What Patient Safety Can Teach about Program Development and Project Management

9th Annual UT Dallas Project Management Symposium

Next-Gen Management of Projects: Performance, People and Processes

August 13, 2015

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Ground To Be Covered

- Setting the macro context: *where is healthcare today?*
- Healthcare quality: *a long way to go.*
- Patient safety (PS): *tip of the 'quality spear'*
- A mid-level context related to projects to improve PS
- Comparing work in quality/safety and project management
- Change management approaches
- Evolving focus on "reliability"
- Throughout the presentation and recap: *some key lessons learned about managing projects and people*
- Your thoughts and questions

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Healthcare Is Rightfully In Turmoil

- Costs are almost unfathomable
- Outcomes are not "the best"

So value must be . . . .

- Inconsistent access to care
  - For population with insurance
  - For the 9.2% without any coverage
- Shift from paying for care delivered to paying for value achieved
  - "Triple Aim" thinking
  - Paying for care that's not provided?

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An Expanding Quality "Movement" in Health Care

From the US Institute of Medicine

1999

2001

TO ERR IS HUMAN
BUILDING A SAFER HEALTH SYSTEM
INSTITUTE OF MEDICINE

CROSSING THE QUALITY CHASM
A New Health System for the 21st Century

- <u>Vision</u>: *To achieve care that is:*
  - Safe
  - Timely
  - Effective
  - Efficient
  - Equitable
  - Patient Centered

S
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P

- Organizations are reducing "unit cost" of care
  - When possible, standardize care *(order sets, etc.)*
  - Reducing waste
- Increasing P4P *(and new models of pmt)*
- PS is improving . . . slowly

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The Triple Aim

- Initially advanced by Insitute for Healthcare Improvement
- During tenure at HHS, Dr. Don Berwick used this as cornerstone for health policy / ACA
- Notable is community perspective and importance of population health

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So what is Patient Safety?

- Being free of risk that care intended to help actually injures patients
- Processes of care *vs.* outcomes of care; <u>adverse event = harm to patient</u>
- Initial focus on error → blame, shame, train → limited effectiveness
- Increasing focus on risk and/or harm to patients; scale is very large
  - Build stronger, more reliable systems of care
  - Increase use of checklists, team concepts
  - Engage clinicians in being situationally aware

  Need for many programs and projects
- Patient care is "complex" especially when illness is more serious

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On a very busy Saturday night in the ER . . .

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Scale and Frequency of the PS "Problem"

- Serious <u>reported</u> clinical events that are clearly preventable: ~0.5-3 per 10,000 discharges (<0.1%)
- Adverse events (AE's) discovered by random record review:
  - Not done widely
  - AE's not clearly preventable but most are possibly or probably preventable
  - 20-30% of inpatients have a hospital-acquired AE of any severity
  - 7-15% of inpatients have a serious AE that: increases LOS; involves permanent injury; or causes or risks death
  - Reduce hospital contribution margin by $1,100 per serious AE
  - More focus on this by Federal regulators
- PS is a major focus for the public, health providers and the media

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Major Types of Adverse Events *(AE's)*

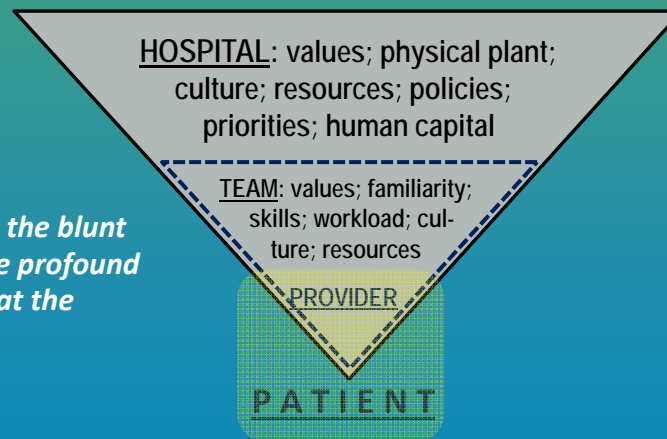| Types of AE's	Source of AE	Preventability
Surgery	Complications >> Errors	Some
Adverse drug event	Complications >> Errors	Some
Hospital-acquired infection	Sub-optimal care processes	Most
Pressure ulcers / Falls w injury	Sub-optimal care processes	Most

- Improvement methods can reduce many but not all AE's
- Many of these types of AE's are not being used for P4P programs

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Systems Thinking: *Blunt and Sharp Ends*

Society - Government - Regulators

HOSPITAL: values; physical plant; culture; resources; policies; priorities; human capital

TEAM: values; familiarity; skills; workload; culture; resources

PROVIDER

P A T I E N T

Decisions made at the blunt end can often have profound impact upon care at the sharp end.

From James Reason

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Findings in Need of Improvement

- Using a root cause analysis and "5 why's" approach:
- Poor approach to budget management
- Blunt end affecting sharp end
- Poor inter-professional coordination of care
- No speaking up since working in higher risk environment became "the norm"

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IHI Framework for Patient Safety

Culture	Learning System
1. Leaders who facilitate and mentor teamwork, improvement, respect and psychological safety	1. A Continuous Learning Process that generates reliable care by applying best evidence and minimizing variation
2. Teams who know the game plan and agree upon specific behaviors	2. Reliable Care Processes continuously, owned by frontline providers
3. Communication where transmission and reception of information is one and the same	3. Applies Formal Improvement Methods and Measurement to generate quality and mitigate and eliminate defects
4. Accountability that supports psychological safety because employees believe that they'll be treated fairly	4. Transparency where the learning efforts are known to all and discussed as a daily part of work
5. Psychological Safety comfortable asking questions and raising concerns	

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Improving PS: *An Organizational Perspective*

- Set Vision:
  - No preventable deaths
  - No preventable injuries
  - No preventable risk
- Strategies
  - Achieve a culture of safety
  - Deploy processes that improve PS
  - Use technology that supports PS

Technology

Clinical Processes

Culture

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Psychological Safety

- **A** shared belief that the team is **safe** for interpersonal risk taking. In **psychologically safe** teams, team members feel accepted and respected. The most studied enabling condition in group dynamics and team learning research.
- Must be nurtured to develop and is very frail when trust is lost'
- What happens when people speak up?
- "Stopping the Line" at Toyota *vs.* Virginia Mason *vs.* other org's
- Critical language
  - "I need some clarity" *(from Allina)*
  - CUS: "I'm: **C**oncerned . . . **U**ncomfortable . . . **S**top for **S**afety"

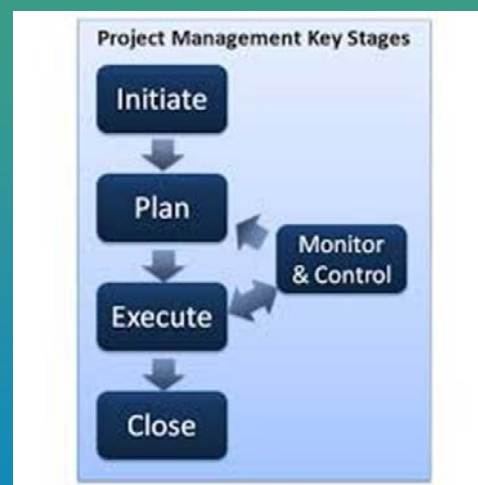# What Makes a Healthcare Initiative Successful?

- Work of Gustafson *et al*
  - Health Serv Res. 2003 38: 751
  - 192 projects
  - 12 project characteristics / factors used in retrospective analysis of level of success of the projects based upon rating of these factors; *p<0.001*
  - OCM survey developed
- Issue of level of innovation needed for a project (novel or in adaptation)
  - *Ten Faces of Innovation* (*Tom Kelley of Ideo*) 2005

THE TEN FACES OF INNOVATION

IDEO'S STRATEGIES FOR BEATING THE DEVIL'S ADVOCATE & DRIVING CREATIVITY THROUGHOUT YOUR ORGANIZATION

TOM KELLEY
WITH JONATHAN LITTMAN
AUTHOR OF *THE ART OF INNOVATION*

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Linking to Classical Project Management

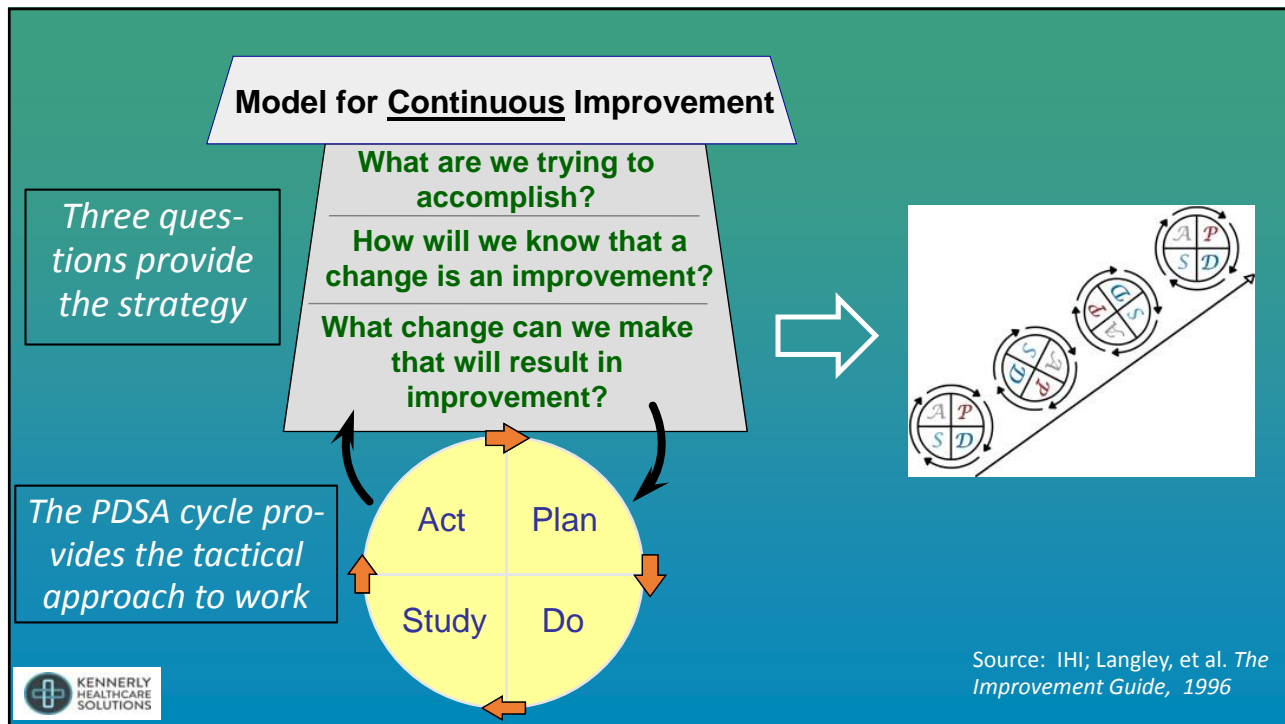A Guide to the
PROJECT MANAGEMENT BODY OF KNOWLEDGE (PMBOK GUIDE)
Fifth Edition

Project Management Key Stages

Initiate → Plan → Execute → Close

Monitor & Control

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Model for <u>Continuous</u> Improvement

Three ques-tions provide the strategy

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

The PDSA cycle pro-vides the tactical approach to work

Act | Plan
Study | Do

Source: IHI; Langley, et al. *The Improvement Guide, 1996*

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Comparing Characteristics of Projects

Characteristic	Patient Safety *(Fix an identified problem)*	Patient Safety *(proactive)*	Continuous Improvement	Discreet Project
Careful Design	No	Yes	Yes	Yes
Reliance on culture	Less	Yes	Yes	Yes
Leader sponsorship	Minimal	Yes	Minimal	Yes
Role of Front Line	Some	Some	Crucial	Stakeholder
Specified Budget	No	No	No	Yes

While some of the characteristics differ, there is much in common related to accomplishing the work

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Initiation Phase of Projects

Time spent here is <u>very</u> valuable.

"Why are we doing this? Really?

Need candid input / guidance from thought leaders.

So how would this work?

Who / what group will oppose this?

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Preventing Blood Clots in High Risk Inpatients

- Evidence-based risk assessment developed
- Evidence-based interventions for high risk patients

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Lessons

- Culture conflict between physicians and nurses undermined success; due to inadequate vetting with thought leaders
- Time pressure prevented redesign despite a near certainty that success will be limited

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Comments on Culture

A few practical thoughts since much has been written . . .
- The "eats strategy" view is right on
- What people do (or will do) when no one is looking
- Organizational-wide and "tribal" *(profession, geography, generation)*
- Power *vs.* Traction
  - Control vs. influence
  - 100 x 0 = 0; 0 x 100 = 0
  - Traction is typically more rate limiting than power; culture supports both
- Often not addressed proactively, candidly and/or early in process
- Listen to the "doubters" and "worriers in pre-initiation work

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A Lesson Learned

Identify which changes in a project will "stress" culture *(organization, groups, individuals).*

Not "if" . . . "which ones," "affecting who," and "by how much"

An important component of ***project readiness***

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Some Key Questions

- Why does this initiative / goal / project matter?
  - To me
  - To you
  - To our profession
  - To our organization
  - To our customers
  - To my community
  - To the world

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Reducing the Inpatient Mortality Rate

- Focus on patients with sepsis *(a very serious blood stream infection)*
- Focus on their care only in the ED vis a vis use of evidence-based processes
- Very strong leadership engagement, including hospital CEO's
- Tracked delivery of targeted processes of care
- Moved from worst quartile mortality rate to top quartile in one year
- Tracked delivery of targeted processes of care

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Lessons

- Was focused (single illness / single location)
- Strong engagement by leaders and all stakeholders
- Used evidence-based interventions
- Good measurement system
- Strong accountability system

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Making Need / Success / Failure Personal

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Making Need / Success / Failure Personal

Lives saved over 5 years as a result of reducing risk-adjusted inpatient mortality

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Metrics to Measure Progress

A few practical thoughts since much has been written

- Must be VERY solid
  - Easily understood (passes the "elevator rule")
  - Highly valued by most/all stakeholders and sponsors
  - Realistically obtained
- Listen to the metric "doubters" . . . Maybe there's a better metric

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Plan Individual Recognition, Celebration and Fun

- Recognize: work above and beyond, breakthroughs and courage
- Must have a quick win and make it visible / fun
- Milestones are important, even if late . . . <u>Everyone involved</u>
- Consider JetBlue
  - Values: Safety, Caring, Integrity, Fun and Passion
    - *We're serious about all our values. Including this one. Having fun at work is good for our crewmembers and customers.*
    - #28 on Glassdoor; #3 of Top 10 best places to work in travel industry
- Office of PS at Baylor had a semi-formal Chief Spirit Officer
- Parking lot location for leader's desk . . .

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The World Health Organization OR Checklist
"Safe Surgery Saves Lives"

- Surprisingly little "push back"
- Record audits → Observation
- Survey

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Lessons

- Poor pre-Initiation work: limited pushback did not reflect agreement
- Process not "owned" by all in the OR's; high "authority gradient"
- Became a initiative to help evolve surgical culture

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From Kotter Model

Complicating the application of the Kotter model related to healthcare

• Professional resistance

• Nurses are free agents (not modular)

• Many physicians split their work between different hospitals and systems

Would suggest cultural considerations be reviewed very early _AND_ at the end _(to help sustain)_

From Kotter International

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Models of Readiness to Change
Individuals and Groups

• Stages of Change model
  • DiClemente and Prochaska _(1983)_
  • Initial work: smoking/addiction; shown relevant to other types of behavior
  • Stages:
    Pre-contemplation _(denial common / no change)_
    Contemplation _(change not yet worth it)_
    Preparation _(getting ready to change)_
    Action _(initiating the change)_

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Another Model to Advance Readiness to Change

> *"It's easier to act your way into a new way of thinking than to think your way into a new way of acting"*
>
> *Jerry Sternin*

Consider the evolution of using seat belts

Some practical approaches:

- *Travel to a site where the goal process has been achieved; see it and do it*
- *Develop internal prototype as part of feasibility work; stakeholders try it*

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Professional Affinity Groups and Professionalism

- So, what's your tribe? Engineer, leader, analyst, nurse, physician, etc.
- Patient care has been a cottage industry / tribal → slow to change
- Individuals and small groups are often "too close" to view issue without an inherent conflict of interest *(cardiology and echo's for pts with HF)*
- Two edged sword
  - Resistant to change
  - But . . . May have more strongly embedded values that may accelerate change
- Kotter and change management
  - Docs and especially nurses are "free agents" so can strongly resist approaches that are excessively "top down"

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Reducing Inpatient Falls

- Fall risk assessment
- In room signs; arm bands; patient and family education
- Hourly rounding on all patients
- Used hospital level fall rates to evaluate

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Lessons

- A one size fits all approach
- Missed opportunity
  - Metric: days since last fall with injury
- Time needed for hourly limited work on other things
- Later: unit level drivers evaluated and several important ones discovered

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C Suite Sponsors

- Rapid changes in healthcare push leaders to try too much
  - PM can help by being realistic about scope/scale/"chunking" of projects
  - A huge "win" to align with a related project with overlap of elements
- Need "eyes and ears" . . . They will validate via their rounding and Town Hall meetings
- Less time on benefits and costs, more time on "why is this important and the risks
- Set the culture by their <u>actions</u>
- Most important role is typically via influence not control

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The Leader / Project Manager Interface

- Scope negotiation / management
  - Boundaries
  - Limits
  - Less is often more
- Role of the PM in shaping the view of leaders
  - Share key information on concerns and evolving risks
  - Be focused in time with leaders; headlines only

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CIO's Top 14 Sources of IT Project Failures

M Levinson; CIO; Jul 23, 2008

- Lack right resources with right skills
- Projects lack experienced project managers
- A standard, repeatable PM process not used
- Too much process / too complicated
- Don't track changes to project scope
- Inadequate data about project status
- Problems are ignored

- Too little time to define project scope
- Fail to identify dependencies between projects
- Don't consider "Murphy's Law"
- Give short shrift to change management *(i.e. culture & resistance)*
- Incomplete project schedules
- Accepted unreasonable deadlines
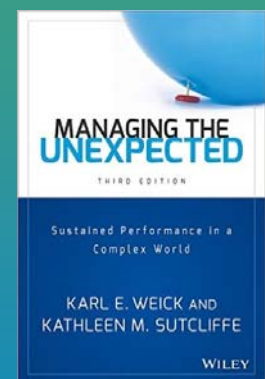- Inadequate communication with project sponsors and stakeholders

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Reliability: *Another Movement in Healthcare*

Organizational reliability *(concepts exemplified by high reliability organizations, HRO's, that expect and plan for the unexpected)*

- Preoccupation with failure
- Sensitivity to operations
- Deference to expertise
- Failure to simplify
- Resilience

University of Michigan Business School Management Series

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Kathleen M. Sutcliffe

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Assuring High Performance in an Age of Complexity

MANAGING THE **UNEXPECTED**

THIRD EDITION

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KARL E. WEICK AND
KATHLEEN M. SUTCLIFFE

WILEY

From Weick and Sutcliffe

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Human Factors

- The study of human-human, human-technology and human-system interactions
- Types of human decision making
  - For simple familiar tasks, automatic routines are used based on knowledge and extensive experience → little need for thinking
  - For new and/or complex situations → carefully thought out decisions
- Humans are error-prone and need other "systems" to help prevent them *(order sets, protocols, checklists, teamwork, pausing before acting . . .)*
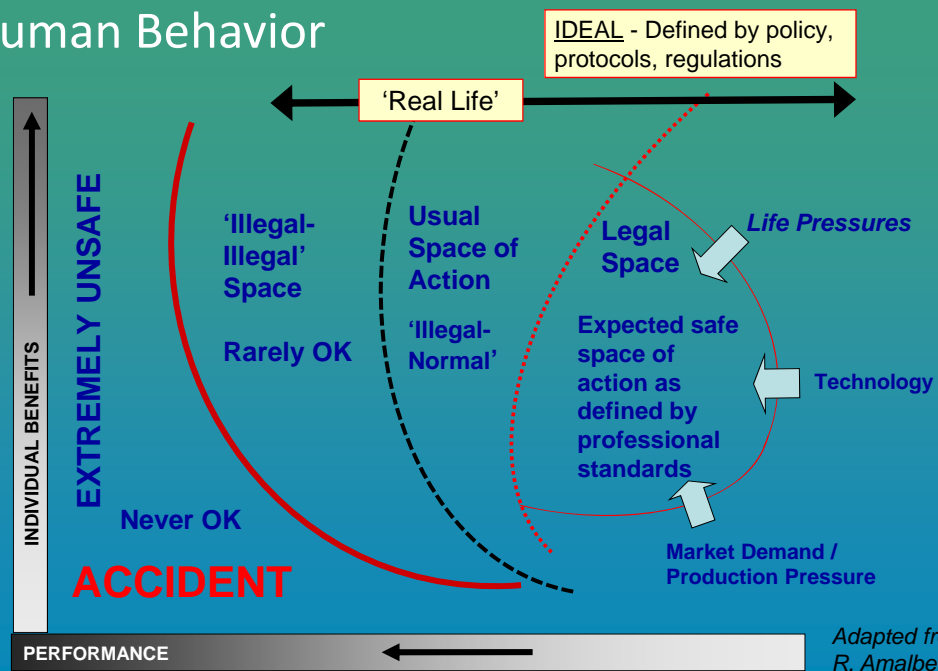- Systems are commonly prone to biases; neutral observation very important

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Range of Human Behavior

- To me
  - To you
  - To our profession
  - To our organization
  - To our customers
  - To my community
  - To the world

IDEAL - Defined by policy, protocols, regulations

'Real Life'

INDIVIDUAL BENEFITS

EXTREMELY UNSAFE

'Illegal-Illegal' Space

Rarely OK

Never OK

ACCIDENT

Usual Space of Action

'Illegal-Normal'

Legal Space

Life Pressures

Expected safe space of action as defined by professional standards

Technology

Market Demand / Production Pressure

PERFORMANCE

Adapted from R. Amalberti

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Recap of Key Concepts for People-Focused Projects

Relevant to initiation
- Making success personal
- Thinking about group or individual "readiness"
- Prioritizing . . . The critical few; take things off the plate? (stop doing list)
- Minimize complexity; chunk, segment and stage the work
- Acting into a new way of thinking

Sustaining the team: fun, quick wins, observe work; walk a mile in their shoes . . .
- Power *vs.* Traction
- Slowing down to go faster *(HBR, 2010)*
- Plan to have fun / celebrate
- Culture / culture / culture

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Recap of Some Practical Suggestions - *1*

- Seriously "test drive" of list of initiatives being considered
- Develop an approach to assess cultural alignment
- Become more familiar with front line work
- Consider a Human Factors engineer
- Work on culture that doesn't pass the "your mother test"
- Review some current projects in light Gustafson & Bisognano approach
- Invest more on development of the project team
- Seriously debrief about the management of the project and in 3 months, 6 months and one year *(anonymous predictions . . .)*

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Recap of Some Practical Suggestions - *2*

- Plan for recognition and fun
- Refine the "elevator speech / pitch" to enhance line of sight
- Consider ways to make the goal have personal meaning
- Ways to prototype both to reject what won't work and help people "act their way into a new way of thinking"
- Be sparing with use of policies as a way to "force" behavior

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Roll out of standardized unplanned RN to MD communication (SBAR)

- Used evidence based methods
- Strong implementation materials used
- Strong tracking method of experience of nurses and physicians with method
- Solid but incomplete use of the method

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Lessons

- Design failed to take into account impact of cultural differnces, especially for less experienced nurses and nurse who trained in the Philippines
- A one size fits all approach was not needed. For clinicians who knew and respected each (20-50%) other a more efficient approach was reasonable and those who did so were not following the new policy → loss of credibility. Initial vetting was too limited.

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