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THE MERKIN CASE SERIES ON  
**INNOVATIONS IN  
CARE DELIVERY:**  
CONGESTIVE HEART FAILURE

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Grateful acknowledgement for this case study and event to the Dr. Richard Merkin Initiative on Payment Reform and Clinical Leadership, under the direction of Alice Rivlin and Mark McClellan at The Brookings Institution.

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# WELCOME

Alice Rivlin

Director, Engelberg Center for Health Care Reform

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SPEAKING  
**FROM THE HEART :**  
THE PATIENT  
EXPERIENCE

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Lee F. Satterfield  
District of Columbia Superior Court Chief Judge

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THE ANATOMY OF  
**A BROKEN HEART :**  
CONGESTIVE HEART  
FAILURE

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Kapil Parakh, M.D.  
Director of Heart Failure, Faculty, Johns Hopkins Bayview



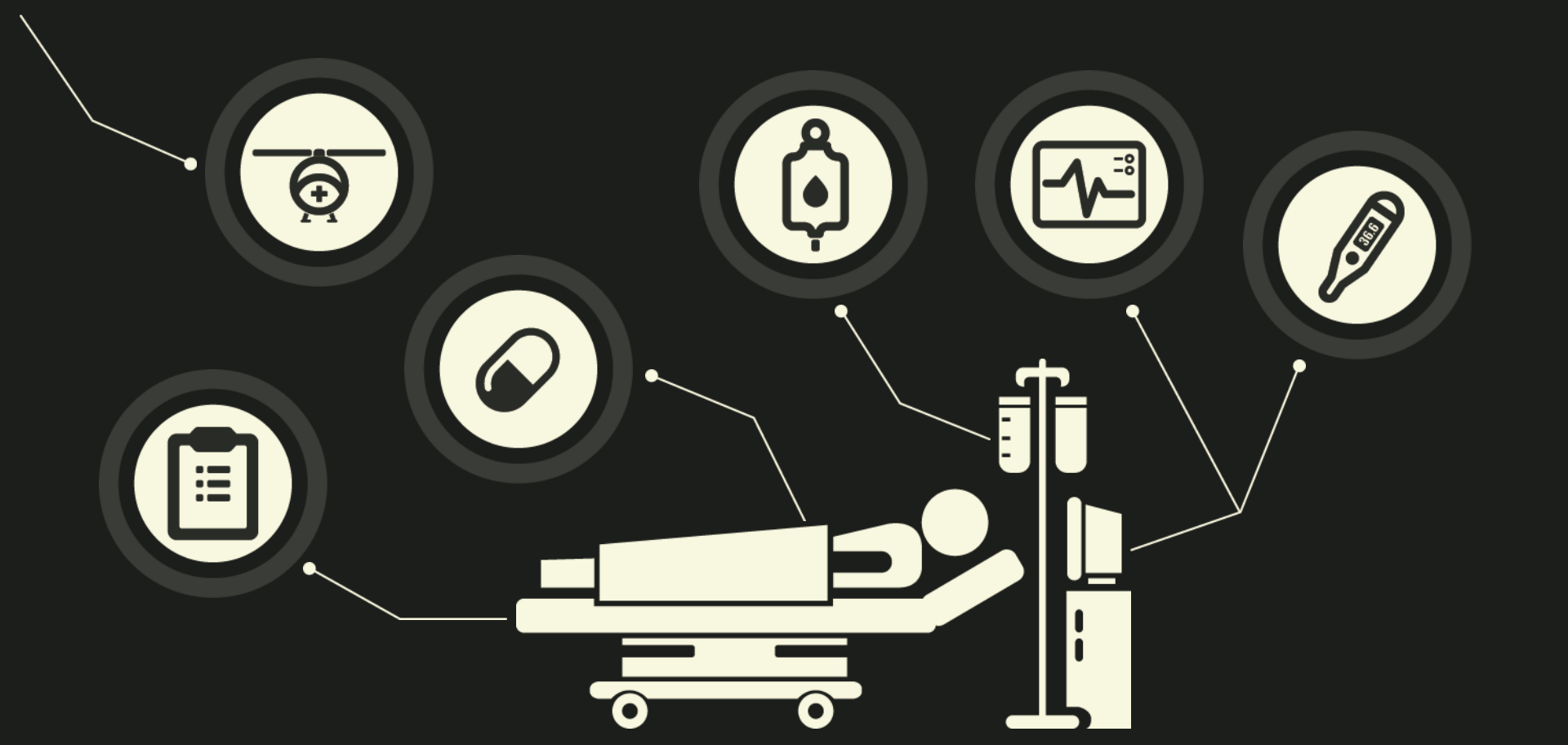


A PROVIDER  
**HEART TO HEART:**  
A CONVERSATION ABOUT  
OPTIMAL CARE

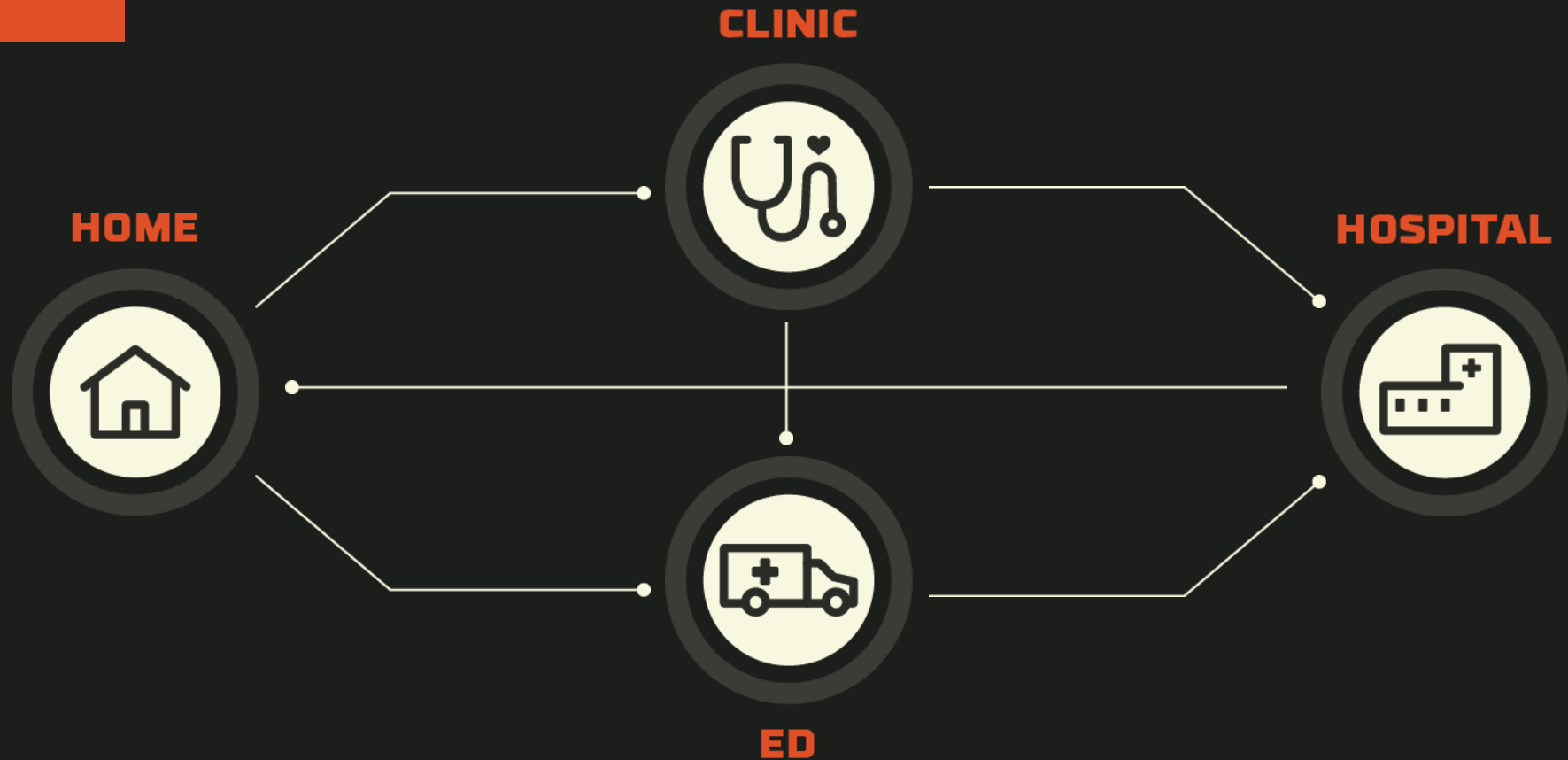
Zubin J. Eapen, MD, MHS  
Medical Director, Duke Heart Failure Same Day Access



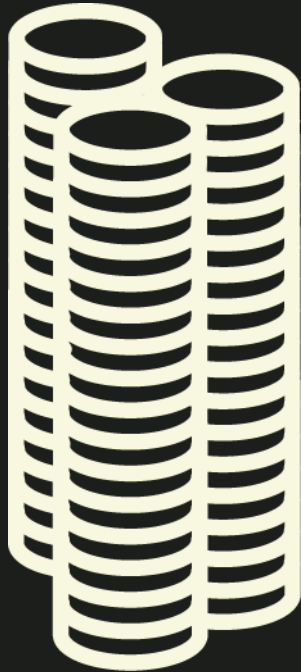




# OLD CARE PATHWAYS



WE ARE SPENDING MORE



THE UNITED STATES RANKS

**FIRST**

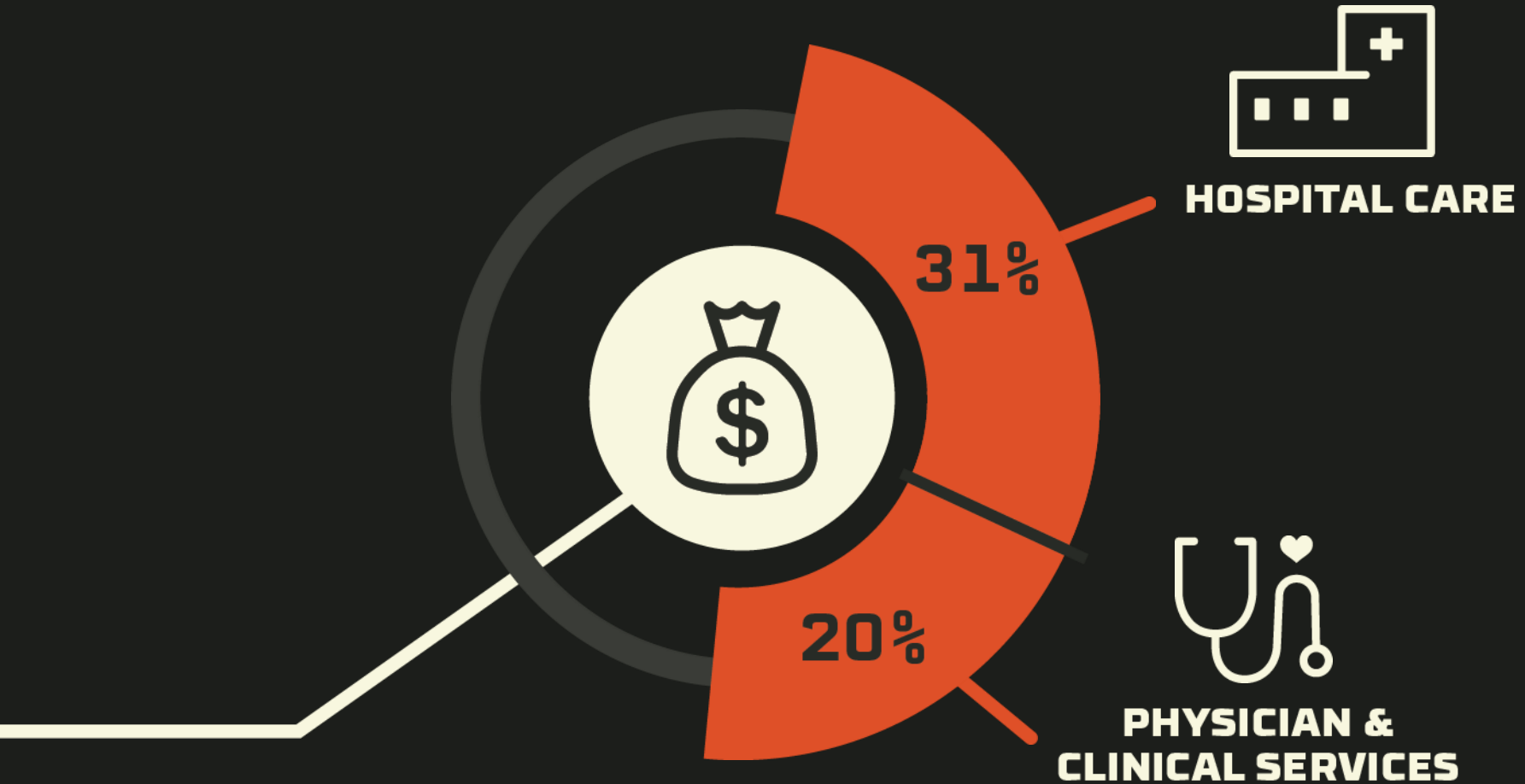
IN HEALTH CARE SPENDING

# WE'RE NOT LIVING LONGER

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THE UNITED STATES  
**RANKS 27TH**  
IN LIFE EXPECTANCY



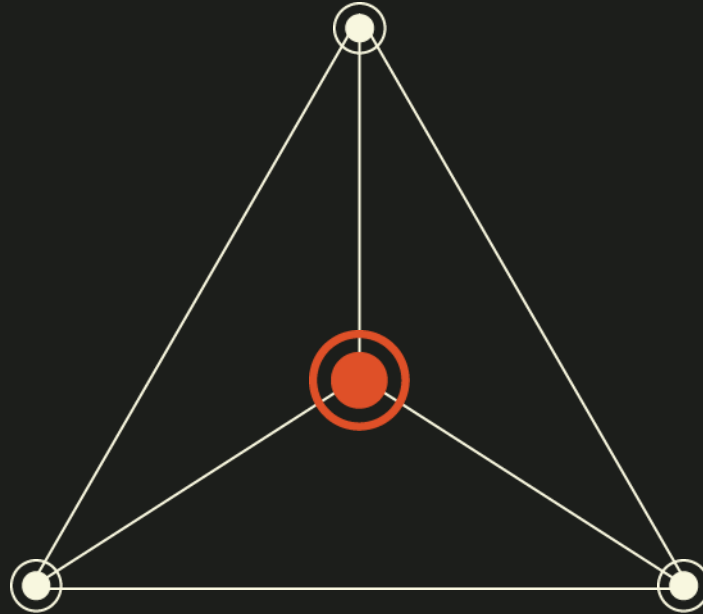


**HOSPITAL CARE**



**PHYSICIAN &  
CLINICAL SERVICES**

**IMPROVE THE  
HEALTH OF POPULATIONS**



**IMPROVE THE  
PATIENT EXPERIENCE  
OF CARE**

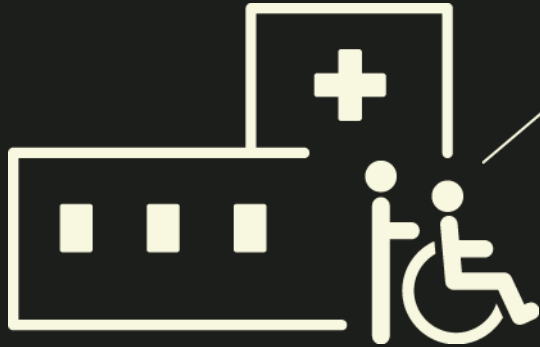
**REDUCE THE  
PER CAPITA COST  
OF HEALTH CARE**

**IHI TRIPLE AIM**

# DUKE HEART FAILURE SAME DAY ACCESS



HOME



HOSPITAL



# A NEW CARE PATHWAY

HOME

CLINIC

DISEASE  
MANAGEMENT

ED

HOSPITAL





# WHAT DOES SELF-CARE INVOLVE?

ADHERING TO  
MEDICATIONS



ACTIVELY  
MONITORING  
CONGESTION



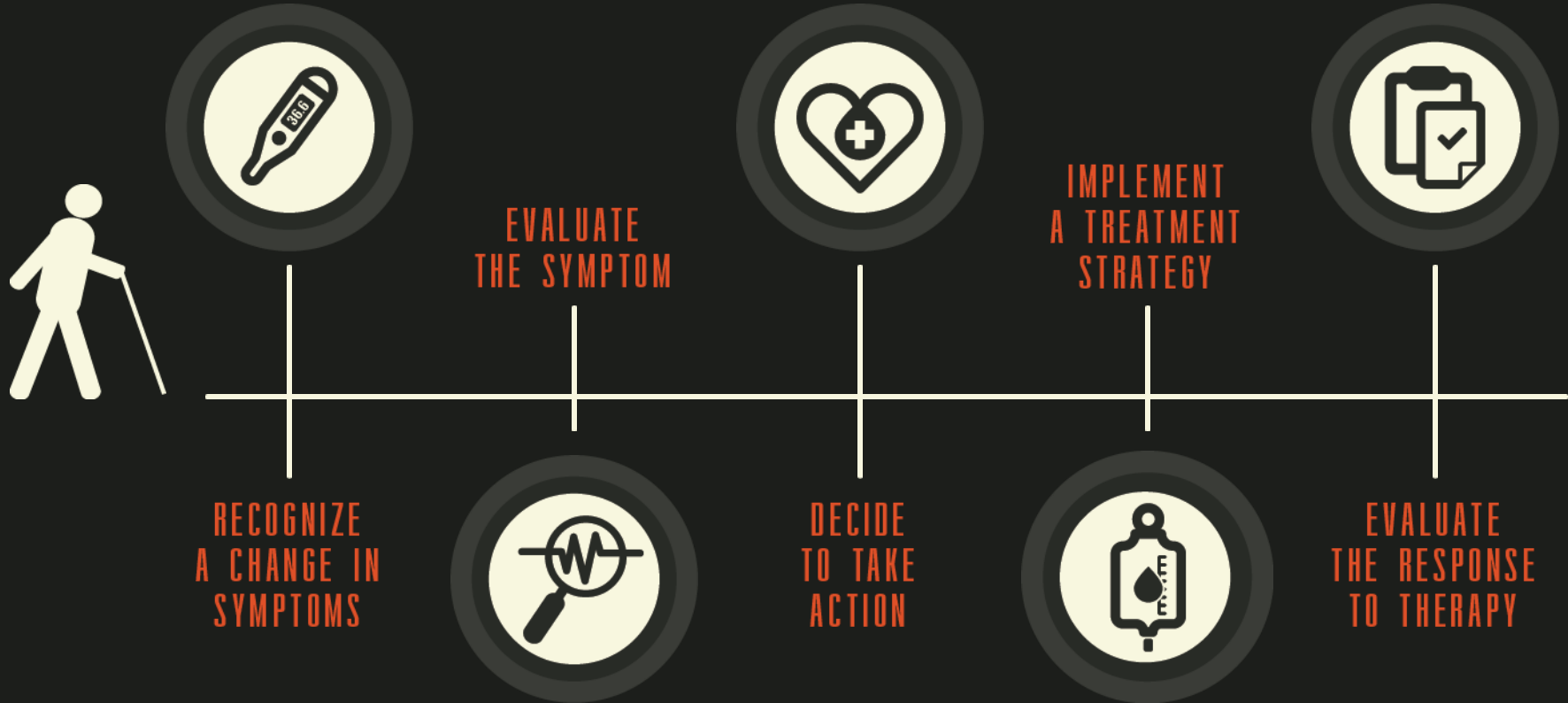
FOLLOWING DIET  
AND EXERCISE  
RECOMMENDATIONS



MANAGING  
OTHER  
CONDITIONS



# SELF-CARE IS A COMPLEX PROCESS



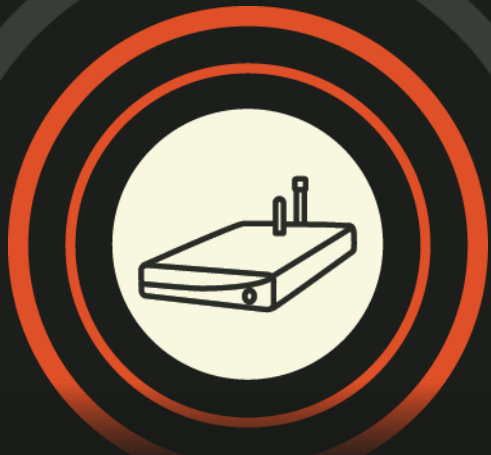
SMART SCALE



BLOOD-PRESSURE  
MONITOR



PULSE  
OXIMETER



PILL  
DISPENSER

TECHNOLOGY WILL IMPROVE CARE OUTSIDE  
THE HOSPITAL FOR CHRONIC CONDITIONS



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AVOIDING A  
**FINANCIAL FLATLINE**  
THROUGH PAYMENT REFORM

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Hoangmai Pham, MD, MPH  
Acting Group Director, Seamless Care Models Group, Center for Medicare and Medicaid Innovation

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DUKE UNIVERSITY  
**HEALTH SYSTEM:**  
LESSONS IN PAYMENT REFORM  
AND CLINICAL DESIGN

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George Cheely, MD, MBA

Medical Instructor, Medical Director for Care Redesign, Office of the Chief Medical Officer, Duke University Health System

# IMPROVING THE TREATMENT OF CHRONIC HEART FAILURE



# SHARED SAVINGS





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**WE MUST CHANGE  
HOW WE APPROACH  
PATIENT CARE**

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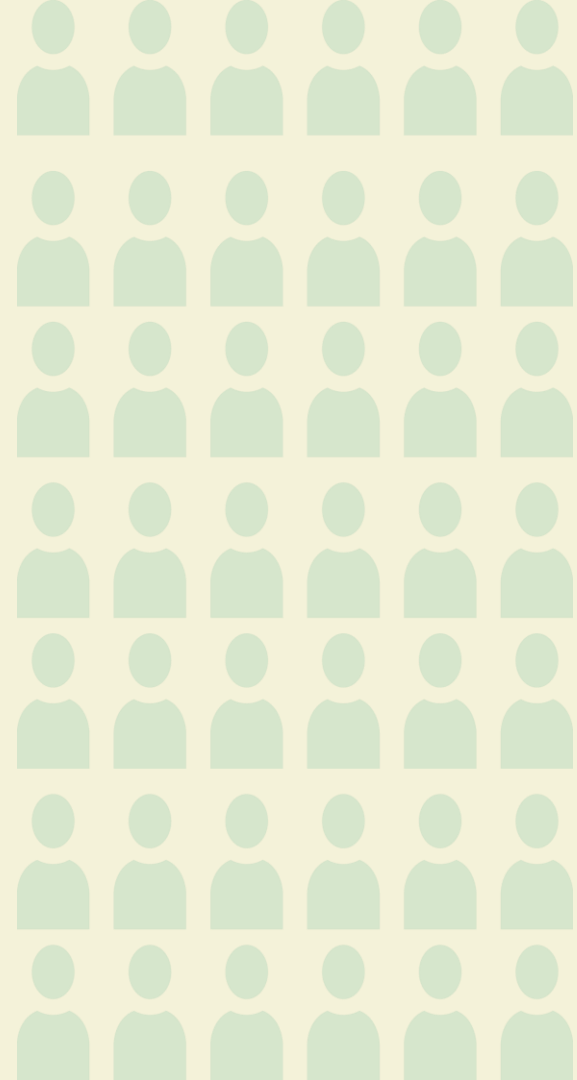


# LEADERS IN THIS COUNTRY

**MUST TAKE A BRAVE STEP FORWARD**



TAKE GREAT CARE  
OF PATIENTS



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UNIVERSITY OF COLORADO  
**HOSPITAL:**  
LESSONS IN PAYMENT REFORM  
AND CLINICAL DESIGN

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Larry Allen, MD  
Assistant Professor, University of Colorado Hospital



University of Colorado Hospital

UNIVERSITY OF COLORADO HEALTH



DukeMedicine



(2008)

{ 5 }  
DAYS

# DRG EPISODE OF CARE



**\$9000**

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# **CULTURAL SHIFT**

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Risk-standardized  
readmission rates  
for heart failure



## Administration

MCCI Pilot Bundle



## Multi-Disciplinary Committee

H2H Task Force



## Information Technology

Engagement



**Identification**  
of Patients



**Standardized Order Sets**  
Optimal Basic Care



**Risk Score Calculation**  
High-intensity interventions  
to higher-risk patients

# TODAY



# A LONGITUDINAL APPROACH

## KEY INGREDIENTS

- + DESIRE TO LEARN**
- + COLLABORATION**
- + DIVERSITY: THOUGHT & EXPERIENCE**
- + WILLINGNESS TO TAKE RISKS**
- + SYSTEM FOR TRIAL & ERROR**
- + TECHNOLOGY**

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WHERE DO WE GO FROM HERE?  
**LESSONS LEARNED**  
AND CHALLENGES AHEAD

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Darshak Sanghavi, MD

Merkin Fellow for Finance and Clinical Leadership, Engelberg Center for Health Care Reform

# - PATIENT



**CARDIOLOGIST**



**REHAB**

Rehabilitation of sensory and cognitive function typically involves methods for retraining neural pathways or training new neural pathways to regain or improve neurocognitive functioning that has been diminished by disease or trauma.



**DOCTOR**

A professional who practices medicine, which is concerned with promoting, maintaining or restoring human health through the study, diagnosis, and treatment of disease, injury, and other physical and mental impairments.



**HOSPITAL**

A hospital is a health care institution providing patient treatment by specialised staff and equipment. Hospitals are usually funded by the public sector, by health organisations (for profit or nonprofit), health insurance companies, or charities, including direct charitable donations.



**INTERNIST**

Internal medicine physicians are specialists who apply scientific knowledge and clinical expertise to the diagnosis, treatment, and compassionate care of adults across the spectrum from health to complex illness.



**HOSPICE**



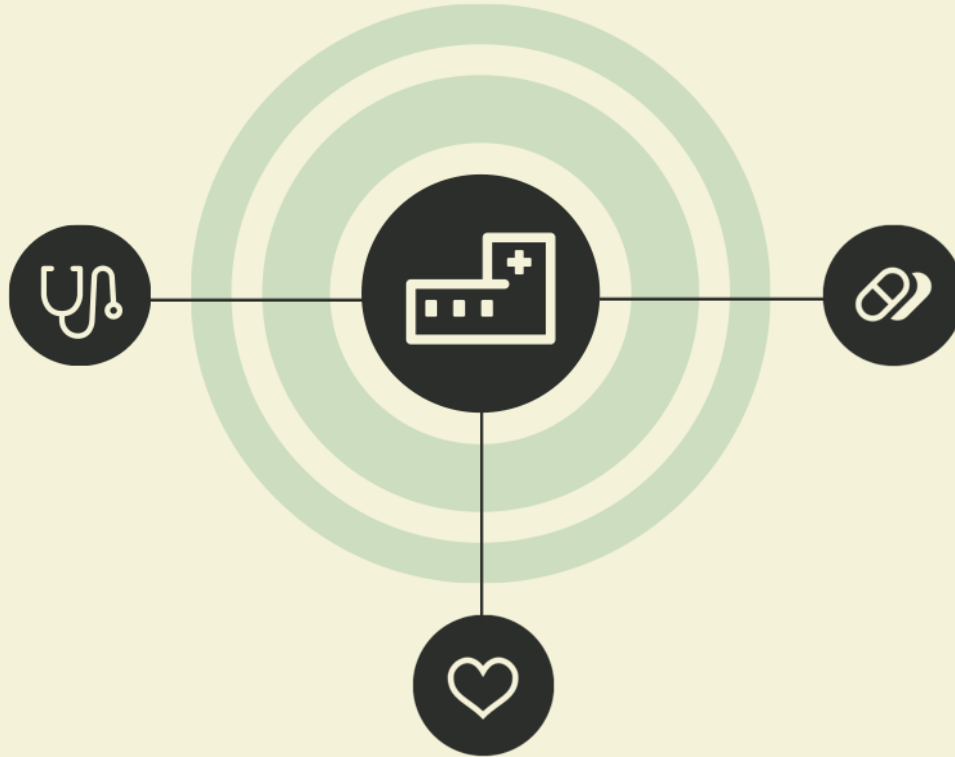
**ER**



**INTENSIVE CARE**

# BUNDLED PAYMENT

UCH'S MAJOR INNOVATION





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**GOAL:** NOT BEING  
READMITTED

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# BUNDLED PAYMENT

UCH'S MAJOR INNOVATION

Someone who can

**CATALYZE**

**CHANGE**



# BUNDLED PAYMENT

UCH's MAJOR INNOVATION

ONLY

**\$30K to 40K**

ALL YEAR



# BUNDLED PAYMENT

UCH'S MAJOR INNOVATION



Change works best  
when you are not  
thinking about it

# BUNDLED PAYMENT

UCH'S MAJOR INNOVATION

Prevention  
not built in

Is this  
scalable?

**LIMITATIONS  
& CHALLENGES**

# - PATIENT



**CARDIOLOGIST**



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**ER**



**INTENSIVE CARE**



**HOSPICE**

# ACCOUNTABLE CARE ORGANIZATION

**DUKE**



focus on  
**PREVENTION**

ACCOUNTABLE CARE ORGANIZATION

**DUKE**



**RIGHT** CARE



# ACCOUNTABLE CARE ORGANIZATION

**DUKE**



**RIGHT** PLACE

# ACCOUNTABLE CARE ORGANIZATION

**DUKE**



**RIGHT** TIME

# ACCOUNTABLE CARE ORGANIZATION

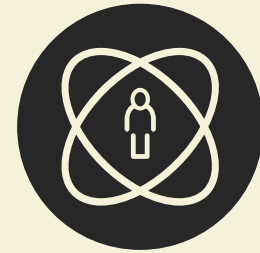
**DUKE**



HOSPITAL



OUTPATIENT



NON-CARDIAC

# ACCOUNTABLE CARE ORGANIZATION

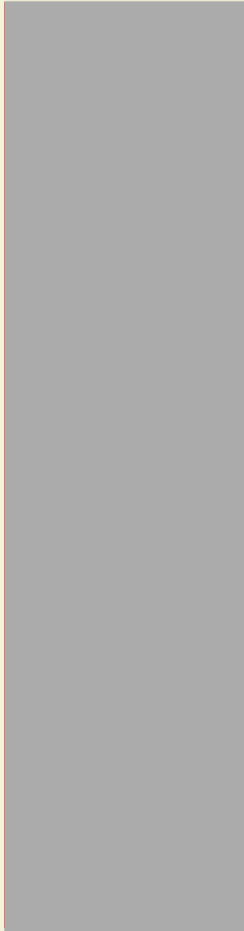
**DUKE**

Working in  
isolation

Didn't cut  
the paperwork

**LIMITATIONS  
& CHALLENGES**

1968



2014

DEATHS FROM  
**HEART PROBLEMS**

HAVE FALLEN BY **HALF**  
ACROSS THE WORLD.

REDUCED  
SMOKING



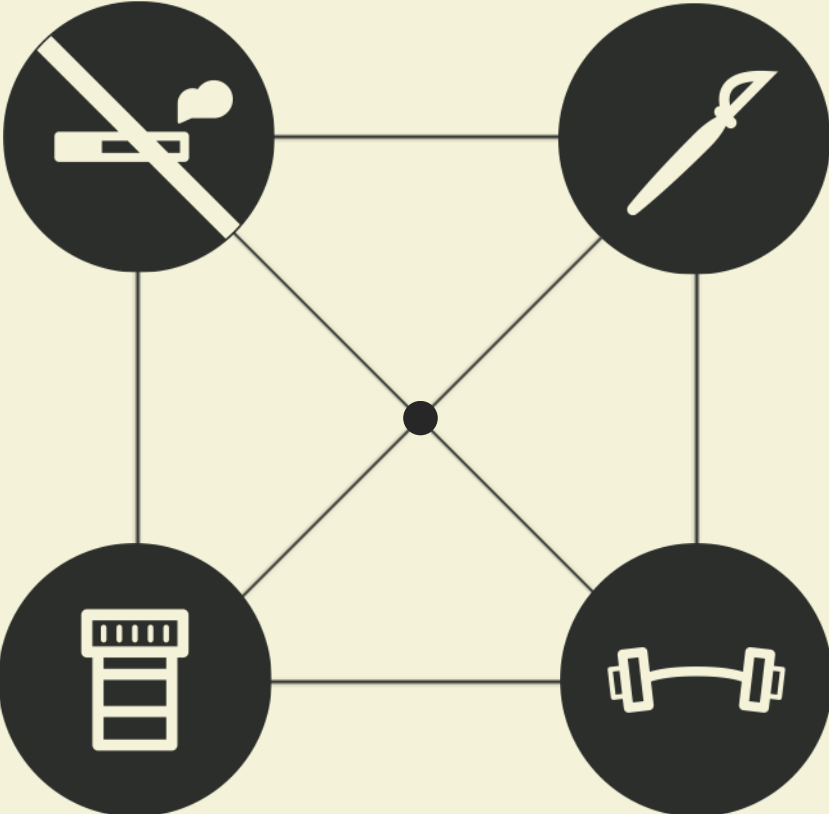
BETTER  
HEART  
SURGERY



BETTER  
EXERCISE



LONG-TERM  
BLOOD  
PRESSURE  
MEDICATIONS



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**WE CAN MAKE  
HEART CARE BETTER**

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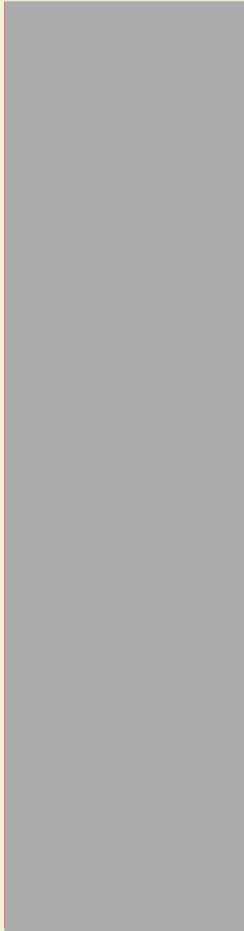
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# **CONTINUOUS IMPROVEMENT**

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1970



DEATHS FROM  
**CHILDHOOD LEUKEMIA**

FELL FROM 90% to 10%.

2014



ASK



FORCE



BRIBE

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# **VIRTUOUS CYCLE OF INNOVATION**

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