

Post High Tech Act!



"We don't know what we don't know about our patients"

Lynne Penberthy, MD
DMC, NCI

 CLINICAL LAB 2.0

Take Home 2



Procuring and performing a test is **NOT** a diagnosis;
Although we get paid for it!

88305 is **NOT** a holly Grail, but a key assets!

Eric Glassy, MD

Take Home



The lab's potential impact doesn't end
when we release a result;
that's where it begins.

The content of this presentation is proprietary. For permission regarding the use, referencing, or distribution please contact Katherine Shoverman

70%

All U.S. hospital inpatients are admitted through the Emergency Department
This is not a statistic. This is an indictment.

Every day in America:

- **411,000 patients** are seen in Emergency Departments
- **74,000 patients** are admitted to hospitals from EDs
- **106,000 total patients** are admitted to hospitals nationwide

FRAGMENTATION OF DATA = FRAGMENTATION OF CARE

CONSIDER A TYPICAL PATIENT JOURNEY:

- PRIMARY CARE AT HEALTH SYSTEM A
 - LABORATORY TESTING AT A COMMERCIAL LAB
 - SPECIALIST VISIT AT HEALTH SYSTEM B
 - URGENT CARE VISIT AT CVS MINUTECLINIC
 - EMERGENCY DEPARTMENT AT HEALTH SYSTEM C
- EACH SYSTEM HAS A SLIVER OF THE PATIENT'S STORY.**

**HIE YET TO DELIVER ON ITS PROMISE
NO ONE HAS THE COMPLETE PICTURE.
NO AGGREGATED LONGITUDINAL VIEW EXISTS.**

**HOW DO YOU DEFINE UPSTREAM
UPSTEMA YOU MEAN MIDSTEMA
SYSTEM VS SOCIETY**

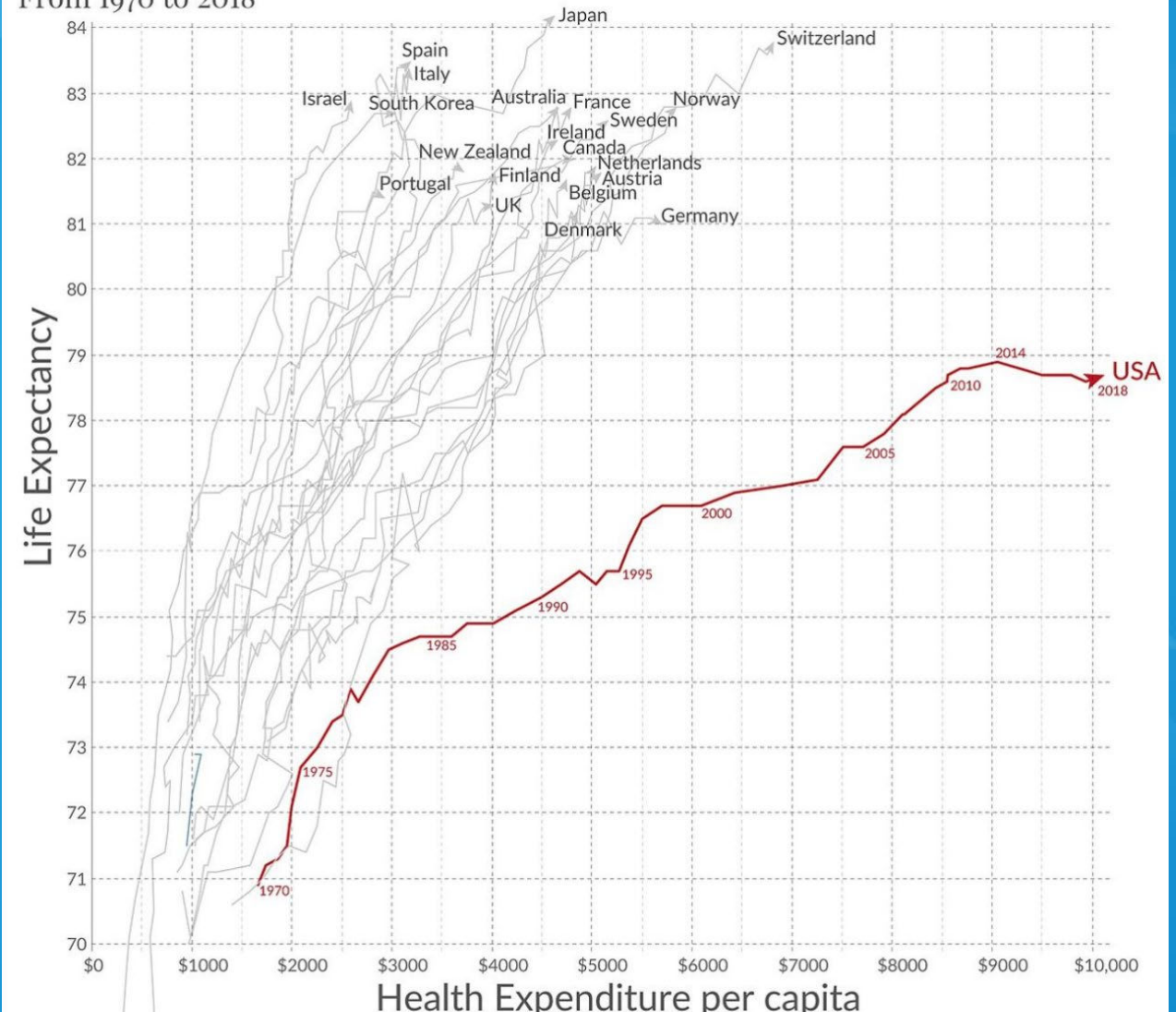
***THE EMERGENCY DEPARTMENT HAS BECOME THE DE
FACTO FRONT DOOR TO AMERICAN HEALTHCARE.
SOURCE: EMERGENCY DEPARTMENT BENCHMARKING ALLIANCE (2018); JAMA
NETWORK OPEN (2023); PENN LDI (2023)***

- \$5 T HEALTH SPENT
- 4% GLOBAL POPULATION
- 19% GDP
- HIGHEST COMORBIDITY
- HIGHEST MORTALITY
- ROI???

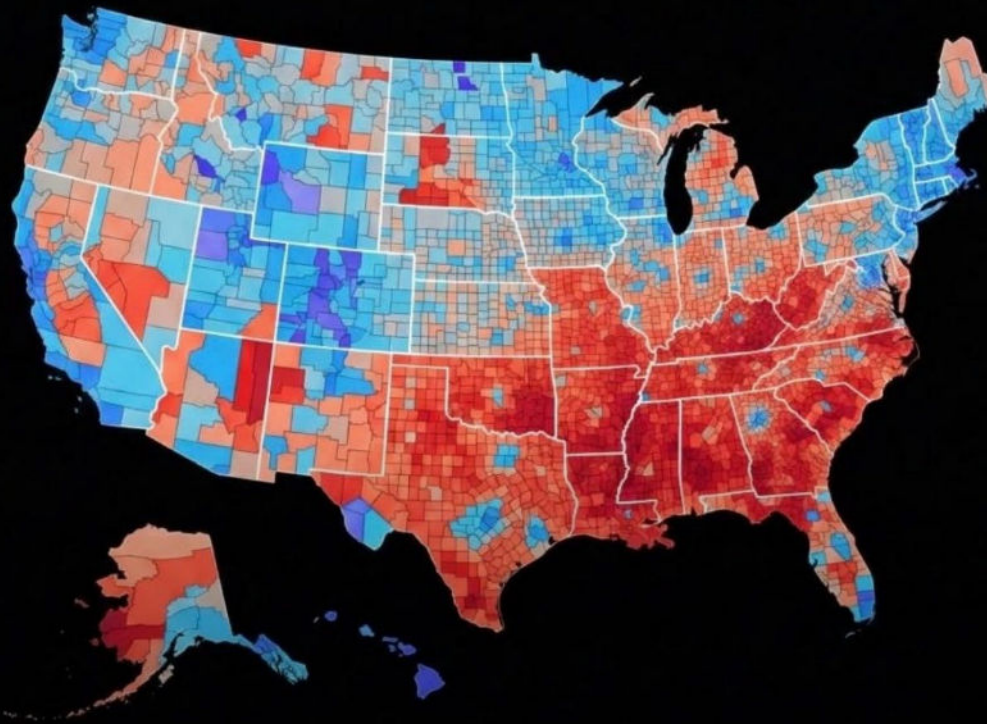
- PUBLIC HEALTH DEVOTEE PRACTITIONERS
- ARCHITECT
- DRIVER SEAT

Life expectancy vs. health expenditure

From 1970 to 2018



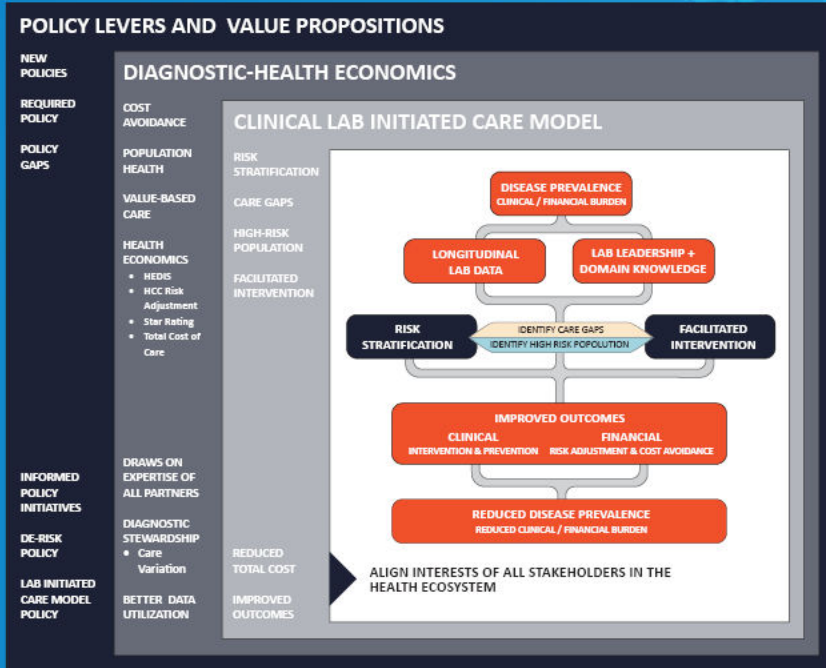
LIFE EXPECTANCY IN AMERICA



STORY OF THE STONE MASSIONS



CL2 MODEL FRAMING THE MOVEMENT

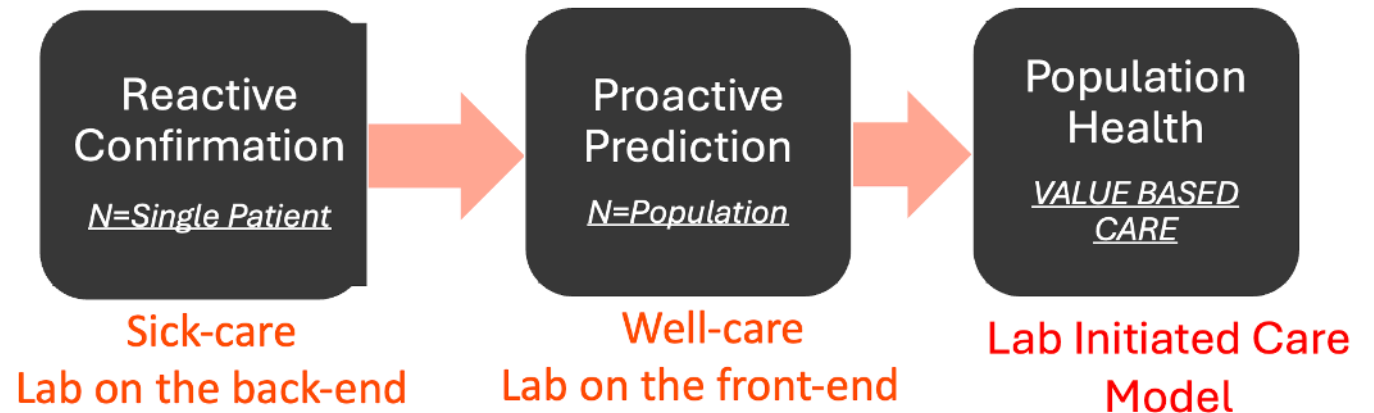


Framing the Movement: Transforming from Reactive Confirmation to Proactive Prediction: An Architectural Framework for Healthcare Transformation Through Laboratory Medicine

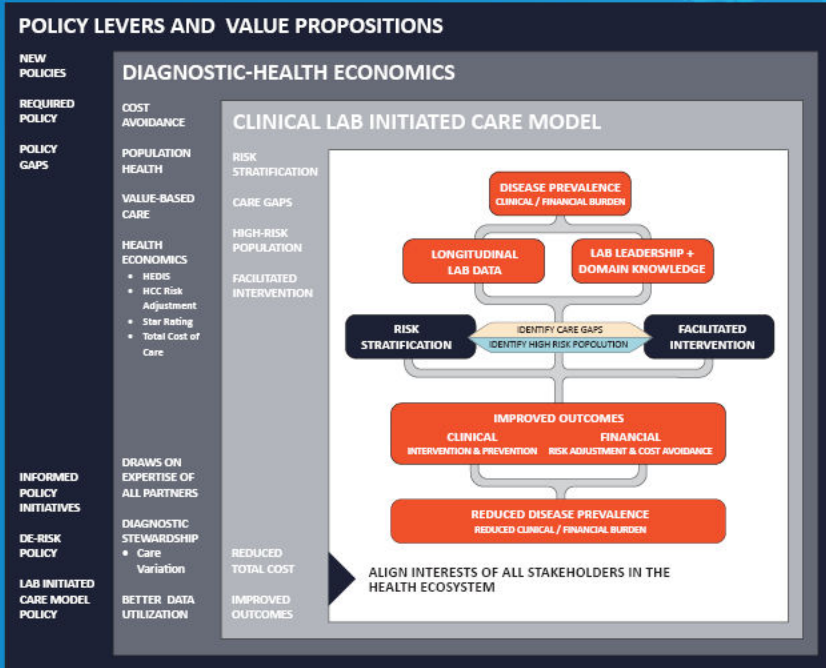


Value-based care = "Proactive Prediction Dx", the right care, at the right time, in the right place, at the right cost

Manufacturing a Sustainable Future!



CL2 MODEL FRAMING THE MOVEMENT



Framing the Movement: Transforming from Reactive Confirmation to Proactive Prediction: An Architectural Framework for Healthcare Transformation Through Laboratory Medicine

CLINICAL LAB 2.0 The Pillars of Project Santa Fe Foundation

INFRASTRUCTURE FUNCTIONAL CHART - EVOLUTION

SENIOR LEADERSHIP	PSFF Board of Directors					External Advisors	
	PSFF Operational Function		Corporate Officers				
MANAGEMENT/ CONSULTANTS 1099 STAFFING	Event Planning	Social Media/ Marketing/ Website	CPA/Tax Accounting/ Audit	Legal Council	PSFF Publications	Demonstration Project Management	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>← PhD Faculty →</p> <p>Data Scientist Statistical Analysis Health Economist</p> </div>
	Business/ Alternative Payment		Education/Certification		Multi-Institutional Demonstration Projects	CL2.0 Pathology Informatics/AI:	
COMMITTEES	Board Liaison: Khosrow Co-Chairs: Lena, Julie	Board Liaison: Nancy Co-Chairs: Peter, Yasmen	Board Liaison: Jim Co-Chair: Aya, Yachana, Kathy		Board Liaison: Myra Co-Chairs: Amjad and Ulysses	Board Liaison: Khosrow Co-Chairs: Jack, James, Ralph and Jennifer	



CLINICAL LAB 2.0

A PROJECT SANTA FE FOUNDATION INITIATIVE



POPULATION-BASED
DIAGNOSTIC JOURNAL

Publication Date: February 24, 2026

Framing the Movement

Transforming from Reactive Confirmation to Proactive Prediction

An Architectural Framework for Healthcare Transformation Through Laboratory Medicine

Khosrow Shotorbani, MBA, MLS(ASCP)¹, Kathleen Swanson, MS, RPh¹

¹Project Santa Fe Foundation

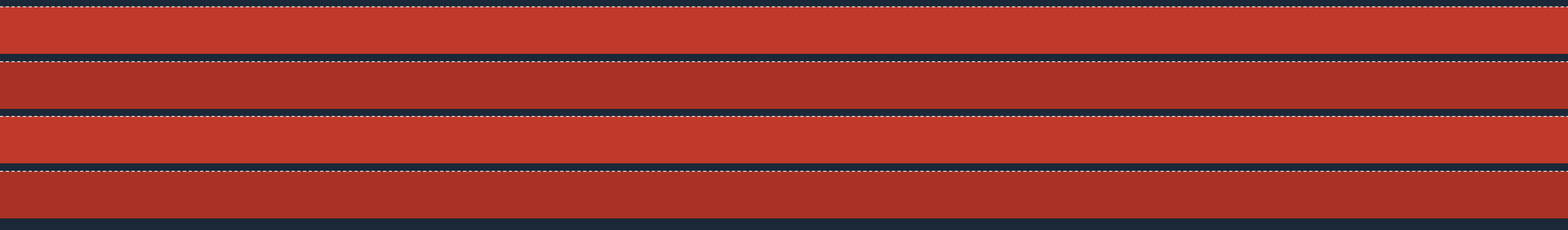
THE RELAY



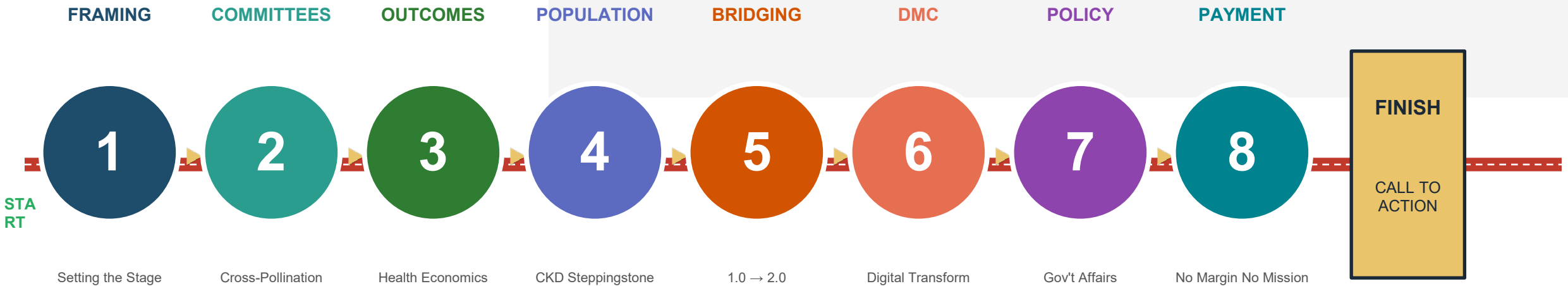
BUILDING MOMENTUM

CLINICAL LAB 2.0 • NINTH ANNUAL WORKSHOP

March 1–3, 2026 | Pendry Hotel, Chicago



THE RELAY: BUILDING MOMENTUM ACROSS EIGHT BLOCKS



Each leg builds momentum • Each handoff strengthens the movement • Together we cross the finish line

"Transforming Diagnostics from Reactive Confirmation to Proactive Prediction through Immense and Intense Collaboration"

THE EIGHT LEGS OF THE RELAY

1

FRAMING THE MOVEMENT

Setting the Stage: Why We're Here



2

EVOLUTION OF COMMITTEES

Amplification & Cross-Pollination



3

OUTCOMES & ECONOMICS

From Reactive to Proactive



4

POPULATION HEALTH

CKD as Steppingstone



5

BRIDGING 1.0 → 2.0

Business of Testing to Business of Data



6

DMC UNVEILING

CL2.0 Operationalized



7

GOVERNMENT AFFAIRS

Policy & Advocacy



8

ALTERNATIVE PAYMENT

No Margin, No Mission

FINISH LINE: CALL TO ACTION

The Baton Is Passed — Now We Run

THE BATON PASS

What makes a relay successful?

CONTINUITY

Each block builds on the previous. No session stands alone. The momentum carries forward.

COLLABORATION

The handoff requires trust. Immense and intense collaboration. We run together.

CONVERGENCE

All eight legs lead to one finish line. One call to action. One movement.

"Transforming Diagnostics from Reactive Confirmation to Proactive Prediction
through Immense and Intense Collaboration."

LAB 1.0

LAB 2.0

order draw

results

eMPI patient-centric longitudinal repository

Pre-Analytical

Analytical

Post-Analytical

Dx Computation - integrative

Regulatory Compliance

Cost/Unit

Accuracy

TAT

Clinical Menu

Clinical Utility- Formulary

Utilization Management- LUM

Sick Care

Episodic

*De-escalation

Reactionary
Transactional
Fee for service
Reimbursement
CPT

Challenge

Over-Utilization
Miss-Utilization

Pre-Care

Chronic Care

Population Health

Disease Burden/prevalence

*Early Escalation

Proactive
New value
New customer
New payment model

Challenge

Population screening
Under-Utilization

Cost/Life or Cost/Population

- Outcome
- Financial Risk

Risk Stratification

Care Gaps

High Risk

Facilitated Intervention

- Prevention
- Cost avoidance

Risk Adjustment

CLINICAL LAB, A Catalyst

FIRST RESPONDER

Pathology Physician Referral= Actionable Triggers in Clinical Practice Guideline

Lab is the CATALYST in Population Health Management



CLINICAL LAB 2.0

A PROJECT SANTA FE FOUNDATION INITIATIVE





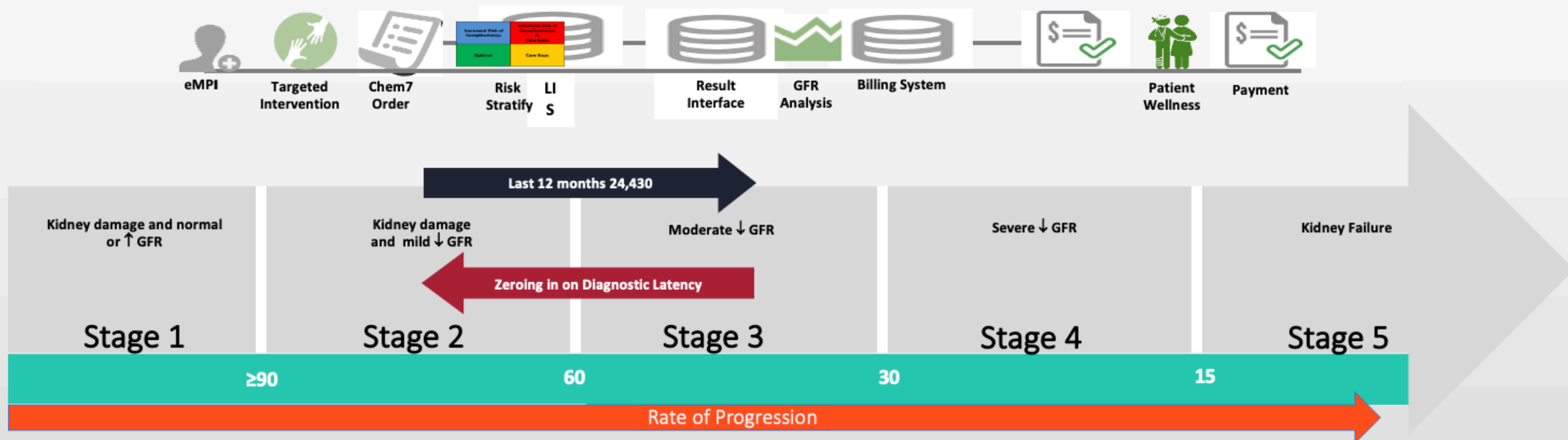
CLINICAL LAB 2.0
A PROJECT SANTA FE FOUNDATION INITIATIVE

FRAMING THE MOVEMENT- HEADLINE

**DIAGNOSTICS SECTOR OF HEALTHCARE SHIFT FROM
REACTIVE CONFIRMATION TO PROACTIVE PREDICTION
TO REDUCE \$1 TRILLION FROM HEALTHCARE DELIVERY,
TO IMPROVE OUTCOMES AND EXTEND LONGEVITY
THAT'S OUR NORTH STAR**

Sick Care vs. Healthcare

Lab 2.0 Identifying Chronic Kidney Disease





DIAGNOSTICS SECTOR OF HEALTHCARE SHIFT FROM REACTIVE CONFIRMATION TO PROACTIVE PREDICTION TO REDUCE \$1 TRILLION FROM HEALTHCARE DELIVERY, TO IMPROVE OUTCOMES AND EXTEND LONGEVITY THAT'S OUR NORTH STAR

THE LOSERS QUESTION



DIAGNOSTICS SECTOR OF HEALTHCARE SHIFT FROM REACTIVE CONFIRMATION TO PROACTIVE PREDICTION TO REDUCE \$1 TRILLION FROM HEALTHCARE DELIVERY, TO IMPROVE OUTCOMES AND EXTEND LONGEVITY THAT'S OUR NORTH STAR

THE LOSERS QUESTION ✓

THE IDENTITY QUESTION



DIAGNOSTICS SECTOR OF HEALTHCARE SHIFT FROM REACTIVE CONFIRMATION TO PROACTIVE PREDICTION TO REDUCE \$1 TRILLION FROM HEALTHCARE DELIVERY, TO IMPROVE OUTCOMES AND EXTEND LONGEVITY THAT'S OUR NORTH STAR

THE LOSERS QUESTION ✓

THE IDENTITY QUESTION ✓

THE DATA OWNERSHIP QUESTION

DIAGNOSTICS SECTOR OF HEALTHCARE SHIFT FROM REACTIVE CONFIRMATION TO PROACTIVE PREDICTION TO REDUCE \$1 TRILLION FROM HEALTHCARE DELIVERY, TO IMPROVE OUTCOMES AND EXTEND LONGEVITY THAT'S OUR NORTH STAR

THE LOSERS QUESTION ✓

THE IDENTITY QUESTION ✓

THE DATA OWNERSHIP QUESTION ✓

THE CONSPIRACY OF SILENCE QUESTION

DIAGNOSTICS SECTOR OF HEALTHCARE SHIFT FROM REACTIVE CONFIRMATION TO PROACTIVE PREDICTION TO REDUCE \$1 TRILLION FROM HEALTHCARE DELIVERY, TO IMPROVE OUTCOMES AND EXTEND LONGEVITY THAT'S OUR NORTH STAR

THE LOSERS QUESTION ✓

THE IDENTITY QUESTION ✓

THE DATA OWNERSHIP QUESTION ✓

THE CONSPIRACY OF SILENCE QUESTION ✓

THE SKIN IN THE GAME QUESTION

DIAGNOSTICS SECTOR OF HEALTHCARE SHIFT FROM REACTIVE CONFIRMATION TO PROACTIVE PREDICTION TO REDUCE \$1 TRILLION FROM HEALTHCARE DELIVERY, TO IMPROVE OUTCOMES AND EXTEND LONGEVITY THAT'S OUR NORTH STAR

THE LOSERS QUESTION ✓

THE IDENTITY QUESTION ✓

THE DATA OWNERSHIP QUESTION ✓

THE CONSPIRACY OF SILENCE QUESTION ✓

THE SKIN IN THE GAME QUESTION

SLIDO SESSION TAKE AWAY