The Next Wave of Innovation to Keep Patients Safe
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Key Message (In A Nutshell)

The next waves of innovation will focus on improving how people interact with one another and how they organize their day-to-day work.

Road Map

• A brief history
• A current perspective
• A future prediction
Benchmarking on High Reliability Organizations (HROs)

- HRO research began in late 1970s as a contrast to Normal Accident Theory
- A subset of hazardous organizations that have “operated nearly error-free” for very long periods of time
- They know that reliable performance can never be established ex ante… so they adopt a special approach to its pursuit

High Reliability...

Common Features of HROs

- Excellent technology, task and work design
- Frequent process audits and continuous improvement
- Technological redundancy
- Attention to personnel selection, socialization, continuous training and mentoring
- Effective reward systems
HROs and Healthcare

“Medicine is not unique among high-risk, high-reliability industries because it too is concerned with learning how to prevent, detect, recover, and learn from mishaps and accidents.”

(US IOM, 1999)

A Current Perspective

- High Reliability Organizing – dynamic rather than static
- Dual Operating Logics
  - Anticipating, preventing
  - Resiling, containing
- A Coherent Operating Management System (principles, processes, practices) that enable:
  - Widespread “intelligent wariness”
  - Alertness and awareness widely spread across tasks and situations
  - Deep and broad capabilities to cope
  - Continuous management of fluctuations rather than organizational invariance
- Feedback and learning

Sutcliffe & Weick, Chpt. 12 in Resilient Health Care, 2013.
Anticipating and Preventing

- HROs consciously design systems to anticipate and prevent mishaps
- Organizations in most industries have worked diligently to improve standardization
  - SOPs, protocols, checklists
  - Reliability analysis tools (e.g. PDSAs, FMEAs)
  - Pre-procedural and post-procedural briefings

Things that have never happened before, happen all the time ... (Sagan, 1993)

“Life is a series of interruptions and recoveries.”

John Dewey, 1922
Resilience

Capacities and processes that enable people or organizations to absorb strain and bounce back under adverse conditions.

Williams, Gruber, Sutcliffe et al., 'Organizational Response to Adversity', AoM Annals, 2017; Patterson & Schulman, Safety Science, 2016

Resilience Requires

- Make discrepancies visible so that people can act on them before "harm" is caused.
- Design the system so that people can:
  - anticipate and prevent breakdowns,
  - catch problems in the making,
  - make adjustments before problems grow bigger, AND/OR
  - deal with consequences after they become manifest.

Williams, Gruber, Sutcliffe et al., 'Organizational Response to Adversity', AoM Annals, 2017

How Do HROs Do It?

1. Enact a bundle of high-performance human resource practices;
2. Build vigilant upstream-downstream coordination;
3. Engage in daily habits of thought and action (e.g., pre-work briefings, huddles, handoffs, rapid response teams, learning moments);
4. Actively shape contexts/climates of respect and trust.
1. Enact High-Performance Human Resource Practices

- Select (for interpersonal skills)
- Train, train, train (ongoing)
- Mentor (formally)
- Create opportunities for discretion (frontline has control over some aspects of work and change)

2. Build Vigilant Coordination

- More vigilant coordination occurs when individuals in a complex system do their best to:
  1. Understand the big picture goal,
  2. Understand how their individual job fits into this big picture, and
  3. Maintain a conscious awareness of both as they perform their duties.
- Lax coordination occurs when an individual simply does her/his job ignoring what goes on around her/him.
Relating and Coordinating Are Central to Great Care

• Coordination is carried out through a web of relationships of shared goals, shared knowledge, and mutual respect.
• Care coordination results from:
  – frequent, timely, accurate, problem-solving communications.

3. Engage in Daily Habits Aimed At

- Attending to Failures
- Avoiding Simplification
- Understanding Current Situation
  - Building Resilience
  - Building Flexible Decision Structures
**Some Typical Daily Habits**

**ANTICIPATION**
- Rounding, huddles, and communication boards
- Performance dashboards and metrics
- Safety observations and conversations
- CUSP Teams
- Team STEPPS

**RESILIENCE**
- Rapid response teams
- Float pools
- Threat management incident reviews
- Situation management team assessments
- Workplace safety incident reviews/simulations
- Peer reviews

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**4. Actively Shape Climates of Respect and Trust**

1. Enact a bundle of high-performance human resource practices;
2. Build vigilant upstream-downstream coordination;
3. Engage in daily habits of thought and action (e.g., pre-work briefings, huddles, handoffs, rapid response teams, learning moments);
4. Actively shape climates of respect and trust.

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**Imagine This:**

It’s end of shift and you run to the ICU to consult on a patient who may be having an allergic reaction post surgery. You witness a tense exchange between Dr. Z and a nurse. You find it difficult to watch someone try to humiliate another person like that. Everyone stands dumbstruck for a few minutes until Dr. Z yells for someone to hurry up and grab a different medication.
Imagine This:

What are the implications of this exchange?

Incivility is Omnipresent

- **Incivility:**
  - The exchange of seemingly inconsequential words and deeds that violate conventional norms of workplace conduct.

- **Incivility in workplaces is common**
  - Almost 50% of employees reported being treated rudely at least once per week;
  - 25% reported it occurring daily.

Incivility Has Consequences

- **Adverse consequences for:**
  - Task performance
  - Well-being (physical, emotional)
- **Being a target (or bystander) of rudeness**
  - Impairs cognitive skills (attention, memory, and motor coordination/skills)
  - Ruins teamwork
- **Kick-starts a vicious cycle**
  - 94% of targets of incivility retaliate or “get even” with their offenders
  - 88% “get even” with their organization
Building a Climate of Trust and Respect

- Climates of trust and respect are more than an antidote to incivility
  - Critical for speaking up, voicing concerns, and making sense of complex information, high performance, well being, avoiding burnout, long term resilience
  - At the core of safe, reliable, high quality performance

- How do we build it?
  - Attend to Three Key Elements:
    - Trust (of others)
    - Trustworthiness (of self)
    - Respect (for self & others)

Why Do We Trust Other People?

- Cognitive Foundation:
  - Competence: My coworker knows what to do
  - Character: My coworker wants to do the right thing
  - Influence: My coworker can get the job done

- Affective Foundation:
  - Benevolence: My coworker looks out for me (cares for me)

Why Do Others Find Me Trustworthy?

They perceive that I have integrity.
- I consistently report my concerns, mishaps, anomalies;
- I am honest in what I tell other people so that we can come to a shared, valid understanding of what we face.
Do I Show Respect? For Myself? For Others?

1. I believe it is my duty to respect my own perceptions and beliefs.
2. I believe it is my duty to respect others' perceptions and beliefs.
3. I try to integrate my perceptions/beliefs with others' reports without deprecating myself or deprecating others.

A Future Prediction: Organizing For High Reliability Is The Future

- Checklists, Protocols, Scripts, & EMR
  - Important strides in reducing omissions, factual errors, and misinformation
- However, introduces risk of "Handoff Hymns"
  - Reciting handoff information without mindfully attending to what is being said
- Scripted handoffs and EMR also result in loss of sentiment & restrict word choice
  - Unsuitable for capturing more tacit knowledge

Source: Ghaferi, Myers, Sutcliffe, & Pronovost, Aug. 2016, (Harvard Business Review)

What Do We Know?

- Mortality in surgery patients continues to vary
  - Large variation: 3% adjusted rates of death at lowest mortality hospitals vs. 7% in very high mortality hospitals
  - Longstanding view: Preventing complications
- Researchers stratified hospitals into 5 groups according to their overall mortality and then examined complication rates across the groups

Ghaferi, Birkmeyer, Dimick, NEJM/Ann Surg, 2009
Prevention Alone is Insufficient

Reducing complication rates alone does not reduce mortality rates
- Preventing complications certainly helps, but it's not the whole story

What differs is how hospitals and surgical teams respond as/after complications occur
- High mortality hospitals FAIL to rescue. They are unable to effectively sense and manage complications.
- Rescuing reflects a more general set of processes that enable sensing, sensemaking, and learning as things unfold.

Rescuing

- Rescuing requires:
  - Timely recognition of failures
  - Effective intervention
- These depend on:
  - Trust and respect
  - Voice
  - Daily habits that keep us focused, alert, and aware (e.g., principles of high reliability organizing)
High Reliability Organizing

• Enhances individual alertness
• Fosters organizational awareness
• Counters tendency toward complacency
• Enables more immediate and effective responses to unfolding events and mishaps
• **Is the essence of productivity** – not working harder or faster; working smarter (contingently responding moment to moment to changing conditions)

In Sum: Back Where We Started

• Particular organizing principles and practices are associated with highly reliable performance.
• These ways of working:
  – increase the “quality of collective attention” to better manage dynamism and prevent unexpected surprises from escalating out of control;
  – enable a strong culture of safety and reliability.

Implications For You
High Reliability Leadership Means…

- Taking actions to:
  - successfully unsettle organizational routines to increase alertness and awareness (want to make the unthinkable cognizable and the invisible apparent);
  - create capabilities to cope with what is “seen.”

1. Attend to vulnerability
   - Avoid “arrogance of optimism”
   - Consider mistakes that must not occur
     - What do you count on?
     - What do you expect from the things you count on?
     - In what ways can the things you count on fail?

2. Seek out small failures and make sense of them.
3. Complicate your thinking and question your assumptions.

4. Make it safe for people to speak up and actively seek out diverse views.
5. Build Relational Coordination

Ask Yourself…

1. To what extent do people involved in care share the same goals?
2. To what extent do people involved in care share their knowledge/expertise?
3. To what extent do people involved in care respect one another and the work they each do?
4. How frequently do people involved in care communicate with each other?
5. How timely is the communication?
6. How accurate is the communication?
7. When errors occur, do people blame each other or share responsibility?

6. Develop the skills to cope and bounce back.
1. HRO paradigm = a lens for understanding how high performance under trying conditions comes about.
2. HRO ≠ a recipe, a formula, or step by step procedure for achieving reliable performance day after day.
3. HRO = is something of a misnomer; a good today doesn’t guarantee a good tomorrow — thus we emphasize the idea of organizing rather than organization!

Two Final Caveats

Hubris is the enemy!
Reliable performance is perishable!

Parting Reflection:
What stood out for you?
What do you commit to doing differently?