Think again! Everyone doesn't think the Same

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Disclosures

- VCU Health Anesthesiology Critical Care Medicine
- South Shore Hospital –Critical Care Medicine
- Consultant
- No Industry Funding
- There will be no discussion of off label medication use

Objectives

- **1. Review the historical strategies to reduce health care disparities and improve outcomes**
- **2.Discuss the role of biases on decision making and health care outcomes**
- **3. Explain how patient health care literacy and empowerment can reduce and bad outcomes**
- **4. Discuss solutions which can decrease SSE**

Background

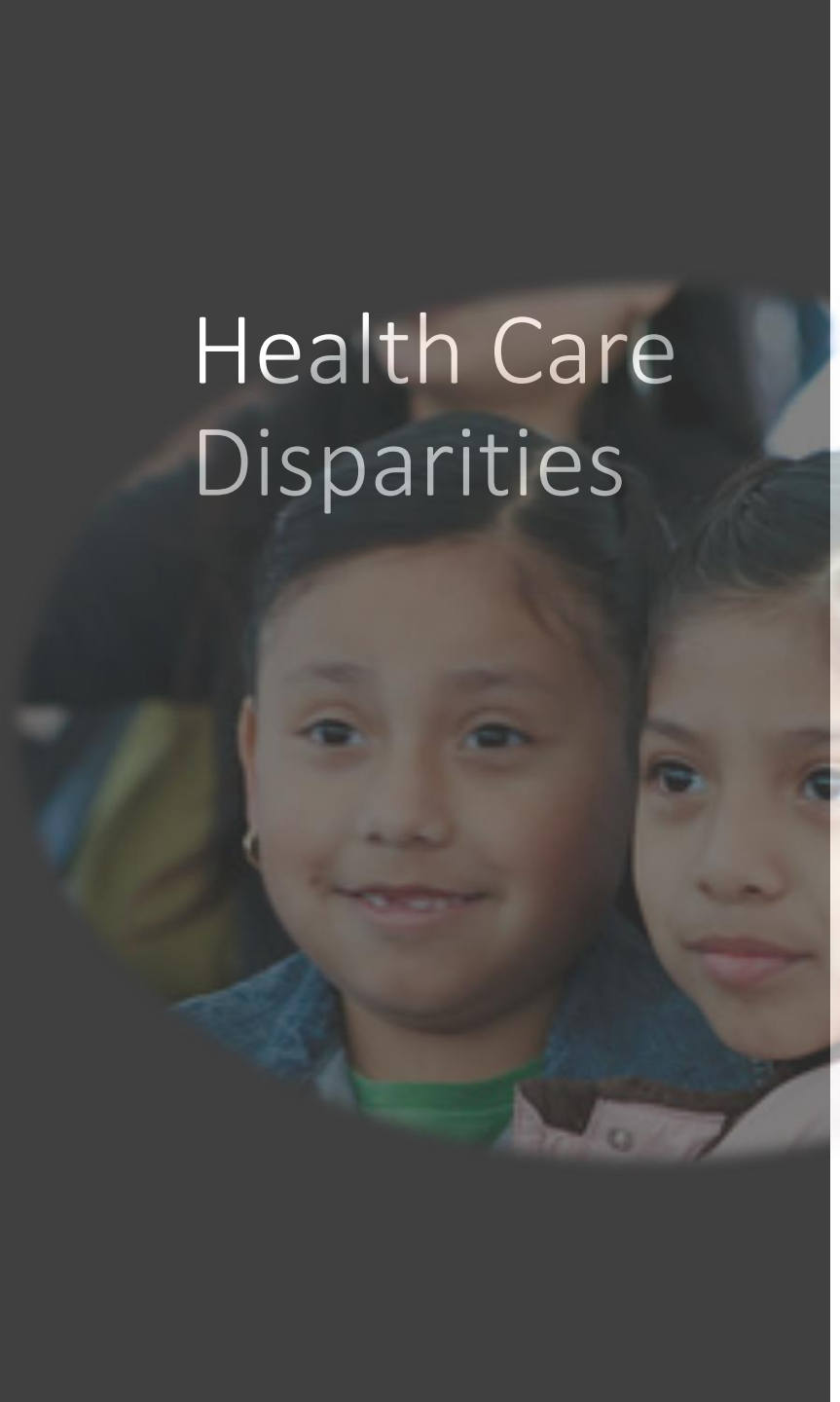
Compton to MGH

Family Background

Health and Health Care Disparities

Quality and Safety

Health Care Disparities



CDC

- "**Health disparities** are preventable differences in the burden of disease, injury, violence, or in opportunities to achieve optimal **health** experienc ed by socially disadvantaged racial, ethnic, and other population groups, and communities."

- **Health Care Disparities**- Differences in outcomes related to the delivery of health care or prevention or deficiencies in care

- 2002 "**IOM Unequal Treatment**" Disparities in outcomes exist in minorities regardless of Socioeconomic level or insurance coverage"

- Disparities exist in many other settings- Gender, Disability, Orientation

- Multiple etiologies require multi-prong approach

Disparities in Quality and Safety Events
Strategies to decrease Health Care Disparities

ACCESS- not always about the absence of engagement

Cultural Competency/Health Care Worker Awareness

Diversity of Workforce

Linguistic Concordance

Advocacy

Biases

Woman Dies in ER Lobby as 911 Refuses to Help

June 13, 2007

Tapes show operators ignored pleas to send ambulance to L.A. hospital

Fury after woman dies in hospital lobby

June 13, 2007

: NBC's Michael Okwu reports on a desperate 911 call made as a woman lay dying in a California hospital lobby.

Associated Press Updated: 10:43 a.m. ET June

“Edith Isabel Rodriguez, 43, died of a perforated bowel on May 9 at Martin Luther King Jr.-Harbor Hospital. Her death was ruled accidental by the Los Angeles County coroner’s office.
Relatives said Rodriguez was bleeding from the mouth and writhing in pain for 45 minutes while she was at a hospital waiting area. Experts have said she could have survived had she been treated early enough.”

Disparities Quality and Safety

- How do we evaluate and does it matter ?

- ***Tale of last 90 minutes of woman's life* Remembering Edith Rodriguez**
- ***BY CHARLES ORNSTEIN***

Value Proposition

Diversity

Diversity Workforce and Training yields Cultural Competency

- Combining divergent random groups

Joseph Stiglitz-Gaussian Curve

The Phenomena of the Nobel Laureate Dinner

Impact of Workforce Diversity

- Increasing the supply of minority physicians increases access to medical care (Komaromy 96')
- AAMC 13, 428 MD Degrees between 1974-75
  - Results- "almost twice the proportion of minority graduates as non-minorities were practicing in federally designated manpower shortage areas (11.6 vs.6.1%, $p<0.001$)
- Black physicians practice in predominantly metropolitan areas (Rochleau 1978)
- Howard University School of Medicine alumni 55'-75'
  - 60% practice in large city , 32% in inner city

Patient-Physician Racial Concordance and the Perceived Quality and Use of Health Care

- “Black respondents with black physicians were more likely than those with non-black physicians
  - Rated their physicians as **excellent**
    - (adjusted odds ratio [OR], 2.40; 95% confidence interval [CI], 1.55-3.72)
  - Report **receiving preventive care**
    - (adjusted OR, 1.74; 95% CI, 1.01-2.98) and all needed medical care (adjusted OR, 2.94; 95% CI, 1.10-7.87) during the previous year.
  - Hispanics with Hispanic physicians were more likely than those with non-Hispanic physicians **to be very satisfied** with their health care overall
    - (adjusted OR, 1.74; 95% CI, 1.01-2.99). Komaromy 99 Archives

Student Body Racial and Ethnic Composition and Diversity-Related Outcomes in US Medical Schools, Saha S, MD, MPH; Guiton, G et.al.*JAMA.* 2008;300(10):1135-1145.

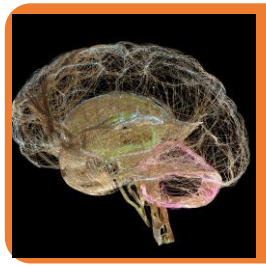
- Medical schools ask the question does Student Diversity matter?

1. The educational benefits of a more diverse schools resulted **in improve preparedness of students to address a more diverse patient populations** (survey responses) overall
2. **White students** within the Highest Quintile for Medical Schools Diversity were more likely to rate themselves as **highly prepared to care for minority populations** in the lower Diversity Quintile Schools
3. Also, the White students (diversified schools) were more likely to have a strong attitude to **endorse equitable access to care**.
4. URM minority medical students were more likely to **plan on serving underserved communities**

Anatomy

- **Health Inequities/ Health Care Disparities**
- **Quality and Safety**
- **Decision-making** and **Biases**
- **Patient Empowerment**
- **Health Care Literacy**

What do biases have to do with Serious Safety Events ?



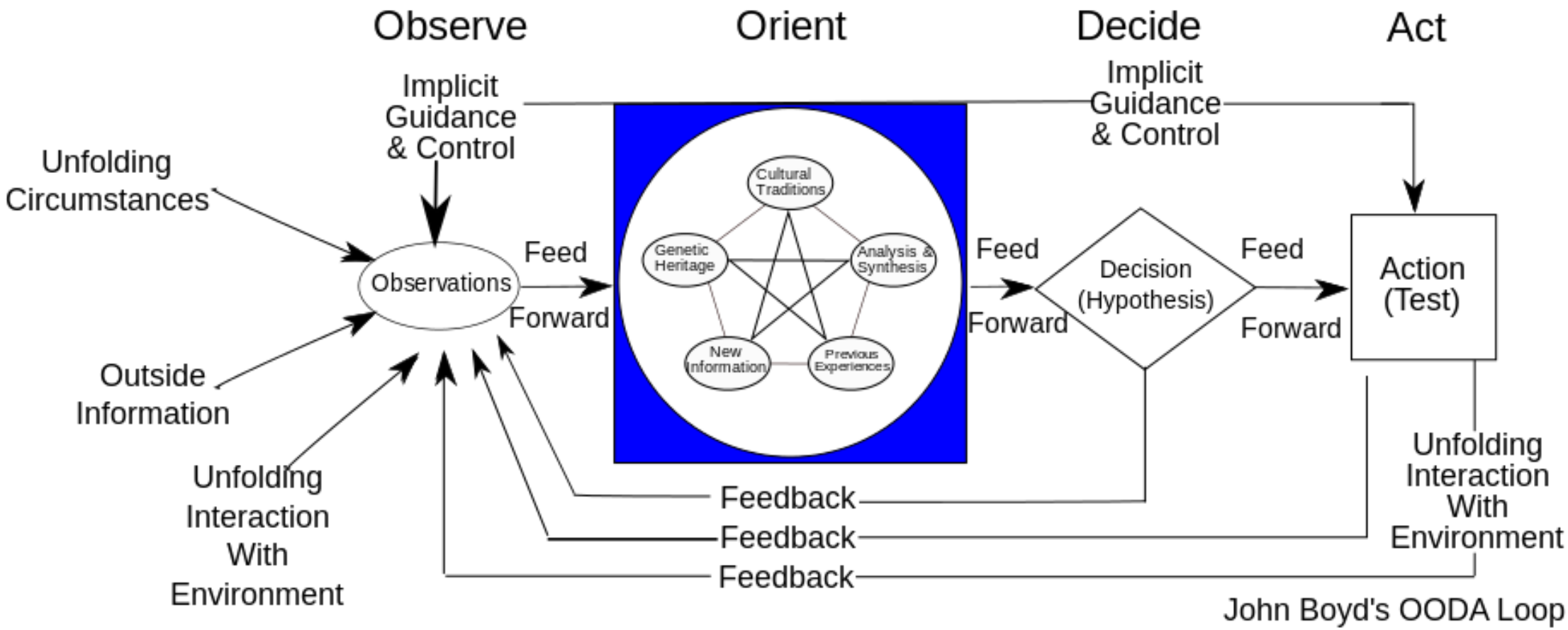
Jonathan Kahneman and Michael Tversky
Concepts that help to frame Decision-making

1. Affects your Perception and how you view people and situations

2. OODA Loop – Observation, Orientation, Decision Action

OOADAR-Observation, Orientation, Decision, Response

3. Impacts your response or lack of response



John Boyd's OODA Loop

Bias

Physicians should understand biases and racial and ethnic discrimination historical roots, and implications for health disparities

Existing methods to discuss racial inequality in physician training

- **Health disparities**: awareness over critical examination of disparity origin from social, historic, and economic reasons
- **Cultural Competency:** often mobilize stereotypes of People of color in efforts to cite behavioral choices as likely causes of health disparities
- **Implicit bias:** encourage increased recognition of personal prejudices but fail to consider structural inequities

Thinking Fast and Slow Health Care Disparities

- Distinguishing between unconscious bias and decision making
- Cultural
- Familiarity
- Learned behavior
- Heightened Vigilance

- Choice Architect- Designing systems to combat HCD
- Incentives
- Developing a self-preference veer right Negative or Positive reinforcement
- Habits

Patient Safety Gaps
HCW Decision Making influences by Biases

Examples

Chest Pain –ED evaluation of women

Hispanic male with pain from long bone fractures

Number of AA receiving heart transplants

The number of males receiving leg amputation (limb salvage vascular bypass)

- Implicit Bias
- Recency bias
- Confirmation Bias
- Availability Bias
- System 1 vs System 2 thinking
- Altered SUNK COST Bias
- Nudges

Biases and the Patient- Physician Relationship

- Room full of people
- Eye Contact
- Proximity Factor
- Untouchable
- **Affinity Quotient**

SSE Drill down

- **Systematic analysis of cases and contributing factors, adapted from (e6)**

Contributing factor	Explanation
Patient factors	Illness; social, physical, or psychological conditions; relationship between patient and outpatient practice/hospital; language; articulateness; personality
Task factors	How the process is structured; are protocols/standards available?
Individual (staff) factors	Knowledge, skills, education/training, stress levels, health, motivation
Team factors	Verbal and written communication, team structure, supervision, seeking help
Work/environment factors	Staffing levels, staff qualifications, work stress, design, availability and servicing of equipment and devices, environmental conditions, noise, distractions
Organizational and management factors	Resources, restrictions, structure of practice (single-handed or group practice) or structure of hospital, existence of and handling of rules, regulations, safety culture, and priorities
Institutional context	Financial situation/funding of the organization, requirements imposed by the liability insurers, legal/statutory requirements (quality management)
Safety barriers/defenses	Existing, reliable, and known? Might the safety barriers have prevented the event?

The Nature of Serious Safety Events and Decision making Solutions

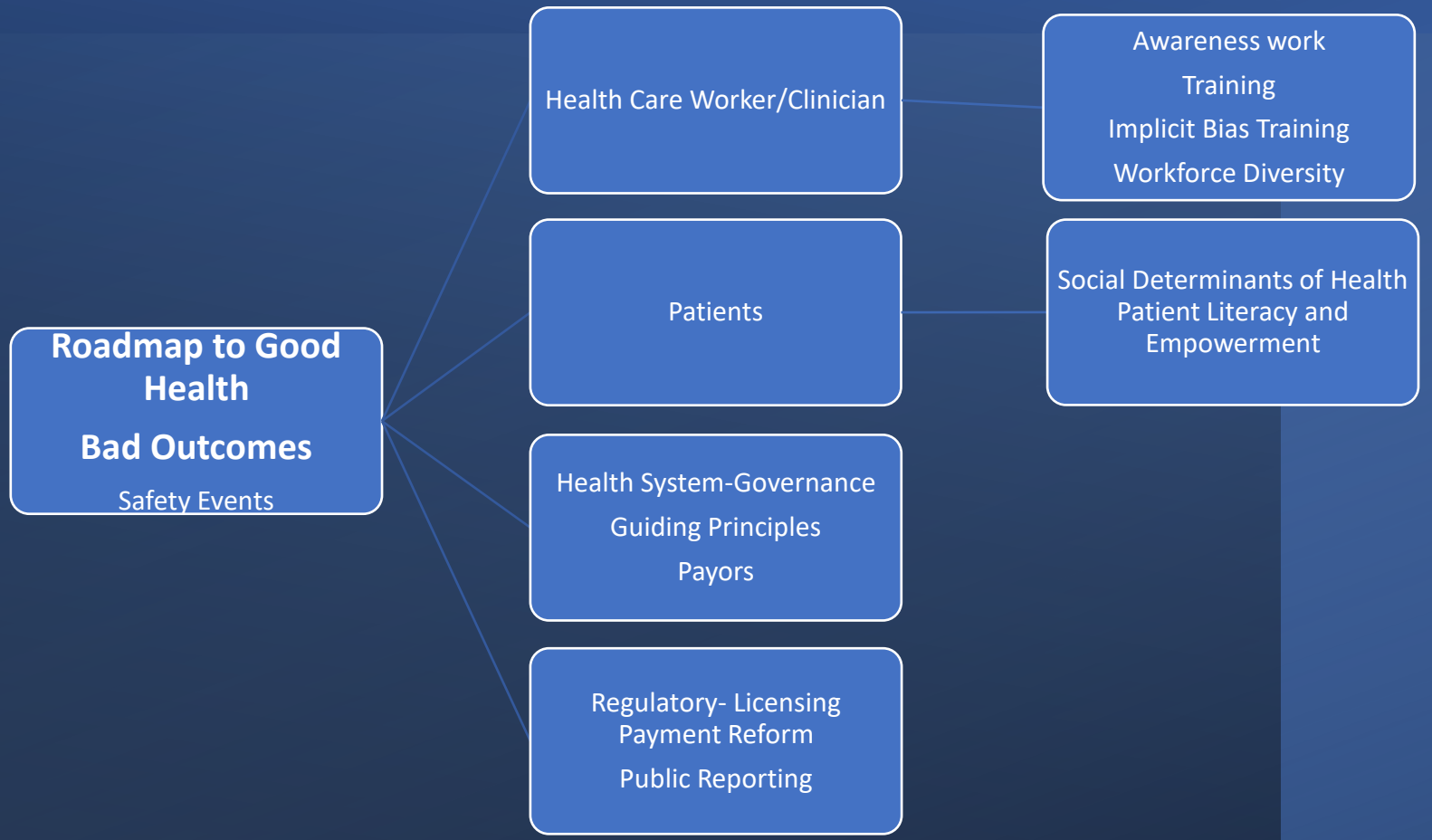
- Anatomy of Serious safety events (SSE)
- Creations of Algorithms in response to SSE
- Safe Patterns of Care
- Check and Balances
- Habit forming exercises
- Culture of transparency and call out
- Stop the line

Are we able to go to zero SSE?

Transparency

- Medical Trainees challenges
- Escalation of Care
- Attending Accountability
- Marry two ideals for success

Moving ON to Solutions



Health Care Literacy Empowerment

For Want of a Dentist

Washington Post, Wednesday, February 28, 2007; Page B01

- Deamonte Driver, sitting next to his mother, Alyce,.
- Twelve-year-old Deamonte Driver died of a toothache Sunday.

Health Disparities and Health Care Economics

- Inequality in Economics Mirrors Inequality in Health Care Disparities
- Top 1% Americans control some 40% of the Nation Wealth
- Disparity in wealth growth the evolution of Self interest over community interest
- Higher unemployment, wage gradient,
- Market Distortions-invisible hand, supply demand curve
- Wealth dominated Political Agendas

- Resource limitations yields default decision making (9million person uninsured make 75k or more)
- Regulation-ACA
- Mal-distribution of workforce/resources
- Right persons on the Bus
- Disincentives
- Discretionary

Health and Health Care Literacy

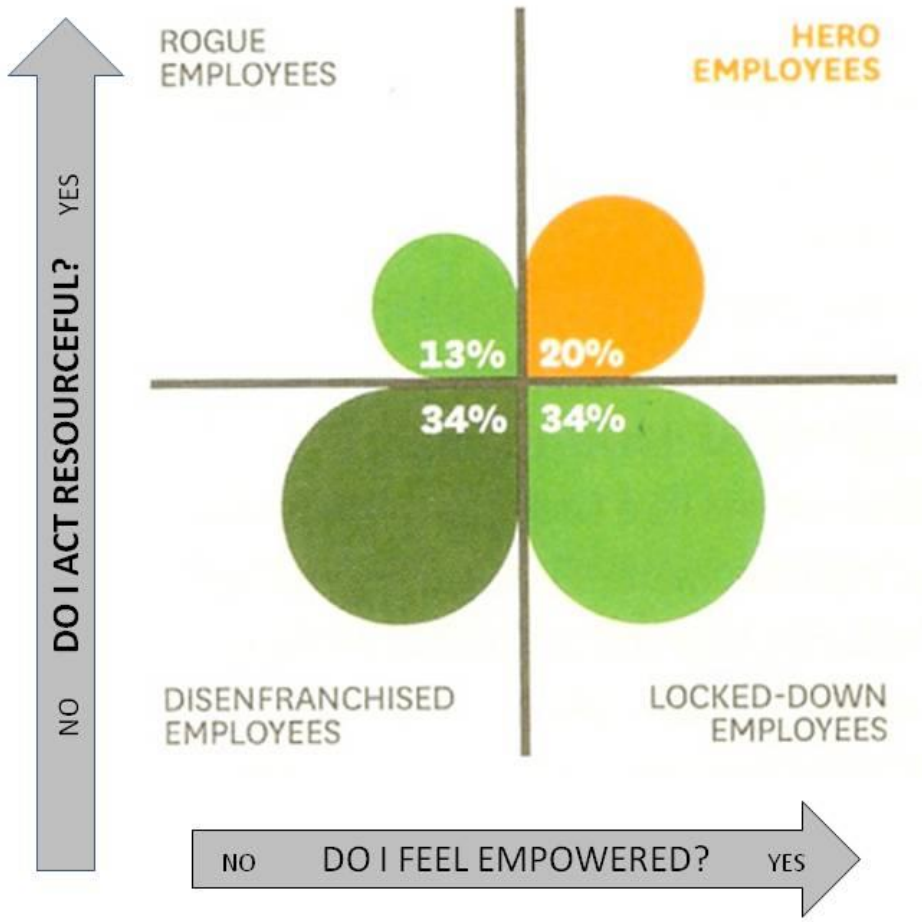
- Definition
- Fundamental Knowledge
- Resourcefulness- Do you use resources and how do they benefit you?
  - Information
  - Experiences
  - New disruptive ideals-Taking info and utilizing it
    - Patient sawed off part of four finger tips on His Left Hand and goes to the local clinic
- Empowerment- Am I motivated , confident to solve problems engage in changing my circumstances to improve status or Outcome

Social Context Barriers to Health Care

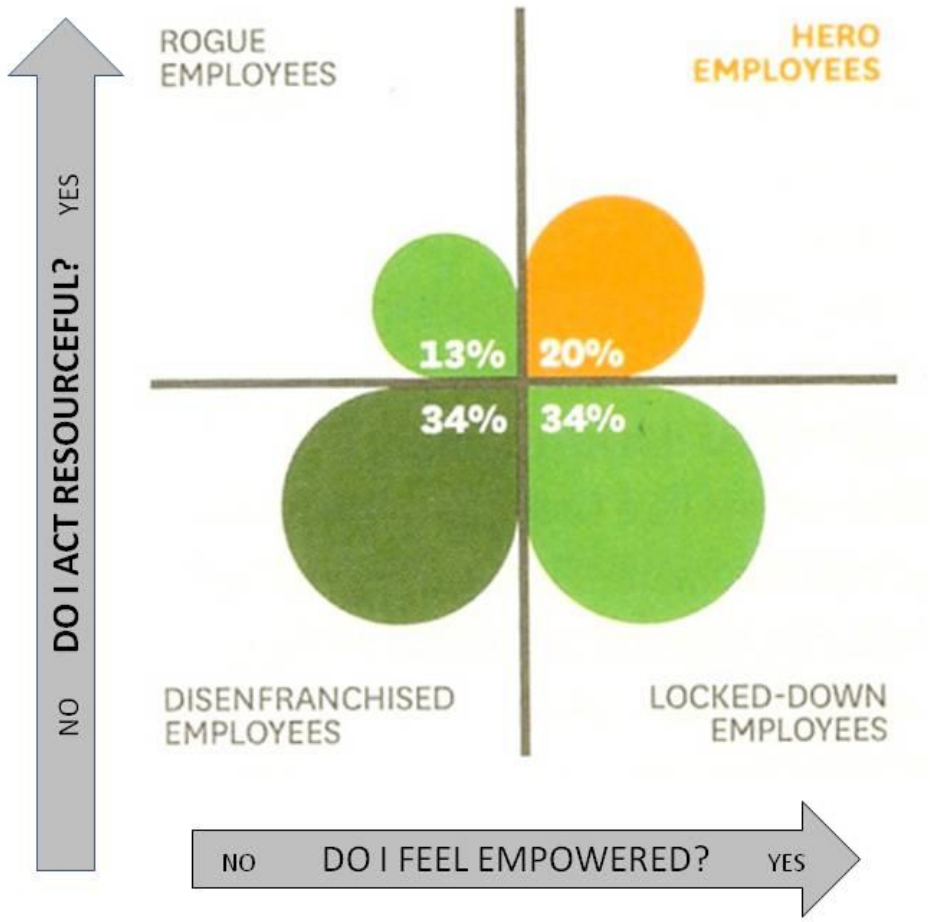
- Poverty
- Lack of insurance
- Physical Barriers
- Limited access to health care
- Education

- Language
- Cultural competence
- Poor provider attitudes: stereotyping, prejudice, bias

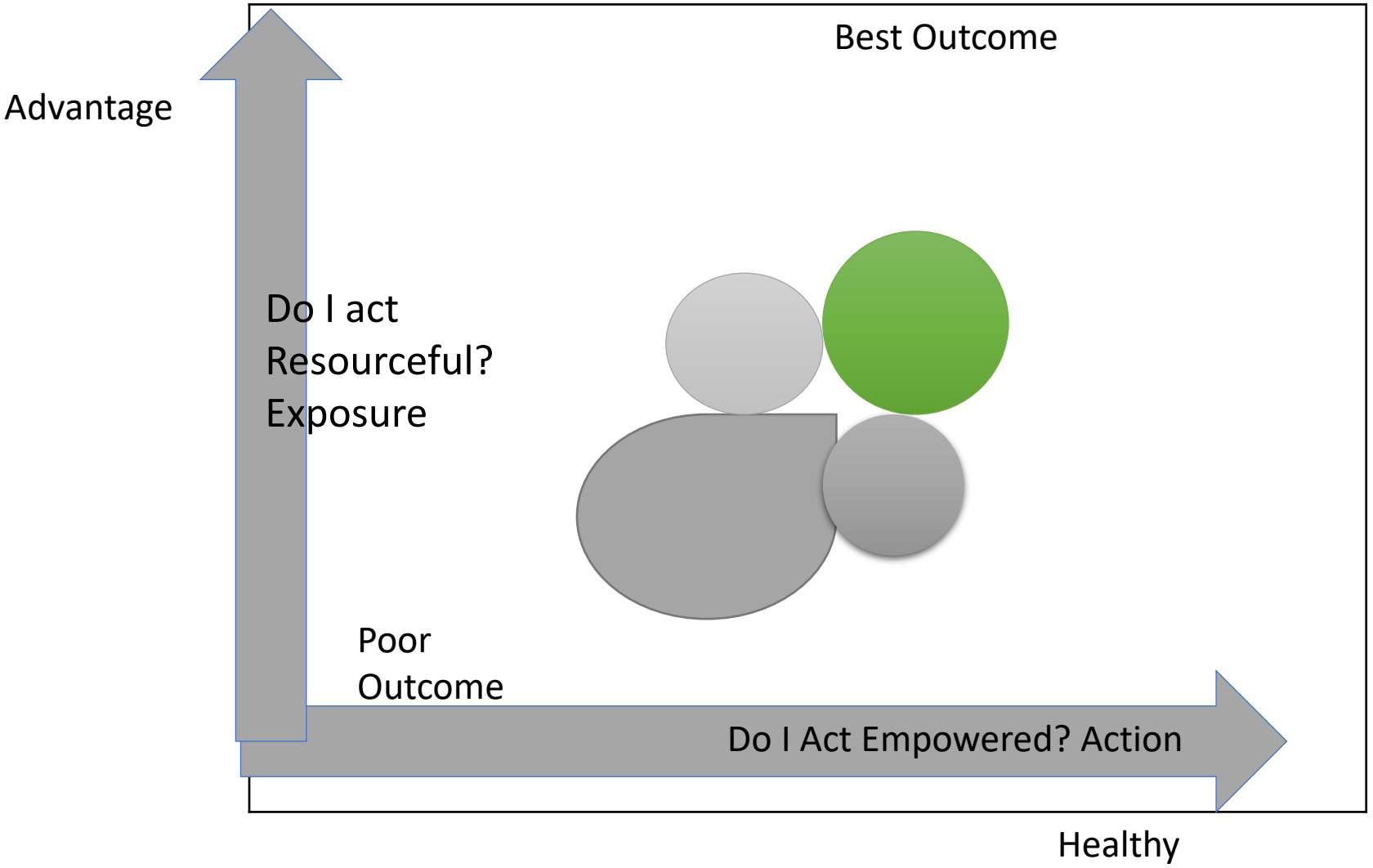
Harvard Business Review-*Empowered* J Bernoff ,T Schadler July-Aug 10’ Survey of 5000 Workers



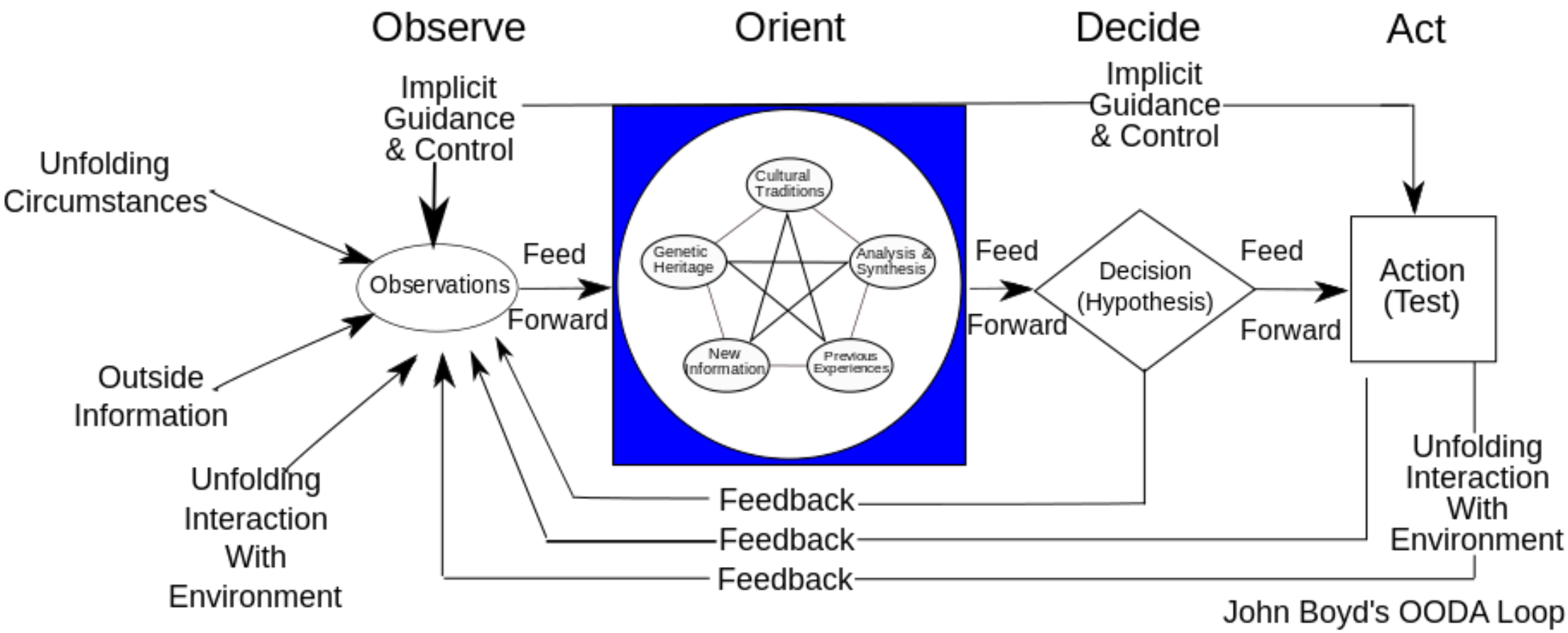
Patients


ROGUE EMPLOYEES
HERO EMPLOYEES
13%
20%
34%
34%
DISENFRANCHISED EMPLOYEES
LOCKED-DOWN EMPLOYEES
NO
DO I ACT RESOURCEFUL?
YES
NO
DO I FEEL EMPOWERED?
YES

Patients


Best Outcome
Advantage
Do I act
Resourceful?
Exposure
Poor
Outcome
Do I Act Empowered? Action
Healthy

OODA


Observe
Orient
Decide
Act
Implicit Guidance & Control
Implicit Guidance & Control
Unfolding Circumstances
Observations
Feed Forward
Cultural Traditions
Genetic Heritage
Analysis & Synthesis
New Information
Previous Experiences
Feed Forward
Decision (Hypothesis)
Feed Forward
Action (Test)
Outside Information
Unfolding Interaction With Environment
Feedback
Feedback
Feedback
Unfolding Interaction With Environment
John Boyd's OODA Loop

Case Presentation

- 27 Y/o AA M with HTN on Lisinopril went to ED at 0630 in am to a hospital complaining “swollen tongue and difficulty speaking”.
- MD, Dx angioedema secondary to lisinopril, admitted to the ICU for close monitoring .
- Next 8 hrs. waxing waning course, drooling, eat popsicle
- 3-5pm increased tongue swelling, muffled speech,
- 7-8pm had difficulty breathing
- BIPAP applied, increased agitation midazolam administered, Decreased O2 saturation,
- Surgical resident and second year medical resident care for Maurice
- ,Anesthesiologist was called , couldn’t intubate, resident attempt unsuccessful Crico-thyroidotomy, patient had cardiac arrest ROSC to OR
- ENT called in (at home) to do emergency trach, arrive in OR after he is resuscitated
- Trach performed
- Patient has irreversible Severe Anoxic Brain damage- Passed away

Mother Response Lisa Parks

Thanks so much Lisa Parks for agreeing to participate in this part of the Program

Describe to us what you were feeling at the Family in which your son prognosis was discussed

Questions

Quality  Safety

- Falls
- Catheter related -Infections
- C Difficile Colitis
- Line infections
- Prolonged Mechanical Ventilation
- Aspiration Pneumonia

- Wrong Site Procedures
- Ventilator Disconnection
- Hyperkalemia Untreated
- Retained Foreign Body
- Unsupervised Trainee
- Impaired HCW
- Lack of equipment or resources