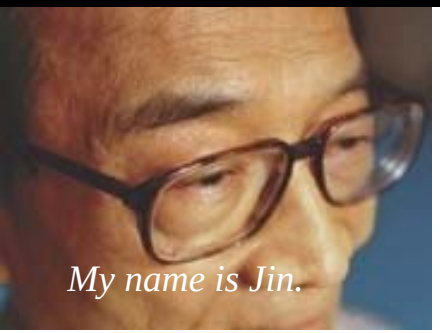
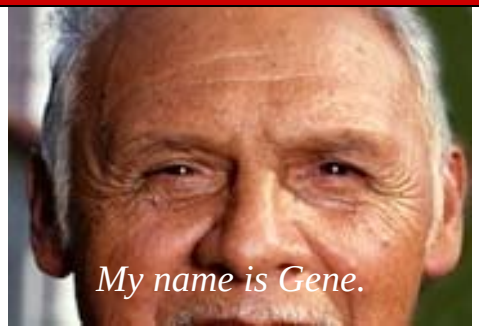








Do you know me?

# The New Science of Unconscious Bias: Workforce and Patient Care Implications

CRITICAL MEASURES

Presented by:

David Hunt, J.D.
President & CEO
(612) 746-1375

# About Us: Critical Measures

- National management consulting and training firm focusing on diversity and inclusion.
- Two-thirds of our work is in cross-cultural health care.
- Provides organizational assessments and training (classroom-based and e-learning).
- Created nation's first e-learning programs on cross-cultural medicine, The Law of Language Access in Healthcare (2010)
- Work favorably discussed in: AMA News, Forbes, Health Affairs, Managed Health Care Executive, Minority Nurse, Hispanic Business, American College of Healthcare Executives

# Agenda

- The New “Science of Bias”
- The Implicit Association Test
- Workforce Implications
- Patient Care Implications
- Managing Unconscious Biases
- The Culturally Competent Provider

# Understanding the New Science of Bias

# Two Competing Bias Theories

1. Freudian Psychology - the human mind defends itself against the discomfort of guilt by denying or refusing to recognize those ideas, wishes and beliefs that conflict with what the individual has learned is good or right.
2. Cognitive Psychology – culture (including the media and an individual's peers, and authority figures) transmits certain beliefs and preferences. Because these beliefs are so much a part of the culture, they are not experienced as explicit lessons. Instead, they seem part of the individual's rational ordering of the world.

# Awareness: New Research re: Bias

1. In the past, bias was regarded as aberrant, conscious and intentional.
2. Today, we understand that bias is normative, unconscious and largely unintentional.
3. Social Cognition Theory establishes that mental categories and personal experiences become “hard-wired” into cognitive functioning.
4. As a result, human biases can be seen as evolutionarily adaptive behaviors.

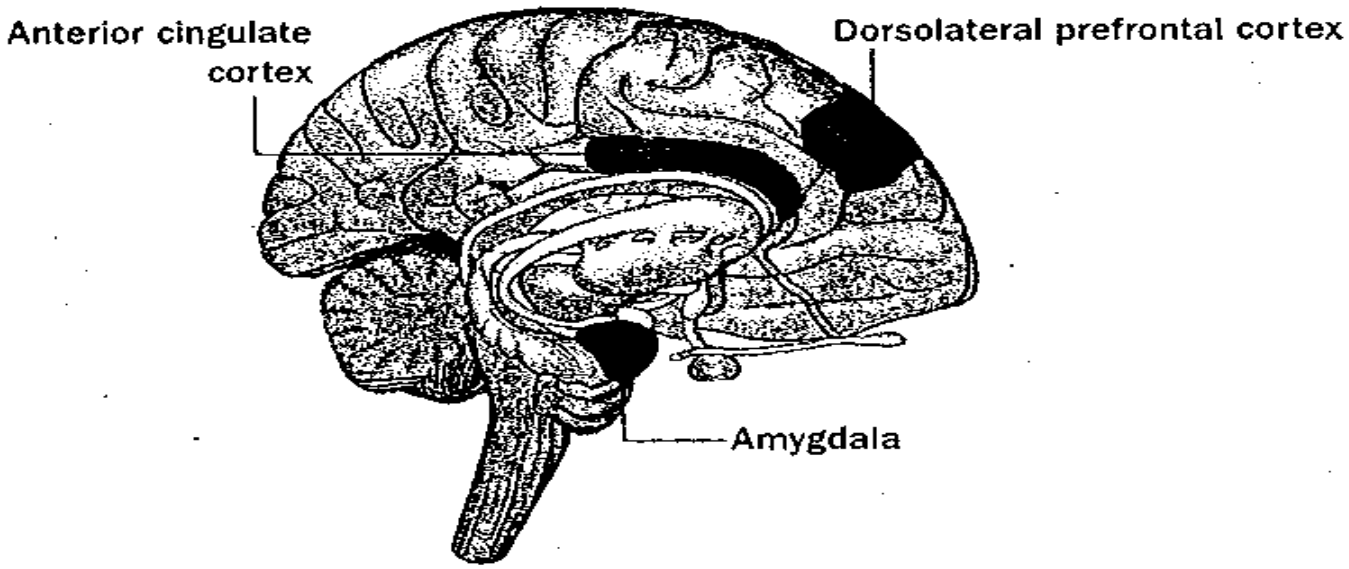
# Human Biases are Evolutionarily Adaptive Behaviors

CRITICAL MEASURES

1. We go out in the world every day and make decisions about what is safe or not.
2. Much of this decision-making is automatic and unconscious. Our brains determine whether or not something or someone is safe before we can even begin to consciously make a determination.
3. When the object, animal, or person is assessed to be dangerous, a “fight or flight” response occurs in our Amygdala – a part of the brain that processes alarm.
4. Scientists estimate that we are exposed to as many as 11 million pieces of information at any one time, but our brains can only functionally deal with about 40. So how do we filter out the rest?
5. Answer: we use categories as a form of intellectual short-hand.

# Race and the Brain

## Sounding (and Silencing) the Alarm




**The brain's lower-most parts are its most primitive. Racism begins in the basement**

**REFLEXIVE FEAR**

When people see a member of a different race, the first part of the brain to react is the amygdala, which processes alarm and fear

**THE ALL-CLEAR**

Magnetic resonance imaging reveals that two higher brain regions may kick in after the amygdala, sensing no danger and canceling the alert

TIME October 20, 2008

# Brain Scans Show Activation of the Amygdala

Brain scans using magnetic resonance imaging techniques has found that white subjects respond with a greater activation of the amygdala – a region that processes alarm – when shown images of black faces than when shown images of white faces. (One of the amygdala's critical functions is fear-conditioning…) Later studies have shown similar results when black subjects look at white faces. Source: Race and the Brain, Time, October 20, 2008, at p. 59.

# What Activates Our Biases?

Our biases are most likely to be activated by four key conditions. They are:

- stress
- time constraints
- multi-tasking
- need for closure

# The Implicit Association Test

# Project Implicit®

https://implicit.harvard.edu

## Demonstration

The demonstration site for the Implicit Association Test. Click this button to learn more about implicit associations and try out some sample tasks. Or, go directly to the featured task: Presidential Candidates IAT.

## Research

The research site for Project Implicit. Click this button to participate in on-going research measuring implicit associations for a variety of topics.

中文 (China), Deutsch (Germany), English (Australia, Canada, India, South Africa, U.K.), Español (Mexico), Français (Canada, France, Switzerland), Magyar (Hungary), עברית (Israel), Italiano (Italy), 日本語 (Japan), 한국어 (South Korea), Nederlands (Netherlands), Norwegian (Norway), Polski (Poland), Português (Portugal), Română (Romania), Svenska (Sweden), Türkçe (Turkey)

Project Implicit Information Site

# Project Implicit®

Featured Task

Try a Study | Take a Demo Test | Background | Tech Support | The Scientists | Project Implicit

## Select a Test

**Skin-tone IAT**

***Skin-tone* ('Light Skin - Dark Skin' IAT).** This IAT requires the ability to recognize light and dark-skinned faces. It often reveals an automatic preference for light-skin relative to dark-skin.

**Weight IAT**

***Weight* ('Fat - Thin' IAT).** This IAT requires the ability to distinguish faces of people who are obese and people who are thin. It often reveals an automatic preference for thin people relative to fat people.

**Asian IAT**

***Asian American* ('Asian - European American' IAT).** This IAT requires the ability to recognize White and Asian-American faces, and images of places that are either American or Foreign in origin.

**Arab-Muslim IAT**

***Arab-Muslim* ('Arab Muslim - Other People' IAT).** This IAT requires the ability to distinguish names that are likely to belong to Arab-Muslims versus people of other nationalities or religions.

**Native IAT**

***Native American* ('Native - White American' IAT).** This IAT requires the ability to recognize White and Native American faces in either classic or modern dress, and the names of places that are either American or Foreign in origin.

**Weapons IAT**

***Weapons* ('Weapons - Harmless Objects' IAT).** This IAT requires the ability to recognize White and Black faces, and images of weapons or harmless objects.

| | |
|---|---|
| Presidents IAT | ***Presidents* ('Presidential Popularity' IAT).** This IAT requires the ability to recognize photos of George W. Bush and one or more previous presidents. |
| Gender-Science IAT | ***Gender* - *Science*.** This IAT often reveals a relative link between liberal arts and females and between science and males. |
| Age IAT | ***Age* ('Young - Old' IAT).** This IAT requires the ability to distinguish old from young faces. This test often indicates that Americans have automatic preference for young over old. |
| Gender-Career IAT | ***Gender* - *Career*.** This IAT often reveals a relative link between family and females and between career and males. |
| Religion IAT | ***Religion* ('Judaism - Other Religions' IAT).** This IAT requires the ability to recognize religious symbols from various world religions, especially Judaism. |
| Disability IAT | ***Disability* ('Disabled - Abled' IAT).** This IAT requires the ability to recognize symbols representing abled and disabled individuals. |
| Race IAT | ***Race* ('Black - White' IAT).** This IAT requires the ability to distinguish faces of European and African origin. It indicates that most Americans have an automatic preference for white over black. |
| Sexuality IAT | ***Sexuality* ('Gay - Straight' IAT).** This IAT requires the ability to distinguish words and symbols representing gay and straight people. It often reveals an automatic preference for straight relative to gay people. |
| Candidates IAT | ***2008 Presidential Primaries* Candidates IAT.** This IAT requires the ability to recognize the faces of presidential candidates from the democratic and republican parties who are participating in the primaries. |

# Key IAT Findings - Age

- Age: Around ninety percent of Americans mentally associate negative concepts with the social group "elderly"; only about ten percent show the opposite effect associating elderly with positive concepts. Older people do not, show an automatic preference for their own group. Remarkably, the preference for “young” is just as strong in those in the over-60 age group as it is among 20-year-olds.

# Key IAT Findings - Gender

- Gender: Seventy-five percent of men and women do not associate female with career as easily as they associate female with family. (Women show an implicit attitudinal preference for females over males, but they nonetheless show an implicit stereotype linking females closer to family than career.)

# Key IAT Findings - Race

- Race: White participants consistently show a preference for White over Black on the IAT – a substantial majority of White IAT respondents (75% to 80%) show an automatic preference for White over Black. Data collected from this website consistently reveal approximately even numbers of Black respondents showing a pro-White bias as show a pro-Black bias.
- Other key race findings: younger people are just as likely to display an implicit race bias as older adults, women are as likely to display an implicit race bias as men and educational attainment appears to make no difference with respect to implicit race bias.

# The Implicit Association Test: Pro's and Con's

# Evaluating the Implicit Association Test

1. Contention - IAT data come from a self-selected sample which are not generalizable to the U.S. population as a whole.

   Response - Studies with representative samples conducted outside the website tend to match website results/trends.

2. Sharp dispute exists over what psychological processes the IAT actually measures. Critics contend that the IAT measures:
   a. variations in the mere familiarity with particular group categories
   b. egalitarian empathy for disadvantaged social groups; (are members of certain groups perceived as “bad” or “badly off”?)
   c. performance anxiety linked to the fear of being labeled a bigot

# Evaluating the Implicit Association Test

2. Sharp disputes exist over what psychological processes the IAT actually measures.

   Response: Psychologists understand that people may not say what's on their minds either because they are *unwilling* or because they are *unable* to do so. The unwilling-unable distinction is like the difference between purposely hiding something from others and unconsciously hiding something from yourself. The authors of the Implicit Association Test claim that the test makes it possible to penetrate both of these types of hiding. The IAT measures *implicit* attitudes and beliefs that people are either unwilling or unable to report.

# Evaluating the Implicit Association Test

3. Contention - The IAT is an arbitrary metric that sorts people along a dimension—reaction time—that looks objective but lacks any objective connection to real world behavior toward others.

   Response: Research demonstrates that implicit bias measures do correlate with real-world behavior. Those who show a larger bias on the IAT also discriminate more in their behavior. Implicit biases have been found to correlate with real-world behaviors like being friendly toward a target, allocating resources to minority organizations, and evaluating job candidates.

# Other Social Science Research Regarding Implicit Bias

# Racial Discrimination Among NBA Referees

Price, Joseph and Wolfers, Justin, "Racial Discrimination Among NBA Referees," NBER Working Paper Series, Vol. w13206 (2007). Available at http://www.nber.org/papers/w13206.pdf

# Racial Discrimination Among NBA Referees

CRITICAL MEASURES

- Unique dataset - over a quarter million player-game observations
- From 1991-92 - 2003-04 seasons
- Each season - about 60 NBA referees - ref in 3 person crews - each ref works 70-75 games per season
- Richness of data allowed for control of a plethora of non-race related relevant factors in foul calling
- Black/White players receive fewer fouls when more of the referees present in the game are of the same race
- Bias in foul calling large enough -probability of team winning affected by racial composition of refereeing crew

# Does Unconscious Racial Bias Affect Trial Judges?

This article reports the results of the first study of implicit racial bias among judges

Jeffrey J. Rachlinski, Sheri Lynn Johnson, Andrew J. Wistrich & Chris Guthrie, Does Unconscious Racial Bias Affect Trial Judges?, 84 Notre Dame L. Rev. 1195 (2009)

# Workplace Implications

# Biases Impact Decisionmaking

Unconscious bias can infect management decisions throughout the employment life cycle:

a. Interviewing. Recruitment, hiring & retention.

b. Expectations of and interactions with employees. (“Micro-inequities”)

c. Employee evaluations. (“Set Up to Fail Syndrome” – Harvard Business Review)

d. Decisions about promotions, training and other job benefits.

e. Termination and discharge decisions.

# The “Big Five” Orchestras

- Chicago and Boston
  - None of the Big Five employed more than 12% women until the 1980’s
  - Blind auditions
    - Improved the chances that a woman would ultimately be hired
    - Female musicians in the Big Five increased five-fold from 1970 to 2000

Orchestrating Impartiality: the Impact of “Blind” Auditions on Female Musicians, 94 Am. Econ. Rev. 715 (2000).

# Are Emily & Greg More Employable than Lakisha & Jamal?

- Study of actual racial hiring bias in Chicago and Boston
  - Resumes sent to actual want ads
    - 4 resumes per position – 2 “high” quality and 2 “low” quality
    - African American sounding names assigned to one high quality and one low quality
  - Primary measurement was the “callback” rate
  - Results: people with "white-sounding" names are 50 percent more likely to get a response to their resume than are those with "black-sounding" names.

Marianne Bertrand and Sendhil Mullainathan, Are Emily and Greg More Employable Than Lakisha and Jamal? Field Experiment on Labor Market Discrimination, 94 Am. Econ. Rev. 991 (2004).

# Diversity and Productivity

- Effective diversity programs are associated with higher productivity (+18%). (National Urban League, 2004)
- Gallup found that 24.7 million U.S. workers, or 19%, are actively disengaged. Another 56% of workers were not engaged, while only 25% of workers were actively engaged. Result: 75% of workers are not fully engaged.
- “Actively disengaged" employees -- those fundamentally disconnected from their jobs -- cost the U.S. economy between $292 billion and $355 billion a year. (Gallup)
- What causes workers to disengage at work? One notable cause is DRI’s – Diversity Related Incident’s of Disrespect.

# Workplace Incivility – DRI's

- Studies have found that over 71 percent of the workforce has experienced some form of workplace incivility in the last five years. Incivility is evidenced by disrespectful behavior. Source: Don Zander, Brookings Institution, 2002
- Of the reported incidents of workplace-related DRI's: 32% were related to gender; 28% were related to race; 20% were related to age; 14% were related to sexual orientation and 6% were related to religion.

# Workplace Incivility – DRI's

CRITICAL MEASURES

## Fiscal Impact of Workplace Incivility:

Of those who experienced work-place related DRI's:

- 28% lost work time avoiding the instigator of the incivility;
- 53% lost time worrying about the incident/future interactions;
- 37% believe their commitment at work declined;
- 22% have decreased their effort at work;
- 10% decreased the amount of time that they spent at work;
- 12% actually changed jobs to avoid the instigator.

Source: The Sparticus Group: 2003.

# Race, Ethnicity and Perceptions of Workplace Relationships in Healthcare Management

| | | White | Asian | Black | Hispanic |
|---|---|---|---|---|---|
| Race relations within my company | Women | 79% | 60% | 41% | 55% |
| are good. | Men | 90% | 70% | 53% | 73% |
| Managers of Color usually have to | Women | 6% | 29% | 75% | 47% |
| be more qualified to get ahead here. | Men | 3% | 33% | 66% | 35% |
| White managers share vital growth | Women | 57% | 29% | 10% | 18% |
| and career-related information with | Men | 55% | 37% | 12% | 30% |
| managers of color. | | | | | |
| The evaluation of both whites and | Women | 69% | 51% | 18% | 33% |
| employees of color are equally | Men | 75% | 50% | 22% | 43% |
| thorough and carefully evaluated . | | | | | |
| Has a strong feeling of belonging | Women | 82% | 70% | 58% | 71% |
| to the organization. | Men | 85% | 72% | 72% | 79% |

Source: A Race/Ethnic Comparison of Career Attainment in Healthcare Management: American College of Healthcare Executives; Institute for Diversity in Healthcare Management, 2002

# EEOC Charge Data FY 1999 – FY 2009

| | FY 1999 | FY 2009 | % |
|---|---|---|---|
| Total Charges | 77,444 | 93,277 | +17% |
| Race | 28,819 | 33,579 | +14% |
| Sex | 23,907 | 28,028 | +15% |
| National Origin | 7,108 | 11,134 | +36% |
| Religion | 1,811 | 3,386 | +46% |
| Age | 14,141 | 22,778 | +38% |
| Disability | 17,007 | 21,451 | +21% |

Source: Equal Employment Opportunity Commission website:

http://www.eeoc.gov/eeoc/statistics/enforcement/charges.cfm

# Patient Care Considerations

# The Effect of Race and Sex on Physicians' Recommendations for Cardiac Catheterization

- 720 physicians viewed recorded interviews
- Reviewed data about hypothetical patient
- The physicians then made recommendations about patient's care

# New Study Finds Unconscious Bias in M.D. Decision-making

- Emergency room doctors in the study were told two men, one white and one African-American, were each 50 years old and complained of chest pain. The patients were not actually real people, but rather computer-generated images seen by the doctors only on a monitor.
- After the doctors in the study evaluated the two simulated patients, they were then given an implicit association test examining unconscious racial biases.
- The result was most of the doctors were more likely to prescribe a potentially life-saving, clot-busting treatment for the white patients than for the African-American patient.
- The study, by the Disparities Solutions Center, affiliated with Harvard University and Masschusetts General Hospital, is the first to deal with unconscious racial bias and how it can lead to inferior care for African-American patients. It was published in the online edition of the Journal of General Internal Medicine in June, 2007.

# U.S. Patient Satisfaction Data – Race

1. Research has found that Hispanic, Asian, and African Americans, compared to whites, report lower quality in their overall interaction with their physicians, less time spent with their physicians, poorer patient-physician communication, diminished trust in their physicians, and less respect from their physicians.

2. A 2007 Harvard School of Public Health/Robert Wood Johnson Foundation survey of 4,334 randomly selected U.S. adults compared perceptions of the quality of physician care among fourteen racial and ethnic groups with those of whites. On each measure examined, at least five and as many as eleven subgroups perceived their care to be significantly worse than care for whites. In many instances, subgroups were at least fifteen percentage points more negative than whites. Many of the differences remained after socioeconomic characteristics and language skills were controlled for. Health Affairs, May '08.

# Picker – Inpatient Satisfaction with Doctors By Race, CLIENT 2003-2005

| Question/Statement | White | Of Color | Signif? |
|---|---|---|---|
| Didn't always have confidence/trust in my doctors. | 14.5% | 26.1% | Yes |
| Doctors talked as if I wasn't there. | 6.3% | 23.2% | Yes |
| Courtesy of doctors "fair" or "poor" | 2.5% | 5.5% | Yes |
| Doctors/nurses gave conflicting info. | 21.5% | 26.5% | Yes |

* Scores over 20% are considered "problems" by Picker.

# Picker – Inpatient Satisfaction with Nurses By Race, CLIENT 2003-2005

| Question/Statement | White | Of Color | Signif? |
|---|---|---|---|
| Didn't always have confidence/trust in my nurses. | 24.8% | 34.7% | Yes |
| Nurses talked as if I wasn't there. | 6.5% | 22.9% | Yes |
| Courtesy of nurses "fair" or "poor" | 3.5% | 5.6% | Yes |
| Nurses answers to questions weren't always understood. | 25.8% | 29.6% | Yes |

* Scores over 20% are considered "problems" by Picker.

# Picker – Treated with Courtesy, By Race, CLIENT 2003-2005

| Question/Statement | White | Of Color | Signif? |
|---|---|---|---|
| Courtesy of admissions staff rated fair or poor. | 2.0% | 5.9% | Yes |
| Courtesy of people who took blood samples rated fair or poor | 2.8% | 8.8% | Yes |
| Courtesy of people who brought food rated fair or poor. | 5.0% | 8.8% | Yes |
| Courtesy of people bringing to and from room rated fair or poor. | 1.2% | 6.2% | Yes |
| Courtesy of people taking x-rays rated fair or poor. | 1.4% | 7.6% | Yes |
| Courtesy of people who cleaned room rated fair or poor | 3.3% | 8.6% | Yes |

# Picker – Other Key Indicators of Care By Race, CLIENT 2003-2005

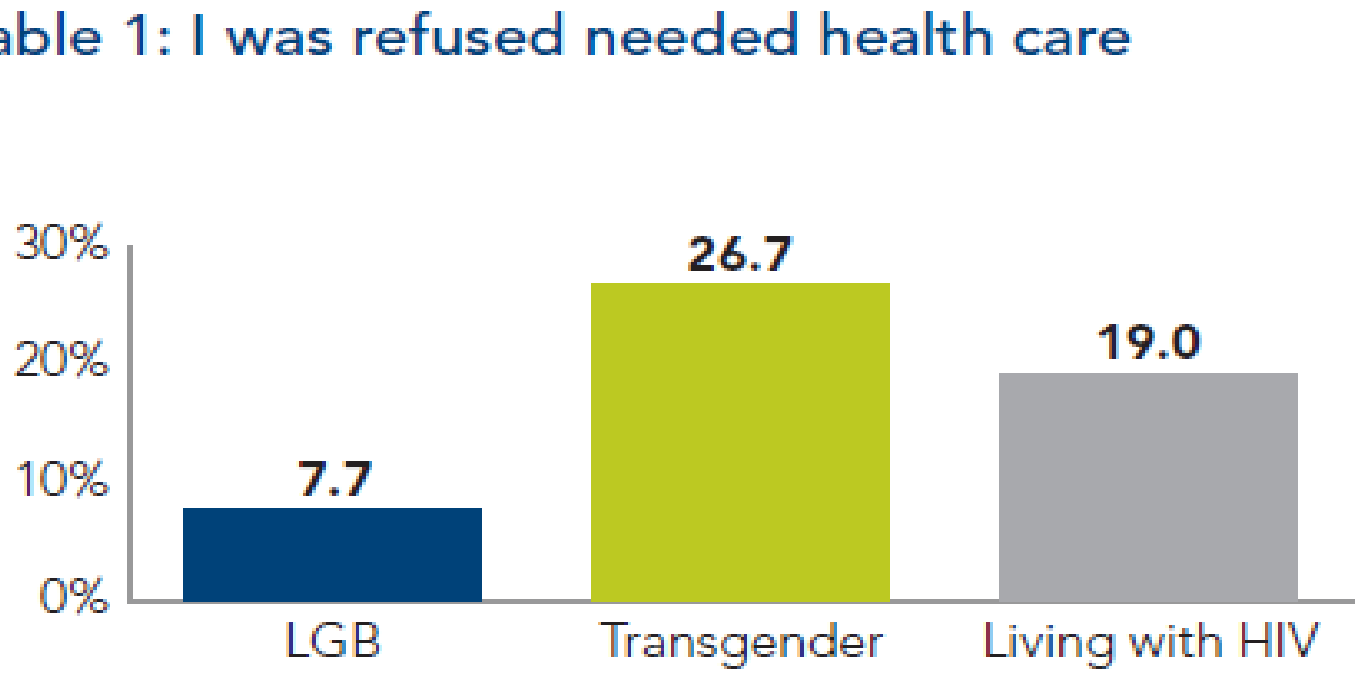
| Question/Statement | White | Of Color | Signif? |
|---|---|---|---|
| Not always treated with respect and dignity. | 13.1% | 21.6% | Yes |
| Didn't always get help in time going to the bathroom. | 20.4% | 30.8% | Yes |
| After using call button, had to wait > 15 minutes for help. | 2.1% | 4.3% | Yes |
| Staff definitely did not do everything they could to control pain. | 19.7% | 26.3% | Yes |
| Didn't have enough say about pain control during delivery. | 26.1% | 38.4% | Yes |
| Probably would or would not recommend to family/friends. | 23.9% | 28.8% | Yes |

# When Health Care Isn't Caring

1. Lambda Legal surveyed 4,916 GLBT people and people living with HIV nationwide in the spring of 2009. Results showed that these populations were frequently:

- Denied care;
- Treated in a discriminatory manner while obtaining care;
- Subjected to harsh or abusive language by health professionals;
- Treated by health professionals who refused to touch them or used excessive precautions when doing so;
- Blamed for their conditions by health professionals

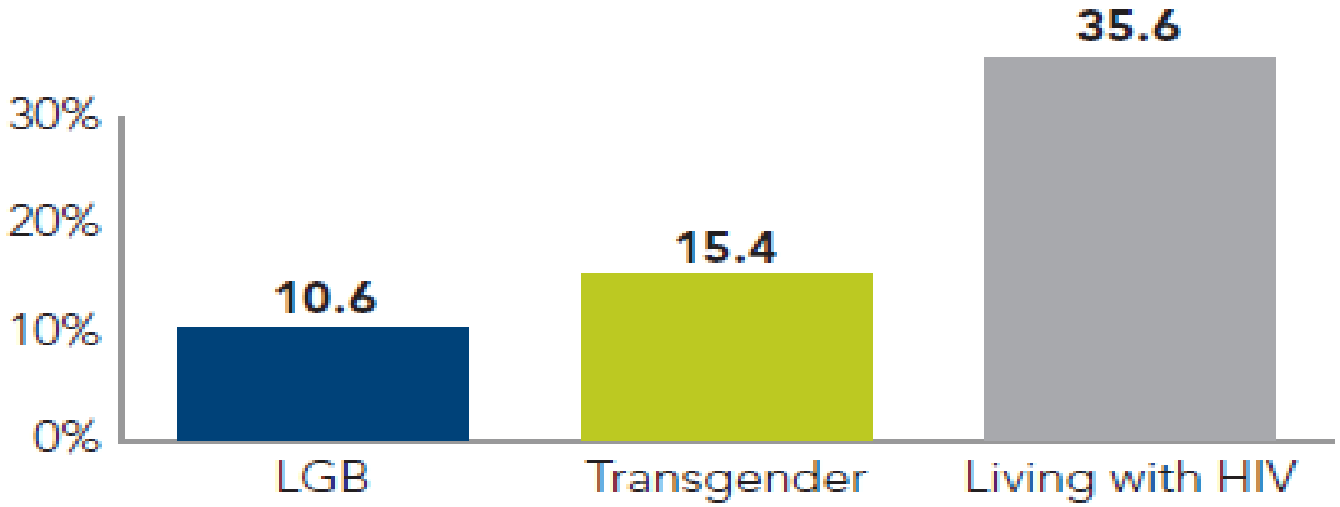
# When Health Care Isn't Caring




Source: When Health Care Isn't Caring: Lambda Legal's Survey on Discrimination Against LGBT People and People Living With HIV, (New York: Lambda Legal, 2010). Available at: www.lambdalegal.org/health-care-report

# When Health Care Isn't Caring

Table 2: Health care professionals refused to touch me or used excessive precautions




Source: When Health Care Isn't Caring: Lambda Legal's Survey on Discrimination Against LGBT People and People Living With HIV, (New York: Lambda Legal, 2010). Available at: www.lambdalegal.org/health-care-report

# Can Implicit Bias Be Controlled?

# Can Implicit Bias Be Controlled?

1. Researchers long believed that because implicit associations develop early in our lives, and because we are often unaware of their influence, they may be virtually impervious to change.
2. But recent work suggests that we can reshape our implicit attitudes and beliefs or at least curb their effects on our behavior.
3. In particular, there are several strategies that appear to make a difference:
   A. Information – re: the psychological basis of bias
   B. Motivation - internal (vs. external) motivation to change
   C. Individuation – learning to see diverse others as individuals rather than as members of groups.
   D. Direct contact with members of other groups.
   E. Working together on teams, as equals, in pursuit of common goals.
   F. Context/environment – images of leaders from diverse groups helps
4. In sum, one can either “think one’s way into a new way of behaving or behave one’s way into a new way of thinking.” Why? Humans do not like cognitive dissonance.

# Battling Bias – What Works?

CRITICAL MEASURES

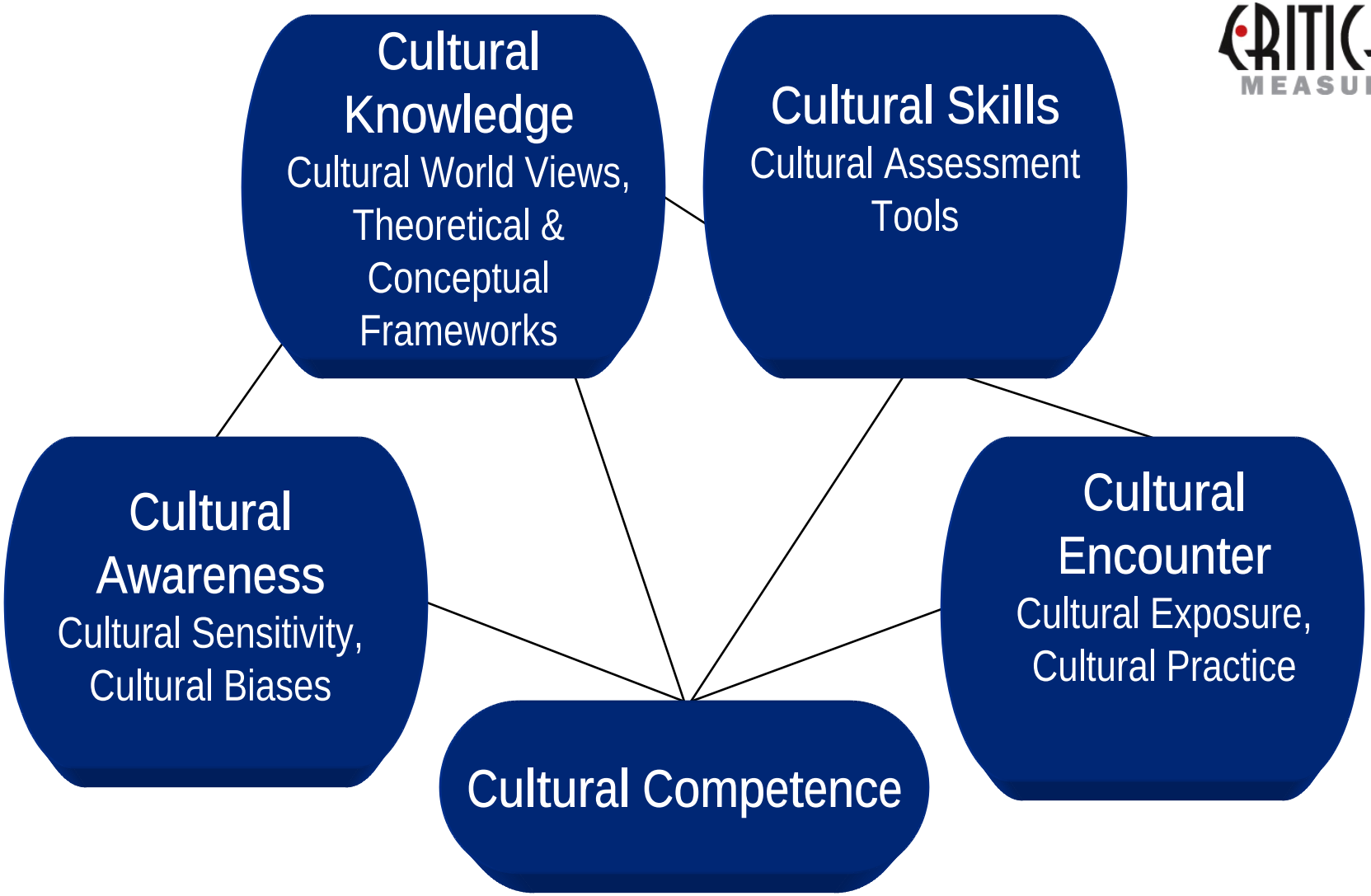
1. Enhance understanding of the psychological basis of bias.
2. Replace negative mental images of the target group with positive mental images.
3. Increase positive contacts with socially dissimilar groups .
4. Increase affective empathy and perspective taking toward outgroups.
5. Work with target group members to achieve common tasks/goals.
6. Replace tolerance behaviors with acceptance and appreciation behaviors. (Shift from micro-inequities to micro-affirmations.)
7. Analyze personal patterns of privilege and privation in light of the Set Up to Fail Syndrome. (Who do you micro-manage?)
8. Get 360-degree diversity feedback from diverse members of your work-team.

# Battling Individual Biases

9. Collect, monitor and evaluate personal, diversity-related decision metrics. How frequently do you recruit, hire, mentor, promote target-group employees?
10. Obtain a target-member coach or diversity professional from outside your workgroup.

# Towards Cultural Competence In Healthcare

# Can Implicit Bias Be Controlled?




Culturally Competent Leaders

# Ten Core Cross-Cultural Issues

CRITICAL MEASURES

1. Orientation: Individualistic vs. Collectivistic
2. Status: Achieved vs. Ascribed
3. Focus: Task vs. Relationship (Univ. Rules vs. Partic.)
4. Communication: High Context vs. Low Context
5. Time: Clock Time vs. Cyclical Time
6. Mental Processes: Linear vs. Lateral
7. Affect: Neutral vs. Emotional
8. Conflict Style: Harmony vs. Confrontation
9. Locus of Control: Internal vs. External (Fate)
10. Power: Egalitarian vs. Hierarchical

# The Culturally Competent Manager: Skills

- Culturally inquisitive, manages own biases
- Capable of perspective shifting
- Hires, retains, manages and mentors diverse workforce
- Trust building with diverse employees
- Cross-cultural communication
- Teambuilding
- Cross-cultural conflict resolution
- Issue-spots diversity-related employment matters that could create liability
- Masters the art of complaint handling

# New Skills for the Clinically Competent Global Physician

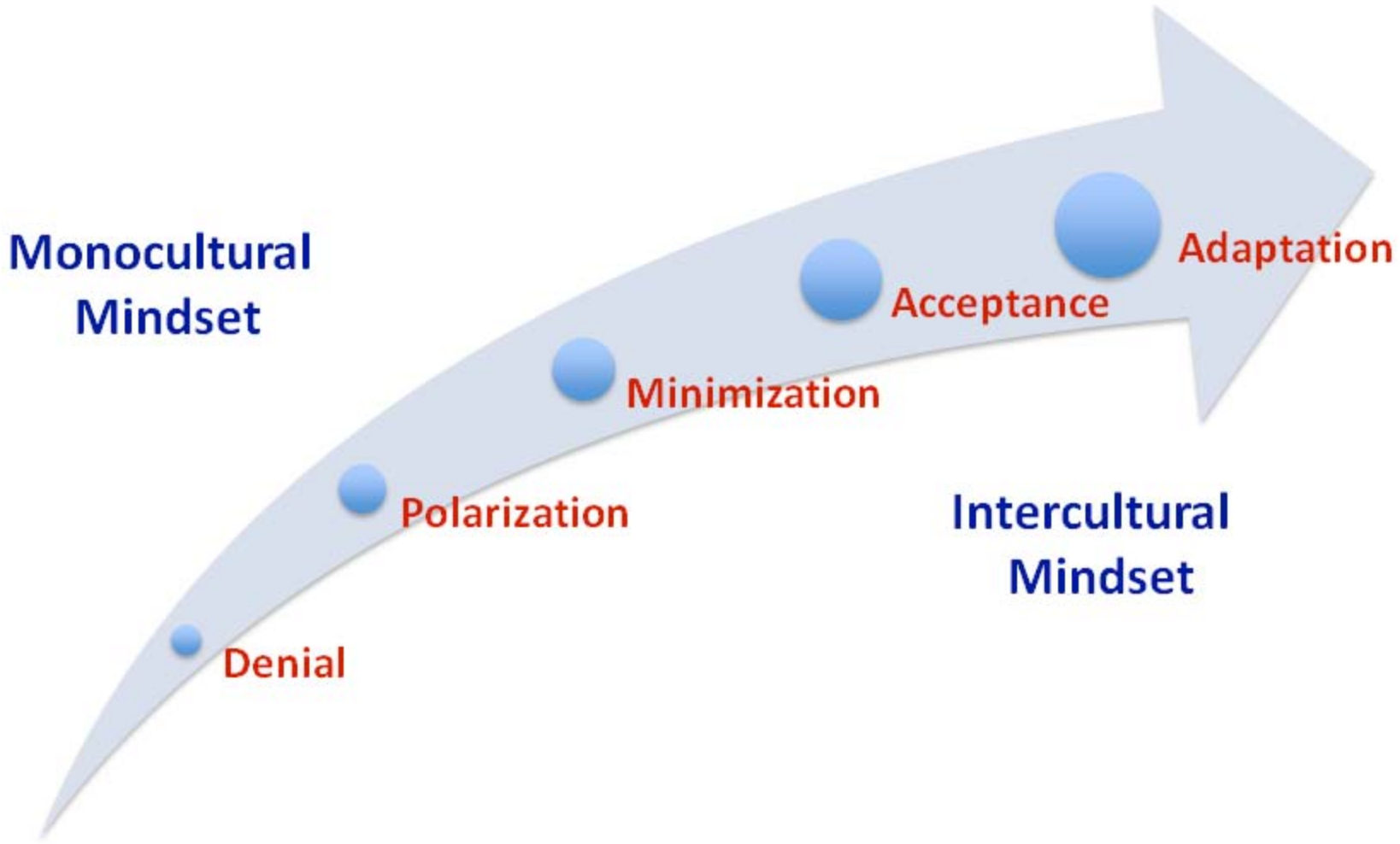
CRITICAL MEASURES

1. How to conduct a culturally competent patient examination/history using the LEARN Model (Listen, Explain, Acknowledge, Recommend, Negotiate)
2. How lack of knowledge of epidemiological and pathophysiological differences may lead to unintended iatrogenic consequences.
3. How to work with patients using qualified medical interpreters
4. Understanding the Law of Language Access (implications for informed consent and other legal issues)
5. Given the increase in globally mobile populations, physicians should know their patients national origin and travel history and be mindful of diseases endemic to other parts of the world that might share symptoms with diseases commonly seen in the U.S.
6. Health care providers should be aware of at least the five most common infectious diseases most commonly encountered in refugee populations.

# New Skills for the Clinically Competent Global Physician

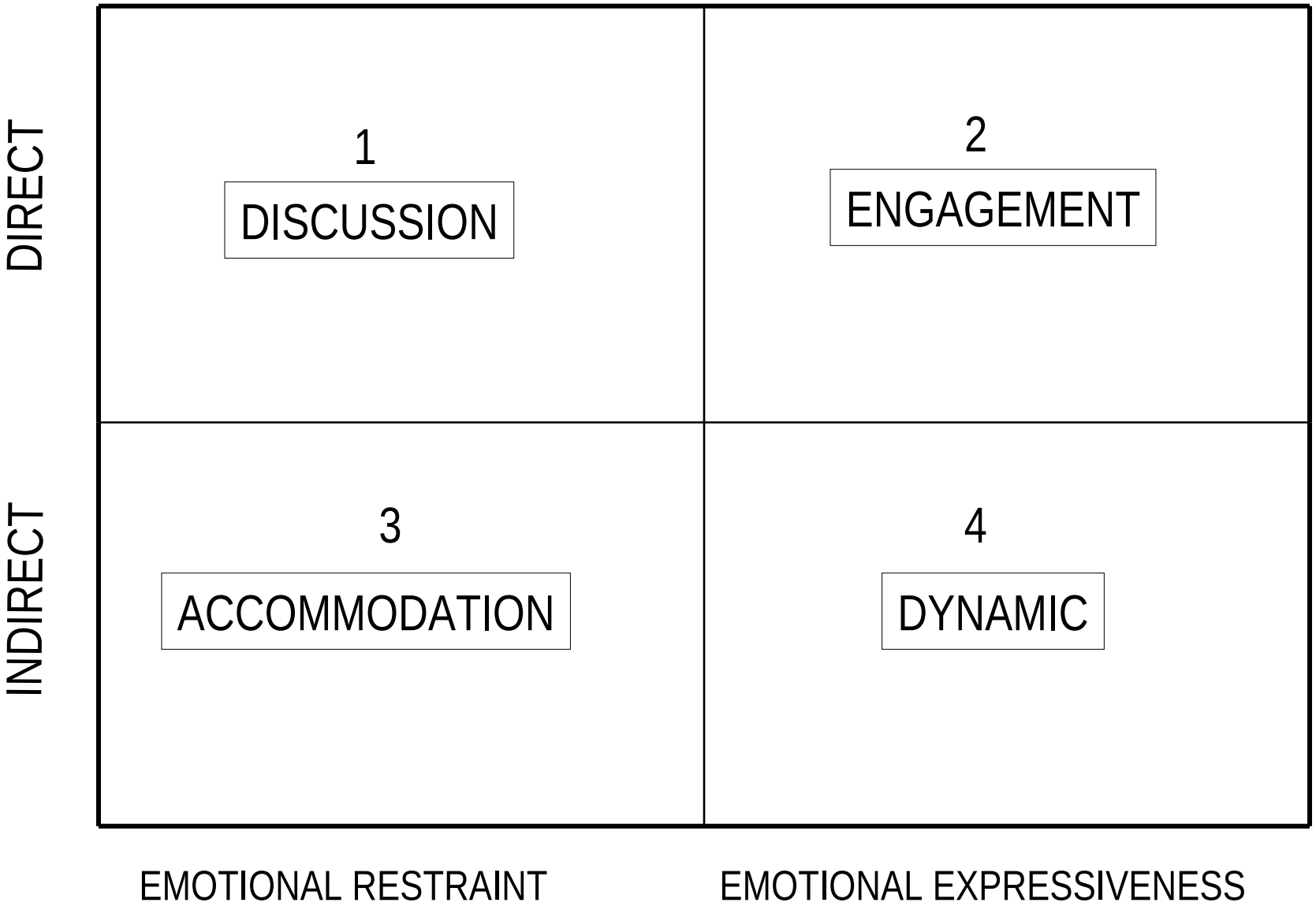
7. Cross-Cultural Medical Ethics (examples:  cultural differences around death and dying, blood beliefs, surgery, organ transplants, mental health etc.)
8. Ethnopharmacology and its implications for current clinical practice

# Intercultural Development Continuum



# INTERCULTURAL CONFLICT STYLES

CRITICAL MEASURES



## For Additional Information, Contact

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