Value Incentives & Systems Action Collaborative Webinar

Leveraging Behavioral Economics as a Tool for Individual and Population Health

December 1, 2021 | 12:00 PM – 3:00 PM ET

Share your thoughts!

@theNAMedicine

NATIONAL ACADEMY OF MEDICINE
Welcome & Introduction

Michael McGinnis
Leonard D. Schaeffer Executive Officer
Value Incentives and Systems Action Collaborative Chairs

James Madara
American Medical Association

Diane Holder
University of Pittsburgh Medical Center
Stakeholder leaders in private, public, and independent organizations from key health sectors, collaborating under the auspices of the National Academy of Medicine for action on their common interests in advancing effectiveness, efficiency, equity, and continuous learning in health, medical care, and biomedical science.
Advancing the Learning Health System

A learning health system is one in which science, informatics, incentives, and culture are aligned for continuous improvement, innovation, and equity—with best practices and discovery seamlessly embedded in the delivery process, individuals and families active participants in all elements, and new knowledge generated as an integral by-product of the delivery experience.

Leadership Consortium Charter 2006
focus:

COLLABORATION FOR ACTION
COLLABORATIVE ACTION

**SCIENCE: Evidence Mobilization Action Collaborative**

* Aim: continuous learning through real-world evidence

**INFORMATICS: Digital Health Action Collaborative**

* Aim: digital infrastructure & data as a core utility

**INCENTIVES: Value Incentives & Systems Action Collaborative**

* Aim: payment based on health outcomes for people and populations

**CULTURE: Culture, Inclusion & Equity Action Collaborative**

* Aim: full and equitable health engagement for people and communities
CORE ELEMENTS FOR EACH COLLABORATIVE

Organizational **NETWORKS**

Anchor **PRINCIPLES**

Key progress **INDICATORS**

Collaborative **PROJECTS**
Emerging Stronger After COVID-19
• Explores the US health system’s weaknesses, pandemic response and opportunities for transformation, including adjusting incentivizes to prioritize equity, alignment, and innovation

Financing that Rewards Better Health and Well-being
• Identifies the vision, levers, and strategic actions surrounding financial mechanisms that facilitate whole-person, whole-population health and well being

CMMI Catalyzing Health System Transformation
• Identifies priority investment opportunities that will enable CMMI to accelerate transformation in effectiveness, efficiency, equity, and beneficiary experience in health and health care

Vital Directions for Health and Health Care: Priorities for 2021
• Assesses and highlights national opportunities and priorities in health and health care, including strategies and challenges to health costs and financing

Implementing High-Quality Primary Care: Rebuilding the Foundation of Health Care
• Examines the current state of US primary care and develops a plan to strengthen services, featuring payment reforms that support and invest in high-quality primary care
Emerging Stronger after COVID-19

Transformation Priorities

Clinicians
Health care payers
Patients, families, and communities
Public health
Care systems
Quality, safety and standards organizations
Research
Digital health
Health product manufacturers and innovators

Emerging Stronger After COVID-19: Priorities for Health System Transformation - National Academy of Medicine (nam.edu)
Sector Paper Release Status

**RELEASED/AVAILABLE ONLINE**

- Quality, Safety, and Standards Organizations
- Payers
- Patients, Families, and Communities
- Clinicians and Professional Societies
- Public Health
- Biomedical Research
- Care Systems

**SOON TO BE RELEASED**

- Digital Health
- Health Product Manufacturers and Innovators

**FULL SECTOR PAPERS AVAILABLE ONLINE**

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**NAM Leadership Consortium**

Collaboration for a Value & Science-Driven Health System

**NATIONAL ACADEMY OF MEDICINE**

Slide 11
Value Incentives and Systems
Action Collaborative Chairs

James Madara
American Medical Association

Diane Holder
University of Pittsburgh Medical Center
## Agenda

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<th>Time</th>
<th>Session</th>
<th>Facilitator</th>
<th>Speakers</th>
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<tr>
<td>12:00 – 12:15 PM</td>
<td>Welcome, Introductions &amp; Meeting Overview</td>
<td>Michael McGinnis</td>
<td>James Madara, American Medical Association &amp; Diane Holder, University of Pittsburgh Medical Center</td>
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<tr>
<td>12:15 – 1:00 PM</td>
<td>Keynote Session: Motivating Health System Transformation in the Pandemic Era</td>
<td>James Madara</td>
<td>Cass Sunstein, Harvard University &amp; Kevin Volpp, University of Pennsylvania</td>
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<td>1:00 – 1:45 PM</td>
<td>Incentives in Action for Individual- and Workforce-Driven Change</td>
<td>Diane Holder</td>
<td>Nancy-Ann DeParle, Consonance Capital Partners &amp; Brent James, Stanford University &amp; Mitesh Patel, Ascension</td>
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<td>1:45 – 2:55 PM</td>
<td>Leveraging Behavioral Economics for a Healthier Future</td>
<td>James Madara</td>
<td>Charlene Wong, Duke University &amp; Karl Ronn, Health2047 &amp; Anaeze Offodile, MD Anderson Cancer Center &amp; Sachin Jain, SCAN Group and Health Plan</td>
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<td>2:55 – 3:00 PM</td>
<td>Closing Remarks &amp; Adjourn</td>
<td>James Madara</td>
<td>Michael McGinnis, National Academy of Medicine &amp; Diane Holder, University of Pittsburgh Medical Center</td>
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Zoom Instructions

Panelists

• Always keep your line muted unless you are called on to speak
• If possible, turn on video while speaking to the group. To enable video click the ‘start video’ option at the bottom left of your screen

Attendees - Q & A

• Please type in questions into the Q&A located at the bottom of the screen on your zoom interface
• Question format:
  • Your name and organization
  • To whom
  • Question
Keynote Session:
Motivating Health System Transformation in the Pandemic Era
Cass Sunstein, JD
Harvard University

Kevin Volpp, MD, PhD
University of Pennsylvania
Incentives in Action for Individual- and Workforce-Driven Change
Nancy-Ann DeParle, JD, MA
Consonance Capital Partners

Brent James, MD, MStat
Stanford University

Mitesh Patel, MD, MBA
Ascension
Leveraging Behavioral Economics as a Tool for Individual and Population Health: Lessons from Policymaking

December 1, 2021

Nancy-Ann DeParle
Managing Partner & Co-founder, Consonance Capital Partners
Early Lessons: Enrolling in Medicaid, c.1990
From Actively Discouraging Enrollment to “Nudging” Bedside Sign Ups

Tennessee Department of Human Services office, Jackson Avenue, Memphis
Patient room, Regional Medical Center, Memphis
Nursing Home Compare, c.1998

Does Information About Quality Change Consumers’ Choice of Nursing Homes?

- Informed ACA’s many disclosure requirements:
  - Health plans—must post “plain language” summary of benefits and coverage; premium increases > 10%
  - Hospitals—must post “chargemaster” or list prices
  - Trump Administration rules require health plans to disclose pricing/cost-sharing for health services and Rx drugs in advance
Maximizing Health Plan Enrollment: Is Auto-Enrollment the Answer?

Why Nudging Can Be Hard to Do

2009
- “Individual mandate” most effective policy, but politically unpopular
- Auto-enrollment considered as alternative, given 401(k) success
- CBO “scorekeeping” huge hurdle
- Employers with >200 employees required to auto-enroll

2021
- With mandate repealed, should auto-enrollment replace it?
- Bipartisan support—Families USA, AEI, Hoover Institution
- MD Easy Enrollment— & CO, NJ
- In contention for BBB Act—but has CBO changed view?
ACA Menu Labeling, “Smart Snacks in Schools” Rule

The Last Time I Enjoyed a Frappucino

• Process took 8 years
• Incredibly complex—the “Papa John’s” problem; planes, trains, & Kroger buffets
• Evidence of impact mixed

School’s Out?

• Process took 4 years
• More than disclosure: choice is removed. No more bake sales & cupcakes—unless 50% whole-grain
• Snacks must have fruit, vegetable, dairy or protein as 1st ingredient
• Evidence of impact mixed
“Incentives That Work”
at the Front Lines of Health Care Delivery

Brent C. James, M.D., M.Stat
Clinical Excellence Research Center (CERC), Dept of Medicine, Stanford University School of Medicine
Disclosures

I receive a monthly retainer from Health Catalyst as a part time (3 days / month) senior advisor. I also own (a small amount of) Health Catalyst stock.

I serve on an advisory board for Amplifire, a privately-held company that provides computer-based health care education products.

Other than that, neither I nor any family members have any relevant financial relationships to be directly or indirectly discussed, referred to or illustrated within the presentation, with or without recognition.
Outline

1. Algorithmic vs heuristic work
   – individual level vs the organizational
   – intrinsic vs extrinsic motivation
   – threshold effect: Maslow’s hierarchy of human needs

2. Unexamined, incorrect assumptions
   – adequate ability to measure comparative performance
   – the belief that the underlying problem is motivation

3. The risk of perverse incentives
   – necessity of effective audit – GAAP and GAAS
Two contexts

- **Algorithmic** – follow a set of established instructions down a single pathway to (achieve) one conclusion.

- **Heuristic** – no fixed algorithm exists; requires exploration and experimentation, creativity on the fly.


Key finding

In a heuristic setting, for individual workers, financial incentives actively damage performance.
What “motivates” individual workers (in heuristic settings)?

**Professional values** *(intrinsic motivation)*

**Fair pay** – pay enough to “take money off the table,” so they’re not focused on money.

Then:

1. **Autonomy** – they must have freedom to experiment, create, and adjust to special circumstances.

2. **Mastery** – getting better at things; achieving new heights.

3. **Purpose** – doing things that truly matter; making a real contribution; a “purpose-driven life.”
Unexamined assumptions

- **Current clinical data systems can adequately assess comparative performance**
  - mostly true for patient experience of care (patient satisfaction data)
  - most (not all!) clinical outcomes performance ranks have very wide confidence intervals. This makes accurate performance evaluation very hard.

- **With strong enough incentives, “they” will be able to figure it out** *(the primary reason for poor performance is motivation)*
  - the actual causes: (1) increasing complexity; in (2) a system that relies primarily on human memory for execution; with (3) poor process-level transparency for front line workers.
When incentives turn to the dark side ...

Deming note that when people are pressured to meet an external target, they can

1. **improve real performance** – requires vision, tools, time, resources;

2. **teach to the test** – suboptimize the system by “working harder” under the measurement spotlight at the expense of areas in the penumbra = overall clinical performance declines; or

3. **game the data** (a.k.a. “improve documentation”)
   - As pressure to “make a number” increases, reliance on methods #2 and #3 increases disproportionately.
   - Often takes the form of “goal displacement”.
   - External pressure conflicts with and destroys internal motivation.
Using Nudges to Improve the Delivery of Health Care

Mitesh Patel, MD, MBA

December 2021

Vice President, Clinical Transformation;
National Lead for Behavioral Insights;
Ascension

MiteshSPatel.com @MiteshSPatel
Human behavior is the final common pathway

Patel, Volpp, Asch. *NEJM*. 2018
Medical decision-making is often suboptimal

- Sometimes we do too much
  - Nearly one-third of health care spending is wasteful and unnecessary

- Sometimes we don’t do enough
  - We often fail to practice evidence-based medicine

90% of clinicians

80% of US adults
Three lessons from implementing nudges in health care
1. We are already being nudged whether we know it or not
Generic prescription rates: opt-in versus opt-out

Patel et al. JAMA IM. 2016
2. Good nudges are often available but need strategic attention to identify

**National Guideline Recommendations**
For palliative cancer patients, daily imaging for radiation alignment does NOT offer benefit

**Penn Medicine**
80% of palliative cancer patients received daily imaging for radiation alignment
2. Good nudges are often available but need strategic attention to identify
Imaging for Palliative Cancer Patients

Figure. Unadjusted Trends in Daily Imaging During Palliative Radiotherapy

68.2% → 32.4%

$P<0.01$

3000

Less imaging tests per year

20%

Reduction in visit time

Sharma et al. JAMA Oncology. 2019
3. Reducing sludge is half the battle

• Cardiac rehab is an evidence-based pathway
  – Demonstrated to reduce mortality and readmissions by up to 30%

• Referral rates were low
  – Only 15% of patients at Penn were referred at the time of hospital discharge
  – More than 25% of hospitals in the US refer less than 20% of their patients

• Manual opt-in process (sludge)
  – Cardiologists had to complete paper form with 12+ fields while on rounds
  – Patients had to identify a rehab center on their own and check insurance coverage

Adusumalli et al. JAMA Network Open. 2021
Redesigned as an opt-out decision pathway

Automate identification and notification

Restructure rounding and discharge process

Adusumalli et al. *JAMA Network Open*. 2021
Cardiac Rehab Referral Rates Over Time

Adusumalli et al. *JAMA Network Open*. 2021

15% → 85% Referral

5% → 40% Attendance
Summary

• Medical decision-making is often suboptimal

• Design of choice environments influences our behavior
  – We are already being nudged but are often unaware of it
  – Strategic attention to align design with our goals

• Nudges can improve the delivery of health care
  – Systematic approach to design, implement, and test interventions
  – Steer decisions towards higher value and better patient outcomes
Using Nudges to Improve the Delivery of Health Care

Mitesh Patel, MD, MBA
Email: Mitesh.Patel3@Ascension.org
Twitter: @miteshspatel
Website: www.miteshspatel.com
Leveraging Behavioral Economics for a Healthier Future
Leveraging Behavioral Economics for a Healthier Future

Charlene Wong, MD MSHP
December 1, 2021

Combined financial and social Incentives
Cooperative incentives to address whole person health
### Financial & Social Incentives for COVID-19 Vaccination

NC DHHS offered **$25 cash cards** for COVID-19 vaccination

<table>
<thead>
<tr>
<th>Vaccine Receipt</th>
<th>Transport</th>
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<td>$25 gift card for transporting individuals to a vaccine site</td>
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## Financial & Social Incentives for COVID-19 Vaccination

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### No Incentives vs Incentives

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<tr>
<th></th>
<th>Apr 28-May 11</th>
<th>May 12-25</th>
<th>Change</th>
<th>June 2-8</th>
<th>Change</th>
</tr>
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<tbody>
<tr>
<td>Incentive sites</td>
<td>0.82</td>
<td>1.20</td>
<td>46%*</td>
<td>0.88</td>
<td>-26%</td>
</tr>
<tr>
<td>Rest of county</td>
<td>5.65</td>
<td>5.11</td>
<td>-10%*</td>
<td>2.50</td>
<td>-51%*</td>
</tr>
<tr>
<td>Rest of state</td>
<td>23.26</td>
<td>23.67</td>
<td>2%*</td>
<td>12.18</td>
<td>-49%*</td>
</tr>
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**Impact:** Uptake fell by half without incentive, but only by a quarter with incentives

*Wong, et al, 2021, *JAMA IM* @DrCharleneWong
Incentives to Address Whole Person Health

- NC InCK is a CMMI-funded care delivery and payment pilot model to integrate care for children birth to age 21 in five central North Carolina counties across their health, social, and educational needs.

- The NC InCK Alternative Payment Model has been co-designed with Medicaid, MCOs, and health systems.

### NC InCK APM Performance Measures

<table>
<thead>
<tr>
<th>Cross-sector well-being metrics</th>
<th>Health care utilization &amp; cost metrics</th>
</tr>
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<tbody>
<tr>
<td>Kindergarten Readiness</td>
<td>Screening for Clinical Depression &amp; Follow-Up</td>
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<tr>
<td>Food Security</td>
<td>Rate of Emergency Department Visits</td>
</tr>
<tr>
<td>Housing Stability</td>
<td>Equity: Reduction in disparity for infant well child visits</td>
</tr>
<tr>
<td>Shared Action Plan</td>
<td>Total Cost of Care</td>
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Behavioral Economics for a Healthier Future

Anaeze C. Offodile II MD MPH
Rationale

Health system transformation is a re-alignment of the prevailing structures, processes and culture in clinical practice towards higher value care

At its core, durable transformation modifying human behavior

Natural experiment of COVID-19
- how we socialize, deliver services, and work have been reimagined
- will these behavior changes “stick”
Behavior-first Transformation

- Clearly articulate a mission-focused “why”
- Tap into what really motivates employees – autonomy, mastery & sense of greater purpose
- Design environments with behavioral economics principles in mind
- Data and transparency can be great enablers of change
Framework for Transformation

Phase one
Identify
Identify and prioritize behaviors that need to change

Phase two
Understand
Understand drivers of behavior

Phase three
Change
Design interventions to change behavior

Deloitte Insights
# Drivers of Behavior

<table>
<thead>
<tr>
<th>What is it?</th>
<th>How does it drive human behavior?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fundamentals</strong></td>
<td>Psychological factors, cognitive biases, mental heuristics</td>
</tr>
<tr>
<td></td>
<td>Much of human decision-making is automatic. Instinctive, often apparently illogical behaviors are very common.</td>
</tr>
<tr>
<td><strong>Incentives</strong></td>
<td>Performance, promotion, compensation, recognition</td>
</tr>
<tr>
<td></td>
<td>Humans are intrinsically motivated by incentives: physical, psychological, financial.</td>
</tr>
<tr>
<td><strong>Relationships</strong></td>
<td>Leadership, teams, customers, suppliers, governments</td>
</tr>
<tr>
<td></td>
<td>Humans are highly social animals, strongly influenced by the behavior of other people. To a large extent, our social relationships define us.</td>
</tr>
<tr>
<td><strong>Stories</strong></td>
<td>Mission, values, narratives</td>
</tr>
<tr>
<td></td>
<td>Telling stories is a critical part of what makes us human. The stories we tell about ourselves and our organizations shape our behavior.</td>
</tr>
<tr>
<td><strong>Tools</strong></td>
<td>Location, physical environment, technology, processes, systems</td>
</tr>
<tr>
<td></td>
<td>Our physical environment and the tools and systems we use influence behavior, both subtly and in more obvious ways.</td>
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**Psychological factors that influence individual behavior**

**Organizational levers that influence behavior in the specific client context**

**Deloitte Insights**
Intrinsic > Extrinsic

US healthcare organizations significantly outperform the global benchmark in most motivation practices but are comparable in financial incentives.

US healthcare performance in motivation practices compared with global benchmark,¹ median point difference

- Meaningful values: 13% or greater
- Inspirational leaders: 11% or greater
- Career opportunities: 8% or greater
- Financial incentives: 4% difference
- Rewards and recognition: 9% or greater

¹Statistical significance is defined by differences (higher or lower) that fall outside of the 95% confidence interval for chance error. All of the percentages in this exhibit are statistically significant except the financial-incentives metric.

Source: US healthcare sample: surveys = 20, respondents = 108,249; global-survey database, Organizational Health Index by McKinsey sample: surveys = 836, respondents = 2,472,246

McKinsey Healthcare Systems & Services
Healthcare systems are highly complex and interrelated entities - organizational transformation will never be a “one-and-done” undertaking. Need a structured process for thinking through sustainment and as-needed iteration.
Role for Implementation Science

Causal Factors
- Structural
- Organizational
  - Patient
  - Provider
  - Innovation

Implementation Outcomes
- Adoption
  - Fidelity
  - Implementation Cost
  - Penetration
  - Sustainability

Chaudoir et al. Implementation Science 2013, 8:22
Closing Remarks

Thank you for joining!

For more information about the National Academy of Medicine’s initiatives, please visit us at: nam.edu
Value Incentives and Systems Action Collaborative

For more information about the Value Incentives and Systems Action Collaborative or to share opportunities to address and advance this work, please contact:

Ayodola Anise
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