A Train the Trainer Guide: Health Disparities Education

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I. Objectives
   A. Cite examples of disparities and sources of such literature
   B. Discuss the multidimensional causes of disparities
   C. Review a broad range of available resources to follow/update current disparities and trends

II. Suggested Content
   A. Review US population demographics, especially demographic trends that are likely to affect health care, changes in immigration/birth rates. The United States is projected to be nearly half populated by minorities by 2050
   B. Provide evidenced based examples of disparities and differentiate disparities in health care outcomes from disparities in health care treatments
      - Infant mortality rates are twice as high among African-American infants as whites.\(^1,2\)
      - Several minority groups suffer and die disproportionately from conditions such as cardiovascular disease, diabetes, asthma, cancer, and HIV/AIDS.\(^3\)
      - Hispanics and African Americans less likely to receive rehabilitative care after traumatic brain injury.\(^4\)
      - Hispanic and African Americans receive less curative surgery than whites for non-small cell lung cancer.\(^5,6\)
      - Hispanics less likely to receive smoking cessation messages.\(^7\)
      - Hispanics and AA less likely to receive colorectal and breast cancer screening, and influenza immunization.\(^8\)
      - American Indians, Hispanic, and AA less likely to receive prenatal care.\(^8\)
      - African-Americans are referred less than whites for cardiac catheterization and bypass grafting.\(^9-13\)
      - African-Americans and Latinos receive less pain medication than whites for long bone fractures and cancer.\(^14-16\)
      - African Americans receive fewer referrals to renal transplantation.\(^17\)
      - African Americans receive lower quality treatment of pneumonia, congestive heart failure.\(^18\)
      - AA receive less treatment for HIV/AIDS.\(^19,20\)
• AA have lower utilization of general services covered by Medicare (e.g., immunizations and mammograms), and various procedures and levels of ambulatory care.

• American Indians and Alaska Natives born today have a life expectancy that is 2.4 years less than the U.S. all races population.

• American Indian and Alaska Native infants die at a rate of nearly 12 per every 1,000 live births, as compared to 7 per 1,000 for the U.S. all races population.

• American Indians and Alaska Natives die at higher rates than other Americans from tuberculosis (750% higher), alcoholism (550% higher), diabetes (190% higher), unintentional injuries (150% higher), homicide (100% higher) and suicide (70% higher).

• Asian American and Pacific Islanders had the highest number of (TB) case rates (33 per 100,000) of any racial and ethnic population in 2001.

• The reported rate of Hepatitis B acute infection in 2001 was more than twice as high among Asian Americans as among white Americans.

*** Note: racial differences in health often persist even at equivalent levels of socioeconomic status.

C. Explore multidimensional etiologies of disparities

• Review the interplay of **social determinants**

  1. **Socioeconomic status**
     
     Socioeconomic status accounts for much of the observed racial disparities in health outcomes.

  2. **Education**
     
     a. Minorities disproportionately lack education, literacy, and/or employment, which are powerful determinants of health.
     
     b. Whites additionally receive higher income returns from education than do AA and Hispanics.

  3. **Environmental/residential/occupational**
     
     a. Discuss how environmental hazards, such as pollution or lead paint exposures, or safety and violence risks, affect health outcomes among minorities.
     
     b. Poor socioeconomic conditions of neighborhoods associated with increased risk of adult mortality, long term illness, lower ratings of self rated health, heart disease and smoking.
     
     c. Discuss residential segregation and impact on location of food resources and distribution of liquor stores, and waste sites.
d. Availability of medications at pharmacies may vary by neighborhood.  

37  
e. Residential segregation associated with adult and infant mortality.  

38, 39  

4. **Racism**  
   a. Perceptions of racism associated with psychological distress, well being, number of bed days, and chronic conditions in AA.  

40  
   b. Discrimination experiences adversely related to a range of health outcomes.  

41, 42  
   c. Skin color possible marker for degree of exposure to discrimination. Darker skin associated with higher levels of perceived discrimination and may be a stronger predictor of occupational status and income than parental SES.  

43  
   d. Darker skin also associated with higher blood pressure.  

42, 44  

5. **Acculturation**  
   a. Rates of infant mortality, low birthweight, cancer, high blood pressure, and psychiatric disorders increase with length of stay in the US.  

45  
   b. Recent evidence suggests SES may be less closely linked with health outcomes in contrast with other racial groups.  

46  

6. **Power**  
   a. Those with power can influence decision making and allocation of resources for themselves.  

47  
   b. Location of hazardous waste sites  

28, 30  
   c. Blue collar workers’ limited ability to affect occupational safety and health codes.  

48  

• **Review the role of health care**  

1. **Decreased Access** – Minorities more often lack health insurance or a usual source of care, Uninsured individuals are less likely to have a regular source of care, are more likely to report delaying seeking care, and are more likely to report that they have not received needed care—all resulting in increased avoidable hospitalizations, emergency hospital care, and adverse health outcomes.  

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2. **Availability and use of language/interpreter services**  
Twenty-one million Americans are limited in English proficiency (LEP). Quality of care is compromised when LEP patients need but do not get interpreters. Conversely, trained professional interpreters and bilingual health care
providers positively affect LEP patients' satisfaction, quality of care, and outcomes.\textsuperscript{50-52}

3. \textit{Limited quality and quantity of health care resources} –
Minors often receive care in areas with scarce or poorly funded resources. Even pharmacy supplies often different in certain areas.\textsuperscript{37}

- Review role provider-patient encounter
  1. \textit{Provider perceptions/ bias/ referral patterns} – review articles discussing differences in referral patterns. (These issues reviewed in more detail in the attitudes section).
    a. Studies suggest many factors – a sex, age, diagnosis, sexual orientation, sickness,\textsuperscript{53-59} and more recently, race/ethnicity,\textsuperscript{13, 60} influence provider beliefs about and expectations of patients.
    b. Race/ethnicity and socio-economic status have been found to independently and negatively influence physicians’ ratings of patients’ personality, education, intelligence, career demands, and adherence.\textsuperscript{61}
    c. Provider perceptions of behavior/ symptoms may differ based on patient characteristics. Evidence suggests that observers assign different meaning to the same behavior depending on the race, class, or other demographic characteristics of the actor.\textsuperscript{62-65}
    d. Providers’ beliefs about patients’ characteristics may influence decision-making. Patients perceived as likely to adhere with strong social support may be more likely to receive certain treatments. In one study using vignettes, African American patients were more likely to be rated as non-adherent than their otherwise identical counterparts.\textsuperscript{66} African American have been rated as lacking in social support and as less likely to participate in cardiac rehabilitation than white patients.\textsuperscript{61}

  2. \textit{Patient mistrust} – Review Tuskegee and other influences
    a. The US Public Health Service Study at Tuskegee is often seen as a touchstone for minority mistrust in medicine.\textsuperscript{67}
    b. While Tuskegee often cited, mistrust predated public awareness of Tuskegee and emphasis on this single event may minimize complex attitudes. A broader historical and social context is needed….

\textit{Bussey-Jones, J. Disparities Foundations}
c. Historical context of J. Marion Sims, thought to be the father of Gynecology, between 1845-1849 over 30 experimental operations on 3 slave women without anesthesia.68

d. Study in Austin, Texas in 1969 of primarily poor Hispanic women who were unknowingly given placebos rather than contraceptives.69

e. 1973 and 1976, Indian Health Service physicians sterilized over 3000 without obtaining adequate consent.70

f. Separate health care facilities for racial and ethnic minorities were common until the mid to late 20th century.71


   a. Trust associated with longer continuity relationships72

   b. Trust associated with patient satisfaction73-76

   c. Adherence to treatment74, 76, 77

   d. Improved prevention78, 79

   e. Self-reported health80

D. Review the disparities in racial backgrounds of US physicians

- Compared to the US population, US physicians are disproportionately white.

- Black physicians and Hispanic physicians often practice in areas where the percentage of black or Hispanic residents is higher, caring for significantly more minority, Medicaid, and uninsured patients.81

- Black patients and white patients may to a large extent be treated by different physicians. Physicians treating primarily black patients often have less access to important clinical resources, and may be less well-trained clinically than physicians treating primarily white patients.82

- Comprehensive data and recommendations on minority healthcare workforce issues can be found in a recent report of the IOM, “In the Nation’s Compelling Interest” 83 and in the Sullivan Commission Report, “Missing Persons: Minorities In The Health Professions.”84
E. Know the prevalence and severity of key health disparities in the most common disease categories
   • Examine each of the top five causes of death in the US in each age group by race/ethnicity. What trends are present? http://www.cdc.gov/nchs/deaths.htm
   • Note that along with racial and ethnic minorities, other groups such as women, children, the poor, elderly, and individuals with special health care needs experience health disparities.

III. Methods of teaching about knowledge of disparities
A. Didactic sessions
B. Readings
C. Targeting teaching during specific conferences or retreats
D. These could be combined with case-based encounters or discussions and offering coursework focusing on in community and social issues as discussed in other modules

IV. Important Resources for Teaching about Health Disparities
   • Tracks disparities in both quality of and access to health care in the U.S. for both the general population and for AHRQ’s congressionally designated priority populations
   • Racial/ethnic group comparisons focus on 22 core measures of quality and 6 core measures of access
   • Income group comparisons highlight 17 core quality measures and 6 core access measures
   • Focuses on 4 components of quality- effectiveness, patient safety, timeliness, and patient centeredness; and 2 components of access- facilitators and barriers to health care and health care utilization

   • Contains most recent national and selected state data for tracking the Healthy People 2010 objectives
   • Online, interactive database
   • Includes sociodemographic data for population-based objectives (i.e. race/ethnicity, gender, SES) and operational definitions for objectives that have baseline data
   • Updated quarterly with new data and necessary revisions to previous data

D. National Center for Health Statistics
www.cdc.gov/nchs
- Includes information about the overall Health of the Nation, Health Status by Sociodemographic Characteristics, Health Care Resources, Expenditures and Payors, and Access to Health Care and Utilization of Health
- Slides with colorful charts, graphics available

E. SGIM Disparities Education Manuscript (Wally R. Smith, Roseph R. Betancourt, Matthew K. Wynia et al.)

F. Institute of Medicine’s “Unequal Treatment: Confronting Racial & Ethnic Disparities in Health Care” report:
http://www.nap.edu/catalog.php?record_id=10260; www.nap.edu (to download the Executive Summary)

G. Kaiser Family Foundation: www.kff.org
- Non-profit, private operating foundation focusing on the major health care issues facing the U.S.; they develop and run their own research and communications programs, sometimes in partnership with other non-profit research organizations or major media companies; non-partisan
- (3) primary missions: 1. Produce policy analyses; 2. Serve as a “go to” clearinghouse of news and information for the health policy community; 3. Develop and help run large-scale public health information campaigns in the U.S. and around the world
- Focus on 3 main areas: Health Policy (including Race/Ethnicity and Health Care Program), Media and Public Education, Health and Development in South Africa
- Has a separate section on minority health (including information on racial disparities) http://www.kff.org/minorityhealth/index.cfm; contains reports and fact sheets from 2007-1998

V. Studies documenting disparities, explaining disparities, or strategies to reduce disparities:
VI. Pew Hispanic Center: http://pewhispanic.org/reports/archive/
- Founded in 2001; nonpartisan research organization supported by The Pew Charitable Trusts; mission is to improve understanding of the U.S. Hispanic population and to chronicle Latinos’ growing impact on the entire nation; the Center does not advocate for or take positions on policy issues
- Contains a survey that examines Latinos’ experience with health care in the US- topics discussed include coverage, accessing health care services, and communicating with health care providers
- Contains research by topic area (Demography, economics, education, identity, immigration, labor, politics, remittances) based on survey data


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Teaching about Health Care Disparities (HCD) in the Clinical Setting

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This workshop will encourage and enable faculty to address provider driven health care disparities when and how they present in clinical precepting and hospital rounds. We use common clinical scenarios to create “teachable moments” and offer strategies to promote an evidence based approach to teaching about health care disparities. We also discuss challenges commonly encountered when teaching about health care disparities and suggest possible strategies to overcome them.

The workshop will be interactive and incorporate the audience’s experience and expertise.

- Powerpoint on Teaching in the Clinical Setting
- Discussion about Challenging Teaching Experiences

While there is a robust literature about health care disparities which can help guide responses to the scenarios we discuss, there is often no ONE right answer, even when guided by the literature.

We review five cases drawn from resident focus groups. For each case we will review possible clinical outcomes or consequences, some of the relevant evidence, practical skills and teaching papers, and then revisit possible outcomes in light of the discussion.

Cases include:
1. Limited English Proficiency
2. A Medical Mistake
3. Limited Literacy
4. Stereotyping
5. Informed Consent
Situations that may contribute to HCD are common in daily clinical care. Addressing these issues is part of good clinical care and critical to decreasing HCD. Explicit recognition of issues, modeling good or skillful behavior, and use of the evidence base to support teaching may help decrease disparities.

**Important Skills and Behaviors to Reduce HCD in Clinical Setting include:**

1. Obtain a good social history
2. Elicit patient’s agenda—patient-centered interview
3. Elicit fears and concerns about treatment
4. Identify reasons for non-adherence
5. Explain things clearly (free of jargon) and assess patient understanding.
6. Promote (truly) informed consent
7. Work effectively with interpreters and LEP patients
8. Build trust
9. Understand possible reasons for distrust
10. Negotiate towards common goals—prioritize
11. Be aware of taboos and culturally sensitive issues
12. Elicit sexual history
13. Identify and anticipate common cultural concerns that may impact clinical care

One of the key roles of the teacher is to promote reflection. This includes reflection about stereotypes, racism, cultural differences and similarities, and about interactions and situations such as to promote greater empathy, improved skills, and greater interest and empowerment in diminishing HCD.

**Reflection can be promoted in many ways. These include:**

1. Promoting meaningful conversations with patients
2. Challenging stereotypes
3. Cognitive dissonance/recognizing contradictions
4. Peer interactions
5. Modeling behavior
6. Identifying cultural differences AND commonalities
7. Use of the relevant medical literature

*Fernández L, Fernández A, Glick SB, Teaching about HCD in the Clinical Setting*
Challenges to Teaching in the Clinical Setting

There are many challenges to discussing and teaching HCD in clinical and academic settings. We review some of the common issues below.

Institutional culture
Institutional culture that believes disparities are unimportant, that the evidence does not support their existence, or that they are not a curriculum priority when there is so much “hard science” to cover.

Team dynamics
There are many competing roles for members of a health care team (clinician/teacher/administrator/evaluator). The attending needs to keep patient care paramount and central, while also teaching and building a team/professional relationships. Diversity within the team (origins/ethnicity/age/gender/power) may also influence team dynamics and conversations about HCD.

The Hidden Curriculum
Trainees learn most from people directly above them in the medicine hierarchy. As many current residents and young faculty have nor been trained to address HCD, there will be an institutional lag in change, and change agents may have to come from below, ie medical students and interns. Strategies for addressing HCD from a lesser position in the team hierarchy are key to institutional change.

Suggestions for working with learners who seem “skeptical: about HCD include:

- Explore reasons for resistance or difference of opinion (avoid humiliation of learners)
- Model and Recognize good behavior
- Demonstrate knowledge and skills
- Identify good work and praise it. (Let learners know what you value and desire.)
- Catch people doing something right
- Align with situational difficulties
  - Residents/students may be tired, stressed, overworked, or feel that they are being charged with fixing all the failings of our health care system
- Help out, facilitate things, lighten the scut load, “practice what you preach”
- Priority is to care for the patient–make an independent clinical assessment of the patient
- Ask learners what they learned
- Revisit when safer
  - Address biased comments

Fernández L, Fernández A, Glick SB, Teaching about HCD in the Clinical Setting
- Consider whether your feedback should be private
- Describe what you saw
- Praise good/effective behavior
- Set/revisit expectations
- Consider the use of humor if appropriate

- Identify generalizable lessons
- A little resistance is a good thing — this may sometimes promote learning
- Redefine win
- Goal is to “move people along” in their thinking, at least a little.
- Empower the learner
References


Module: Teaching about Disparities In Venues beyond the Clinical Setting

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Contents of this module

- Overview
- Objectives
- Suggested content
- Suggested teaching methodology and venues
- Sample Teaching Exercises
  - M&M exercise
  - Identities exercise
  - Iceberg exercise – visible vs. invisible identity
  - Reflective Practice exercise
  - Images exercise
  - Draw a picture activity
  - Journaling
- PowerPoint sample slides (see foundation module)
- Vignettes/ Cases and discussion
- Representative videos and other resources
Overview

Educators often find themselves in various teaching situations outside of the clinical arena where they come in contact with learners and need to develop curricular goals and objectives, along with learning activities that emphasize issues of disparities in health.

This module will focus on the following main areas:
- Provider – patient communication including trust building
- Evaluating and addressing the patient’s social context
- Evaluation of physician role in disparities including bias/ referral patterns. Examples of reflective practices will be given to explore provider attitudes and communication
- Role of Trust
- Role Society – including resource allocation, health care, SES, environment
- Additionally, several useful teaching tools will be discussed

Communication issues that will be addressed in this portion of the workshop include: formation of trust, addressing cultural differences, patient health literacy and level of English proficiency. Learners will review how to implement such learning exercises such as reviewing the literature that will highlight issues of disparities and offer evidence for their existence; developing case-based discussions that are appropriate for a wide variety of learners from medical students to the CME community and other allied health professionals; and curricular points that provide the educator with classroom approaches effectively address issues of racism, bias and stereotyping in health care and amongst peers and patients.

Because this module is focusing outside the realm of the clinical setting, included within the didactic portion will be the role that the environment, economics and insurance play in developing, reinforcing and potentially solving issues of disparities. Participants will also be exposed to a variety of reflective practices that will assist teachers in hopefully affecting attitudinal changes and awareness in their learners. The workshop attendee will be taught how to facilitate reflective practices that include journaling, role playing and partnering of personal and professional experiences. Finally, the authors of this group will provide example resources for teaching. These may include but are not limited to: clips form the movies Crash and Color of Fear, Hold Your Breath, Worlds Apart, Brown Eyes/Blue Eyes, and the Harvard AIT Assessment of Bias.
I. Learning Objectives:
   By the end of this session the learner will be able to:
   a. Understand their own cultural background, including health-related values, beliefs, biases and experiences and appreciate the broad dimensions of culture related to self and others
   b. Explore and discuss personal views about caring for racial, ethnic, or cultural groups unlike yourself
   c. List at least three ways the patients social context may impact their care
   d. Articulate common patient attitudes and beliefs related to race, ethnicity and culture that can affect quality of care and clinical outcomes
   e. Objectively discuss physician attitudes and behaviors (both past and present) related to race, ethnicity and culture may affect quality of care and clinical outcomes
   f. Develop healthy attitudes and curiosity regarding the health values, beliefs and experiences of diverse cultural groups and each individual patient
   g. List at least three ways identified in the literature for fostering trust with patients of different backgrounds.

II. Suggested Content
   a. Awareness of self and others
      i. Exercises prompting reflective practices on the part of learners
      ii. Exercises that enhance the awareness of one’s own cultural biases and how that might impact patients
      iii. Review personal background utilizing some of the enclosed exercises
      iv. Review of Components of Bias
   b. Social Issues (detailed literature examining social, health care and Provider issues available in foundations sections)
      i. Socioeconomic status
      ii. Education
      iii. Environmental/residential/occupational
      iv. Racism
      v. Acculturation
      vi. Power
   c. Health Care issues
      i. Decreased Access
      ii. Availability and use of language/interpreter services
      iii. Limited quality and quantity of health care resources
   d. Provider issues
      i. Dynamics of the patient-physician encounter
      ii. Review data on differing referral patterns
      iii. Review and dissect Van Ryn’s manuscript on aspects of clinical encounter that may lead to disparities
      iv. Acknowledge the role that racism and intolerance plays in healthcare and how we all engage in that activity at some level
v. Be patient with one’s own growth and progress

e. Physician - Patient communication factors (building Trust)
   i. Review the historical issues in health care that have led to mistrust
   ii. Review other literature regarding differential treatment/ research
        based on race
   iii. Review the health care literature on patient trust
   iv. Literature on patient preference – eg. Race concordance

III. Suggested Teaching Methodology
   a. Didactic sessions to review literature on trust, social factors, health system
      issues, and patient preferences and referral patterns.
   b. Audience participation/ shared experiences
   c. Cased passed discussions
   d. Reflective exercises
   e. Reflective Triggers

IV. Sample Learning/teaching exercises, case vignettes, power point slides, etc.
   a. Discussion Triggers – race, culture, trust
      i. How easy/hard is it for you to talk about race or to interact with
         people from other races/cultures?
      ii. Who is to blame for prejudice and racism in medicine and society?
      iii. How often does the health care system treat people unfairly due to
           their race or ethnicity?
      iv. How important are stereotyping or bias in determining medical
          care? Why?
      v. What historical and current factors might drive patient mistrust in
         you as a doctor?
      vi. How often will your patients share the same health-related values,
          beliefs and experiences as you?
      vii. How can mistrust or misunderstanding lead to poor health
           outcomes?

   b. Discussion Triggers – That may lead to exploration of social barriers (see
      handout)
      i. Frequent disagreement with physician regarding medical treatment
         plans
      ii. Habitual lateness or missed appointments
      iii. Long periods of loss to follow-up (discontinuity)
      iv. Frequent emergency room visits
      v. Repeated noncompliance
      vi. Misunderstanding of instructions
      vii. Accusations of racism/bias
      viii. Accusations of mistreatment
      ix. Unfilled prescriptions
c. Exercises
   i. M&M exercise
   ii. Identities exercise
   iii. Iceberg exercise – visible vs. invisible identity
   iv. Reflective Practice exercise
   v. Images exercise
   vi. Draw a picture activity
   vii. Journaling

d. PowerPoint sample slides (see foundation module)
e. Vignettes/ Cases and discussion
f. Representative videos and discussion

V. Important resources
M& M Exercise

Suggested venue: small group

Try this…the M&M are provided:

- Pass around a bag of M&M's. Tell the trainees to take as many as they want. Once all the trainees have M&M's, tell them that for each M&M they took they have to say one thing about themselves. For instance, if a trainee took 10 M&M's, they would have to say 10 things about themselves. If someone took no M&M make them explain why and then share something about themselves.

We would suggest, however, that you do take the time (but not too much) to talk about yourself—background, area of specialty, etc.—so that the students begin to know who their instructor is.
Identities Exercise

Goal: The goal of this exercise is for each trainee in the group to reflect on prominent dimensions in his/her social and cultural identity. In order for trainees to appreciate the different backgrounds of patients, it is critical to first consider one’s own background.

Suggested venue: Small group

Instructions: Make a general statement about the diversity and the impact disparities have on medical outcomes

Example: “Because the US is a society made up of a wide diversity of people, it is critical that we, as physicians, be able to work with people who may be very different from ourselves. This is both from the perspective of practicality—to be able to deliver the best medical care to our patients—and from that of fairness to all. The goal of today’s session is to begin to get to know each other and to explore the diversity of backgrounds, interests and identities even within this group, this class, and this school. It is the start of an ongoing conversation that we will have on how to become the best physician possible.”

Ask trainees to select two dimensions (see examples are given in Table 1—they can choose others as well) that are central to their identity right now. One of the dimensions selected must be visible (i.e., apparent when first meeting someone) and one must be invisible (e.g., sexual orientation, family structure).

Model this exercise by selecting your own two dimensions and describing the importance of these dimensions to the group. It’s obviously helpful to think about which 2 dimensions you would choose prior to the session.

At the end of the exercise, ask students the following question, “Why do you think we did this exercise?”

Main point: There are many differences within the small group with regard to backgrounds, experiences, life circumstances, and cultures. In addition to differences, there are also some commonalities students share.

Our experiences and background can influence the way we communicate, interact with people, and think in general and in the
healthcare context. Our backgrounds can also affect the way we treat people or how people treat us in healthcare (Transition to case-based discussions)
Table: Example cultural dimensions of identity

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Some Examples</th>
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<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
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<td>Female</td>
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<tr>
<td>Economic Background</td>
<td>Working class</td>
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<td>Middle class</td>
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<td>Upper middle class</td>
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<tr>
<td>Race</td>
<td>African-American</td>
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<td>Caucasian</td>
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<td>Asian</td>
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<td>Latino</td>
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<td>Ethnicity</td>
<td>Nigerian</td>
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<td>Chinese</td>
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<td>Mexican</td>
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<td>Lebanese</td>
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<td>Sexual orientation</td>
<td>Lesbian</td>
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<td>Heterosexual</td>
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<td>Transgender</td>
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<td></td>
<td>Gay</td>
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<td>Geographic Background</td>
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<td>Urban</td>
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<td>Suburban</td>
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<td>Foreign country/city</td>
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<td>Role</td>
<td>Partner/spouse</td>
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<td>Parent</td>
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<td>Caregiver</td>
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<td>Friend</td>
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<td>Activities/Interests</td>
<td>Athlete</td>
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<td>Community service</td>
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<td>Music</td>
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<tr>
<td>Family</td>
<td>Single parent family</td>
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<td></td>
<td>Large family</td>
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<td></td>
<td>Blended family</td>
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<td>Single child</td>
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<td>Age</td>
<td>Young</td>
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<td></td>
<td>“middle-aged”</td>
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<td>relative to others</td>
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<tr>
<td>Spirituality</td>
<td>Religious affiliation</td>
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<td>Belief system</td>
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<td>Philosophy</td>
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<tr>
<td>Activism</td>
<td>Environmentalist</td>
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<td></td>
<td>Feminist</td>
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<td></td>
<td>PETA</td>
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<td></td>
<td>Habitat for Humanity</td>
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<tr>
<td>Lifestyle</td>
<td>Nutritional choices (e.g., Vegan)</td>
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<td></td>
<td>Occupation (student vs. professional)</td>
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<td>Recreation</td>
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Iceberg Exercise: Visible vs. Invisible Identity

Purpose
To begin to explore the meaning and dimensions of culture, particularly those aspects of culture that are not immediately apparent upon meeting a patient for the first time. To begin to think about the assumptions and stereotypes we make about other people based on how they differ from what may be considered “normal”.

Suggested Venue
Small group

Materials
Dry erase board and marker to demonstrate “Iceberg” concept. Overhead or slide on dimensions of culture.

Exercise
Draw an iceberg on the board. Ask the participants to consider meeting a patient for the first time.

☐ What are the characteristics that are immediately visible? Write these characteristics above water. (Examples: skin color, dress, age, weight)

☐ What are the characteristics that cannot be seen? Write these items below the water of the iceberg. (Examples, marital status, sexual orientation, language, religion, values, beliefs)

Emphasize that what we know about a patient on the first meeting is only what we see at the top of the iceberg (“tip of the iceberg”). The majority of a person’s qualities remains hidden from view and can often cause us to make assumptions. The most important character traits are the ones at the lower part of the iceberg and require additional time and effort to achieve a deeper understanding of people who are different.

The Tip of the Iceberg
Reflective practice Exercise

Suggested: Small group

Can you reflect on a clinical scenario where your bias has interfered with your care of a patient or patients? Please spend 3 minutes jotting down those notes.

Can you reflect on a clinical scenario when you failed to intervene on a trainee’s care of a patient because of what you perceived as prior bias? Please spend 3 minutes jotting down some notes.

Please break up in 3’s to discuss the scenarios above.

Follow up - Large Group discussion:

How will disparities education assist you in developing critical thinking skills in your trainees?

How could you measure attitudes or changes in attitudes among your trainees?

Exercise #3

We are developing a module using segments from the film CRASH—as trigger points to assist faculty in developing their facilitation skills with trainees on difficult topics involving race and sex.

-I need to talk to my collaborators about sharing.

1. Summarize major issues raised in each exercise

   - Broad definition of culture
   - Impact of cultural experience and background in fostering trust
   - Impact of cultural experience and background in communication
   - Background and associated privilege (income, education, profession, race)
   - Background and implications for power differentials

2. Go around the room and ask each trainee to report one thing they learned from this small group session.
Images Activity – 10 minutes

Suggested venue: Small or large group

Ask the group to relax and listen. Have everyone close their eyes. Tell them that you will introduce five different people to them. Each introduction will be followed by a few descriptors. Ask them to examine the images that come up in the privacy of their minds and think about why those particular images occurred. Pause after you have introduced each person and before you move on to the next.

Slowly read each description:

- African American Woman
  - single mother
  - wealthy
  - physician

- Teenage girl
  - Salvadorian refugee
  - Lives in New York city
  - Studies in famous school for arts

- Japanese man
  - Father
  - Farmer
  - Gay

- White man
  - 25 years old
  - World class athlete
  - Wheelchair bound

- Chinese man
  - Drug addict
  - Family practice resident

Discussion:
What images came to mind? Did they change as more information was given. What was your reaction to what you heard? What did you think the people were going to be like? Explore stereotypes.
Draw a Picture Activity – 10 minutes

Suggested venue: small group less than 20 (informal)

Pick an learner to give only “verbal” directions (no body language) of what he/she sees in the picture given to him/her and they can use the name of each shape/figure (e.g. triangle, star, etc.) The rest of the group will each try to draw the picture without seeing the picture and from the verbal directions given. Clarifications can be asked by drawers. Allow 3-5 minutes to provide directions. Alert them when they have one minute left and then when 10 seconds are left. Once allotted time for directions is done, show the picture to everyone and ask if anyone had the EXACT same picture. Have learners compare their pictures to original and to each other. Then have a discussion.

Discussion:
Why was this type of communication difficult? Did you get close to the original? If not, why not? Where you missing other clues of communication such as nonverbal? Why if everyone is receiving the same information nobody’s picture is the same? How is speaking another language compound the difficulty?, How did you feel drawing the picture? How did the informant do? Bring to the discussion the idea of this being a medical session where the drawers were patients and the person describing the picture was a health care provider. What were the major barriers? What could have been done to make sure that the communication went better?

This activity has as objective to show how our different perceptions, communication styles, preconceptions and previously acquired knowledge can be barriers to communication. Other factors that affect our communication: Time constraints, not using non-verbal communication or visual aids. Make sure that all understand that many times the message that we are trying to convey is not the same one that is delivered.
Sample Case 1: “My patient is a train wreck”.

You are precepting a resident in clinic who begins telling you the history of patient Rose Adams. She is a 50 year old woman who has several medical problems including uncontrolled Type II diabetes mellitus, uncontrolled hypertension, chronic renal failure and coronary artery disease. The resident characterizes the patient as a “train wreck” who routinely runs late to her appointments. She also frequently visits the emergency room and comes to see the resident today after a hospitalization two weeks ago for hypertensive emergency. Her vitals today are notable for a blood pressure that is 160/100. The resident is frustrated and ready to give up on being able to get Ms. Adams’ medical problems controlled.

What are potential triggers in this scenario for teaching about social barriers to care? How might you approach discussing these issues with the resident?

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<tr>
<th>Topic</th>
<th>Patient Behaviors</th>
<th>Failures</th>
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Sample Case 2: Hospital readmission

It is post-call day on the inpatient service and you are in the conference room getting a run-down from your team on the patients admitted last night. One of the patients the team presents is John Smith, a 60 year old man with a history of COPD and hypertension, who is admitted for a community-acquired pneumonia and a COPD exacerbation. The patient was evaluated in the Outpatient Urgent Care Clinic yesterday. It was thought that the patient could have gone home after receiving steroids and a couple nebulizer treatments in the Clinic. However, he was admitted from the Urgent Care Clinic after it was discovered that he could not afford to purchase the antibiotics for treatment of his pneumonia nor the steroid taper he would need for treatment of his COPD exacerbation. The team is obviously frustrated to receive this “unnecessary” admission for something that could have been managed as an outpatient.

What are potential triggers in this scenario for teaching about social barriers to care?
Which settings do you think would be most appropriate for addressing different triggers?

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<tr>
<th>Location</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Conference Room</td>
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<td>Bedside</td>
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<td>Post-Bedside</td>
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Sample Case 3
A medical student is rotating with you in your outpatient practice. The student presents the history of one of your long-time patients, Samantha Johnson, who is a 65 year old former grade school teacher who has a history of uncontrolled Type II diabetes mellitus (HbA1C 11%), hypertension and mild renal insufficiency. She returns after a 9-month loss to follow-up and presents with a blood glucose level of 370 mg/dL and a blood pressure of 140/90. Ms. Johnson is utterly surprised to find out that her blood glucose and blood pressure are high. She says she has not been eating any sugary foods. Although she does not monitor her blood sugar or blood pressure, she states that she usually can feel when her sugar or blood pressure is high and she does not feel like they are high now. Also, though you discussed the presence of kidney disease at her last visit, she is surprised to hear she has any kidney problem at all as she “feels just fine.” She also explains to the student that her mother, who she had been caring for, died six months ago and, perhaps, it is the stress of this loss that is causing her blood glucose and blood pressure to be high. She mentions to the student that her mother died shortly after starting on insulin for her diabetes mellitus. The student rightly concludes that this patient, who is on maximum oral therapy, will need transition to insulin and will also need to achieve tighter blood pressure and glycemic control to prevent progression of her renal insufficiency.

What are potential triggers in this scenario for teaching about social barriers to care? Which settings do you think would be most appropriate for addressing different triggers?

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<td>Post-Bedside</td>
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Sample Case 4: “I want to see a black doctor”

A 38 y/o male presents for a clinic appointment he had scheduled weeks ago when he called saying that he needed a routine physical. When his care-provider, a white female resident, enters the exam room the patient looks at her calmly and states that he would prefer to have a black doctor. He adds that he had seen a black doctor in the waiting room, and that he is willing to wait for that physician to see him. She tells him that she will go discuss his request with a supervising attending physician.

1. How should the resident handle this situation?

2. Why might the patient prefer an African-American physician?

3. If there is a black doctor available, should the patient be reassigned to him? If the resident decides to reassign the patient, what should she say to her fellow resident who will be seeing him?

4. What was your own reaction to the patient’s expression of not wanting to see the white physician?

5. How would/do you feel about the reversed scenario, i.e. a white patient’s refusal to see physician who was an ethnic minority?

Try to convey recognition that the patient might prefer another clinician, but explain that even in order to honor his request, (which may not be possible); it would help to get some understanding of what his medical concerns are. That approach is different from asking the patient to justify his request. Stating that she knows she is not black, but that if they talk first she may still be able to help him might start the communication process. If the patient is adamant, it is appropriate to ask the attending for guidance (without labeling the patient as hostile or uncooperative).
Sample Case 5: A Young man with no insurance....

Andrew Baker, an 19 year-old freshman at Community College, presents to the emergency department of private hospital on a Monday afternoon with a chief complaint of shortness of breath. Three weeks before coming to the hospital, he stopped playing basketball in the evenings with friends of breathlessness with exertion. Over the previous week, he began feeling short of breath while walking, and had trouble lying flat at night.

He has no significant past medical history, denies use of drugs or alcohol, and was taking no medication prior to the current illness. His mother, who accompanies him to the E.D., states that Andrew has no history of heart problems, has been active in sports throughout childhood without any limitations or symptoms. He has not traveled outside the U.S. and had no sick contacts, except when he and all three of his roommates had caught the flu three months previously.

On physical examination he has normal vitals, mild jugular venous distension, bibasilar rales.
Chest x-ray: cardiomegaly with mild pulmonary congestion
Emergency echocardiogram: biventricular hypokinesis with EF of 27%

The ED physician recommends admission for evaluation by a cardiologist, and further testing. He and his mother agree. To complete the paperwork, a financial screener comes to the bedside to request information on Andrew’s insurance coverage.

His father is a painting contractor. He dropped health insurance coverage for himself and his four employees two years previously because of rising premiums. His mother is the evening shift manager at a large, discount electronics store. She has coverage under an HMO plan, which also covers her husband and their 14 year-old daughter. She is unsure whether Andrew is still covered under the plan.

The screener records the information, and then politely informs Andrew and his mother that, because of the lack of proof of health insurance, the hospital requires a $5,000 deposit prior to admission. Cash and credit cards are accepted.

Andrew and his mother are concerned about the family’s ability to afford the deposit fee. The emergency physician explains that it may be possible to arrange transfer to a public hospital, where advance payment may not be required. After considering their options, Andrew and his family request transfer to the public hospital. Three hours later, he is transported by ambulance to Harbor-UCLA, where he is admitted to the cardiology service.

After two days of diuresis as an inpatient, his symptoms are improved and he is discharged on three medications. Follow-up appointments are scheduled in the cardiology clinic. At the time of discharge, the first-year resident directly responsible for Andrew’s care explains the discharge instructions, medications, and symptoms to watch out for that his heart failure may be worsening. She also discusses his prognosis, which includes about 50% chance of spontaneous recovery from idiopathic cardiomyopathy. To Andrew’s question about what will happen if he is in the 50% that don’t get better, she say replies that in that case he may need a heart transplant.

{discuss}
Lypson M, Blackmon D, Bussey-Jones J. Teaching Disparities in other venues
Sample Case 6: “Mrs. Jones”

Yvonne Jones, an African American woman in her 50’s, has come in for her regular physical examination. Her regular doctor is not available, so she will be seeing Dr. Hancock, whom she has never met. The doctor, a Caucasian man approximately the same age as Mrs. Jones, enter the exam room and introduces himself, saying, “Hello Yvonne, I’m Dr. Hancock. It’s nice to meet you.” Dr. Hancock continues with the examination, and notices that Mrs. Jones is quiet and unresponsive to many of his questions, although she had been smiling and friendly when he first walked in the room. He is concerned that he might have missed important information about her health history because of her reticence, but no matter how friendly he tries to be, she remains reluctant to talk.

Discussion Questions

1. What type of miscommunication happened between Mrs. Jones and Dr. Hancock?

2. What cultural factors influenced this interaction?

3. Why do most Americans prefer to be on a first name basis?

4. How do you decide whether to address your patients by their first or last name?

Discussion points:
Many Americans consider the use of first names a sign of friendliness. Others may consider using a first name with anyone other than a close friend or family member to be inappropriate. African Americans often show respect to elders by sing their last name. Additionally, Mrs. Jones might be sensitive to lack of respect from a white male. And lastly, Dr. Hancock showed a lack of sensitivity by introducing himself by his last name while simultaneously using Mrs. Jones first name. Discussion of patient perceptions of clinical encounters may be helpful here – including a history of experiences (perhaps personal or group) that may alter perceptions of respect of clinical encounters.
Sample Case 7: “Don’t tell my mom”

Mrs. Yoshida is a 60 year-old Japanese woman whose test results have just shown evidence of advanced stomach cancer. Mrs. Yoshida has been in the U.S. for 10 years, has limited English proficiency and brings her son and daughter-in-law to act as interpreters. Mrs. Yoshida’s physician, Dr. Harlan, has just discussed the diagnosis with Mrs. Yoshida’s son and his wife. Mr. Yoshida and his wife feel very strongly that Mrs. Yoshida should not be told the diagnosis, as they fear that the word cancer will sound like a death sentence to her and that she will lose hope and get sicker more quickly. They also explain to Dr. Harlan that Mrs. Yoshida will feel that she is placing a great burden on her son and daughter-in-law is she is made aware of her diagnosis, and that the tradition in Japan is to keep the truth from the patient as long as possible in order to keep her spirits up.

Dr. Harlan understands that the Yoshidas are from a different culture, but she feels both legally and morally obligated to inform Mrs. Yoshida of her diagnosis and discuss treatment options with her. However, she also wants what is best for the patient, and the son and daughter-in-law are convinced that Mrs. Yoshida would be happier not knowing she has cancer. She feels caught in an ethical dilemma, and isn’t sure what to do.

Discussion Questions

1. If you were an ethicist assigned to this case, what would your recommendation be to Dr. Harlan?

2. If you were Dr. Harlan, what would your next step be?

3. What are the implications for using family members as interpreters in situations like this?

4. What about the U.S.? Why do we place such a high value on informed consent and individual responsibility for health care decisions?

In many cultures, patients may not be told that they have cancer, especially in the case of a terminal diagnosis. Families usually support this decision, as they feel that a diagnosis of cancer would lead to a loss of hope and feelings of guilt about placing a burden on one’s family. Informed consent is not mandated in Japan, as it is in the U.S., so disclosure of the diagnosis is usually left to the discretion of the physician and the patient’s family. In the U.S., however, a high value is placed on the patient’s right to know, and it is assumed that the individual patient will want to make his/her own health care decisions. How should we proceed when these two systems meet, as in the case study presented here?

This case also highlights the need for skilled interpreters whenever possible (see selecting and using interpreters tool below).
S-E-L-F: An Approach to Teaching about Social Barriers to Care
Dionne Blackman, M.D.

Background: Past efforts to teach students about eliminating health disparities have focused more on the issue of cultural competence and less on the often greater social barriers to care (e.g. literacy, immigrant or health care experiences, social stressors, etc.). Part of the problem in teaching emphasis may be the absence of an efficient approach to teaching learners about social barriers to care. Green and colleagues propose using a social context review of systems to train learners to identify social barriers to care (Acad Med 2002). I have taken their review of systems added two categories to it and changed their “environment changes” category to the broader category “environment.” To ease recall, I have created an acronym to assist faculty in teaching learners about these categories that comprise important aspects of the social context of care.

References

I. S = Social Stressors and Sources of Support
A. Social Stressors
Preface: Most people I see are facing stresses in their lives that could affect their health.
“What is causing the most stress in your life? How do you deal with this?”

B. Social Support
“Do you have friends or relatives that you can call on for help? Do they live with you or close by?”

Preface: I have found that many people turn to God or spirituality as a source of support in their lives.
“Do you feel that God (or spirituality) provides a strong source of support in your life?”

II. E = Environment and Experiences of Medical Care
A. Environment
1. Changes in Environment
“Where are you from originally? When did you come to this (country, city, town)?” “What made you decide to come to this (country, city, town)?”

2. Safety of the Environment
“Would you describe your neighborhood and generally safe or unsafe?” or “How safe would you say you feel doing activities in your neighborhood such as walking or shopping?”

3. Resources in the Environment
“How easy is it for you to find the goods or services you want in your neighborhood (e.g. public transportation, banking, health care facilities, exercise facilities, clothing, food, laundry or dry cleaning, etc.)?”

B. Experiences of Medical Care
“What was the medical care like where you come from compared with here?”
“What have your experiences with medical care been like for you?”

III. L = Life control and Literacy
A. Life Control
Preface: *Because everything keeps getting more expensive, I find that many people have difficulty affording the things that they need like food and medicines.*

“Do you ever feel that you’re not able to afford food, medications, or other things you need?”

Preface: *Staying on top of your health can involve taking medications or changing habits.*

“Do you feel that you have the ability to affect your own health (or particular medical condition) or is it out of your control?”

Preface: *Sometimes, some people have not been treated fairly in our health care systems.*

“Do you ever feel that you have been treated unfairly by the health care system for any reason (e.g. socioeconomic status, insurance status, race/ethnicity, language, etc.)?”

B. Literacy

Preface: *In order to address their health problems patients may need to make appointments for tests or with different specialists and may need to be on one or more medications. Many patients find that keeping track of all of these things can be a challenge.*

“How do you keep track of appointments/medications?”

Preface: “*I find that many people have trouble reading the complicated instructions that doctors give out.*”

“Have you had trouble with this?”

“Do you have trouble reading your medication bottles, instructions, or other patient information?”

“Do you have trouble with reading in general?”

IV. **F** = Faith in the facts and Family beliefs

*Many people have thought about what has caused their symptoms and how to investigate or treat them.*

What do you think is the cause or causes of your (symptom, particular medical condition)? What does your family think about this?

Do you have any ideas about how your (symptom, particular medical condition) should be (investigated, treated)? What does your family think about this?
Guidelines for Selecting an Appropriate Interpreter and Strategies
To Increase Effective Communication during Use of an Interpreter

**Selecting an interpreter**
- A trained interpreter is **ALWAYS** preferred.
- Never use a child to interpret because this may disrupt social roles and put undue stress on a child.
- Do not ask a stranger from the waiting room to interpret because of potential confidentiality breech.
- It may occasionally (in emergent situations) be appropriate to use an adult who the patient brings to the visit for this purpose. However, be aware of potential problems of medical terminology and revelation of personal information/questions. Additionally, both your comments and those of the patients may be edited (saving face, not asking “sensitive” questions, etc)
- Ask the patient if the designated interpreter is acceptable to him or her.

**During encounter**
- Introduce the interpreter formally at the beginning of the interview.
- Direct questions to the patient, not to the interpreter unless they are meant for the interpreter
- Maintain visual contact with the patient during interpretation. You may pick up important nonverbal clues.
- Avoid technical terms, abbreviations, professional jargon, and idioms
- Ask the interpreter to interpret as literally as possible rather than paraphrasing or omitting information.
- Use non-language aids (e.g. charts, diagrams) whenever possible.
- To check the patient’s understanding and accuracy of the interpretation, ask the patient to repeat instructions/advice in their own words, with the interpreter facilitating
- Expect the interpreter to be a potential cultural bridge to explain cultural bound syndromes
- Be patient, an interpreted interview takes longer.
### Teaching Triggers

**Dionne Blackmon, M.D.**

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<th>Topics</th>
<th>Patient Behaviors</th>
<th>Failures</th>
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<td>• Unequal Access to Care</td>
<td>• Frequent disagreement with physician regarding medical treatment plans</td>
<td>• Uncontrolled medical problems</td>
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<tr>
<td>• Social determinants of disparities in</td>
<td>• Habitual lateness to appointments</td>
<td>• Lack of preventive care</td>
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<td>health status</td>
<td>• Missed appointments</td>
<td>Avoidable patient Morbidity and Mortality due to:</td>
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<td>• Mistrust and roots of mistrust in the</td>
<td>• Long periods of loss to follow-up (discontinuity)</td>
<td>• Missed or delayed diagnoses</td>
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<tr>
<td>healthcare system</td>
<td>• Frequent emergency room visits</td>
<td>• Occurrence of preventable complications from chronic medical conditions</td>
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<td>• Health literacy</td>
<td>• Repeated noncompliance</td>
<td>• Unnecessary emergency room care</td>
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<td>• Underinsurance</td>
<td>• Misunderstanding of instructions</td>
<td>• Unnecessary hospitalization</td>
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<td>• Compliance</td>
<td>• Accusations of racism/bias</td>
<td>• Untreated pain</td>
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<td>• Accusations of mistreatment</td>
<td>• Untreated mental illness</td>
</tr>
<tr>
<td></td>
<td>• Unfilled prescriptions</td>
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</tbody>
</table>
Suggested Videos and Discussion Points

The eye of the storm.
This program, produced by ABC News, documented Jane Elliott's efforts to help her third grade class understand the meaning of prejudice following the assassination of Martin Luther King, Jr. Living in the homogenous farming community of Riceville, Iowa, many of Ms. Elliott's students harbored subtle and not so subtle prejudices despite the fact that many of them had never seen blacks before. This video chronicles her, now famous, exercise where she divides her class based upon the color of their eyes and bestows upon one group privileges and on the other group impediments. This exercise provides a glimpse into the development and propagation of prejudice and, more importantly, how arbitrary and unfair they are. http://www.newsreel.org/main.asp Cost: $295 for DVD

Worlds Apart: Robert Phillip’s Story
This is a story of a patient with ESRD who describes his encounters with the health care system, and disappointment with the level of physician involvement and the quality of his care. He expresses specific concerns about physicians not readily referring African-American patients for transplantation. He feels that he had to push his own nephrologist into giving him options besides dialysis. In his view, physicians tend to stereotype African-American dialysis patients as being less worthy of receiving kidney transplants since they’re “just going to ruin it anyway.” This case and the facilitator guide that is available, allows for discussion of stereotyping, disparities, referral patterns, and patient perceptions and trust. Distributors: Fanlight Productions www.fanlight.com Cost: $399 for DVD

The Color of Fear
This is a film about the state of race relations in America as seen through the eyes of 8 men of Asian, European, Latino and African descent. In a series of intelligent, emotional and dramatic confrontations the men reveal the pain and scars that racism has caused them. What emerges is a deeper sense of understanding and trust. This is provocative and highly charged and can provoke revealing discussions with careful facilitation. www.stirfryseminars.com Cost: $110 for individual DVD
Unnatural Causes
Unnatural Causes investigates the stories that are shaking up conventional notions about what makes us healthy or sick. The social, economic, and physical environments in which we are born, live and work profoundly affect our longevity and health – as much as smoking, diet and exercise. The series sheds light on mounting evidence of how lack of access to power and resources can get under the skin and disrupt human biology as surely as germs and viruses. http://www.unnaturalcauses.org/
Cost: $295

Crash
Crash, the 2005 academy award winning movie, presents a complex look at race in America and in Las Angles in particular. This is an urban drama that explores the complex relationship amongst its multi-ethnic cast. It delves deep into the gray between black, white, Asian, Latino, Persian, immigrant, victim, oppressor etc. The movie takes place in various short vignettes that provides brief but dramatic clues into everyone’s very complex life. Various scenes that can be used for teaching include the interplay between the White cop, his father, affirmative action, and access to health care. In addition, the movie demonstrates dramatic displays of issues surrounding prejudice and police brutality and sexism. http://www.crashfilm.com/ Cost: $9.49

Sicko
Fifty million Americans are uninsured, and those who are covered (whom Moore states at the beginning are what the film is about rather than the uninsured) are subject to becoming victims of insurance company fraud and red tape, with real case costs shown ranging from loss of fingertips or coverage to loss of life. Interviews are conducted with both people who have been denied care who thought they had adequate coverage as well as former employees of insurance companies who describe cost-cutting initiatives that encourage bonuses for insurance company physicians to deny medical treatments for policy holders. Distributor: The Weinstein Company
Resources

I. Making the case: Why Is It Important?
Unequal Treatment: Confronting Racial and Ethnic Disparities
Printed Book Edition
Unequal treatment: Confronting Racial and Ethnic Disparities in Health Care
Board on Health Sciences Policy, Institute of Medicine.
Dana Library RA563.M56 U53 2003
Health Care Quality and Disparities Reports- Agency for Healthcare Research and Quality
Insert several articles showing treatment or referral pattern differences

II. Interpersonal Skills Promoting Cultural Sensitivity
National Standards on Culturally and Linguistically Appropriate Services (CLAS)
are primarily directed at health care organizations; however, individual providers are also
encouraged to use the standards to make their practices more culturally and linguistically
accessible. The principles and activities of culturally and linguistically appropriate
services should be integrated throughout an organization and undertaken in partnership
with the communities being served
Office of Minority Health- U.S. Department of Health and Human Services
National Center for Cultural Competence- Georgetown University
Cultural Competency: Tools and Resources- University of Michigan
Providers Guide to Quality and Culture- Management Sciences for Health
Student Handbook Contents: Communicating with Patients- University College Of
London
www.thinkculturalhealth.org

III. Information for Physicians on Cultures
American Indian Health- National Library of Medicine
CultureClues- University of Washington Medical Center
Ethnomed.org
Medical Ethics in Islam- International Strategy and Policy Institute
SPIRAL- This website is a joint initiative of the South Cove Community Health Center
and Tufts University Hirsh Health Sciences Library. * Provide consumer information in
the languages of the community served, specifically Chinese, Cambodian, Vietnamese
and Laotian.
Cultural Diversity in Health

IV. Languages
DHMC Services
Language and Deaf Interpreter needs are centrally coordinated for the hospital and
Lebanon clinics through Care Management. To arrange an interpreter please call 650-
5792 Monday - Friday 8:00 - 5:00. For emergencies outside regular business hours please call the Social Worker on call, who can be reached through the hospital operator.

**DiversityRx** - Kaiser Foundation

**V. Culturally Specific Patient Information**
- Cancer Resources in Languages other than English - CancerIndex
- Multilingual Health Education - University of Utah
- National Network of Libraries: Multilingual Health Information
- African-American Health - MEDLINEplus
- Health Information in Chinese - New York University
- Tribal Connections - eHealth Information Resources

**VI. Key Associations**
- Kaiser Family Foundation
- Minority Affairs Consortium - American Medical Association
- The Commonwealth Fund

**VII. Teaching Tools for Health Professionals**
- Case Studies: Diversity and Cultural Competency - American Medical Student Association
- Cultural Competency Course - Medical University of South Carolina
- Ethnogeriatric Curriculum - Stanford University
- New Hampshire Minority Health Coalition
Module: Community Involvement and Social Justice

Crystal Wiley, MD, MPH, Assistant Professor, Johns Hopkins School of Medicine
Carol R. Horowitz, MD, MPH, Assistant Professor, Mount Sinai School of Medicine
Elizabeth Jacobs, MD, MPP, Assistant Professor, Rush Medical College
Monica Peek, MD, MPH, Assistant Professor, The University of Chicago

I. Objectives
   A. To identify strategies to learn about existing health disparities within your community
   B. To learn basics of becoming involved in community-based activities
   C. To become familiar with range of opportunities for involvement
   D. To recognize the challenges involved in teaching about disparities in the community
   E. To understand how community involvement fits within context of larger social issues related to social justice

II. Why this module is important?
   A. Social disparities along race/ethnic lines ◊ racial/ethnic health disparities
      • 15% of health status is due to medical care
      • Goal: optimal health, not just health care
      • Social determinants of health
         1. Housing, employment, education
         2. Neighborhood crime, disruption
         3. Exposure to hazards (lead paint, toxic waste, cockroaches, gun violence, trauma/stress)
         4. Growing data re: biological links between social inequity/discrimination and health outcomes
   B. Learning about disparities helps one understand & address broader issues of social justice
   C. Addressing health disparities can catalyze community empowerment & mobilization
   D. Health issues important to the community often reflect social inequities

III. What is Service Learning?
   A teaching and learning strategy that integrates meaningful community service with instruction, reflection, and scholarship/research to enrich the learning experience, teach civic responsibility, and strengthen communities

Suggestions for enhancing learning
   • Accompanying reading lists
• Discussion groups
• Journaling
• Meetings with mentors
• Interactive sessions

IV. Possible pathways to community involvement
A. How faculty may become involved
   • Mandate from university/institution
   • Learner initiated
   • Community initiated
   • Grant funding
   • Fellowship opportunities: e.g. Open Society Institute’s “Medicine as a Profession” advocacy fellowship
B. Specific approach may vary, but general “steps” are the same

V. Examples of Types of Activities
A. Education/Training, Clinical Service, Advocacy/Policy/Community-Based Outreach.
B. Consider using the ACGME core competencies as a framework for what teachers & learners could do
C. Examples of potential activities
   • needs assessment
   • walking tour
   • community health fair
   • start a free health clinic

VI. Things to Consider before you get started
A. Purpose of activity
   • Education/Training vs. Clinical Service vs. Advocacy/Policy/Community-Based Outreach.
B. Need for “group” vs. “individual” continuity?
C. Time frame
   • Discrete vs. Ongoing vs Recurrent
D. Human subjects concerns/IRB issues?

VII. Getting Started
A. Identify the racial/ethnic communities in your area
B. Learn about particular health disparities in your city/area
C. Identify a specific community with whom to work

VIII. Learning About Disparities
A. Institutional Resources
   • Colleagues in Public Health, Nursing, Preventive and Family Medicine
B. Community Resources
   • Patients and their families
   • Local community organizations
C. Literature searches
   • Target CBPR projects with community partners
D. City/County Public Health Departments
E. Web-based resources (e.g. census data)
F. Media sources
   • Television, Newspaper, Radio

IX. How to Identify A Specific Community With Whom to Work
A. Institutional Resources
   • Community Relations Department
   • Researchers doing CBPR
   • Clinicians/clinician educators working in the community
   • Patients
   • Students from the local area
B. Clinical and Translational Science Awards
C. Advocacy groups working on content area

X. Things to Consider when Choosing a Specific Community
A. Interests of your learners
   • Clinical vs. non-clinical experiences
B. Interests/Needs of the community
   • Community-based intervention
   • Tangible and lasting local benefits (vs. “drive-by” research or programs)
C. Interests of your institution
   • Existing community relationships
   • Institutional goals/priorities

XI. Identifying Goals
A. Goals of the Program
   • Will there be an “end product”?
   • “Deliverable” vs service learning vs. research experience?
B. Goals of the Individual Learners
   • What is their motivation?
   • What do they hope to achieve?
     1. Increase understanding of community
     2. Establish a relationship in preparation for more “substantive work”
     3. Practice or enhance clinical skills

XII. Parameters to Consider when Choosing a Project
A. Availability of time
B. Availability of resources
   - Community
   - Institutional (faculty/student volunteers)
   - Additional local grant support
   - Money
   - Mentors

C. Magnitude
   - How many learners will take part
   - Geographic constraints

D. Other existing campus/community projects within content area

XIII. Community Project example: Sisters Working It Out…
Health Advocacy in Motion
A. Community-based intervention and CBPR
B. Diverse partnerships
   - Academic medical center
   - Public hospital and health centers
   - Mobile mammography unit
   - Advocacy organizations
   - Community organizations
C. Trained low-income African American women in public housing
   - Health educators re: women’s health
   - Health advocates

XIV. Common Concerns in Teaching About Disparities in Community
A. Bias
   - Stereotyping, Hidden racism
   - Paternalism; Deficit (vs. asset) approach
   - e.g. Harvard’s Implicit Association Test
     https://implicit.harvard.edu/implicit/demo/index
B. Heterogeneity in learners’ skills/experience
C. Discordant concerns of learners/community
D. “Bad blood”
   - H/o negative/predatory institutional practices
   - Community mistrust (or healthy skepticism)
E. Language barriers (see teaching beyond clinical setting module)
F. Lack of familiarity with culture
G. Perceived neighborhood safety
H. Time constraints
I. Social problems too large/complex to make meaningful interventions
J. The “Skeptical Learner”

XV. Bridging Health Advocacy/Social Justice and Teaching about Health Disparities
A. Media campaigns
• Op-Ed pieces
  • “Pitching stories” to local media
B. Community-based coalitions
C. Regulatory mechanisms
  • Example: public health dept policy
D. Legislative strategies
  • Grassroots lobbying
  • Write letters to congresspersons
E. Economic strategies
F. Professional health organizations
  • See Resource list at the bottom

XVI. Bridging Scholarship and Service Learning and advocacy
A. Didactics: lectures, required readings/literature review relevant to current topic area could be included. Samples topics below…
  • Welfare Programs
  • Prison system/prison health
  • Health Coverage
  • Cross-cultural communication/cultural competence training/Patient centered communication
  • Unserved/Underserved populations
  • Environmental Health
  • Health Care for Homeless
  • Immigrant Health
  • Poverty and Health
  • Physicians as Agents of Change
  • Public Speaking
  • Media Advocacy
  • Rural Health
  • Health Care Advocacy
  • Community based participatory research
  • Health Literacy
B. Independent Scholarly activity: Work may culminate in activity such as
  • research abstract/poster
  • oral presentation,
  • original research article worthy of submission to a relevant scientific/clinical meeting or peer-reviewed publication.

XVII. REFLECTION AND EVALUATION
A. Small group discussions with faculty and/or community partner facilitator
B. Journaling
C. Resident and/or community partner feedback
D. Mentor feedback (for individual projects): The mentor relationship is highly individual, but mentors typically provide advice and support to foster the public service dimension of the research, and to pursue larger questions of how this work relates to students’ life and career goals.

XVIII. Resources/ Articles of Interest by Module Authors

Designing and Implementing a Community Health Fair

I. Pathway to involvement: Resident Initiated- 1 “resident champion” approached the program director with the idea of a “resident directed” community health fair and then he solicited another resident to assist with the planning and leadership of the health fair.

II. Purpose: To engage the community beyond the inpatient and clinic settings. We also wanted to give residents an opportunity to do community service and health education.

III. Time Frame: This would be the first community health fair, but the resident champions wanted this to be an annual event, so there was a need for “group” continuity.

IV. Choosing a Community: Resident champions knew that they wanted this event to serve the community where they saw their continuity patients. This community was ethnically diverse.

V. Interest of the learners: Resident champions wanted a combination of clinical and non-clinical experiences available (e.g. blood pressure checks, sickle cell testing, urine screening for kidney disease, vision testing; in addition to health education and counseling, getting uninsured & low income patients enrolled in medical assistance and getting people registered to vote)

VI. Goals of program/hospital: Residency program director wanted the residents to have a meaningful service learning experience; hospitals wanted an opportunity to show that they were committed to their stated mission to serve the community & the underserved.

VII. Parameters to consider:

a. Availability of time: The resident champions spend a considerable amount of time “getting buy-in/support” of the idea from the residency program directors, key hospital personnel at 2 hospitals; additionally, a lot of time was spent identifying and then meeting with potential community partners (approximately 15-20 different community organizations were partners in this event) and the other residents. The resident champions led weekly meetings for 1-2 hours/week for 3 months prior to the event with residents & faculty (who were divided into committees) to plan the health fair. Overall, the resident champions spent on average approximately 10 hours per work for 6-8 months working on this health fair.

b. Availability of resources: The local YMCA housed the community health fair (both indoor and outdoor space); Multiple organizations (both local and national) and pharmaceutical companies provided health education materials, supplies, “give away/prizes”, local restaurant vendors sold food at this event.

c. Magnitude of the event: This was a large event. All of the residents (including some alumni of the residency program) and many of the faculty & staff of the residency program and the hospital took place in this event (approximately 50-
75 residents/staff who “worked” at the fair; >900 community members attended the fair the 1st year and close to 1,000 attended the 2nd year

d. **Coverage issues:** Because we wanted all of the primary care residents to have the opportunity to be present on the day of the health fair, the program paid “moonlighters” from the “traditional” residency program to provide coverage.

**VIII. Things to consider if you choose this type of activity:**

a. **Language barriers:** Make sure that all written educational materials were in English and Spanish

b. **Abnormal results:** Have a plan in place for “unexpected” lab results- e.g. extremely elevated blood pressure, elevated fingerstick blood sugars

c. **City regulations:** Make sure that you get the appropriate permits that may be required (e.g. permits to close the road so that the outside activities can be held, food vendors need to have permits, there may be mandatory requirements for police officers to provide security for an event such as this; make sure you abide by fire codes)

d. **Location:** Choose a location that’s easily accessible via bus/train lines, centrally located, with good availability of parking (especially handicap parking)

e. **Residents’ comfort:** Be aware that some residents may feel uncomfortable and be unfamiliar interacting with people in the community (e.g. one of the ways the resident champions advertised the event was by walking through various neighborhoods and passing out fliers, going to local churches, “neighborhood stores,” etc; however, all residents may not be comfortable with this approach).

f. **Identification:** Have a way that the “workers” (residents/faculty/staff) are easily identifiable in case of questions, etc. We choose to get T-shirts (in bright colors) designed that all of the “workers” wore during the event with name tags.

g. **Organize:** Organize any pamphlets/educational materials immediately after the event and keep them because you can use them in future years.

h. **Ideas for raising money:** The resident champions, in coordination with a local campus clothing shop decided to design T-shirts (short and long-sleeved), sweatshirts, and hats with the residency program name and logo. The funds were used to assist with the health fair expenses. This activity was very successful. It’s important, however, to make sure that 1 resident is in charge of this effort (placing orders, collecting the money, delivering the clothing), but s/he can work on this along with a residency program staff member.

i. **Process evaluation:** Make sure that you build in a time to “debrief” with the residents, faculty and staff after the event (discuss the successes and the challenges) and decide what modifications should be made for the next year. Resident champions should also keep good “notes” throughout the planning and implementation phase and pass these along to the next resident who will take over the next year.
Teaching with the Community*
Case Example
Elizabeth A. Jacobs MD MPP

Teaching Challenge: Teach medical and pediatrics residents who are predominantly international medical graduates about health care disparities.

Leaner setting: Urban, public hospital residency in Chicago, IL

Solution: Community-Academic partnership formed to teach residents over 4 half day sessions spread out over a month. Sessions are taught in the hospital and in the community by physician faculty and community faculty.

Curricular Components:
1) The US Health Care System---overview and description of how it contributes to health care disparities
2) Introduction to Community—discussion of and then visit to a local community that experiences high rates of disparity. Residents learn first hand from community members and visit the factors that contribute to health care disparities
3) Worlds Apart: Mr. Phillip’s Story—discussion of mistrust of health care and racism and how they contribute to health care disparities, particularly in some African American Communities
4) Community as a Positive Force---visit to local community organization working at the grass roots level to reduce health care disparities

Evaluation: Reflective writing by residents

Pitfalls:
1) It has been hard to sustain funding to pay our community partners; this is key as they are equal partners they need to be paid for their time
2) Figuring out how to best evaluate participants’ learning
3) Coordinating 3 physician and 6 community faculty

Rewards (a few of the many):
1) You can see the residents getting it when the community member share their own personal experiences
2) Community members have become amazing resources in their community to help over come distrust of medicine and encourage healthy behavior through their teaching experience
3) Residents get new patients and start to volunteer in community

Evaluation Module: 
Implementing Health Disparities Education

LuAnn Wilkerson, Ed.D., David Geffen School of Medicine at UCLA 
Ming Lee, Ph.D., David Geffen School of Medicine at UCLA

As we implement new curricular components on health disparities, we have a special responsibility and opportunity to use our interest in education and our skills as scholars to evaluate the impact of these new educational programs. Evaluation studies help us understand how the program can be improved, how planned curricular activities are actually implemented, and what outcomes occur. Outcome studies can serve the additional purpose of generating worthwhile knowledge about teaching and learning in medicine.

What are the barriers to approaching curriculum innovation as an opportunity for scholarship? First, a tension exists between implementing and evaluating. In a rush to meet deadlines for learners and curriculum committees, we implement new educational approaches without an evaluation study in place, or when resources are limited and time is of the essence, we satisfy ourselves with measures of participant satisfaction. Sometimes, elaborated plans for evaluation may be laid aside during a rush to get materials prepared for on-time delivery. Second, evaluation studies of medical education may not be viewed by our departments and institutions as worthy of the title of scholarship. In a study of faculty members in higher education and how they spend their professional time, entitled Scholarship Reconsidered, Boyer (1990) concluded, “We need scholars who not only skillfully explore the frontiers of knowledge, but also integrate ideas, connect thoughts to action, and inspire students.” He described three forms of scholarship that allow for the blending of educational and research activities: the scholarship of integration, the scholarship of application, and the scholarship of teaching. The design and evaluation of innovative curricula fall soundly within this broadened view of scholarly activities. Third, faculty members may have limited access to the medical education literature. Studies of similar innovations and instruments validated in other settings are published for the most part in a few medical education journals that are not widely read. Many evaluation studies are never published, but remain internal documents unavailable to faculty members charged with the design of evaluation studies of new curricula. Fourth, faculty members may lack familiarity with social science research methods and may be unaware of the range of study types that can be applied to questions about medical education innovations. If we cannot do a randomized controlled trial, is there anything else worth considering? Finally, as with any new research endeavor, medical education research suffers from a lack of funding and publication outlets.

To these general difficulties in conducting educational research and evaluation in medical education, Betancourt (2003) identifies special challenge for evaluating cross-cultural

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SGIM
Society of General Internal Medicine
To Promote Improved Patient Care, Research, and Education in Primary Care and General Internal Medicine
medical education. In measuring attitudes, social desirability makes honest opinions and actions difficult to capture. However, attitudes play a major role in the recognition and response of physicians to health care disparities. Knowledge about cultural and ethnic differences is difficult to separate from stereotyping. Knowledge of specific health care disparities in burden of disease, treatments, and outcomes may be less important than knowing when to suspect disparities and how to use up-to-date knowledge of disparities in the process of clinical care. Skills in the communication, negotiation, trust building are difficult to observe and measure. And finally the cultural competence domain which is an important component of any disparities curriculum is typically viewed by learners, if not by faculty, as soft and unmeasurable.

In Evaluation Module, you will:

- explore program evaluation as a form of disciplined scholarly inquiry,
- consider the design features of an evaluation study that allow the investigator to draw sound conclusions about the specific instance and generalize to other instances,
- identify threats to reliability and validity

In addition, we provide a compendium of instruments (see Table 1) used in previous studies of health disparities or cultural competency curricula that may be useful in developing a study to evaluate your implementation of the other modules in this series.

**What is Disciplined Inquiry?**

We often implement new curriculum with little attention to the evaluation of the impact on students, faculty, patients, or other aspects of the program. Sometimes, just before the end of the experience, we realize that we have not planned to collect ratings from participants and we rush around developing a quick survey that can be filled out with a minimum of fuss and bother. Approaching the same situation as a scholar (Shulman, 1988), we begin to wonder from the moment that a new curricular component is considered how we will know what difference it has made for any number of stakeholders, such as students, patients, faculty members, and society at large. As educational scholars, we want to know:

1. Was the innovation implemented as planned?
2. Did the innovation result in the intended and any unintended outcomes?
3. To what populations, setting, or situations can any identified effect be generalized?

In asking these questions and others like them, we have expanded the purpose of our inquiry beyond the collection of data for program improvement to include the generation of knowledge useful to persons in other settings.

“Disciplined inquiry has a quality that distinguishes it from other sources of opinion and belief. The disciplined inquiry is conducted and reported in such a way that the argument can be painstakingly examined…Whatever the character of a study, if it is disciplined, the investigator has anticipated the traditional questions that are pertinent. He institutes control at each step of information collection and

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reasoning to avoid the sources of error to which these questions refer. If the errors cannot be eliminated, he takes them into account by discussing the margin for error in his conclusions.” (Cronbach and Suppes, 1969, p.15 )

Let’s consider the specific features of an evaluation study that change it from the mere collection of opinion to disciplined inquiry:

1. **THE STUDY IS PLANNED TO ANSWER SPECIFIC QUESTIONS.**

An evaluation study demands the selection of a particular set of observations in response to a clearly-stated question. This question must be set prior to the implementation of the program to be evaluated—not attached after to a data set that we collected “just to be sure.”

In reviewing educational research studies for a number of journals and professional meetings, we are astounded by the frequency with which the question being addressed by a particular study is either left unstated or so vague as to be unanswerable. The questions that we might ask can be drawn from a variety of disciplinary perspectives. Let me take a single topic, teaching history taking, and illustrate the way in which a question will set the parameters for the research methodology.

**Observational studies**  
*What are the most powerful predictors of medical students’ use of a patient-centered communication style during a multiple-station clinical skills examination?*  
This question will require developing an operational definition of patient-centered care as demonstrated during patient-physician interaction and a measure of individual performance on communication skills, data on demographics, personal characteristics, performance in other domains, etc., analyzed using correlations, regression analysis, or structural equation modeling.

**Experimental and Quasi-experimental designs**  
*Do residents who completed a community action project demonstrate higher levels of knowledge about health disparities outcomes and treatments than residents who completed a similar training program without a community action project?*  
This question will require a systematic assignment of the learners to an experimental or control group, the design of the community action project, and assessments of both groups to determine the impact of the intervention.

**Descriptive studies**  
*What instructional strategies do students find most helpful in recognizing their own cultural background, including health-related values, beliefs, biases, and experiences that can affect patient care?*  
The exploration of opinion may require a combination of qualitative and quantitative methodologies. Qualitative tools such as focus groups or interviews may be necessary to identify the range of possible features of a successful learning environment.  

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constructed on the basis of these qualitative findings would allow validation in a broader sample and provide a chance to compare the perspectives of various types and levels of learners.

2. REFLECTS EXISTING LITERATURE AND THEORY

Just as in other types of research, a review of the literature is essential in determining the question to be asked and identifying existing measurement tools. There are few subject terms relevant to searches of educational topics in PubMed. Useful Mesh terms include the following:

Education, medical, undergraduate
Education, medical, graduate
Educational measurement
Evaluation, program
Program effectiveness
Curriculum, methods
Faculty, medical

Major non-medical education journals are not catalogued in PubMed, but can be accessed through ERIC, a similar database system that is not as readily available in medical libraries. Often a phone call or an email inquiry to an author identified in an initial search can be the most productive strategy for the beginning educational researcher. Many program evaluation studies go unpublished, especially those conducted for quality improvement purposes.

3. USES SYSTEMATIC METHODS

“To assert that something has method is to claim that there is an order, a regularity, obscure though it may be, which underlies an apparent disorder, thus rendering it meaningful. Method is the attribute which distinguished research activity from mere observation and speculation.” (Shulman, 1988, p. 3)

Disciplined inquiry does not require adherence to a single methodology. It can be qualitative, as in the study done by Irby (1994) of the teaching approaches demonstrated by the highly evaluated clinical teachers, or psychometric as in a structural equation modeling study by Wimmers, Schmidt, and Splinter (2006) on the relationships among students’ educational experiences in clinical clerkships and outcomes on various measures of clinical competence. It can involve random samples or samples of convenience. It can include multiple measures of multiple dimensions (e.g., knowledge, attitudes, or skills) of a single competency. In other words, as educational scholars, we have a broad range of methods from the social and biological sciences from which we can draw in creating the best design for answering a specific question. The choice of a specific method will depend on the questions that we are asking and the purpose of our research.
If our review of the literature suggests a possible answer for the question that we are asking, our purpose may be confirmatory. In other words, we would like to know if a particular outcome can be expected in a different setting or with a different population. We state a directional hypothesis and set about collecting the data that will allow us to confirm or rather, fail to disconfirm that hypothesis. The methods that we choose will probably be experimental with random assignments to treatments, quasi-experimental using control groups, correlational, or survey.

If our review of the literature reveals that little is known about the selected question, a specific hypothesis cannot be stated with confidence, or the quantitative findings are vague or unexplained, we might choose to shift into the exploratory mode – drawing our methodology from qualitative domain to determine the meaning for participants within the situation.

Whether confirmatory or exploratory in purpose, disciplined inquiry includes a representative or purposeful sample and the use of systematic data collection tools. An existing framework for program evaluation may provide a helpful prompt in designing an educational study so that the multiple aspects of the educational environment and participants are not overlooked. Some examples include the Logic Model (2001), CIPP (1983), Kirkpatrick (1994), and empowerment evaluation (1994).

These models of program evaluation provide a larger perspective for planning an evaluation study that goes beyond educational research to include measures of baseline status, context, process, and outcomes. A comprehensive program evaluation study is planned and implemented together with the curriculum to be evaluated. A comprehensive program evaluation process increases the likelihood of smooth implementation and achievement of program goals. A comprehensive program evaluation includes the following features:

1. Involvement of Stakeholders: Stakeholders refer to all of those who will be affected or interested in the program. The stakeholders of a health disparities educational program may include students, faculty members, patients, program directors, curriculum committee members, educational administrators, state and federal policy makers, and society at large. It is important to involve representatives of internal constituencies in the early stage of program development to brainstorm tangible goals of a new curriculum. This step is aimed at having the new curriculum embraced and blessed from the beginning by all who will be directly involved in the process.

2. Needs Assessment: Before new components of health disparities curriculum are developed, the existing conditions and resources need to be understood and identified first. For example, are there any existing curricular components that cover or relate to the issues of health disparities? Who are currently teaching those related components, if any? Who are the experts or ideal candidates for

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teaching the new components? How does the students’ current schedule look like?

3. Theoretical Foundation of the Program: What is the educational theory for designing and implementing the new curriculum? Although medical literature has already documented the existence of health and health care disparities and the association of health care disparities with patient outcomes, each institution has to determine, based on its individual educational philosophy and curricular design,
   - which year and what courses or programs are more appropriate for adding the new components;
   - what learning objectives are associated with each of the new components;
   - how the expected learning outcomes may be measured and analyzed.

4. Formative Evaluation: Once the above steps have been successfully passed through and the new curriculum has been implemented, the evaluator will conduct a number of evaluation tasks to ensure a smooth implementation and a move in the right direction. The evaluation tasks may be as informal as a causal talk with a faculty instructor or program director about the teaching and student performance, or as formal as a test or survey administered to students.

5. Summative Evaluation: Through a variety of process (e.g., number of students receiving the new components) and outcome (e.g., exam scores) assessments, the evaluator will be able to assemble the evaluation results in a summative way to address the question about the effectiveness of the newly implemented curriculum. Summative evaluation may also include findings of cost-benefit analysis to determine the overall program efficiency.

6. Report to Stakeholders: The program evaluation process is not complete without a report or reports to all the stakeholders identified at the beginning. The report may be prepared in either written or spoken form or both. It may be delivered to different audiences for different purposes, including feedback to improve teaching and learning (faculty instructors and students), curricular decision-making (curriculum committee members and program directors), scholarship activity record (program evaluators), health care assurance (patients and their families as well as general public), health care policy making (state and federal policy makers), and knowledge sharing (medical professionals).

Several frameworks for evaluating medical education in general and cultural competence curriculum in particular are summarized in Tables 2-4.

4. CONTROLS FOR BIAS
What are the questions that someone reading your evaluation results might raise about other factors that could account for your findings? Researchers have to pay attention to the issue of internal validity, the extent to which findings can be attributed to the variables being measured rather than unexplained and unexpected variance (Fraenkel and

Wilkerson L, Lee M, Evaluation Module
Educational studies use similar strategies for increasing internal validity as does clinical research, such as control groups, randomization, pre-post testing, large sample sizes, and clear delineation of subject selection. Careful timing of data collection points is also important, including attention to other contextual factors that might account for any measurable change.

5. CONCLUDES IN A WRITTEN DOCUMENT FOLLOWING THE STANDARDS OF PROFESSIONAL COMMUNICATION

We miraculously implement the innovation just ahead of the students or residents. We breathe a sigh of relief. We have even managed to get a human subjects protocol approved by the Institutional Review Board and collected pre-post data without alienating anyone. What happens next in the busy life of an academic faculty member? We quickly scan the data, maybe we get someone to enter numerical responses, and we provide a verbal report of the results to the appropriate committee. We will do a more careful and elaborate analysis as time permits. The data are placed in a file to be analyzed when time permits. We have abandoned our responsibility as a scholar to inform our colleagues of educational practices.

Disciplined inquiry includes plans for analyzing and reporting data. Strategies might include using data entry services, a statistical consultant, a graduate student from education or public health, or a professional educator colleague. Most of all, it requires setting aside protected time for writing, such as small blocks that can be squeezed into busy weeks on a regular basis, in order to meet the deadline of a submission or presentation. Writing and presenting results is the final step in turning program evaluation into scholarly work.

Designing an Educational Study

Designing a program evaluation or educational research study requires careful attention to the factors that may jeopardize our ability to interpret results or generalize to other situations. These factors are alternative hypothesis that may be used in explaining the results and as such, constitute threats to internal validity (Fraenkel and Wallen, 2006).

History – Specific events that take place during the period of data collection may affect results. Seasonal, institutional, political, and social actions that occur during the study period may produce results that compound or overshadow those results we acquire in the study. For example, during a study of the effect of the Doctoring curriculum on students’ ability to identify risk factors for domestic violence in a presenting patient and to take a thorough history of violence (Short, Cotton, and Hodgson, 1997) as part of a study with the Centers for Disease Control and Prevention, the O.J. Simpson trial drew international attention to the topic of domestic violence.

Maturation – If subjects are observed over time, there may be changes that can be attributed to normal development, such as growing older, growing more experienced, growing more tired. Here again, in studying the long-term impact of the Doctoring
curriculum on skills in history-taking, we would be concerned about the possibility of increased skill occurring as a result of social skills developed with maturity.

Selection Bias – The selection of a sample or the assignment of subjects to groups may make one group of subjects unintentionally different, older, more female or male, more interested, more community-minded. Many curricular innovations are targeted at student volunteers who may be different from those not volunteering to participate in some essential way. Baseline measurements are particularly important to distinguish between the results of selection and those of the intervention itself. (Durning, Hemmer, and Pangaro, 2007).

Mortality – During the process of a study, certain attrition is expected. The dropouts may significantly change the composition of a control or an experimental group. Those who remain in the study may be different in some significant way from those who drop out.

Testing Effect – If multiple tests are used, there could be an effect of repetition. If the test is identical, there could be actual learning as a result of the test. If the test is similar, there may be test-taking skills that develop, impeding the true measure of performance.

Instrumentation – Changes in the calibration of a measuring instrument or in observers or scorers may be responsible for change in the obtained measures rather than the treatment itself. This is of real concern in studies that require multiple raters or judges. Training of judges and testing for inter-rater agreement are important steps in developing sound instrumentation. The appendix contains dozens of instruments that have been developed and tested in previous studies of health disparities and cultural competency.

Diffusion of Treatment – The existence of an experimental program for one group of students may influence the concurrent status quo. For example, a pilot study may lead to informal discussions between faculty and trainees who are involved in the pilot and those who are not so that features of the intervention lead to changes in the non-intervention instructional content or approach.

As in clinical research, the most powerful control for threats to internal validity is randomization; however, this is difficult to accomplish in educational settings given ethical constraints and students’ anxiety about being guinea pigs. One strategy, demonstrated in the comparative study of the effects of the New Pathway curriculum at Harvard Medical School, is to randomize among volunteers to either the experimental or control group (Moore et al, 1994). More frequently applicable in educational studies are pre and post testing, non-randomized control groups, and the use of multiple equivalent groups.

External validity asks the question to what other groups or situations can the results be generalized (Fraenkel and Wallen, 2006). The answer from this question may result in changes in sampling and data collection procedures. Common problems include:
**Reliability** -- Do the measures used produce a consistent picture of the variable under study? Acceptable reliability in educational studies is .7 or higher (it would be better to cite the source. I believe Nunnally (1978) mentioned it, but I think he said .8. I left his book in my office, and will check it out on Monday). A tool that is highly reliable with one group will need to be re-tested to determine its ability to produce a consistent measure of performance with a different group. Starting with a measure with a history of reliability across multiple samples increases the likelihood that it will prove reliable with a new sample.

**Representativeness** – Is the sample representative of the population? A large sample size and multi-institutional study designs increase representativeness.

**Conditions** – Are conditions in which the data were collected the same as that to which conclusions are to be drawn? The evaluator needs to supply sufficient information about the data collection site and methodology that the reader can determine the similarity to his or her own setting and situation.

**Effect of Participation** – Were there unexpected outcomes for subjects as a result of being involved in the study? Qualitative designs that explore the experience of the subjects during an innovation are helpful in accounting for unexpected results.

> “While internal validity is the sine qua non and while the question of external validity is never completely answerable, the selection of designs strong in both types of validity is obviously our ideal. This is particularly the case for research on teaching, in which generalization to applied settings of known character is the desideratum.” (Campbell and Stanley, 1966)

**Clinical Signs of the “Evaluation Syndrome”**

In spite of our best intentions, program evaluation is difficult to implement. Yvonne Guba described the common “clinical signs” of evaluation failure in a classic article, “The Failure of Educational Evaluation” (Guba and Lincoln, 1981). Have you seen one or more of these symptoms in yourself or your colleagues?

- Avoids evaluation whenever possible.
- Demonstrates signs of anxiety when faced with evaluation results.
- Is immobilized in the face of opportunities for evaluation.
- Collects data that fail to provide useful information.

References:


*Wilkerson L, Lee M, Evaluation Module*


Wimmers PF, Schmidt HG, Splinter TA. Influence of clerkship experiences on clinical

*Wilkerson L, Lee M, Evaluation Module*
D. Mentor feedback (for individual projects): The mentor relationship is highly individual, but mentors typically provide advice and support to foster the public service dimension of the research, and to pursue larger questions of how this work relates to students’ life and career goals.
Society of General Internal Medicine
Disparities Task Force Faculty Development Project

Selected Instruments and Frameworks for the Evaluation of Medical Curriculum and Educational Interventions Addressing Disparities in Health and Health Care

Reviewed and Selected by

Ming Lee, Ph.D.
LuAnn Wilkerson, Ed.D.

David Geffen School of Medicine at UCLA
Center for Educational Development and Research
Table 1. Selected Instruments Measuring Knowledge, Attitudes, and Clinical Skills Regarding Health and Health Care Disparities

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Characteristic of Instrument</th>
<th>Measure</th>
<th>Psychometric Property</th>
<th>Sample Item</th>
<th>Other Study Using the Instrument</th>
<th>Associated Content/Module</th>
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<tbody>
<tr>
<td>Multicultural Assessment Questionnaire (MAQ)*</td>
<td>• Content/Format: 16-item, 5-point Likert scale, self-report questionnaire • Target Professional: FM residents • Original Source: Culhane-Pera et al., 1997</td>
<td>• Knowledge in cultural influences on physicians and patients (6) • Attitude toward multicultural medicine (4) • Skills in multicultural communication in clinical settings (6)</td>
<td>• High internal consistency (Cronbach’s $\alpha = .88, .89$)</td>
<td>• (Knowledge) How well can you define culture and list various factors that influence culture? • (Attitude) How well you respect patients and families behaviors and values? • (Skill) How well can you negotiate diagnostic and therapeutic approaches?</td>
<td>• Crandall et al., 2003</td>
<td>• Teaching in the Clinical Setting</td>
</tr>
<tr>
<td>Modified Cultural Competence Self-Assessment Questionnaire (M-CCSAQ)*</td>
<td>• Content/Format: 50-item, 4/5-point Likert scale &amp; True/False, self-report questionnaire • Target Professional: Medical students • Original Source: Godkin MA &amp; Savageau JA, 2001</td>
<td>• Attitude toward race, culture, and social issues (24) • Knowledge of access to health care in US (3) • Self awareness and knowledge of different cultures (21)</td>
<td>• Content validity • High internal consistency</td>
<td>• (Knowledge) How well are you able to describe the groups of color in your community? • (Attitude) Access to health care is not a privilege but a right, regardless of one’s social or political status. • (Behavior) How often do you interact socially with people of color in your community (excluding your own group if you are a person of color)?</td>
<td>• Beyond the Clinical Setting • Community Involvement and Social Justice</td>
<td></td>
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<tr>
<td>Cultural Assessment Survey (CAS)*</td>
<td>• Content/Format: 20-item, 4/5-point Likert scale, self-report questionnaire • Target Professional: Medical students • Original Source: Godkin MA &amp; Savageau JA, 2003</td>
<td>• Attitude toward race, culture, and social issues (8) • Self awareness and knowledge of different cultures (7)</td>
<td>• High internal consistency (Cronbach’s $\alpha = .89, .90$)</td>
<td>• (Knowledge) There is a need to understand cultural differences. • (Attitude) I am interested in having an international component in my career.</td>
<td>• Beyond the Clinical Setting</td>
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* Identified by Gozu et al. (2007) in a systematic review of instruments measuring cultural competence of health professionals as the only instruments demonstrating both reliability and validity.
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| Sociocultural Attitudes in Medicine Inventory (SAMI)*                    | • Content/Format: 26-item, 5-point Likert scale, self-report questionnaire                  | • Attitude toward sociocultural issues in medicine and patient care, including exposure, impact in clinical scenarios, and impact in patient-physician relationship and health status (26) | • Good internal consistency           | • (Attitude) Given the population that I anticipate working with in the future, sociocultural factors will be important issues to incorporate into my patient care.  
• (Behavior) In a clinical setting, I have observed how a patient’s sociocultural background influences health and/or health care decisions. |                                                                                  | • Teaching in the Clinical Setting |
| Cultural Self-Efficacy Scale (CSES)*                                     | • Content/Format: 26-item, 5-point Likert scale, self-report questionnaire                  | • Confidence in knowledge of general cultural concepts (3)             | • Content validity                    | • (Knowledge) Indicate your confidence rating regarding (family organization, beliefs about health, beliefs towards modesty, etc.) for each of the following ethnic/racial groups (African, Hispanic, Asian, Native American) | • Alpers RR & Zoucha R, 1996  
• Williamson E et al., 1996  
• St. Clair A & McKenry L, 1999  
• Smith LS, 2001                                                                 | • Teaching in the Clinical Setting |
| Trans Cultural Self-Efficacy Tool (TCSET/TSET)*                         | • Content/Format: 83-item, 10-point Likert scale, self-report questionnaire                  | • Knowledge of cultural influences on nursing care (25)               | • Content validity                    | • (Knowledge) Among clients of different cultural backgrounds, how knowledgeable are you about the ways cultural factors may influence nursing care (health history and interview, informed consent, safety, birth, dying and death, etc.)?  
• (Attitude) Rate your degree of confidence: How do you appreciate interaction with people of different culture?  
• (Skill) Rate your degree of confidence for each of the following interview topics (religious practices and beliefs, role of elders, traditional health and illness beliefs, etc.). | • Jeffreys MR, 2002                                                              | • Teaching in the Clinical Setting |
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<tr>
<td>Clinical Performance Exam (Single OSCE station)</td>
<td>• Content/Format: 10 yes/no-item, SP assessment checklist • Target Professional: 4th-Year Medical Students • Original Source: Guiton et al., 2004</td>
<td>• Cross-Cultural Skills in OSCE in a single case (10) -- History Taking (6) -- Info Sharing (4)</td>
<td>• Adequate internal consistency with the single case (Cronbach’s α = .70) • Construct validity using communication skills</td>
<td>• (History Taking) Found out what I thought was causing my problem or the name I gave it. • (Information Sharing) Framed the action plan in such a way as to incorporate my beliefs or preferences</td>
<td>• Used by two other medical schools in California (UCSF, USC)</td>
<td>• Teaching in the Clinical Setting</td>
</tr>
<tr>
<td>Comprehensive Clinical Assessment (CCA) (Single OSCE station)</td>
<td>• Content/Format: 10-item, 5-point scale, SP assessment checklist • Target Professional: 4th-Year Medical Students • Original Source: Robins et al., 2001</td>
<td>• Disease Beliefs and Management Scale (4) • Cultural Concerns Scale (4)</td>
<td>• Modest internal consistency for the Disease Beliefs and Management Scale (Cronbach’s α = .61) • High internal consistency for the Cultural Concerns Scale (Cronbach’s α = .83)</td>
<td>• (Disease Beliefs and Management) Discussed importance of getting my blood sugar under control. • (Cultural Concerns) Explored my beliefs about cultural importance of food preparation methods.</td>
<td></td>
<td>• Teaching in the Clinical Setting</td>
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<tr>
<td>12-Station Culture OSCE</td>
<td>• Content/Format: 16-item, 4-point scale, SP assessment checklist • Target Professional: Pediatrics residents • Original Source: Aeder et al., 2007</td>
<td>• Communication Skills (8) • Culture Specific Skills (8)</td>
<td>• Face validity (assessed by favorable ratings of the majority of the participating residents)</td>
<td>• (Communication Skills) Clearly states own agenda for interview (in beginning) • (Culture Specific Skills) Sensitive to cultural nuances about space/touch</td>
<td>• Altshuler L et al., 2003 (used 4 stations in intervention)</td>
<td>• Teaching in the Clinical Setting</td>
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<td>Cross-cultural diversity experiences and attitudes questionnaire</td>
<td>• <strong>Content/Format:</strong> 55-item, yes/no &amp; 4-point Likert scale, self-report questionnaire</td>
<td>• <strong>Attitudes</strong> toward diversity in the medical school and society</td>
<td>• Face validity (items adapted from a previously validated survey developed by the Higher Education Research Institute at UCLA)</td>
<td>• (Attitudes) Your beliefs about the benefits of diversity in medical school; Perceived support for affirmative action in medical school; Perceived social problems resulting from differences; Value in conflict as part of democracy</td>
<td>• Used by two other medical schools in California (UCSF, USC)</td>
<td>• Beyond the Clinical Setting</td>
</tr>
<tr>
<td>Interpreter Impact Rating Scale (IIRS)</td>
<td>• <strong>Content/Format:</strong> 7-item, 5-point Likert scale, self-report questionnaire</td>
<td>• <strong>Skill in the use of interpreters</strong></td>
<td>• High internal consistency (Cronbach’s α = .90)</td>
<td>• (Verbal Behavior) Trainee directly addressed the issues translated that were of concern to me. (Nonverbal Behavior) Trainee showed direct eye contact with me during the encounter instead of at the interpreter most of the time.</td>
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<td>• Teaching in the Clinical Setting</td>
</tr>
<tr>
<td>Faculty Observer Rating Scale (FORS)</td>
<td>• <strong>Content/Format:</strong> 11-item, 5-point Likert scale, self-report questionnaire</td>
<td>• <strong>Skill in the use of interpreters</strong></td>
<td>• High internal consistency (Cronbach’s α = .88)</td>
<td>• (Verbal Behavior) The trainee adequately explained the purpose of the interview to the interpreter. (Nonverbal Behavior) The trainee listened to the patient without unnecessary interruption.</td>
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<td>• Teaching in the Clinical Setting</td>
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</table>
| Patient Satisfaction with Remote Simultaneous Medical Interpreting (RSMI) | • **Content/Format:** 16-item, yes/no & 4/5-point Likert scale, self-report questionnaire  | • Patient satisfaction with physician communication/care                | • Adequate internal consistency among the composite score for satisfaction with physician communication/care (Cronbach’s $\alpha = .77$ on 5 items) | • (Physician Communication) How well did you understand your doctor’s explanation of medical procedures and test results?  
• (Interpretation) How would you rate your interpreter in treating you with respect? |                                                        | Teaching in the Clinical Setting |
|                                                                           | • **Target Professional:** Patients                                                            | • Patient satisfaction with interpretation                              | • Adequate internal consistency among the composite score for satisfaction with interpreter (Cronbach’s $\alpha = .74$ on 4 items) |                                                                                                                                                                                                             |                                |                          |
|                                                                           | • **Original Source:** Gany F et al., 2007                                                    |                                                                         |                                                                                       |                                                                                                                                                                                                             |                                |                          |
| Patient-Centered Attitudes Scale                                          | • **Content/Format:** 9-item, 5-point Likert scale, self-report questionnaire                  | • Patient-Centered Attitudes integral to cultural competence (curiosity, empathy, and respect) | • Adequate internal consistency (Cronbach’s $\alpha = .73$)                            | • Physicians need to “know where their patients are coming from” in order to treat their medical problems.  
• I have a genuine interest in patients as people, apart from their disease.  
• Patients usually know what is wrong with them. |                                                        | Teaching in the Clinical Setting |
<p>|                                                                           | • <strong>Target Professional:</strong> 3rd-year medical students                                           |                                                                         |                                                                                       |                                                                                                                                                                                                             |                                |                          |
|                                                                           | • <strong>Original Source:</strong> Beach et al., 2007                                                     |                                                                         |                                                                                       |                                                                                                                                                                                                             |                                |                          |</p>
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<tr>
<td>Intercultural Development Inventory (IDI)</td>
<td>• Content/Format: 50-item, 5-point Likert scale, self-report questionnaire</td>
<td>• Denial/Defense (DD) of/against cultural difference (13)</td>
<td>• Content validity</td>
<td>• (DD) It is appropriate that people do not care what happens outside their country.</td>
<td>• Altschuler L et al., 2003 (studied pediatric residents)</td>
<td>• Community Involvement and Social Justice</td>
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<td></td>
<td>• Target Professional: General public</td>
<td>• Reversal (R) an adopted culture is experienced as superior to the culture of one’s primary socialization (9)</td>
<td>• Construct validity</td>
<td>• (R) People from our culture are less tolerant compared to people from other cultures.</td>
<td>• Endicott L et al., 2003</td>
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<td></td>
<td>• Original Source: Hammer &amp; Bennett, 1998</td>
<td>• Minimization (M) One’s own cultural worldview are experienced as universal (9)</td>
<td>• High internal consistency (Cronbach’s $\alpha$ ranging from .80 to .85)</td>
<td>• (M) Our common humanity deserves more attention than culture difference.</td>
<td>• Hammer MR et al., 2003</td>
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<td>• Acceptance/Adaptation (AA) accept and adapt to complex worldviews (14)</td>
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<td>• (AA) I evaluate situations in my own culture based on my experiences and knowledge of other cultures.</td>
<td>• Paige RM et al., 2003</td>
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<td>• Encapsulated Marginality (EM) integrate one’s own cultural view into complex worldviews (5)</td>
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<td>• (EM) I feel rootless because I do not think I have a cultural identification.</td>
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<tr>
<td>The Slope Index of Inequality (SII)</td>
<td>• Content/Format: An index computed using simple regression analysis to show local health inequalities</td>
<td>• Local Health Inequalities</td>
<td>• Dependent Variable: An indicator of health outcome, lifestyle or service provision, which needs to be measured on an interval or ratio scale.</td>
<td></td>
<td>• <a href="http://www.erpho.org.uk/topics/tools/multi.aspx">http://www.erpho.org.uk/topics/tools/multi.aspx</a></td>
<td>• Community Involvement and Social Justice</td>
</tr>
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<td></td>
<td>• Target Professional: General public</td>
<td></td>
<td>• Independent Variables: Two types of data by socioeconomic, gender, or ethnic group: the relevant population size and an indicator of deprivation, which can be on an ordinal scale.</td>
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<td>• Original Source: Low &amp; Low, 2004</td>
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| Other measures of health inequality include:  
• Range  
• Lorenz Curve  
• Gini Coefficient  
• Relative Index of Inequality  
• Concentration Index | | | | | | |
| Health Impact Assessment (HIA) | • Content/Format: A structured process, approach or tool that predicts the health consequences of a policy or program  
• Target  
  Professional: Health care planners  
• Original Source: Health Development Agency (UK), 2002 | • Policy or Program Impact on Public Health | | | | |
| | | | | | | Six core elements are identified:  
Screening: Deciding whether to undertake an HIA  
Scoping: Deciding how to undertake a HIA  
Appraisal: Identifying & considering a range of evidence for potential impacts on health and equity  
Developing Recommendations: Deciding on and prioritizing specific recommendations for decision makers  
Engagement: With decision makers, helping reinforce the value of the evidence based recommendations and encourage their adoption or adaptation  
Ongoing Monitoring: Assessing the effect of any specific HIA recommendations adopted | | | | |
See Eastern Region Public Health Observatory website  
http://www.erpho.org.uk/topics/tools/multi.aspx for calculation spreadsheets  
See Scott-Samuel et al., 2001 for sample HIA guidelines  
Check the website at  
www.hiagateway.org.uk for various resources on HIA, including a variety of toolkits at  
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</table>
| Health Inequality Impact Assessment (HIIA) | • **Content/Format:** Step-by-step guidelines for assessing the impact of deprivation on health inequalities  
• **Target Professional:** Health care planners  
• **Original Source:** Lester et al., 2001 | • **Impact of Deprivation on Health Inequalities** | • Five steps are recommended, including:  
*Step one:* To brainstorm relevant health determinants and their effects on the specified area of planning  
*Step two:* To discuss how these determinants operate locally  
*Step three:* To collect and examine evidence to determine the confirmation or refute of the initial thoughts on health determinants  
*Step four:* To identify opportunities for action  
*Step five:* To rate the opportunities in terms of the strength of evidence, magnitude of the possible impact, the probability of achieving change, and the time scale for achieving goals | | | Community Involvement and Social Justice |
| Communication, Curriculum, and Culture (C³) Instrument | • **Content/Format:** 29-item, 5/7-point Likert scale, self-report questionnaire  
• **Target Professional:** 3rd- & 4th-year medical students  
• **Original Source:** Haidet et al., 2005 | • **Patient-Centeredness of Hidden Curricula,** including 3 content areas:  
-- Role Modeling (15)  
-- Students’ Patient-Care Experiences (11)  
-- Support for Students’ Own Patient-Centered Behaviors (3) | • Modest to high internal consistency for the three areas (Cronbach’s α ranging from .67 to .93)  
• Good know-group validity | • (Role Modeling) Indicate how often you observed the individuals (chief residents, etc.) engaged in the following kinds of behaviors: Communicate concern and interest in patients as unique persons.  
• (Students’ Patient-Care Experiences) For each vignette, rate how often you have experienced similar situations: You overhear an attending physician discussing a patient’s case history with another attending with the patient referred to as a diagnosis.  
• (Support for Students’ Own Patient-Centered Behaviors) Rate the response that you received from your instructors when you exhibited efforts to engage in each of the following patient-centered behaviors. | | Curriculum Evaluation |
<table>
<thead>
<tr>
<th>Goals (Why to Assess)</th>
<th>Types</th>
<th>Domains (What to Assess)</th>
<th>Methods (How to Assess)*</th>
<th>Principles</th>
<th>Challenges</th>
<th>Cautions</th>
<th>Content/Module</th>
</tr>
</thead>
</table>
| • To optimize capabilities of all learners and practitioners by providing direction & motivation for future learning | • Formative Assessment: Guiding future learning, providing reassurance, promoting reflection, and shaping values) | • Habits of mind and behavior | • Written Exams  
  --Multiple-choice items  
  --Key-feature and script-concordance items  
  --Short-answer items  
  --Structured essays | • Use multiple methods and a variety of environments and contexts to capture different aspects of performance | • New Domains of Assessment  
  --Teamwork: No validated method to use  
  --Professionalism: No agreement on definition, nor how best to measure it | • Be aware of the unintended effects of testing  
  • Avoid punishing expert physicians who use shortcuts | Curri. Eval. |
| • To protect the public by upholding high professional standards & screening out trainees/physicians who are incompetent | • Summative Assessment: Making an overall judgment about competence, fitness to practice, or qualification for advancement to higher levels of responsibility. | • Communication  
  • Professionalism  
  • Clinical reasoning and judgment in uncertain situations  
  • Teamwork  
  • Practice-based learning and improvement  
  • Systems-based practice | • Assessments by Supervising Clinicians  
  --Global ratings with comments at end of rotation  
  --Direct observation or video review with checklists for ratings  
  --Oral examinations  
  • Clinical Simulations  
  --Standardized patients and OSCE  
  --Incognito standardized patients  
  --High-tech simulations  
  • Multisource (“360-degree”) Assessments  
  --Peer assessments  
  --Patient assessments  
  --Self-assessments  
  --Portfolios | • Organize assessments into repeated, ongoing, contextual, and developmental programs  
  • Balance the use of complex, ambiguous real-life situations requiring reasoning and judgment with structured, focused assessments of knowledge, skills, and behavior  
  • Include directly observed behavior | • Multimethod and Longitudinal Assessment: Needs new ways of combining qualitative and quantitative data in longitudinal assessments that use multiple methods.  
  • Standardization of Assessment: The ideal balance between nationally standardized and school-specific assessment remains to be determined.  
  • Assessment and Learning: Needs to pay attention to both intended and unintended consequences of assessment.  
  • Assessment of Expertise: Present formidable psychometric challenges.  
  • Assessment and Future Performance: Correlation between the two is unknown. | • Do not assume quantitative data are more reliable, valid, or useful than qualitative data | |
| • To meet public expectations of self-regulation | • Formative Assessment: Guiding future learning, providing reassurance, promoting reflection, and shaping values) | • Acquisiton and application of knowledge and skills |  |  |  |  |  |
| • To choose among applicants for advanced training | • Summative Assessment: Making an overall judgment about competence, fitness to practice, or qualification for advancement to higher levels of responsibility. | | | | | | |

* See Epstein, 2007 for detailed descriptions and comparisons of the methods in aspects of domain, use, limitation, and strength.
### Table 3. Frameworks for Addressing Racial/Ethnic Disparities in Health and Health Care (Betancourt et al., 2003)

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Examples include disproportionate representation of minorities in:</td>
<td>Examples include disproportionate representation of minorities in:</td>
<td>• Organizational Barriers: Disproportionate representation of minorities in:</td>
<td>• Organizational Interventions: To diversify leadership and workforce to represent patient population</td>
<td>• Organizational Cultural Competence Interventions, by increasing the numbers of underrepresented minorities in the health professions and health care leadership, will:</td>
<td>• Curriculum Evaluation</td>
</tr>
<tr>
<td>Cardiovascular Disease</td>
<td>Utilization of cardiac diagnostic and therapeutic procedures</td>
<td>--Institutional leadership: e.g., medical school faculty, county health officers, and health care management administrators</td>
<td>--Increase minority recruitment</td>
<td>--Improve both clinical outcomes and the health status of the nation’s vulnerable populations</td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td>Prescription of analgesia for pain control</td>
<td>--Health care workforce: e.g., Physicians</td>
<td>• Structural Interventions: To ensure that the structural processes of care guarantee full access to quality health care for all patients</td>
<td>• Structural Cultural Competence Interventions, by implementing innovations in health care system and structure design, will:</td>
<td></td>
</tr>
<tr>
<td>Asthma</td>
<td>Surgical treatment of lung cancer</td>
<td>• Structural Barriers: Systems that are complex, under-funded, bureaucratic, or archaic in design, such as:</td>
<td>--Reduce language barriers by providing interpreters and multi-language materials, and increase patient-provider language concordance</td>
<td>• Clinical cultural Competence Interventions, by delivering educational initiatives that aim to teach providers the key tools and skills to delivery quality care to diverse populations, will:</td>
<td></td>
</tr>
<tr>
<td>Cancer</td>
<td>Referral to renal transplantation</td>
<td>--Lack of interpreter services</td>
<td>--Improve referral processes</td>
<td>--Directly address racial/ethnic disparities in health and health care</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Treatment of pneumonia</td>
<td>--Lack of culturally/linguistically appropriate health education materials</td>
<td>--Ensure culturally appropriate health promotion and disease prevention interventions</td>
<td></td>
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<tr>
<td></td>
<td>Treatment of congestive heart failure</td>
<td>--Bureaucratic intake processes</td>
<td></td>
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<td></td>
<td>Utilization of specific services covered by Medicare (e.g., immunizations and mammograms)</td>
<td>--Long waiting times for appointments</td>
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<td></td>
<td></td>
<td>--Problems with accessing specialty care</td>
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<td></td>
<td></td>
<td>• Clinical Interventions: To enhance provider knowledge of the relationship between sociocultural factors and health beliefs and behaviors</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Clinical Barriers: Sociocultural differences between patient and health care provider are not fully accepted, appreciated, explored, or understood, such as:</td>
<td>--Develop and deliver cultural competence curricula for providers, with a balance on cross-cultural knowledge and communication skills</td>
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<td></td>
<td></td>
<td>--Health beliefs</td>
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<td></td>
<td></td>
<td>--Medical practices</td>
<td></td>
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<td></td>
<td></td>
<td>--Attitudes toward medical care</td>
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<td></td>
<td></td>
<td>--Levels of trust in doctors and the health care system</td>
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</tbody>
</table>
Table 4. Frameworks for Evaluating Cultural Competence Curriculum (Betancourt, 2003)

<table>
<thead>
<tr>
<th>Suggested Evaluation Strategies</th>
<th>Evaluation of Curricular Link to Health Outcomes</th>
<th>Associated Content/Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed methods of evaluation that include both quantitative and qualitative strategies are required for assessing each of the following aspects:</td>
<td>Do students learn what is taught?</td>
<td>• Curriculum Evaluation</td>
</tr>
<tr>
<td><strong>Attitudes:</strong></td>
<td>• Pre- &amp; post-tests</td>
<td></td>
</tr>
<tr>
<td>• Standard surveying</td>
<td>• Unknown clinical cases</td>
<td></td>
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<tr>
<td>• Structured interviewing by faculty</td>
<td>• OSCE</td>
<td></td>
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<tr>
<td>• Self-awareness assessment (e.g., facilitated small-group discussions after role-playing)</td>
<td>Do students use what is taught?</td>
<td></td>
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<tr>
<td>• Presentation of clinical cases (orally or via case writeups)</td>
<td>• Qualitative physician and patient interviews</td>
<td></td>
</tr>
<tr>
<td>• OSCE with SP comments</td>
<td>• Medical chart review &amp; case write-ups (including “sociocultural assessment and intervention” in templates)</td>
<td></td>
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<tr>
<td>• Videotaped/audiotaped clinical encounter (the “gold standard”)</td>
<td>• Audio or videotape of multiple, random medical encounters</td>
<td></td>
</tr>
<tr>
<td><strong>Knowledge:</strong></td>
<td>Does what is taught have an impact on care?</td>
<td></td>
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<tr>
<td>• Pretest-posttests (multiple-choice, true-false, etc.) on evidence-based, patient-centered information</td>
<td>• Patient and provider satisfaction</td>
<td></td>
</tr>
<tr>
<td>• Unknown clinical cases (either paper or video cases, vignettes)</td>
<td>• Medical chart review</td>
<td></td>
</tr>
<tr>
<td>• Presentation of clinical cases</td>
<td>• Processes of care (e.g., patients being asked their explanatory model more frequently) and intermediate (e.g., completion of health promotion and disease prevention interventions) and conclusive (e.g., better patient adherence to medications and disease control) health outcomes</td>
<td></td>
</tr>
<tr>
<td>• OSCE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Presentation of clinical cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• OSCE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Videotaped/audiotaped clinical encounter</td>
<td></td>
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</tbody>
</table>
Bibliography (Tools and articles mentioned in the tables)


5/20/2008


Health Development Agency (UK). Health Impact Assessment Gateway Website (The core aim of the HIA Gateway website is to provide access to HIA related information, resources, networks and evidence to assist people participating in the HIA process.). Available online at www.hiagateway.org.uk.


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Beagan BL. Teaching social and cultural awareness to medical students: it's all very nice to talk about it in theory, but ultimately it makes no difference. Acad Med. 2003;78:605-614.


Chevannes M. Issues in educating health professionals to meet the diverse needs of patients and other service users from ethnic minority groups. J Advanced Nurs. 2002;39:290-8.


As we implement new curricular components on health disparities, we have a special responsibility and opportunity to use our interest in education and our skills as scholars to evaluate the impact of these new educational programs. Evaluation studies help us understand how the program can be improved, how planned curricular activities are actually implemented, and what outcomes occur. Outcome studies can serve the additional purpose of generating worthwhile knowledge about teaching and learning in medicine.

What are the barriers to approaching curriculum innovation as an opportunity for scholarship? First, a tension exists between implementing and evaluating. In a rush to meet deadlines for learners and curriculum committees, we implement new educational approaches without an evaluation study in place, or when resources are limited and time is of the essence, we satisfy ourselves with measures of participant satisfaction. Sometimes, elaborated plans for evaluation may be laid aside during a rush to get materials prepared for on-time delivery. Second, evaluation studies of medical education may not be viewed by our departments and institutions as worthy of the title of scholarship. In a study of faculty members in higher education and how they spend their professional time, entitled Scholarship Reconsidered, Boyer (1990) concluded, “We need scholars who not only skillfully explore the frontiers of knowledge, but also integrate ideas, connect thoughts to action, and inspire students.” He described three forms of scholarship that allow for the blending of educational and research activities: the scholarship of integration, the scholarship of application, and the scholarship of teaching. The design and evaluation of innovative curricula fall soundly within this broadened view of scholarly activities. Third, faculty members may have limited access to the medical education literature. Studies of similar innovations and instruments validated in other settings are published for the most part in a few medical education journals that are not widely read. Many evaluation studies are never published, but remain internal documents unavailable to faculty members charged with the design of evaluation studies of new curricula. Fourth, faculty members may lack familiarity with social science research methods and may be unaware of the range of study types that can be applied to questions about medical education innovations. If we cannot do a randomized controlled trial, is there anything else worth considering? Finally, as with any new research endeavor, medical education research suffers from a lack of funding and publication outlets.

To these general difficulties in conducting educational research and evaluation in medical education, Betancourt (2003) identifies special challenge for evaluating cross-cultural
medical education. In measuring attitudes, social desirability makes honest opinions and actions difficult to capture. However, attitudes play a major role in the recognition and response of physicians to health care disparities. Knowledge about cultural and ethnic differences is difficult to separate from stereotyping. Knowledge of specific health care disparities in burden of disease, treatments, and outcomes may be less important than knowing when to suspect disparities and how to use up-to-date knowledge of disparities in the process of clinical care. Skills in the communication, negotiation, trust building are difficult to observe and measure. And finally the cultural competence domain which is an important component of any disparities curriculum is typically viewed by learners, if not by faculty, as soft and unmeasurable.

In Evaluation Module, you will:

- explore program evaluation as a form of disciplined scholarly inquiry,
- consider the design features of an evaluation study that allow the investigator to draw sound conclusions about the specific instance and generalize to other instances,
- identify threats to reliability and validity

In addition, we provide a compendium of instruments (see Table 1) used in previous studies of health disparities or cultural competency curricula that may be useful in developing a study to evaluate your implementation of the other modules in this series.

What is Disciplined Inquiry?

We often implement new curriculum with little attention to the evaluation of the impact on students, faculty, patients, or other aspects of the program. Sometimes, just before the end of the experience, we realize that we have not planned to collect ratings from participants and we rush around developing a quick survey that can be filled out with a minimum of fuss and bother. Approaching the same situation as a scholar (Shulman, 1988), we begin to wonder from the moment that a new curricular component is considered how we will know what difference it has made for any number of stakeholders, such as students, patients, faculty members, and society at large. As educational scholars, we want to know:

1. Was the innovation implemented as planned?
2. Did the innovation result in the intended and any unintended outcomes?
3. To what populations, setting, or situations can any identified effect be generalized?

In asking these questions and others like them, we have expanded the purpose of our inquiry beyond the collection of data for program improvement to include the generation of knowledge useful to persons in other settings.

“Disciplined inquiry has a quality that distinguishes it from other sources of opinion and belief. The disciplined inquiry is conducted and reported in such a way that the argument can be painstakingly examined…Whatever the character of a study, if it is disciplined, the investigator has anticipated the traditional questions that are pertinent. He institutes control at each step of information collection and...”

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reasoning to avoid the sources of error to which these questions refer. If the errors cannot be eliminated, he takes them into account by discussing the margin for error in his conclusions.” (Cronbach and Suppes, 1969, p.15)

Let’s consider the specific features of an evaluation study that change it from the mere collection of opinion to disciplined inquiry:

1. **THE STUDY IS PLANNED TO ANSWER SPECIFIC QUESTIONS.**

   An evaluation study demands the selection of a particular set of observations in response to a clearly-stated question. This question must be set prior to the implementation of the program to be evaluated—not attached after to a data set that we collected “just to be sure.”

   In reviewing educational research studies for a number of journals and professional meetings, we are astounded by the frequency with which the question being addressed by a particular study is either left unstated or so vague as to be unanswerable. The questions that we might ask can be drawn from a variety of disciplinary perspectives. Let me take a single topic, teaching history taking, and illustrate the way in which a question will set the parameters for the research methodology.

   **Observational studies**
   *What are the most powerful predictors of medical students’ use of a patient-centered communication style during a multiple-station clinical skills examination?*
   This question will require developing an operational definition of patient-centered care as demonstrated during patient-physician interaction and a measure of individual performance on communication skills, data on demographics, personal characteristics, performance in other domains, etc., analyzed using correlations, regression analysis, or structural equation modeling.

   **Experimental and Quasi-experimental designs**
   *Do residents who completed a community action project demonstrate higher levels of knowledge about health disparities outcomes and treatments than residents who completed a similar training program without a community action project?*
   This question will require a systematic assignment of the learners to an experimental or control group, the design of the community action project, and assessments of both groups to determine the impact of the intervention.

   **Descriptive studies**
   *What instructional strategies do students find most helpful in recognizing their own cultural background, including health-related values, beliefs, biases, and experiences that can affect patient care?*
   The exploration of opinion may require a combination of qualitative and quantitative methodologies. Qualitative tools such as focus groups or interviews may be necessary to identify the range of possible features of a successful learning environment. A survey constructed on the basis of these qualitative findings would allow validation in a broader context.

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sample and provide a chance to compare the perspectives of various types and levels of learners.

2. REFLECTS EXISTING LITERATURE AND THEORY

Just as in other types of research, a review of the literature is essential in determining the question to be asked and identifying existing measurement tools. There are few subject terms relevant to searches of educational topics in PubMed. Useful Mesh terms include the following:
Education, medical, undergraduate
Education, medical, graduate
Educational measurement
Evaluation, program
Program effectiveness
Curriculum, methods
Faculty, medical

Major non-medical education journals are not catalogued in PubMed, but can be accessed through ERIC, a similar database system that is not as readily available in medical libraries. Often a phone call or an email inquiry to an author identified in an initial search can be the most productive strategy for the beginning educational researcher. Many program evaluation studies go unpublished, especially those conducted for quality improvement purposes.

3. USES SYSTEMATIC METHODS

“To assert that something has method is to claim that there is an order, a regularity, obscure though it may be, which underlies an apparent disorder, thus rendering it meaningful. Method is the attribute which distinguished research activity from mere observation and speculation.” (Shulman, 1988, p. 3)

Disciplined inquiry does not require adherence to a single methodology. It can be qualitative, as in the study done by Irby (1994) of the teaching approaches demonstrated by the highly evaluated clinical teachers, or psychometric as in a structural equation modeling study by Wimmers, Schmidt, and Splinter (2006) on the relationships among students’ educational experiences in clinical clerkships and outcomes on various measures of clinical competence. It can involve random samples or samples of convenience. It can include multiple measures of multiple dimensions (e.g., knowledge, attitudes, or skills) of a single competency. In other words, as educational scholars, we have a broad range of methods from the social and biological sciences from which we can draw in creating the best design for answering a specific question. The choice of a specific method will depend on the questions that we are asking and the purpose of our research.

If our review of the literature suggests a possible answer for the question that we are asking, our purpose may be confirmatory. In other words, we would like to know if a

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particular outcome can be expected in a different setting or with a different population. We state a directional hypothesis and set about collecting the data that will allow us to confirm or rather, fail to disconfirm that hypothesis. The methods that we choose will probably be experimental with random assignments to treatments, quasi-experimental using control groups, correlational, or survey.

If our review of the literature reveals that little is known about the selected question, a specific hypothesis cannot be stated with confidence, or the quantitative findings are vague or unexplained, we might choose to shift into the exploratory mode – drawing our methodology from qualitative domain to determine the meaning for participants within the situation.

Whether confirmatory or exploratory in purpose, disciplined inquiry includes a representative or purposeful sample and the use of systematic data collection tools. An existing framework for program evaluation may provide a helpful prompt in designing an educational study so that the multiple aspects of the educational environment and participants are not overlooked. Some examples include the Logic Model (2001), CIPP (1983), Kirkpatrick (1994), and empowerment evaluation (1994).

These models of program evaluation provide a larger perspective for planning an evaluation study that goes beyond educational research to include measures of baseline status, context, process, and outcomes. A comprehensive program evaluation study is planned and implemented together with the curriculum to be evaluated. A comprehensive program evaluation process increases the likelihood of smooth implementation and achievement of program goals. A comprehensive program evaluation includes the following features:

1. **Involvement of Stakeholders:** Stakeholders refer to all of those who will be affected or interested in the program. The stakeholders of a health disparities educational program may include students, faculty members, patients, program directors, curriculum committee members, educational administrators, state and federal policy makers, and society at large. It is important to involve representatives of internal constituencies in the early stage of program development to brainstorm tangible goals of a new curriculum. This step is aimed at having the new curriculum embraced and blessed from the beginning by all who will be directly involved in the process.

2. **Needs Assessment:** Before new components of health disparities curriculum are developed, the existing conditions and resources need to be understood and identified first. For example, are there any existing curricular components that cover or relate to the issues of health disparities? Who are currently teaching those related components, if any? Who are the experts or ideal candidates for teaching the new components? How does the students’ current schedule look like?

3. **Theoretical Foundation of the Program:** What is the educational theory for designing and implementing the new curriculum? Although medical literature has already documented the existence of health and health care disparities and the

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association of health care disparities with patient outcomes, each institution has to
determine, based on its individual educational philosophy and curricular design,
- which year and what courses or programs are more appropriate for adding
  the new components;
- what learning objectives are associated with each of the new components;
- how the expected learning outcomes may be measured and analyzed.

4. Formative Evaluation: Once the above steps have been successfully passed
through and the new curriculum has been implemented, the evaluator will conduct
a number of evaluation tasks to ensure a smooth implementation and a move in
the right direction. The evaluation tasks may be as informal as a causal talk with
a faculty instructor or program director about the teaching and student
performance, or as formal as a test or survey administered to students.

5. Summative Evaluation: Through a variety of process (e.g., number of students
receiving the new components) and outcome (e.g., exam scores) assessments, the
evaluator will be able to assemble the evaluation results in a summative way to
address the question about the effectiveness of the newly implemented
curriculum. Summative evaluation may also include findings of cost-benefit
analysis to determine the overall program efficiency.

6. Report to Stakeholders: The program evaluation process is not complete without a
report or reports to all the stakeholders identified at the beginning. The report
may be prepared in either written or spoken form or both. It may be delivered to
different audiences for different purposes, including feedback to improve teaching
and learning (faculty instructors and students), curricular decision-making
(curriculum committee members and program directors), scholarship activity
record (program evaluators), health care assurance (patients and their families as
well as general public), health care policy making (state and federal policy
makers), and knowledge sharing (medical professionals).

Several frameworks for evaluating medical education in general and cultural competence
curriculum in particular are summarized in Tables 2-4.

4. CONTROLS FOR BIAS
What are the questions that someone reading your evaluation results might raise about
other factors that could account for your findings? Researchers have to pay attention to
the issue of internal validity, the extent to which findings can be attributed to the
variables being measured rather than unexplained and unexpected variance (Fraenkel and
Wallen, 2006). Educational studies use similar strategies for increasing internal validity
as does clinical research, such as control groups, randomization, pre-post testing, large
sample sizes, and clear delineation of subject selection. Careful timing of data collection
points is also important, including attention to other contextual factors that might account
for any measurable change.

5. CONCLUDES IN A WRITTEN DOCUMENT FOLLOWING THE STANDARDS
OF PROFESSIONAL COMMUNICATION
We miraculously implement the innovation just ahead of the students or residents. We
breathe a sigh of relief. We have even managed to get a human subjects protocol

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approved by the Institutional Review Board and collected pre-post data without alienating anyone. What happens next in the busy life of an academic faculty member? We quickly scan the data, maybe we get someone to enter numerical responses, and we provide a verbal report of the results to the appropriate committee. We will do a more careful and elaborate analysis as time permits. The data are placed in a file to be analyzed when time permits. We have abandoned our responsibility as a scholar to inform our colleagues of educational practices.

Disciplined inquiry includes plans for analyzing and reporting data. Strategies might include using data entry services, a statistical consultant, a graduate student from education or public health, or a professional educator colleague. Most of all, it requires setting aside protected time for writing, such as small blocks that can be squeezed into busy weeks on a regular basis, in order to meet the deadline of a submission or presentation. Writing and presenting results is the final step in turning program evaluation into scholarly work.

**Designing an Educational Study**
Designing a program evaluation or educational research study requires careful attention to the factors that may jeopardize our ability to interpret results or generalize to other situations. These factors are alternative hypothesis that may be used in explaining the results and as such, constitute threats to internal validity (Fraenkel and Wallen, 2006).

**History** – Specific events that take place during the period of data collection may affect results. Seasonal, institutional, political, and social actions that occur during the study period may produce results that compound or overshadow those results we acquire in the study. For example, during a study of the effect of the Doctoring curriculum on students’ ability to identify risk factors for domestic violence in a presenting patient and to take a thorough history of violence (Short, Cotton, and Hodgson, 1997) as part of a study with the Centers for Disease Control and Prevention, the O.J. Simpson trial drew international attention to the topic of domestic violence.

**Maturation** – If subjects are observed over time, there may be changes that can be attributed to normal development, such as growing older, growing more experienced, growing more tired. Here again, in studying the long-term impact of the Doctoring curriculum on skills in history-taking, we would be concerned about the possibility of increased skill occurring as a result of social skills developed with maturity.

**Selection Bias** – The selection of a sample or the assignment of subjects to groups may make one group of subjects unintentionally different, older, more female or male, more interested, more community-minded. Many curricular innovations are targeted at student volunteers who may be different from those not volunteering to participate in some essential way. Baseline measurements are particularly important to distinguish between the results of selection and those of the intervention itself. (Durning, Hemmer, and Pangaro, 2007).

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Mortality – During the process of a study, certain attrition is expected. The dropouts may significantly change the composition of a control or an experimental group. Those who remain in the study may be different in some significant way from those who drop out.

Testing Effect – If multiple tests are used, there could be an effect of repetition. If the test is identical, there could be actual learning as a result of the test. If the test is similar, there may be test-taking skills that develop, impeding the true measure of performance.

Instrumentation – Changes in the calibration of a measuring instrument or in observers or scorers may be responsible for change in the obtained measures rather than the treatment itself. This is of real concern in studies that require multiple raters or judges. Training of judges and testing for inter-rater agreement are important steps in developing sound instrumentation. The appendix contains dozens of instruments that have been developed and tested in previous studies of health disparities and cultural competency.

Diffusion of Treatment – The existence of an experimental program for one group of students may influence the concurrent status quo. For example, a pilot study may lead to informal discussions between faculty and trainees who are involved in the pilot and those who are not so that features of the intervention lead to changes in the non-intervention instructional content or approach.

As in clinical research, the most powerful control for threats to internal validity is randomization; however, this is difficult to accomplish in educational settings given ethical constraints and students’ anxiety about being guinea pigs. One strategy, demonstrated in the comparative study of the effects of the New Pathway curriculum at Harvard Medical School, is to randomize among volunteers to either the experimental or control group (Moore et al, 1994). More frequently applicable in educational studies are pre and post testing, non-randomized control groups, and the use of multiple equivalent groups.

External validity asks the question to what other groups or situations can the results be generalized (Fraenkel and Wallen, 2006). The answer from this question may result in changes in sampling and data collection procedures. Common problems include:

Reliability -- Do the measures used produce a consistent picture of the variable under study? Acceptable reliability in educational studies is .8 or higher (Nunnally, 1978). A tool that is highly reliable with one group will need to be re-tested to determine its ability to produce a consistent measure of performance with a different group. Starting with a measure with a history of reliability across multiple samples increases the likelihood that it will prove reliable with a new sample.

Representativeness – Is the sample representative of the population? A large sample size and multi-institutional study designs increase representativeness.

Conditions – Are conditions in which the data were collected the same as that to which conclusions are to be drawn? The evaluator needs to supply sufficient information about the data collection site and methodology that the reader can determine the similarity to his or her own setting and situation.

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Effect of Participation – Were there unexpected outcomes for subjects as a result of being involved in the study? Qualitative designs that explore the experience of the subjects during an innovation are helpful in accounting for unexpected results.

“While internal validity is the sine qua non and while the question of external validity is never completely answerable, the selection of designs strong in both types of validity is obviously our ideal. This is particularly the case for research on teaching, in which generalization to applied settings of known character is the desideratum.” (Campbell and Stanley, 1966)

Clinical Signs of the “Evaluation Syndrome”

In spite of our best intentions, program evaluation is difficult to implement. Yvonne Guba described the common “clinical signs” of evaluation failure in a classic article, “The Failure of Educational Evaluation” (Guba and Lincoln, 1981). Have you seen one or more of these symptoms in yourself or your colleagues?

- Avoids evaluation whenever possible.
- Demonstrates signs of anxiety when faced with evaluation results.
- Is immobilized in the face of opportunities for evaluation.
- Collects data that fail to provide useful information.

References:


During SJ, Hemmer P, Pangaro LN. The structure of program evaluation: An approach for evaluating a course, clerkship, or components of a residency or fellowship training program. Teaching and Learning in Medicine, 19:308-18, 2007.


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