Ill

How Echo Helps

Image: Octavio Aburto, NGS

Pay for PROCEDURE vs. PERFORMANCE



"We'll widen the clogged artery by inserting a balloon."



MD Health Services Cost Review Commission

- all payers pay same rates
- Cover inpatient + outpatient + ER
- Does not regulate physician fees
- Caps cost growth ~4%/yr

No testing vs. SMART testing

No Testing



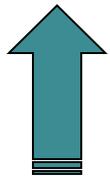
↑ cost
↓ outcomes



Excess Testing



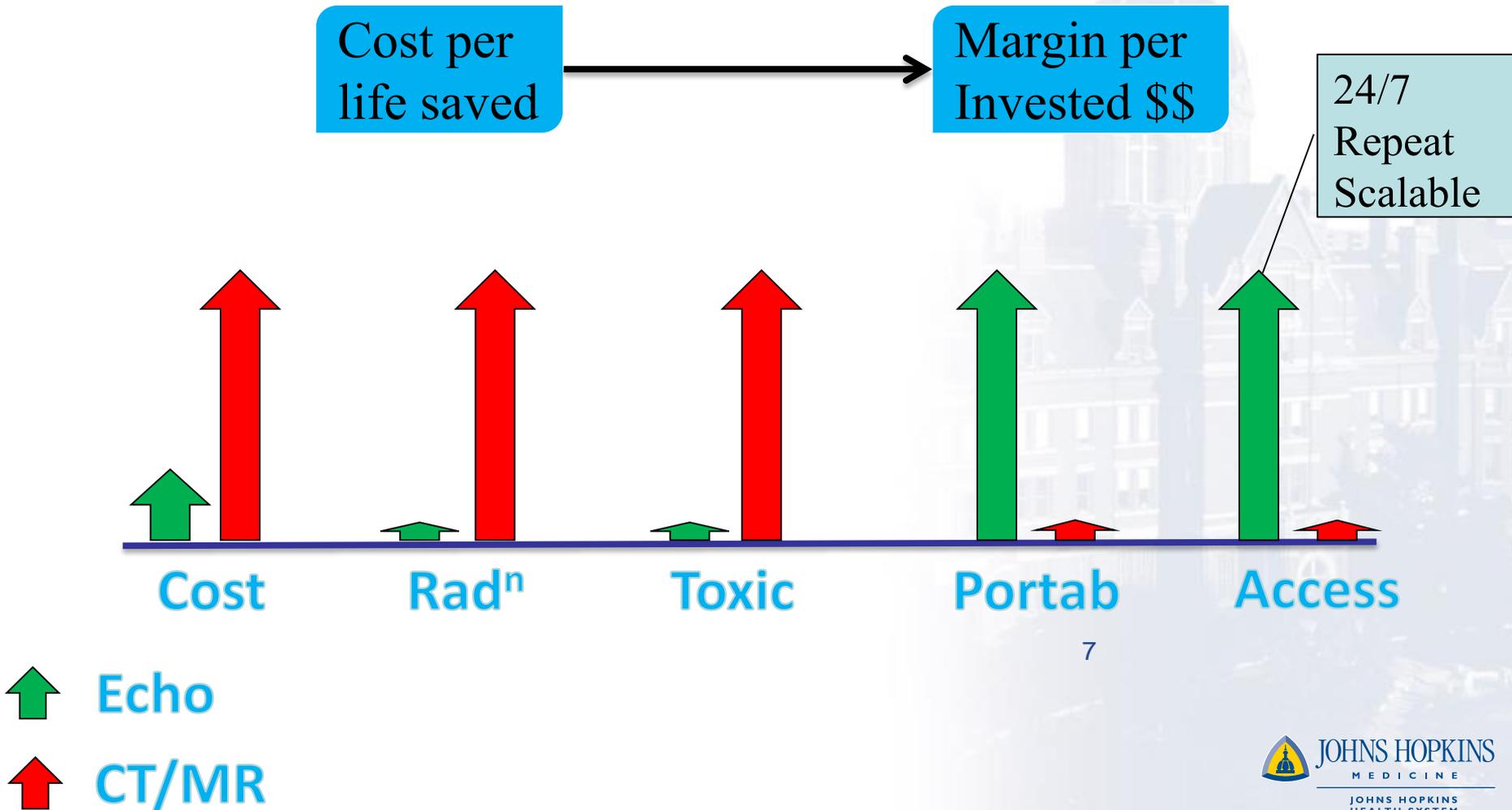
↑ cost
± outcomes



Shortcuts



Dwindling profits = Strategic Investing



Echo = Higher Margins for Similar Work

\$200k



**One SIZE
Fits All**

Full diagnostic



**Scalable Technology =
Scalable Cost**

\$80k



Look under
the hood

\$15k



Kick the tyres

Echo Impacts total care \$

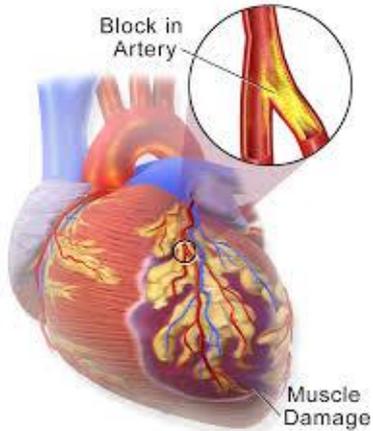
Who to treat

How to treat

When to treat



\$1k



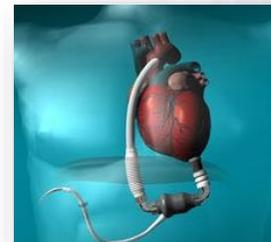
Heart Attack



Echo

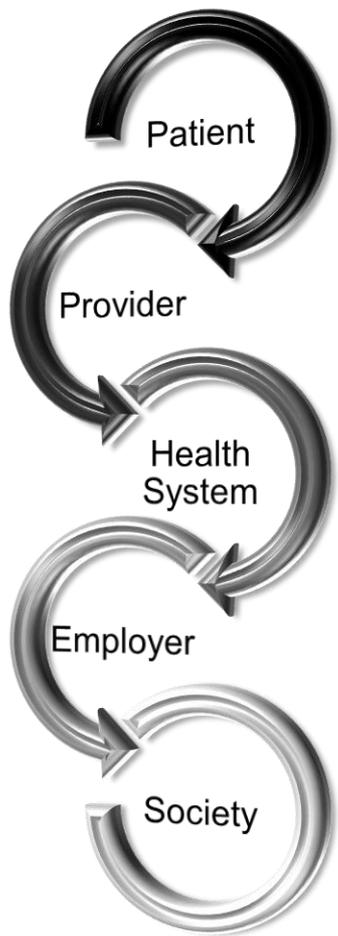


\$40k



\$100k

Echo Value Proposition in HF



Early Detection > Timely Rx > QOL/survival \$

Better Outcomes > Performance Scores \$

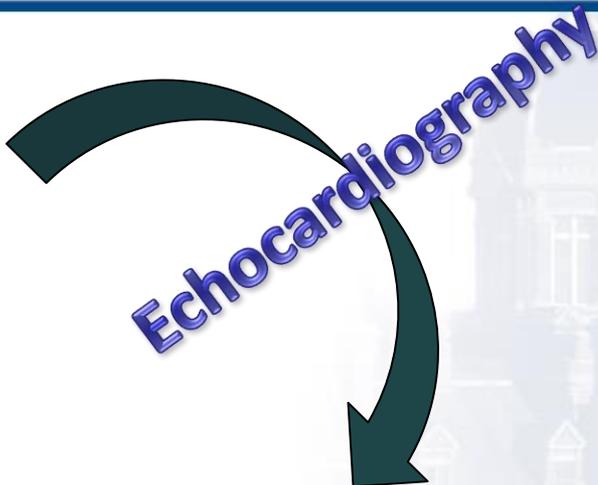
Triage > Throughput > Lower Readmission
>Better Margins \$

Productivity > Insurance Cost \$

[Cost Savings] \$\$\$\$

Echo HIGHLY VALUABLE in Heart Failure

Heart Failure is
Widespread
&
Expensive



Echocardiography

**Optimize OUTCOMES
at
AFFORDABLE COST**