Above all else, we are committed to the **care** and improvement of human life.

The Business Case for Interoperability from a Health System Perspective

ACC IHE Task Force

Harmonizing Dataflow and Workflow Across the Clinical Domain

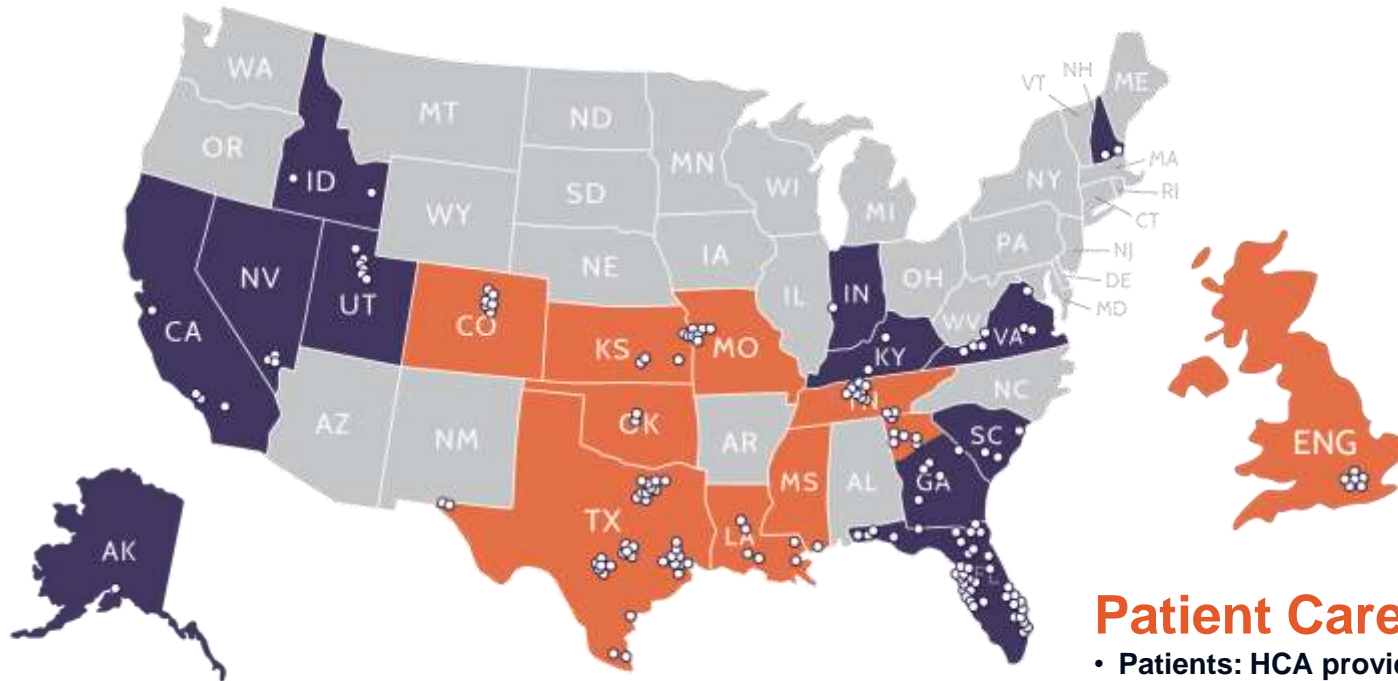Sophia Chaidez, HCA Corporate Director of Cardiovascular Technology

Sophia Chaidez   Sophia Chaidez

May 4, 2018

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HCA | Clinical Services Group
Cardiovascular Services

Size

- **Employees: 243,500 (US)**
  - **Nurses – 79,000**
  - **Allied health professionals – 47,000**
  - **Affiliated physicians – 38,000**
  - **Employed physicians – 3,100**
  - **Practitioners – 1,000**

Facilities

- **179 Hospitals in US and UK**
- **In 20 States**
- **Ambulatory Surgery Centers – 120**
- **Freestanding ERs - 51**

CV Programs

- **Cath Labs – 132**
- **CV Surgery – 88**
- **38 US TAVR Programs (3 UK)**
- **37 Watchman Programs**

Patient Care

- **Patients: HCA provided 26M encounters**
  - **Admissions – 1.8 M**
  - **Patient encounters – 28.2 M**
  - **Deliveries – 217 K**
  - **ER visits – 8.6 M**
  - **Physician clinic visits – 8 M**
  - **Surgeries – 1.4 M**
  - **2016 Isolated CABG - 10,153**
  - **2016 Isolated AVR - 3,996**
  - **2016 CABG + AVR - 2,747**
  - **2016 TAVR Procedures- 1,348**
  - **2016 NCDR CathPCI Procedures – 48,012**

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Objectives

- Strategic Framework

- Focus on Interventional Cardiology

- <u>Connecting the Care to a Business Case for Interoperability</u>

    – Understand your costs

    – Understanding your potential

    – Challenges

    – Building Momentum, Maintaining Energy

    – Delivering Results

- High-Level Strategy

- The Executive View

- Summarize Experience (areas of interest)

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Strategic Framework

DRIVE SUPERIOR COMPETENCIES & CAPABILITIES

DRIVE EXCELLENT CLINICAL OPERATIONS

LEVERAGE DATA & TECHNOLOGY

ASSURE CORPORATE RESPONSIBILITY & ORGANIZATIONAL ADVOCACY

To achieve purpose of driving excellent care at scale

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Focus on Interventional Cardiology

Strategic approach to realize our vision and deliver results

HCA Strategy
Advocacy & Leadership
Increase Performance Visibility
Consistency in Practice & Operations
Leverage Scale to Drive Performance

Business Case for Interoperability

Understand your costs

What are you buying?	Cost to Change
What are your assets?	Cost to run the business
What are your resources?	Recruitment

Define your financial & participation model

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Understanding your potential

Interoperability
Delivers
Benefits

Patient Care, Safety, Quality

Efficiency/Productivity

Cost Savings

Reimbursement
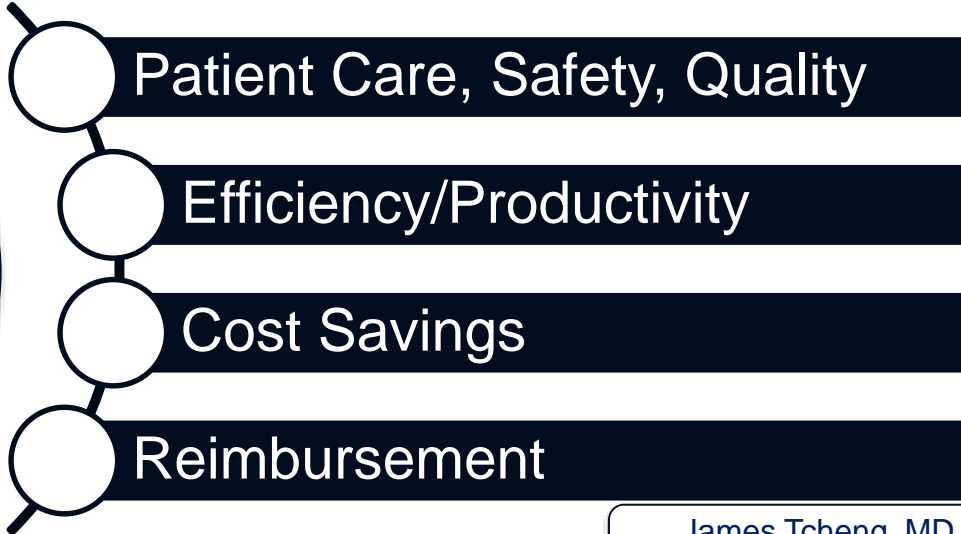
Andrea Price, MS, RCIS, CCA
Indiana University Health

James Tcheng, MD, FACC, FSCAI
Duke Medical Center and Health System

- 100% (00/00) Physician adoption with 00.0% compliance
- Patient Safety:
  - EMR availability in 2 seconds
  - hyperlink to images within the EMR
  - Enterprise accessibility throughout the system
- Medical Legal:
  - One document instead of five in the EMR
  - Low risk for conflicting documentation
- Decreased CathPCI Registry abstraction time - 45% improvement
- 97% improvement for tracking quality improvement efforts
- Increased charge capture per cath lab procedure charge
  2013 + 538; 2014 +730; 2015 +1058; 2016 +1286

What Did We Accomplish?

- **Problem: inaccurate data, incomplete reports**
  - Distributed responsibility for acquiring data to those closest to the data
  - Eliminated double documentation (prelim + final report)
  - Focused the physician on cognitive work (assessment, recommendations) – computer compiles 90% of report
- **Problem: inefficient use of human resources**
  - Each group captures data at point of care
  - Each group responsible for accuracy, quality of data
- **Problem: poor / redundant communication**
  - Was: 4+ days on average to produce final report
  - Now: before the end of the procedure (no prelim report)

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Challenges

- Challenging time to ask for money

- Complexity of invasive workflows to solely attribute the full benefits to interoperability

- Return on investments take time

- This effort is a journey

- Quality can have a value and contribute to cost savings but is not necessarily "cash releasing"

- ***This is hard work***
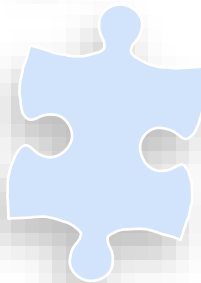
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Build Momentum, Maintain Energy

How is your strategy built?

Contracts, Legal, IT
People, Advocacy & Leadership
Vendors

How will you maintain your program?

This work effort needs to be defined in the business case

Build Partnerships

Allies are required
Influencers
The "glue"
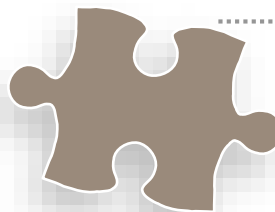
Socialize the Journey

Doing the right thing
Relate the journey back to the patient care
Support your physicians

Identify Key People

Trust
Collaboration
Accountability

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Execution

The ***benefits*** are real and they can happen

- Understanding change and execution in human terms

- How do you identify mutual obligations?

- Define baseline metrics with teams

- Real Factors to consider:

    – Technical landscape is changing

    – Politics are changing healthcare

    – Competing priorities

    – Cross organizational working teams

- Socialization

    – Focused, targeted communication

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Different Perspectives, Leadership and Lessons

To be Interoperable

- Partner Organization (HCA and ACC/NCDR)

- Standards (IHE CPN)

- Competing Priorities (why should a vendor be interoperable)

Working on this

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High-Level Strategy

Executive Steering Committee
(physician focused)

Analytics Strategy

- *Drive data standards with an analytics model*
- *Collaborate with field to build metrics for Cardiovascular Services*
- *One-click executive dashboard*

Education Strategy

- *Implement standard book of work*
- *Adherence to standard annual training (Physicians and Staff)*
- *Standard Onboarding*

Integration Strategy

- *Improve data flow*
- *Focus on key workflows for Interventional Cardiology*

Project Implementation Strategy

- *Dedicated implementation team*
- *Drive standardization*
- *Vendor Adherence to HCA standards*
- *Data to address baseline documentation (Interventional Cardiology)*

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The Executive View

Unified Goal:

Best Experience

+

Best Pricing

+

Best Outcomes

=

Greatest Value

Physicians
Product Choice

Hospital Administration
Clinical Performance
Patient Throughput

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Summary:

1. Costs – do not skimp here
2. What are you trying to accomplish
    1. Tie work effort to transformational care model
3. Provide many examples of benefits and how you will measure benefits for ROI
4. Manage the people, the energy, make it a collaborative work effort, always remember you are doing the work for the patient
5. This is a journey, your business case is alive and breathing (monster)

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Thank you!

Sophia Chaidez   Sophia Chaidez

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