## Failure is not an option

The tragedy of excess mortality and how global insurers can address it with screening, testing & triage – to save lives and mitigate loss.

March 30, 2023 Executive briefing & call to action

#### **Insurance Collaboration to Save Lives**

seek answers, save lives, mitigate loss

Contact: Josh Stirling +1.917.620.0944 m

#### **Executive Summary: The Insurance Collaboration to Save Lives**

Who are we?

What have we been doing?

What are others saying?

The Insurance Collaboration to Save Lives

is a non-profit formed to help global insurers

screen, test and triage to reduce excess mortality.

Our goal is to save lives and mitigate loss

for insurers and humanity.

We've been building...

- √ formed a non-profit
- √ recruited a steering group & board
- √ refined a plan to reduce mortality
- √ in discussions with health partners

...educating

- √ held more than 100 meetings
- √ gained more than 500 ins. followers
- √ invited to life & insurtech events
- √ covered in the insurance news

...and announced our goal to save one million lives though this global initiative

#### BEST'S NEWS & RESEARCH SERVICE

BestWire - March 21, 2023 12:16 PM (EDT)

LIFE INSURANCE

## Insurance Execs Form Nonprofit, Seek to Provide Life Insurers With Tests for Policyholders

By Patricia Vowinkel

OLDWICK, N.J. //BestWire// - Dozens of insurance executives and industry officials have joined together to form a nonprofit that seeks to save lives and mitigate loss by providing life insurers with tests to screen policyholders for a variety of health problems.

#### **Think**Advisor

#### **How Insurers Can Help Prevent Unexpected Deaths**

Unexpected deaths have been rising since the pandemic and could lead to a cascade of costs.

By Marci Sheeran | March 24, 2023





## Stirling convenes group to address excess mortality, seeks industry partners

Adam McNestrie 13 March 2023









#### And who is leading the Insurance Collaboration to Save Lives?

#### **Directors & Officers**



Richard H. Watts, Currently a Board member at Farmers Group, Inc., Apaly Health and Roost, advisor to numerous PE & VC backed ventures, and former President of Direct Group at Progressive Insurance.



**Michael Grasher**, EVP & CFO at The Fortegra Group, specialty multi-line insurer, former CFO at publicly traded work comp company, previously a Managing Director and multi-line insurance analyst at Piper Jaffray.



Bret Swanson, Chairman of the Indiana Public Retirement System (INPRS), President of Entropy Economics, LLC, and non-resident senior fellow at the American Enterprise Institute.



Teresa R. Winer, F.S.A., M.A.A.A. L&H Actuary for the State of Georgia's Commissioner of Insurance, member of the AAA's NGE Working Group, former VP & two-term SOA board member and GSU RMF board member



Noelle H. Sproul, Esq. Senior Advisor, EKM Legal Consulting PLLC, former Managing Director and Assoc. General Counsel at Nuveen (owned by TIAA) and previously, an attorney at Moore & Van Allen.



Josh Stirling, Founder of the Insurance Collaboration to Save Lives, startup advisor, director, former chief insurance & partnerships officer, former sell-side Managing Director and #1 Inst. Investor-ranked analyst

#### **Team Leaders**

#### **Medical & Product**

- Steve Cyboran, ASA, FCA
- Sven Lohse, MBA
- Craig Backs, MD FAPP
- Edward Loniewski, DO, FACOS, FAOAO

#### **Communications**

- Marci Sheeran, CLTC LUTCF
- Mitch Bagley, ins. agent
- Rebecca Richey, ins. agent

#### **Analytics**

Patrick Dooley, analyst

#### **European Representative**

Adam Chambers, Esq.

#### **Steering Committee**

- Chief Executives and CFOs
- Chief actuaries & risk officers
- Chief medical & underwriters
- Attorneys & regulators
- Actuaries & consultants
- Agents, brokers, RIAs
- Capital markets, M&A and ILS
- Reinsurers and primary lines
- Mutuals & stock carriers
- Life, health & P/C execs
- Insurance MDs and RNs
- Clinical and research MDs

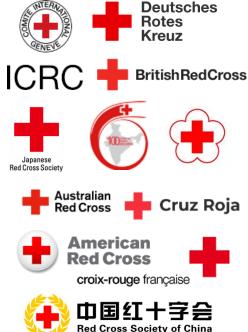
## Introduction

#### The Red Cross was founded by a business leader moved by tragedy

In 1859 Swiss financier Henry Dunant was horrified to witness thousands of injured left to suffer after the Battle of Solferino...

In response, Dunant founded the Int'l Red Cross, organized the Geneva Convention and earned the first-ever Nobel Peace Prize





GENEVA CONVENTION RELATIVE TO THE PROTECTION OF CIVILIAN PERSONS IN TIME OF WAR OF 12 AUGUST 1949 PART I Application of the Convention. Article 3 Conflicts not of an international character Article 4 Definition of protected persons Article 5 Beginning and end of application Article 6 Article 7 Article 8 Non-renunciation of right Article 10 Substitutes for Protecting Powers Article 11 Article 12 General Protection of Populations against certain Cons Field of application of Part II. Article 14 Hospital and safety zones and localit Article 15 Neutralized zones 174 Article 16 Wounded and sick: I. General protection Article 17 II. Evacuation . Article 18 IV. Discontinuance of protection of hospitals Article 19 Article 20 V. Hospital staff. Article 21 VI. Land and sea transport. Article 22 Article 23 Consignments of medical supplies, food and clothing Article 24 Measures relating to child welfare Article 25 178

Battle of Solferino, 1859. Engraving © ICRC https://www.icrc.org/

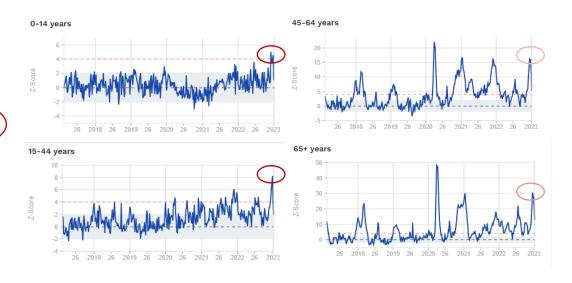
#### Recent data suggest a tragedy, magnitudes worse than Solferino

SOA's group life studies show the rate of excess mortality is the highest among the young

More recent European data suggest this is likely a global phenomena

Table 5.7
EXCESS MORTALITY BY DETAILED AGE BAND

Age	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022
0-24	124%	104%	101%	119%	128%	112%	95%	100%
25-34	132%	121%	118%	132%	179%	136%	122%	123%
35-44	133%	127%	129%	133%	200%	158%	131%	124%
45-54	126%	129%	133%	119%	180%	152%	129%	120%
55-64	123%	129%	129%	114%	153%	140%	125%	112%
65-74	115%	133%	130%	108%	130%	125%	117%	100%
75-84	113%	133%	123%	105%	119%	123%	121%	99%
85+	103%	124%	111%	92%	105%	107%	104%	86%
All <sup>11</sup>	115%	128%	123%	107%	134%	127%	117%	102%



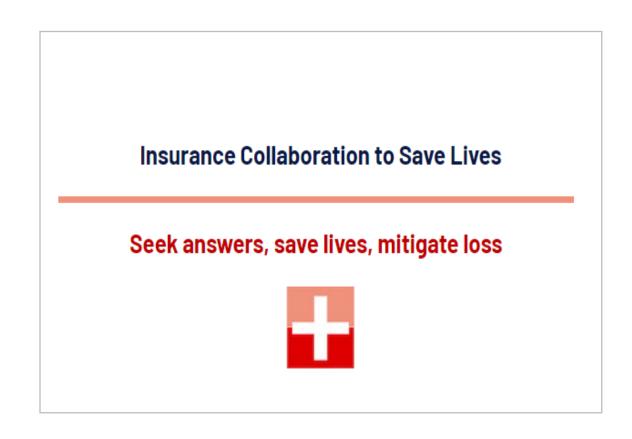
https://www.soa.org/4adeee/globalassets/assets/files/resources/research-report/2022/group-life-covid-19-mortality-06-2022.pd Downloaded 2-14-2023 https://www.euromomo.eu/graphs-and-maps
Downloaded 2-15-2023, through week 2 of 2023

#### Like the founders of the Red Cross, today's tragedy has called us to act

To help global insurers save one million lives

through proactive screening to identify & triage members most at risk

for health factors driving elevated mortality & morbidity



## **Today's Agenda**

1
4
9
17
25
40



## Tragically, global health & mortality challenges continue in 2023

#### Excess mortality continues to be elevated



Leaders | Flashing re-

Excess deaths are soaring as health-care systems wobble



Ireland's excess deaths rate rivals worst of Covid pandemic



Excess deaths exceed predictions in first ten months of 2022



Germany Saw 180,000 Excess Deaths During Three Years of Covid

The deadliest year proved to be 2022



U.S. LIFE EXPECTANCY FALLS TO 25-YEAR LOW

Chris Hayes: "Life expectancy is declining. Biden should act."



American life expectancy is now at its lowest in nearly two decades

#### and is largely due to factors other than COVID



Excess deaths highest since pandemic second wave – and less than 5 per cent are from Covid



Britain's excess death rate is at a disastrous high - and the causes go far beyond Covid



How death rates are soaring across Western world despite Covid fatalities going down

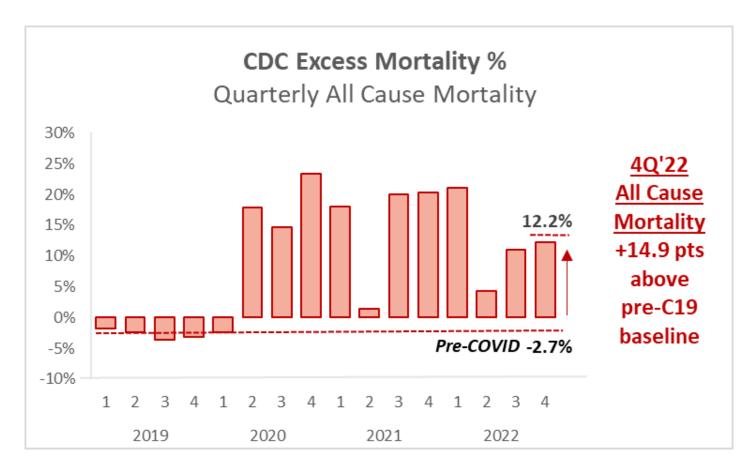


Alberta has seen roughly 10,000 'excess' deaths since 2020, and COVID doesn't explain it all



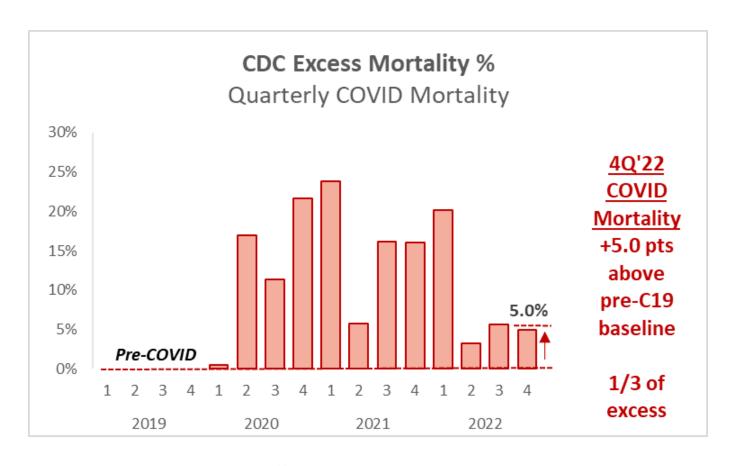
Covid-19 killed fewer people in the US in 2022, but early data suggests it was still a leading cause of death

#### In 2022 U.S. overall all-cause excess mortality remained elevated



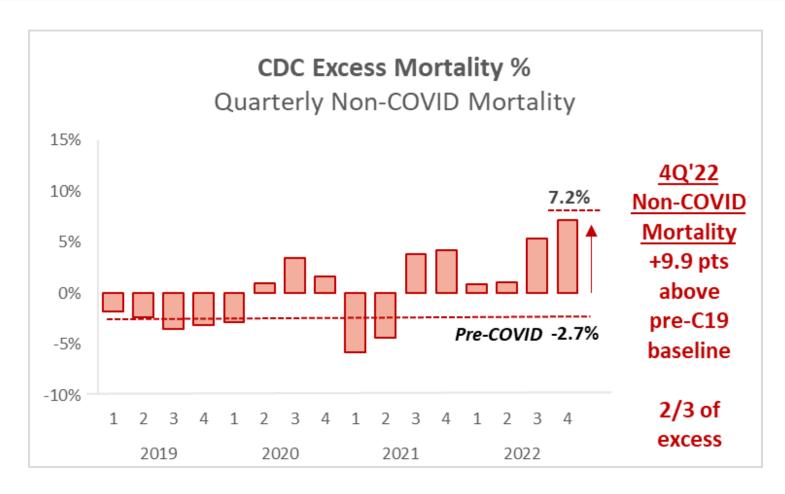
https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess\_deaths.htm Updated as of 2/15/2023

## Thankfully, <u>U.S. COVID deaths have declined substantially</u> from 2020



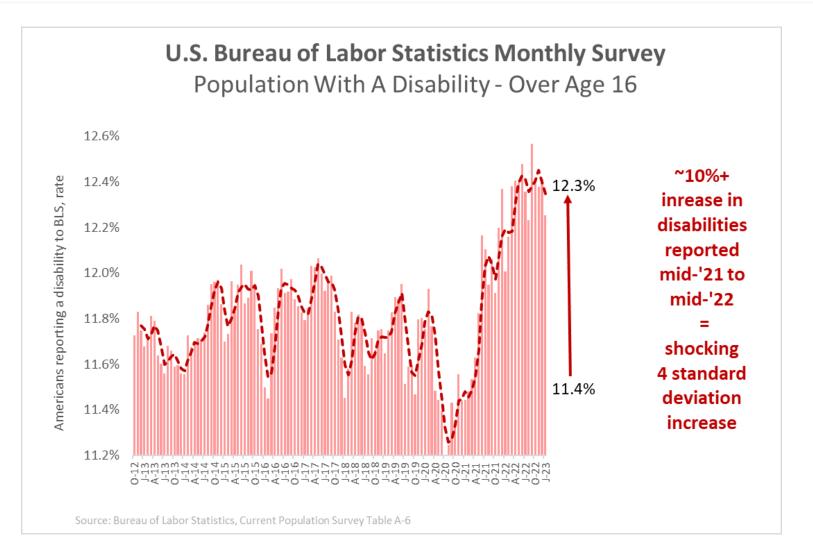
https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess\_deaths.htm Updated as of 2/15/2023

#### However, non-COVID deaths rose markedly to 2/3<sup>rd</sup> of excess deaths



https://www.cdc.gov/nchs/nvss/vsrr/covid19/excess\_deaths.htm Updated as of 2/15/2023

#### Morbidity is also elevated, with the rise in <u>U.S. disability setting records</u>



## Hospital data analysis suggests a complex underlying health situation

Increased share of German in-patient hospital DRGs, ICDs, procedures in 2022 ytd as of May 2022 vs. 2019 baseline Age-stratified proportionate increase, by major group

Other & unknown	Immune & viral	Eyes	Liver & Blood	Female Reprod.	Complex	Heart	Cancer	Nervous system	Digest., Metabol
Up to	Up to	Up to	Up to	Up to	Up to	Up to +52%7	Up to	Up to	Up to
+651% <sup>1</sup>	+397% <sup>2</sup>	+144% <sup>3</sup>	+77% <sup>4</sup>	+73% <sup>5</sup>	+72% <sup>6</sup>		+29% <sup>8</sup>	+26%9	+15% <sup>10</sup>



<sup>1.</sup> Other & unknown +138 to 651%

#### Findings consistent with greater incidence of

- Complex multi-system disorders
- Cardiac arrests, blood clots, stroke, PE
- Immune weakness, re-infection & cancer
- Autoimmune & other multi-system issues
- Infertility, reproductive harm, newborn fatalities
- Sudden adult death syndrome

<sup>2.</sup> Immune deficiency & complex viruses +39 to 397%

<sup>3.</sup> Eye disease and surgeries +38 to 144%

<sup>4.</sup> Liver and blood +21 to 77%

<sup>5.</sup> Female reproductive +16 to 73%

<sup>6.</sup> Complex treatment to +38 to 72%

<sup>7.</sup> Heart and circulatory to +28 to 52%

<sup>8.</sup> Cancer up +12 to 29%

<sup>9.</sup> Nervous system +10 to 26%

<sup>10.</sup> Digestive, metabolic +10 to 15%

#### As we enter year 4 of this emergency, the persistency of these trends

#### ...raise difficult questions

...which do not have clear answers.

The New Hork Times

Why Are So Many Americans Dying Right Now?

yahoo!news

Why are so many more people dying than normal?



Why is the weekly death toll at at its highest since lockdown?

Daily **Mail** 

Massive spike in excess deaths sparks calls for an 'urgent investigation': NHS crisis is blamed for nearly 3,000 more Brits than usual dying each week



Excess deaths in Ireland and beyond: what is behind the surge in mortality rates?



Sudden unexplained death in childhood debated in Parliament



Why Have So Many People 'Died Suddenly'?

Part 2: How can we solve this problem?

#### Given years of controversy, many see only two paths

#### pointing fingers

...or changing the subject



# **Opinion** | The Checkup With Dr. Wen: We need an honest accounting of covid's toll

## Daily **Mail**

Was it worth it? America has suffered 300,000 NON-Covid excess deaths since 2020 — as experts blame lockdowns and delayed healthcare for spike in drug overdoses and firearm fatalities

- America has recorded 300,000 non-Covid excess deaths from February 2020 until the end of 2022
- · Covid lockdowns have been blamed for increases in deaths from other diseases like cancer and heart disease
- The US is recording around 7,000 excess deaths from all causes each week, an analysis last year found

## The Atlantic

## LET'S DECLARE A PANDEMIC AMNESTY

Let's focus on the future, and fix the problems we still need to solve.

## We see a third way = global life insurers can work the problem

# "Instead of cursing the darkness, light a candle."

Benjamin Franklin

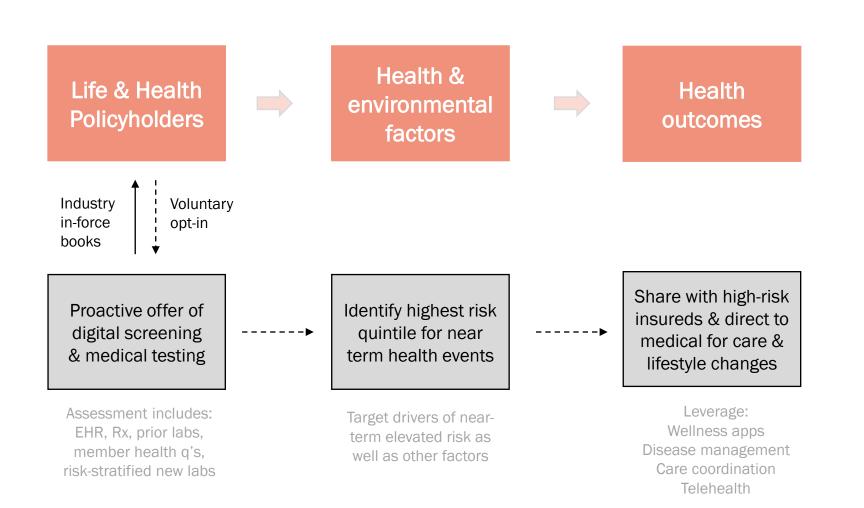
Founding father, signer of the Declaration of Independence, Ambassador to France, publisher, inventor and the Father of American insurance industry as founder of the first insurance company in America in 1752

## How can global life insurers work this problem?

Insurers can deploy screening & targeted testing to identify, triage & mitigate members' elevated risk.

Insurers who screen, testing and triage their members can save lives, and mitigate loss.

## Screening, testing and triage can save lives and mitigate loss



#### Post pandemic

- Mortality & morbidity up
- Longevity & life quality worse

#### **Post-intervention**

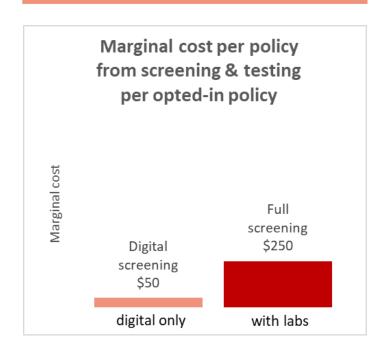
- Mortality & morbidity mitigated
- Longevity & life quality improved

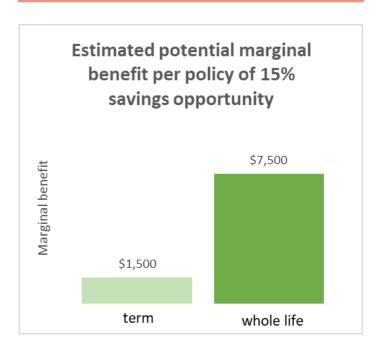
#### Mortality mitigation should pay for itself, and could offer strong returns

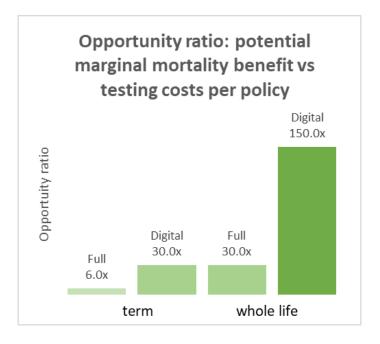
Marginal cost of screening is likely between \$50-250

Estimated cost of excess mortality is substantial

Opportunity for loss mitigation benefits are 10 to 100x cost





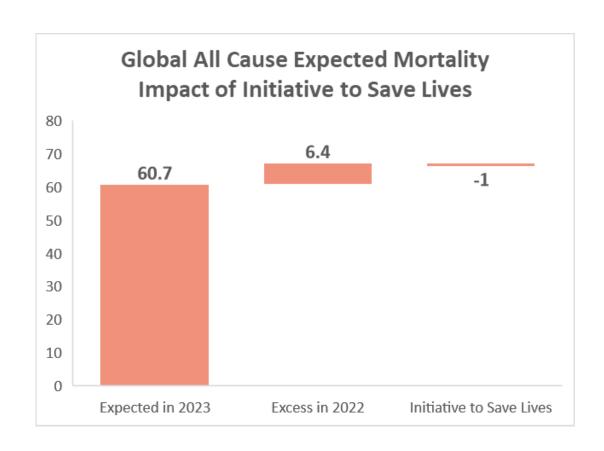


Assuming \$200k face amount and a \$200 cost of screening – savings will cover costs if we can save the life (& avoided loss) in as few as 0.1% (or 1 in 1000) of the members we screened

The industry spends billions each year for brand and goodwill

A public initiative to save one million lives could capture significant earned media and create valuable brand.

## Could insurers really save one million lives? Yes, if we act.



#### One million lives is only

- 1.5% of global mortality each year
- 15% of global excess deaths in 2022
- If these numbers still seem large, consider that insurers' leadership will spur other institutions to follow

## And you may be wondering, why are we giving away this idea?

# "Our solitary goal is to help save one million lives."

Josh Stirling, Founder Insurance Collaboration to Save Lives The Insurance Collaboration to Save Lives is a not-forprofit and has made this presentation today freely available so that our humanitarian effort could get the broadest possible exposure & resources to support it.

We are going to build this solution for insurers, but this is such a vast problem, we welcome all others who care about saving lives in adjacent industries, to use and improve upon our idea and hope that together we can assist the many millions in need.



## How will the Insurance Collaboration achieve its goal?

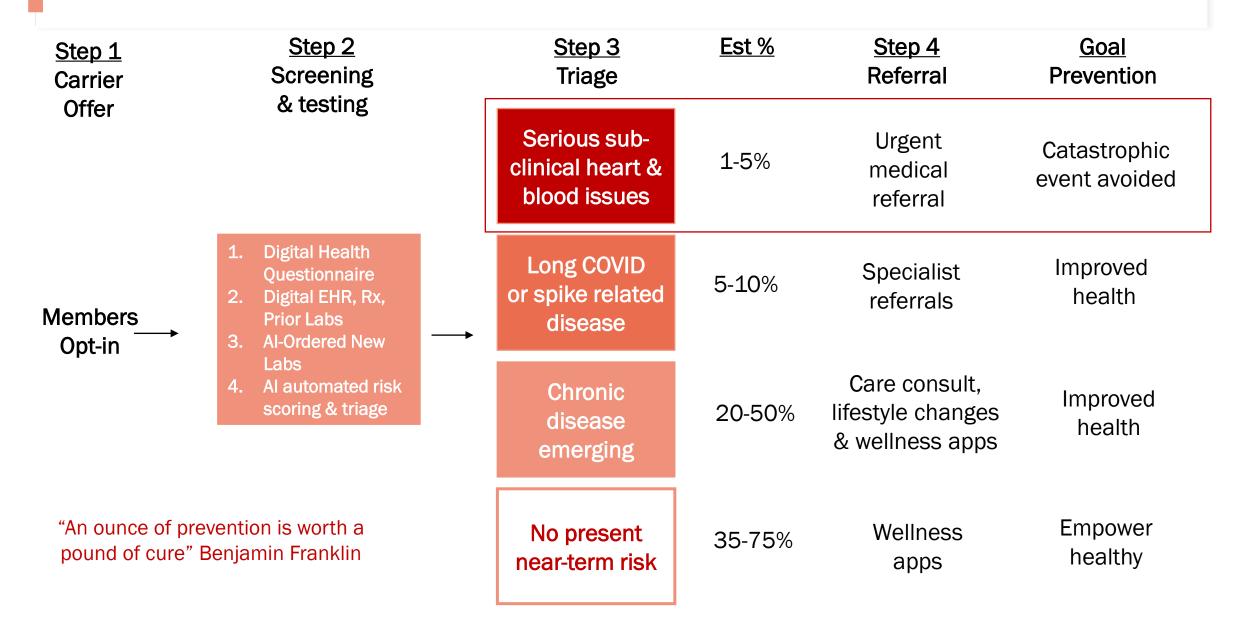
A rapid response at scale...

requires a collaborative industry effort

...to refine, test & deploy a solution

Dozens of volunteers have been hard at work to move this effort forward

## Vision: life insurers can identify and triage for acute and chronic care



## To move quickly from vision to product, we followed five rules

Five design principles we've adopted

- 1) Leverage experts and synthesize perspectives
- 2) Consider data, but use judgment to avoid paralysis
- 3) Keep the pilot simple, and expand later
- 4) Focus on our goals: "to save lives and mitigate loss"
- 5) To build quickly, work with partners

#### 1) We sought out experts and synthesized numerous views

#### Our working group of insurance

- Health actuary
- Health strategist
- Insurance MD & RN •
- life underwriters

- Clinical MDs
- Pharma MDs
- Diagnostic testing
- eHealth executive Insurance agents & •
  - Health tech entrepreneurs

#### Sought out additional input from

- Cardiology
- Pathology
- Diagnostics
- Long-COVID & spike injury

- Emerging devices (ultrasound, BMI)
- Functional medicine testing
- Alternative markers for COVID harms

The group met more than 20 times over six weeks with leadership from Steve Cyboran, ASA, FCA, Sven Lohse, MBA, Rebecca Richey, Craig Backs, MD, FACP, and Edward Loniewski DO, FACOS, FAOAO.

## 2) We leveraged signals from clinical data to target our effort

Hospital signals suggest Other & unknown Up to +651% Up to +397% Immune & viral Eyes Up to +144% Liver & Blood Up to +77% Up to +73% Fem. Reproductive Up to +72% Complex Up to +52% Heart Up to +29% Cancer Nervous system Up to +26% Up to +15% Digest., Metabolic

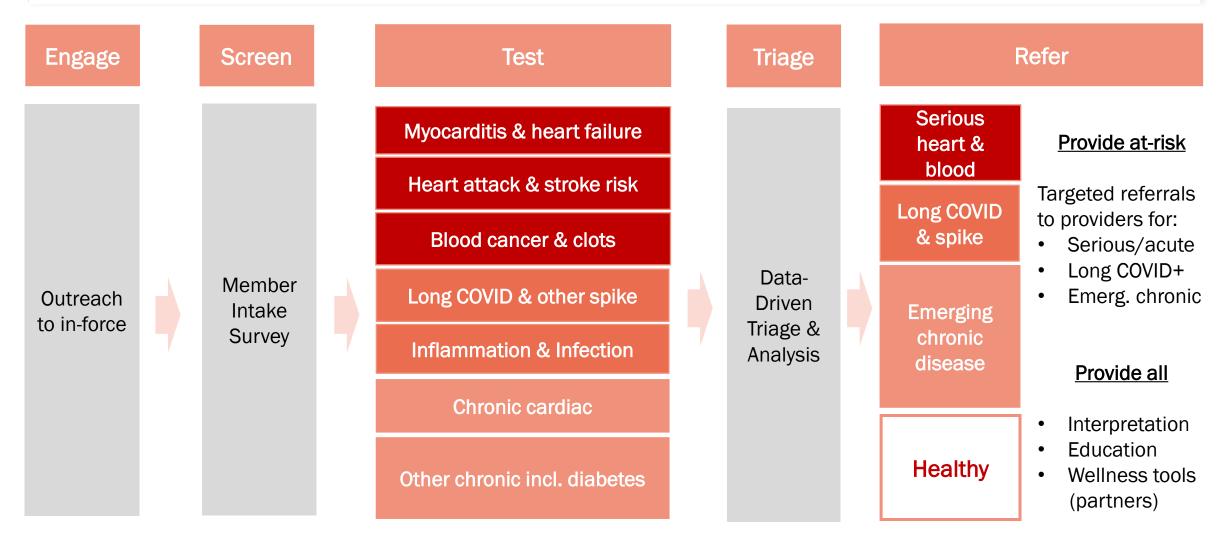
leadership by life insurers

can mitigate loss

Focused screening, testing & triage



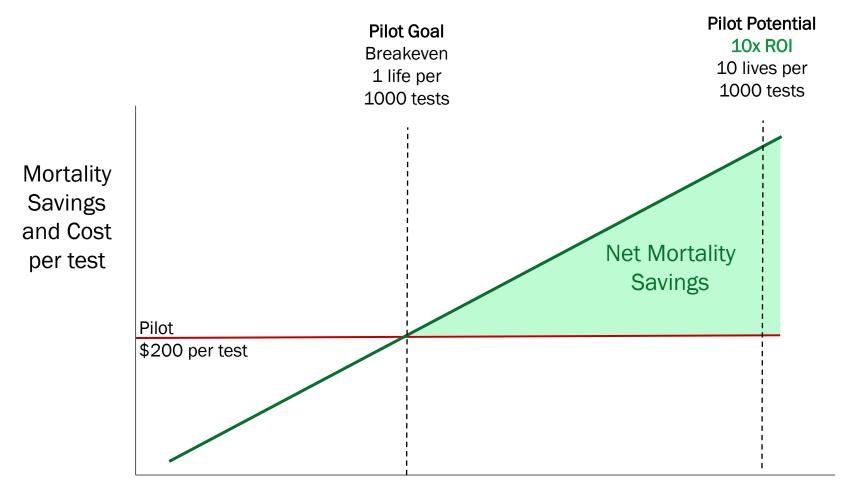
## 3) We designed a focused pilot to drive targeted interventions



## 4) We are focused on outcomes – lives saved & loss mitigated

#### **Mortality Savings Per Lives Saved**

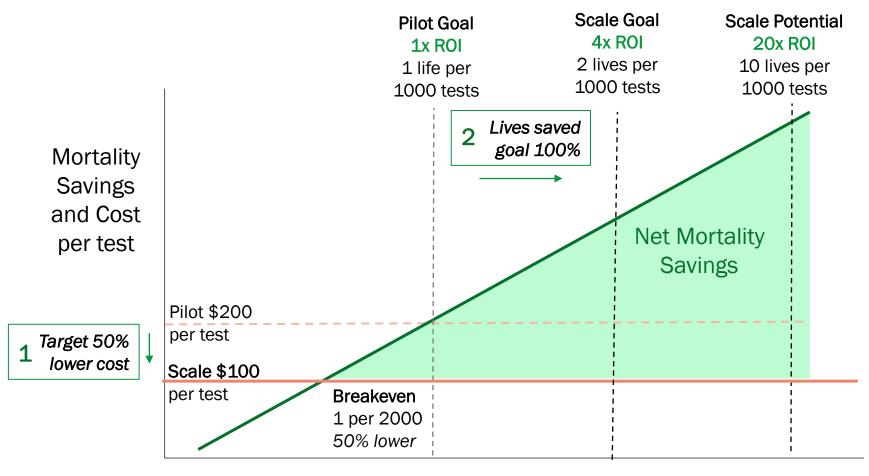
Sensitivity analysis for a \$200k term policy



## At scale, lives saved & loss mitigated will likely be even greater

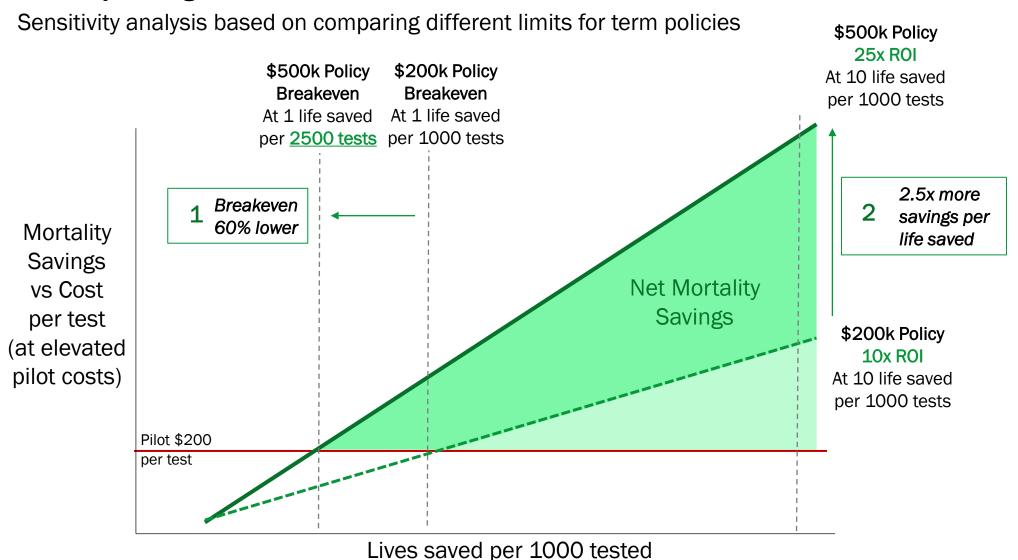
#### **Mortality Savings Per Lives Saved**

Sensitivity analysis for a \$200k term policy



## We can target larger policies first, if necessary to fund the pilot

#### **Mortality Savings Per Lives Saved**



## What are common questions we get from companies?

Why will members opt in?

Post-pandemic, health is still an active concern for many in the U.S.

How will we protect the data?

We will not use personal data for marketing, underwriting, pricing, or claims.

Will the impact be meaningful?

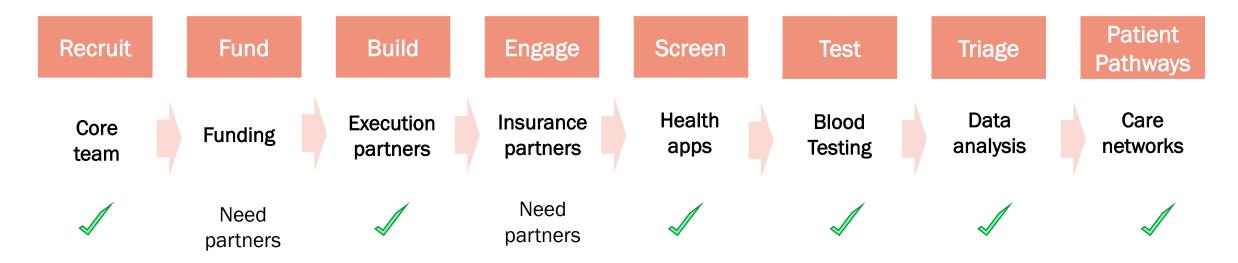
Targeted screening for unseen threats should be impactful, but we will test.

Do we need to do this?

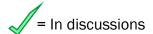
This will save lives, mitigate loss, and mitigate risk of ongoing excess mortality.

## 5) We are working with partners to execute this vision

#### Project & customer journey



We have great partners already but we are tackling a big problem and welcome all to join us in this important effort



## What's next? We need to find our first insurance partners

We share our vision to the industry	We partner with first insurer partners	We build and deliver our pilot	We test, learn and iterate	
(today)	(+30 days)	(+90 days)	(ongoing)	

It is time for leading insurers to join this effort.

How can you help? There are three things you can do

We'd really appreciate it if you would...

Introduce us

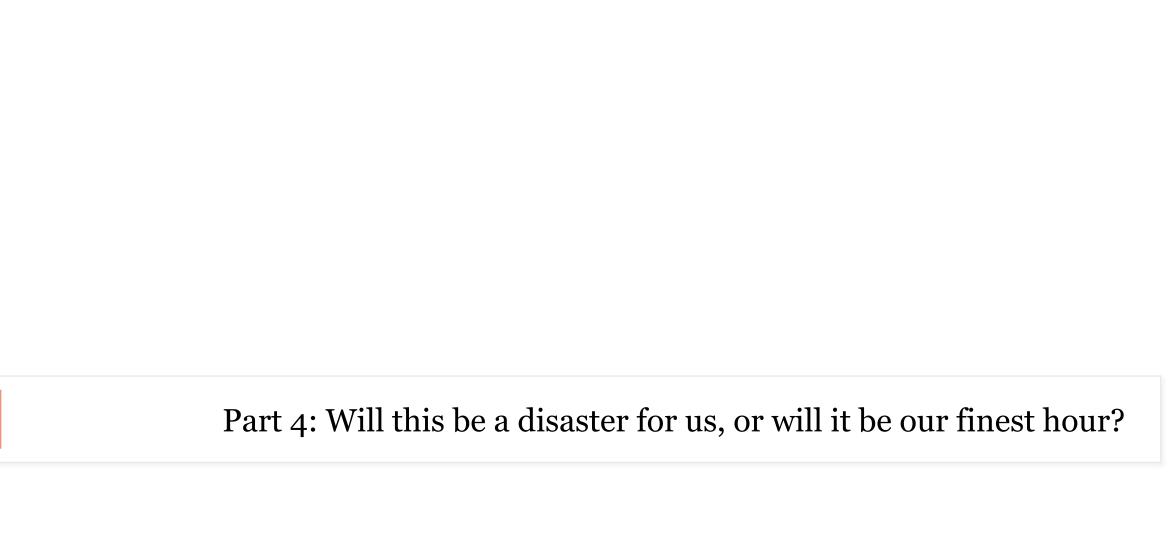
Suggest us

Join us

to your senior leadership

improvements to our plan

to help



## This could be our industry's worst disaster, or its finest hour.



Problem	Recognize	Reprioritize	Rethink	Challenge	Inspire
Explosion in space	"Houston we have a problem."	"From this moment on we have a new mission."	"I don't care about what anything was designed to do, I care about what it can do."	"Failure is not an option."	"Will this be NASA's worst disaster ever? I think this will be our finest hour."

Which step is the global life industry on today?

#### **Insurance Collaboration to Save Lives**

seek answers, save lives, and mitigate loss

# Thank you for your time & look forward to speaking soon.

#### **Contact Josh Stirling**

Call +1.917.620.0944 m | Email josh.stirling@insurancecollaborationtosavelives.org | Book a meeting on Calendly | Visit www.insurancecollaborationtosavelives.org | Follow the Collaboration to Save Lives on LinkedIn