McKinsey Health Institute

Escaping the healthcare matrix

Adding life to years and years to life

October 2022

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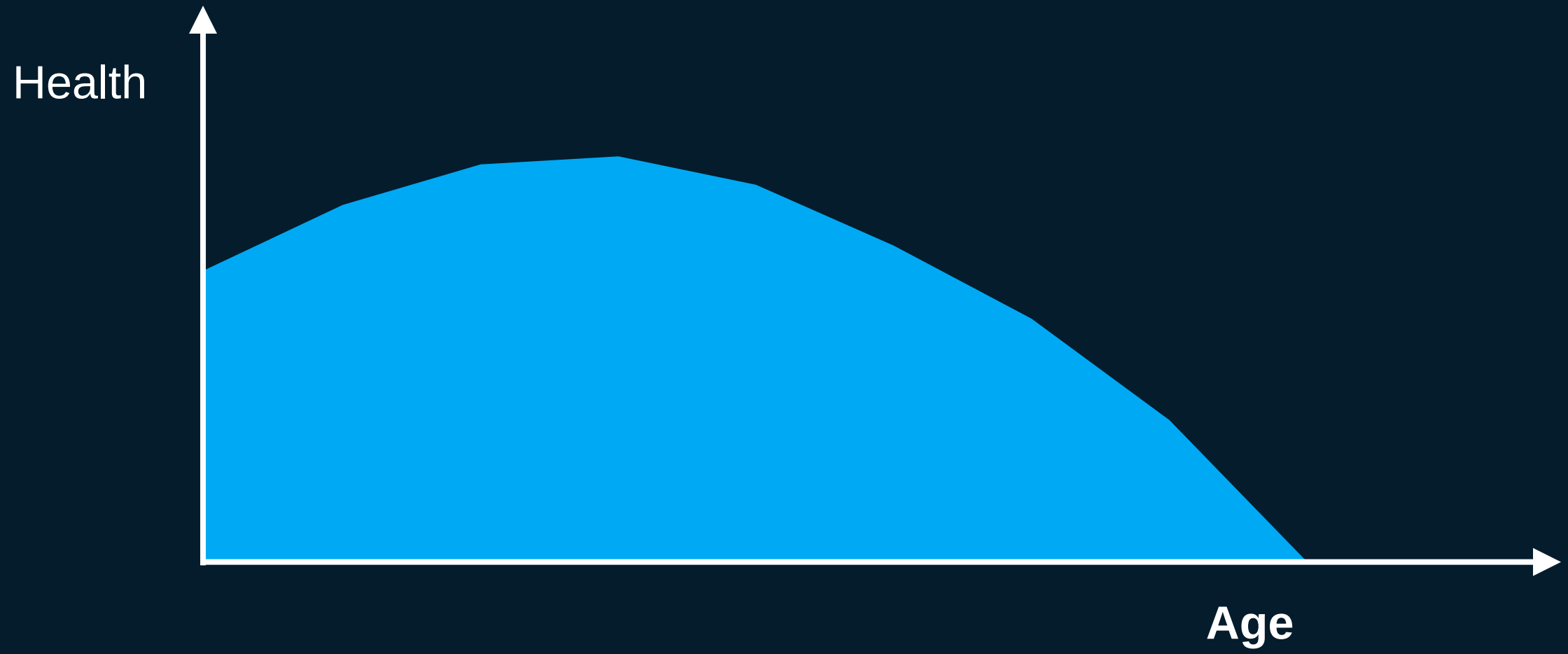
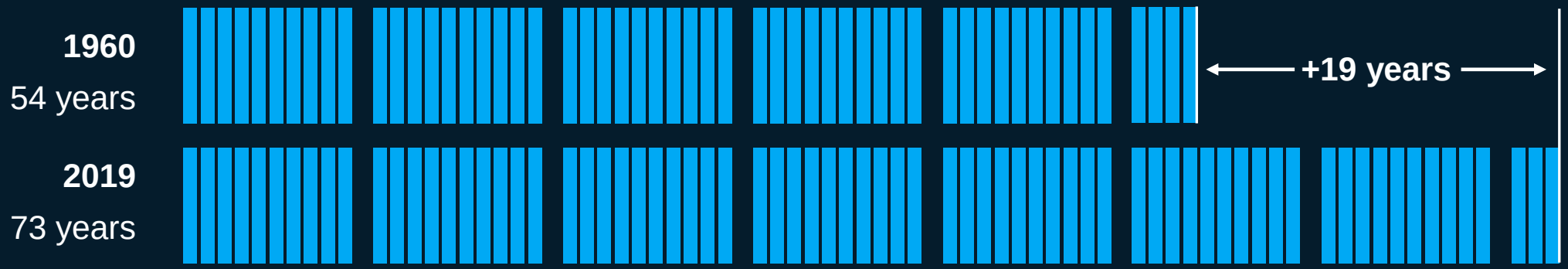
What is a fair price for longevity?

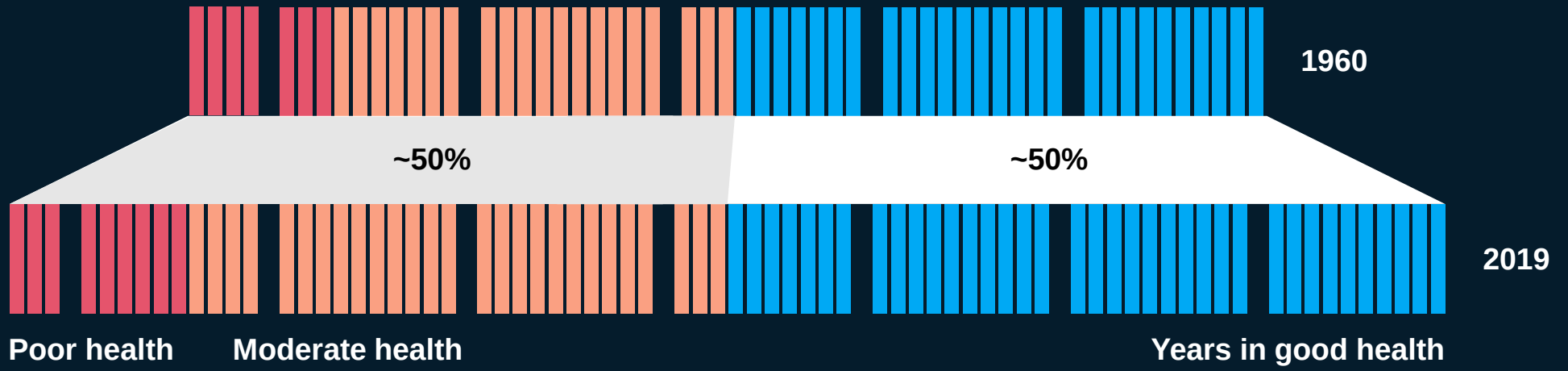


We are living longer, yet spend more years in less-than-good health

The past 60 years have seen a massive change in life expectancy[1] …



… but the proportion of life in *moderate* and *poor* health has not

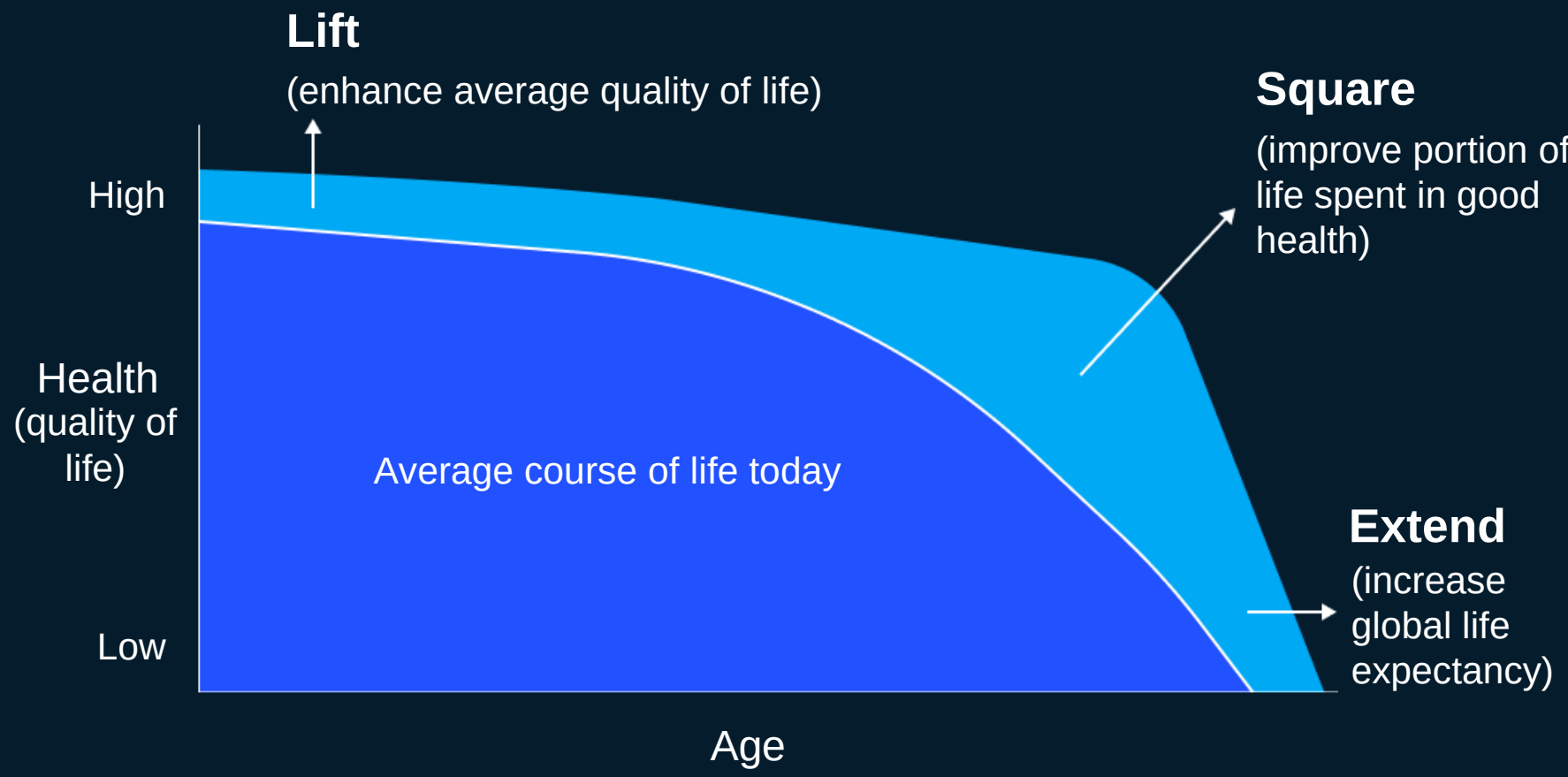


1. Average global life expectancy and health, years

Source: World Bank Data; IHME data; McKinsey analysis

We have the opportunity to lift, square, and extend life over the next decade

Illustrative



The McKinsey Health Institute (MHI) believes that over the next decade humanity could add as many as

~45 billion
extra years of higher-quality life

6 years
per person on average, and substantially more in some countries and populations

Source: "Adding years to life and life to years", MHI

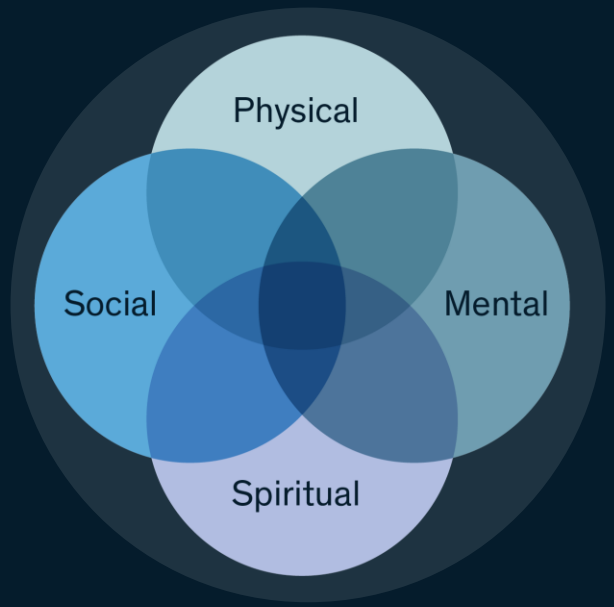
What is health?

The escape plan: Embracing a modernized understanding of health

A long and full life

Physical Function
Physical energy/ vitality
Absence of pain
Senses (sight, hearing, smell)
Movement
Sexual function
Continence

Spiritual function
Meaning - Purpose
Centeredness
Healthy sense of self/identify
Hopefulness
Gratitude
Appreciation of beauty



Mental function
Mental energy/ stamina
Cognition (memory, problem solving)
Resilience
Coping
Positivity
Agency

Social function
Ability to create and maintain healthy relationships
Ability to actively participate in a community
Empathy
Self-awareness

Note: Grounded in the WHO definition: “a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity”

Science is catching up to a few thousand years of philosophy

People who didn't have a **strong life purpose** — which was defined as 'a self-organizing life aim that stimulates goals'—were more than **twice as likely to die** than those who did, and specifically more likely to die of cardiovascular diseases.

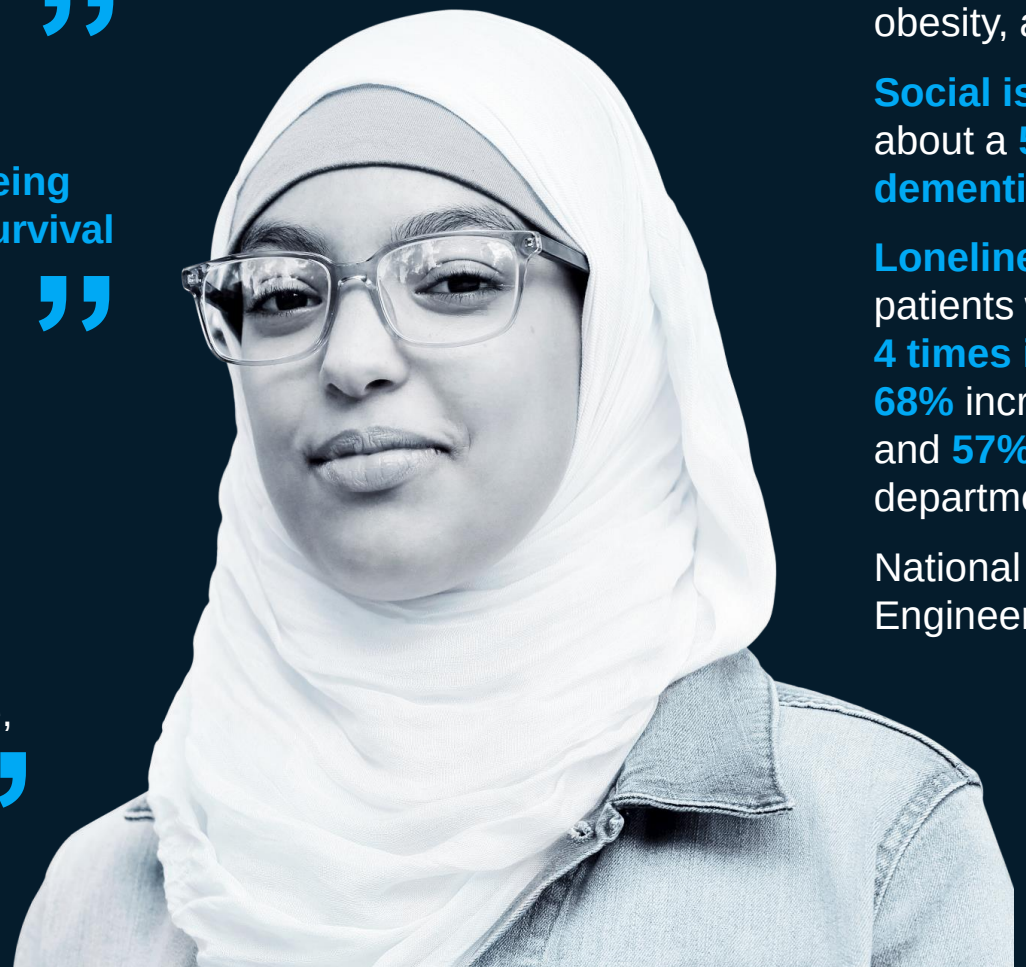
University of Michigan

Higher levels of **emotional wellbeing** are beneficial for **recovery** and **survival** in physically ill patients.

Harvard University

Anxiety alone was associated with the incidence of **heart disease, depression** alone with the incidence of **asthma,** and comorbid anxiety and depression with incidence of **eyesight problem,** persistent cough, asthma, hypertension, heart disease, and gastrointestinal problems.

Chonnam National University Medical School — South Korea



Social **isolation** significantly increased a person's risk of **premature death** from all causes, a risk that may rival those of smoking, obesity, and physical inactivity.

Social isolation was associated with about a **50%** increased **risk of dementia.**

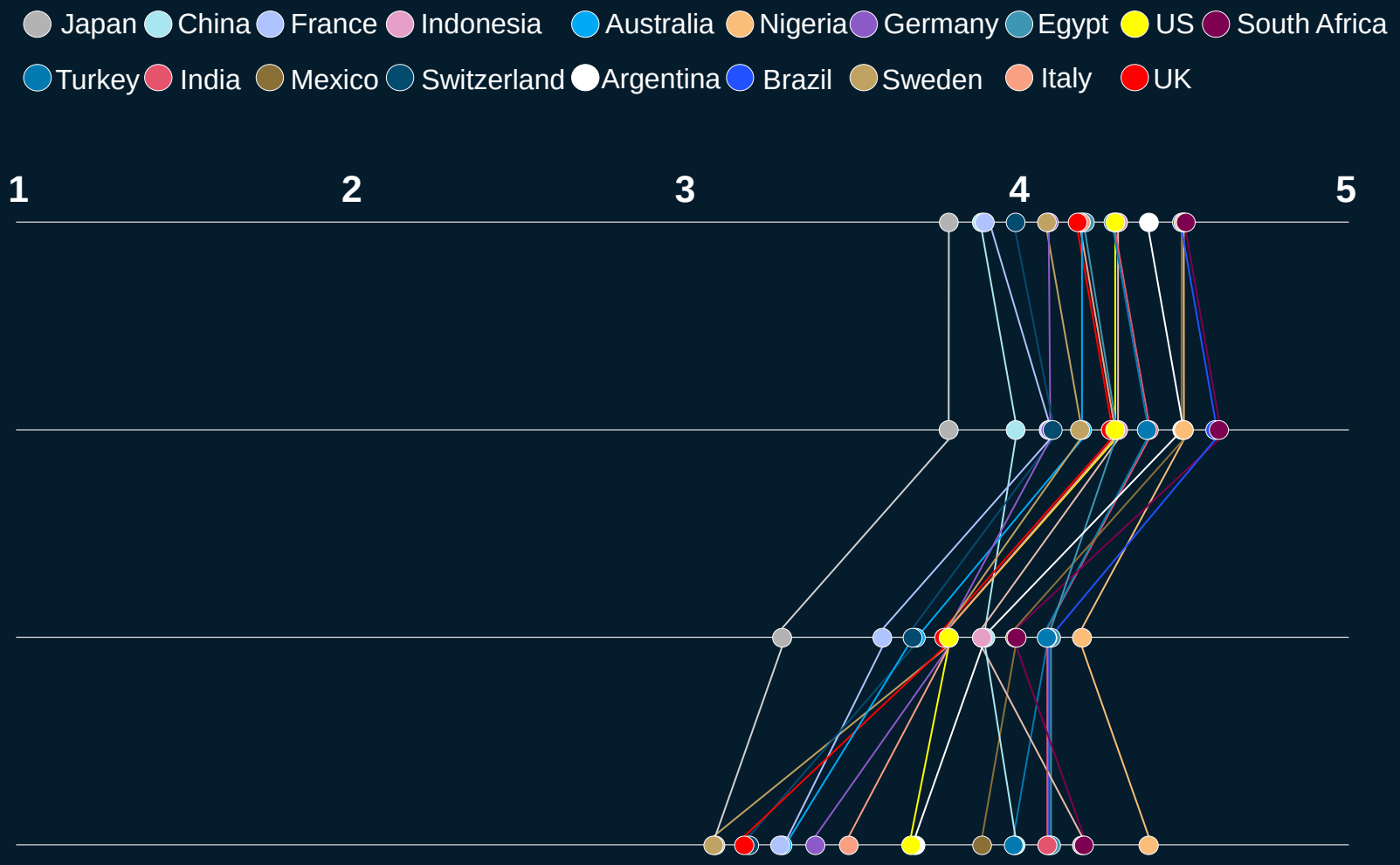
Loneliness among heart failure patients was associated with a nearly **4 times increased risk of death, 68%** increased risk of hospitalization, and **57%** increased risk of emergency department visits.

National Academies of Sciences, Engineering, and Medicine

Individuals already embrace a holistic definition of health (~19,000 respondents in 19 countries)

Preliminary

Importance attributed to MHI's definition of health, scale from 1 to 5,
by country and dimension of health



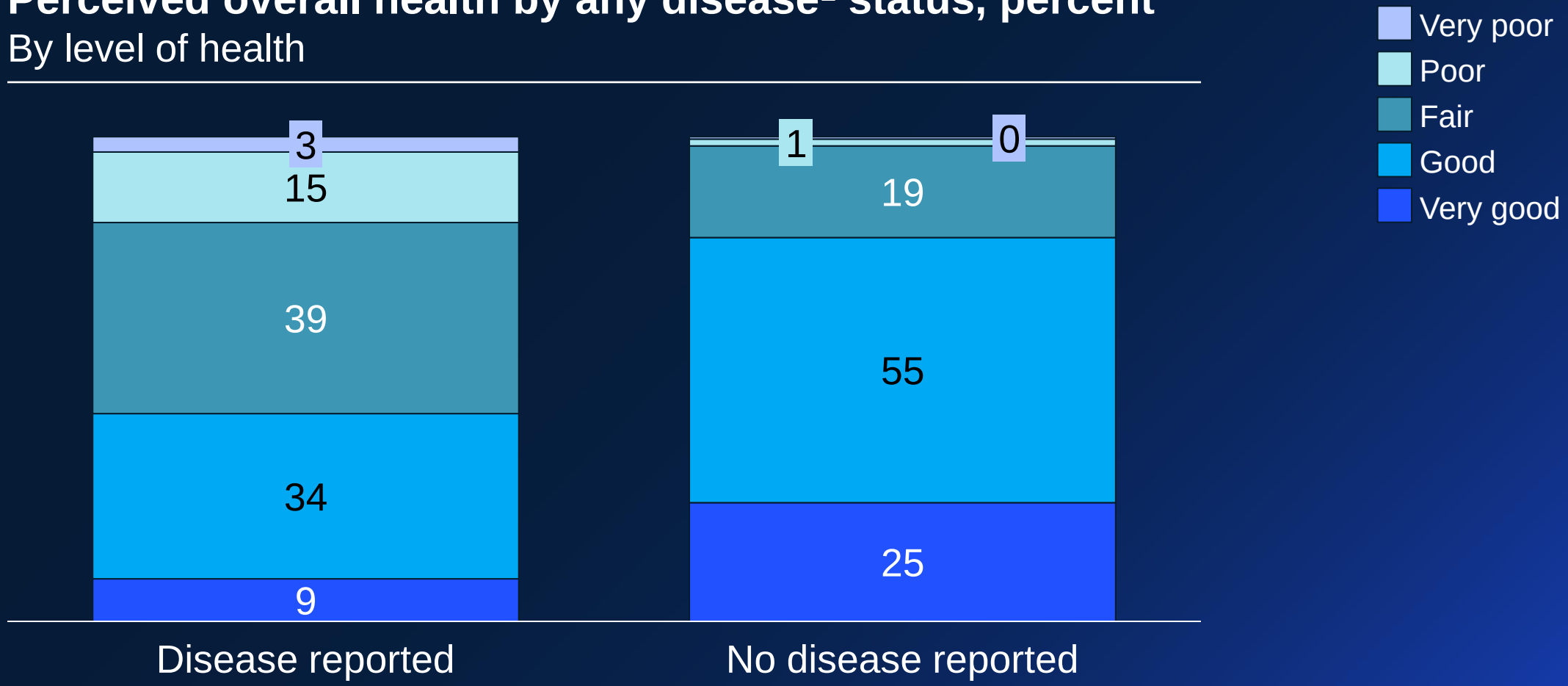
	Global mean
Physical health	4.2
Mental health	4.3
Social health	3.9
Spiritual health[1]	3.7

1. Spiritual health is defined based on the 3 following elements: a strong sense of purpose, a broad sense of connection to something larger themselves, whether to a community, a calling, or to a form of divinity and the ability to feel rooted and mindful in the present moment

Source: McKinsey Health Survey

Perceived health is only loosely correlated with prevalence of disease

Perceived overall health by any disease[1] status, percent
By level of health



1. Defined as physical or mental disease

Source: McKinsey Health Survey, 2022

Judged by action, the world has not embraced modern understanding of health

We estimate **75% of studies** related to health can be classified as having primary end points that measure physical health, while just 12% address mental health, 6% address social health, and 1% examine spiritual health

Most countries have very limited or no data regarding mental health, and data that are comparable across regions are lacking, (eg, **more than 100 countries** have no data about mental-health conditions among adolescents

What is optimal health? (workplace example)

Health dimension	Exacerbation	Poor employee health	Typical employee health	Optimal employee health
Physical	Accident Physical health hospitalization	Symptoms of significant disease Significant fatigue Proneness to error	Regular fatigue Hormonal swings (men and women) Unproductive discomfort	High stamina/energy Greater physical acuity Fewer physical mistakes
Mental	Mental health hospitalization Suicide attempt/success Burnout or “breakdown”	Symptoms of untreated mental illness Partial cognitive capacity Regular lack of motivation	Bouts of anxiety/depression Some symptoms of burnout Sleep affected by work stress	High resiliency Setbacks lead to growth Operating at full cognitive capacity
Social	Toxic behavior/outburst Overdose Suicide attempt/success	Isolated at work Uninspiring interactions Ineffective collaboration	Some intimacy with co-workers, but mostly transactional Mood swings affecting colleagues	Infectious positivity Effective mentor/sponsor Deep friendships with colleagues
Spiritual	Toxic shame Hopelessness	Work undermines sense of hope and identify	Employer/job “means-to-end”	“More than a job, less than a life”

How can we achieve optimal health?

Modifiable drivers of health

Optimized (or not) based on behavior and structures/environments

Physical inputs
Diet
Supplementation
Substance use

Daily living
Productive activity
Social interaction
Content consumption
Hygiene

Movement
Ergonomics
Exercise
Sleep

Exposure
Nature
Atmosphere
Sensory
Materials
Stress

State of being
Mindsets/beliefs
Body composition
Material security

Healthcare
Vaccination
Detection/diagnosis
Treatment
Adherence

Less modifiable drivers of health

Genetics, traits, true randomness

Scientific evidence is growing on the role of modifiable drivers of health outside traditional healthcare system

“I reversed my diabetes. Now I want to help America get healthy”

Eric Adams – Mayor of NYC

“Sauna bathing is inversely associated with dementia and Alzheimer’s disease in middle-aged Finnish men”

Age and Ageing[2]

“Participants who averaged 6 hours or less of sleep per night were about 2.5 times more likely to have frequent mental distress…”

CDC – Univ. North Carolina

“How nature nurtures: Amygdala activity decreases as the result of a one-hour walk in nature”

Nature[1]

“Evidence suggests social media use is associated with mental health in young people”

eClinicalMedicine[3]

“Weightlifting 1-2 times/week has been associated with a 9% lower risk of all-cause mortality”

Further, adults who met both aerobic and weightlifting exercise recommendations had a 41% lower all-cause mortality risk

British Journal of Sports Medicine[6]

“In the general population, job insecurity may be as harmful to health as unemployment”

Ontario HIV Treatment Network Cohort Study[4]

1. https://www.nature.com/articles/s41380-022-01720-;, 2. https://academic.oup.com/ageing/article/46/2/245/2654230; 3. https://pubmed.ncbi.nlm.nih.gov/31193561/; 4. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3654507;
5. https://bjsm.bmj.com/content/56/13/755; 6. https://bjsm.bmj.com/content/early/2022/08/08/bjsports-2021-105315

Judged by action, we are still in the matrix

MHI estimates that **<5% of modifiable drivers of health** are defined consistently (or at all), captured systematically, and made broadly available as data

OECD countries spend just

2.8%

of health budgets on **preventative** care and almost nothing on promoting optimal health

The road to progress will require unprecedented, but feasible adaptation across the public, private, and social sectors

Shift 1

Invest more disproportionately on prevention and promoting optimal health

Shift 2

Improve measurement of health with better data

Shift 3

Scale what works

Shift 4

Innovate more, and more quickly

Shift 5

Unleash the full potential across industries

Shift 6

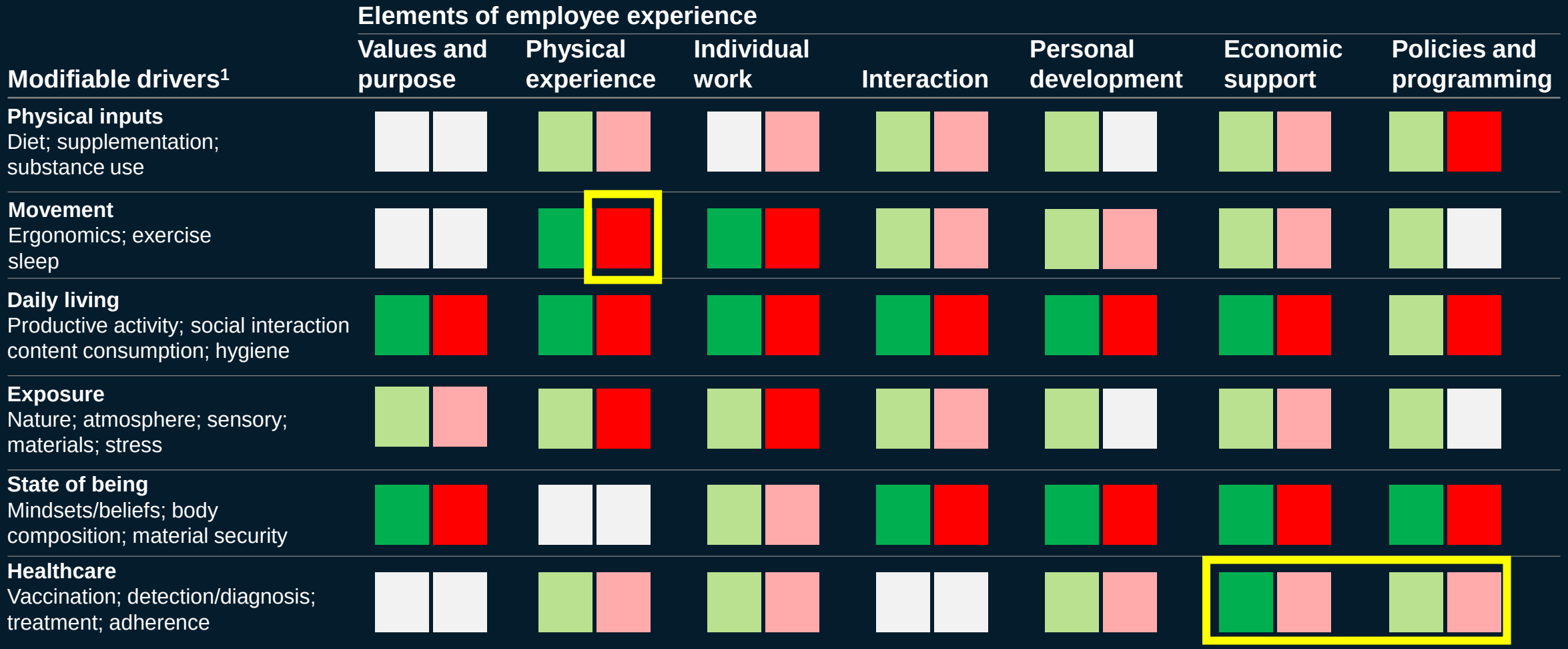
Empower individuals to steward their own health

Source: "Adding years to life and life to years," MHI

How does employment affect health?

Aspect of employment experience	Description
Values and purpose	Extent to which an employee's **values** and sense of **purpose** aligns to their employer's values and mission and the extent to which that linkage manifests (or not) in daily work; impact of **affiliation** with organization to sense of **identity** and **status**
Physical experience	All contributors to **physical safety; work settings** (in-person, remote work, indoor, outdoor); physical aspects of **built environments** (layout, access to light/nature, furniture, screens, noise); norms/policies influencing **remote work environments**
Individual work	Alignment of daily activity to our interests and **passions;** the **nature** of activity (degree of challenge, schedule, alignment to expectations, clarity, intensity); title, reputation, **status** internal and external; degree of **autonomy**
Interaction	Extent and nature of interactions with superiors, subordinates, and peers; extent and nature of **collaboration** with colleagues, vendors, and customers; norms; degree of inclusivity
Personal development	**Development of skills** via apprenticeship, mentoring, formal training; **feedback** frequency, method and value; **progression** potential; mental, physical, social **health fluency**
Economic support	Extent and nature of **compensation; predictability; stability**; **implications of life events** (eg, maternity, illness); degree and extent of primary or secondary **health coverage**
Policies and programming	**Employment policies** (leave, SUD); **health programming** (wellness, EAP), **tangible benefits** (food, transportation), **institutional resources** (on-site gym)

An individual's employment experience affects every modifiable driver of their health



1. Drivers of health are complex, nonlinear (eg, J-curves, U curves) and interact with each other. Each driver can be optimized or suboptimized based on quantity, type, mix, duration, timing/sequencing. Optimization or suboptimization are a result of both individual choices and structural/environmental influences

Investing to improve the health of employees is both just and can enhance business performance

Human flourishing

Breakthroughs

Talent

Productivity

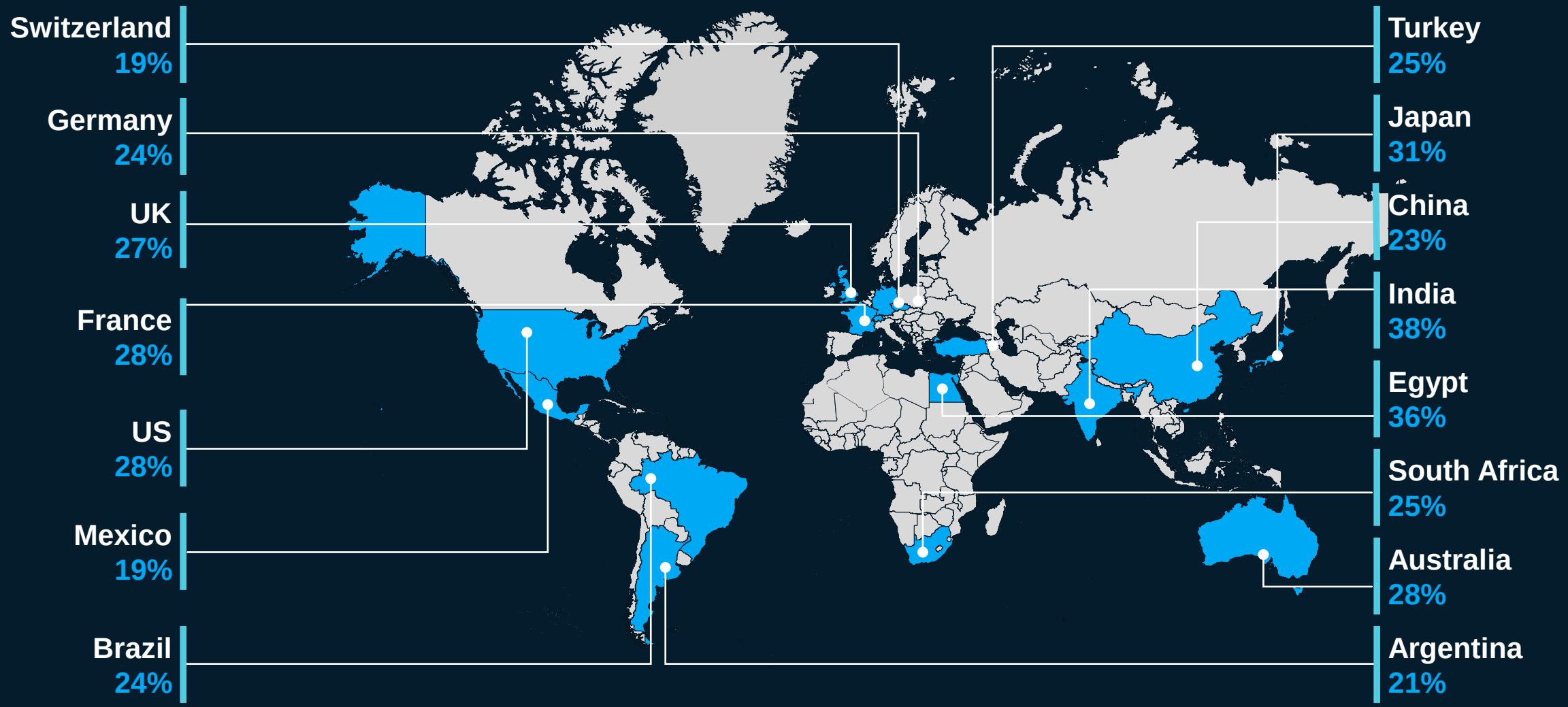
Direct cost

Organizational health

Reputation

So how are employers doing?
1 in every 4 employees indicates experiencing burnout symptoms

Percent of employees experiencing burnout symptoms[1]



1. Calculated by creating average of 12 burnout items from BAT, including employees with averages greater than or equal to 3 (experience symptom sometimes, often, or always)

Note: Estimates are based on employee responses, n = 13,239, data from 15 countries: Argentina, Australia, Brazil, China, Egypt, France, Germany, India, Japan, Mexico, South Africa, Switzerland, Turkey, UK, and US, estimates rounded to the nearest 5%

Sources: Employee Mental Health Panel Survey Phase 2

Investing to employee health requires mindset shifts, not just financial investment

1. Shift mindsets –employee health is valid an objective in and-of-itself; achieving it requires investment

2. Broaden the concept of "Do no harm"

3. Adapt the nature of each employee's work to optimize their health

4. Measure employee health holistically over time

Get going

- ❑ Create or appoint a **Chief Health Officer** (or someone responsible)
- ❑ Conduct rapid **inventory** of biggest risks and strengths, even if anecdotal
- ❑ Participate in collective effort to **measure and improve employee health** (eg, MHI Employer Platform)

Maximizing the positive impact of employer action requires purposeful, synergistic action among employees and policy makers

Issues for employees to consider

1. Where to work
2. Stewarding their own health and development
3. Expectations
4. Making tradeoffs with confidence
5. Supporting colleagues
6. Improving their “corner” of the workplace

Issues for policy makers to consider

1. Investments
2. Expectations for work
3. Standards and transparency
4. Encourage innovation
5. Navigating data
6. Leading by example

Who’s in the business of health?

The mainstreaming of healthspan and longevity research is creating a massive “market for health”

Mainstreaming healthy diets— healthy food value chains, nutritional fluency, personalized supplementation, substance innovation (THC), cooking, preplanned meals, real-time/automated nutrient tracking, continuous glucose monitoring

Movement— exercise, gaming, standing, walking, breathing, fitness tracking

Sleep — built environment, noise, substances, mental health,

Musculoskeletal health — posture, ergonomics, inflammation, pain, strength/balance

Air quality —ventilation, toxins, allergens including at work, home, and cars

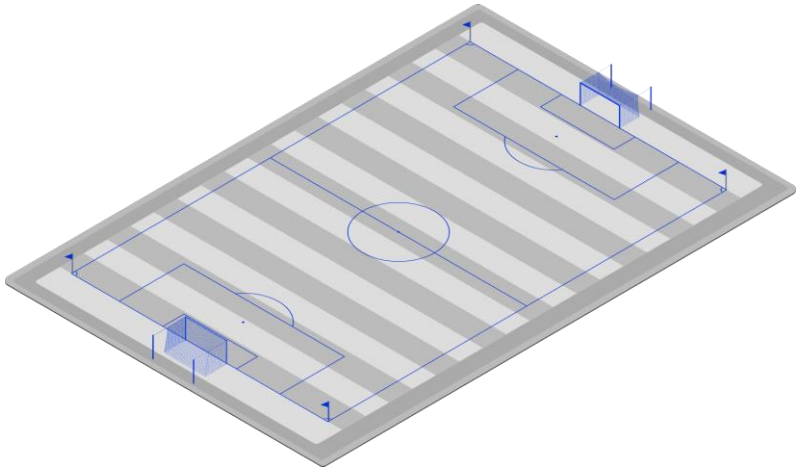
Loneliness —significant others, friends, pets, kids, mentorship

Purpose — enhancing meaning from work, pastimes, volunteering

Beauty— access to nature, experiences, art, poetry, music, the sublime

Mental, social, and spiritual skills / literacy—resilience, fluency with feelings, learned positivity, mindfulness, journaling, cognitive training

What's your role



Drive standards to measure a modern understanding of health

Inspire and support employers to improve human health

Shape the emerging market for health (or at least participate)

We invite you to improve your own health and the health of those in your circle of influence

Actions
you and your institution can take

Resources
MHI can provide to support and facilitate action

Learn

Build stronger understanding of emerging scientific knowledge around what drives our health

Learn from insights, examples, and experiences **outside your domain**

Challenge your own **assumptions** and **biases** with respect to health

- ❑ **MHI knowledge platform:** get research and insights on topics including
  - Modern understanding of health
  - Brain health
  - Healthy aging
  - Prevention and promotion
  - Measurement / data
  - Emerging market for health
  - Role of employment in health
- ❑ **Newsletter:** subscribe to regular collection of most relevant insights and articles shared with you by e-mail
- ❑ **Social media:** engage with an active community of leaders with a shared interest in advancing health

Engage

Decide to improve your own health

Talk to your friends and family for ideas and inspiration

Engage in discussions to learn and **explore opportunities** to promote health within institutions you affiliate with

Endorse (as an individual) the **Charter to Improve Human Health**

- ❑ **Health Optimization Panel of Experts (HOPE): n**etwork of scientific experts across geographies to translate and synthesize evidence around what drives our health
- ❑ **MHI-orchestrated forums, events, and webinars:** join large, topical, and small group events to meet like-minded leaders and experts
- ❑ **Amplification:** amplification of engagement through McKinsey's network of >60,000CxO relationships and media coverage
- ❑ **Public engagement:** speak about your commitment through your own channels and explore opportunities to amplify your health focus through interviews with MHI

Act

Improve a few areas of your **own health** to **role-model healthy living**

Advocate for a **modern understanding** of health that includes physical, mental, social, and spiritual health

Adapt and deliver **institutional strategy** with greater emphasis on **shaping and/or participating** in the **emerging market for health**

Convince your institution to improve the **health of its employees** and **catalyze action by** measuring employee health, preventing exacerbations, adapting work to optimize health

- ❑ **Employee Mental Health and Wellbeing Platform:** No-cost employee survey and intervention library to help your institution assess and improve employee mental health and wellbeing
- ❑ **Open-source data,** including consumer research, to help inform health efforts
- ❑ **Collaborations:** ongoing efforts to consider participation. A full list of collaborations is available on our ecosystem page. Examples include
  - ❑ **World Wellbeing Movement:** global coalition of business, civil society, and academia to put wellbeing at the heart of decision-making in public and private sector
  - ❑ **Prevention/promotion: l**aunching effort spanning private, public, and social sectors to catalyze greater societal investment
  - ❑ **Suicide prevention:** including supporting the rollout of 988 in the US and improving crisis services globally