Transforming Health Disparities through Interprofessional Education, Research & Service

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  - Health Resources and Services Administration (HRSA)

- No financial conflict of interest

Learning Objectives

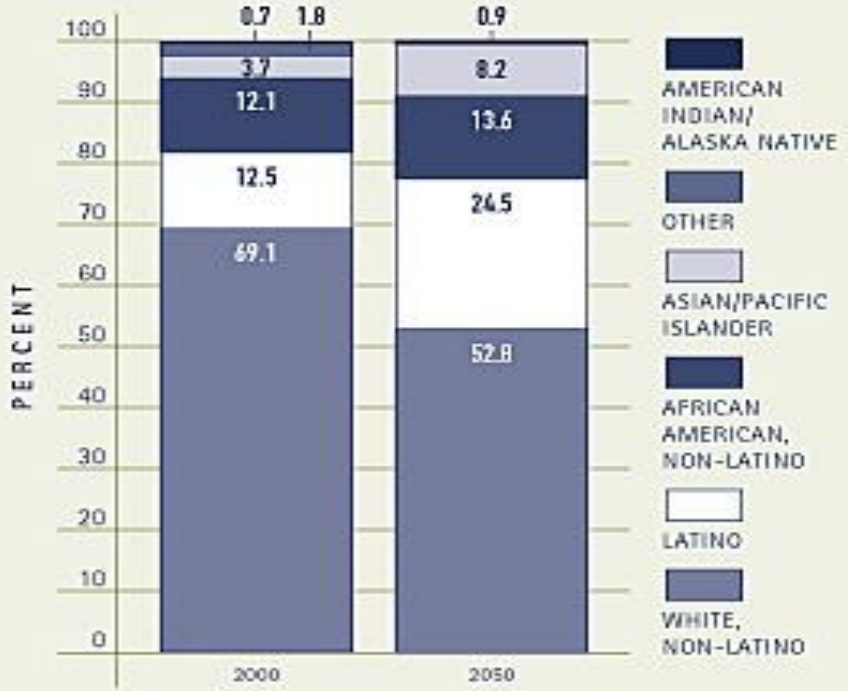
- Analyze priority concerns in health care to contextualize background & rationale for addressing the topic
- Discuss key concepts related to health disparities
- Discuss the role of interprofessional teamwork in optimizing care and reducing health disparities
- Discuss UIC's "Interprofessional Approaches to Health Disparities (IAHD) Program" as an applied example of training interprofessional student teams using CBPR to understand and address special needs of vulnerable patients and reducing health disparities

Background & Rationale

Racial and Ethnic Minorities Will Comprise Almost Half of the Total Population by 2050

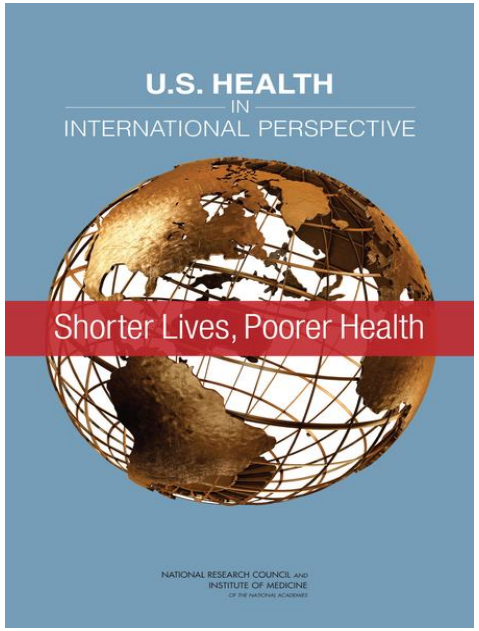
FIGURE 2

Distribution of the U.S. population by race/ethnicity. 2000 and 2050

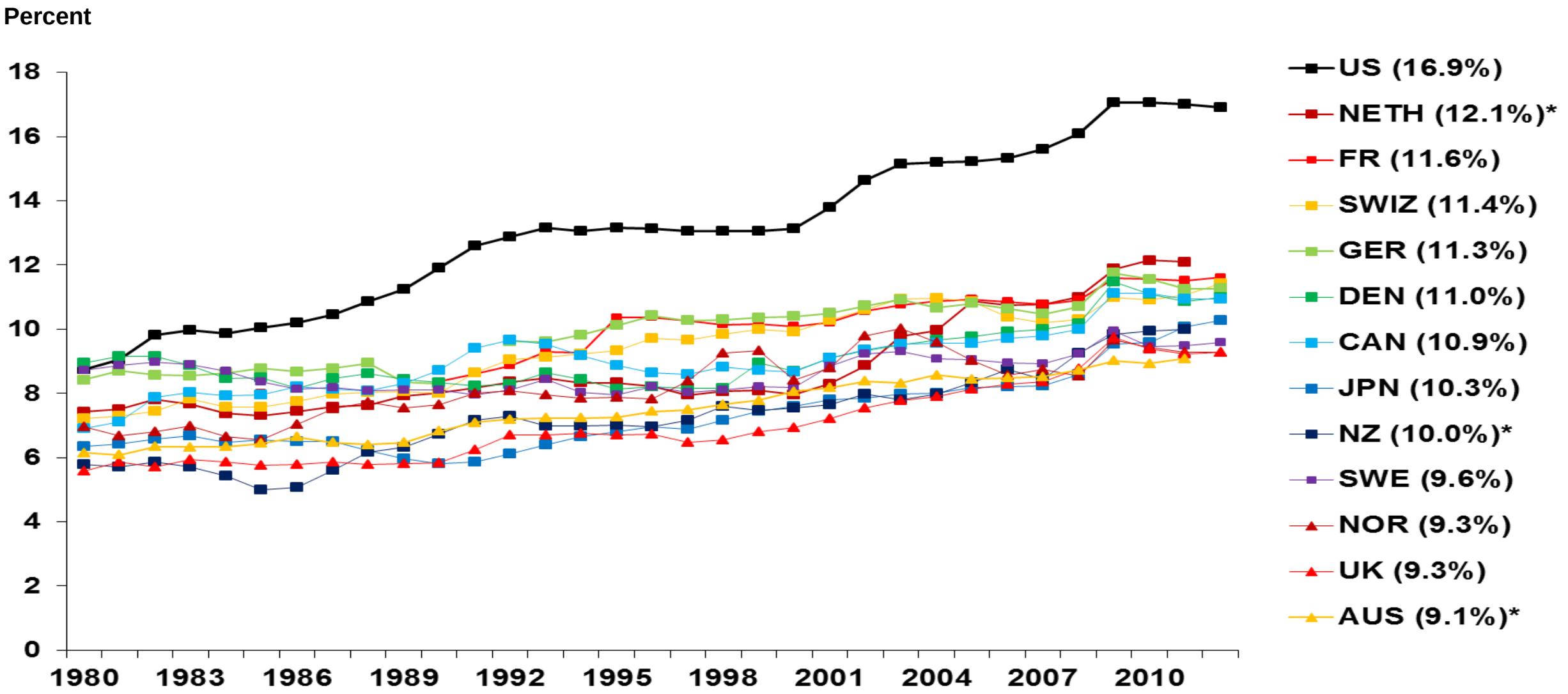


NOTE: "Other" includes non-Latino individuals who reported "Some other race" or "Two or more races." Data for 2050 do not include estimates for the "Other" category.

SOURCES: U.S. Census Bureau. 2001. *PHC-T-1. Population by race and Hispanic or Latino Origin for the United States: 2000.* Available at: http://www.census.gov/population/cen2000/phc-t-1/tab03.pdf and Day, J.C. 1996. *Population projections of the United States by age, sex, race, and Hispanic origin: 1995 to 2050.* U.S. Bureau of the Census Current Population Reports (P25-1130).



Health Care Spending as a Percentage of GDP, 1980–2012



* 2011.
GDP refers to gross domestic product.
Source: OECD Health Data 2014.

The COMMONWEALTH FUND

Mirror, Mirror on the Wall, 2014 Update: How the U.S. Health Care System Compares Internationally

EXHIBIT ES-1. OVERALL RANKING

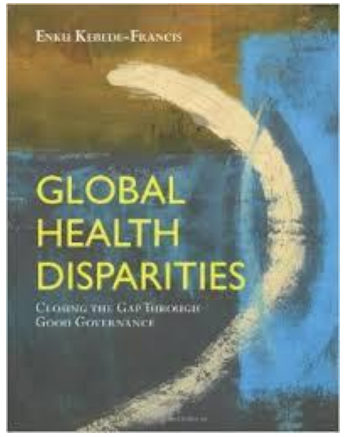
COUNTRY RANKINGS

- Top 2*
- Middle
- Bottom 2*

	AUS	CAN	FRA	GER	NETH	NZ	NOR	SWE	SWIZ	UK	US
OVERALL RANKING (2013)	4	10	9	5	5	7	7	3	2	1	11
Quality Care	2	9	8	7	5	4	11	10	3	1	5
Effective Care	4	7	9	6	5	2	11	10	8	1	3
Safe Care	3	10	2	6	7	9	11	5	4	1	7
Coordinated Care	4	8	9	10	5	2	7	11	3	1	6
Patient-Centered Care	5	8	10	7	3	6	11	9	2	1	4
Access	8	9	11	2	4	7	6	4	2	1	9
Cost-Related Problem	9	5	10	4	8	6	3	1	7	1	11
Timeliness of Care	6	11	10	4	2	7	8	9	1	3	5
Efficiency	4	10	8	9	7	3	4	2	6	1	11
Equity	5	9	7	4	8	10	6	1	2	2	11
Healthy Lives	4	8	1	7	5	9	6	2	3	10	11
Health Expenditures/Capita, 2011**	$3,800	$4,522	$4,118	$4,495	$5,099	$3,182	$5,669	$3,925	$5,643	$3,405	$8,508

Notes: * Includes ties. ** Expenditures shown in $US PPP (purchasing power parity); Australian $ data are from 2010.
Source: Calculated by The Commonwealth Fund based on 2011 International Health Policy Survey of Sicker Adults; 2012 International Health Policy Survey of Primary Care Physicians; 2013 International Health Policy Survey; Commonwealth Fund *National Scorecard 2011;* World Health Organization; and Organization for Economic Cooperation and Development, *OECD Health Data, 2013* (Paris: OECD, Nov. 2013).

Social Determinants of Health

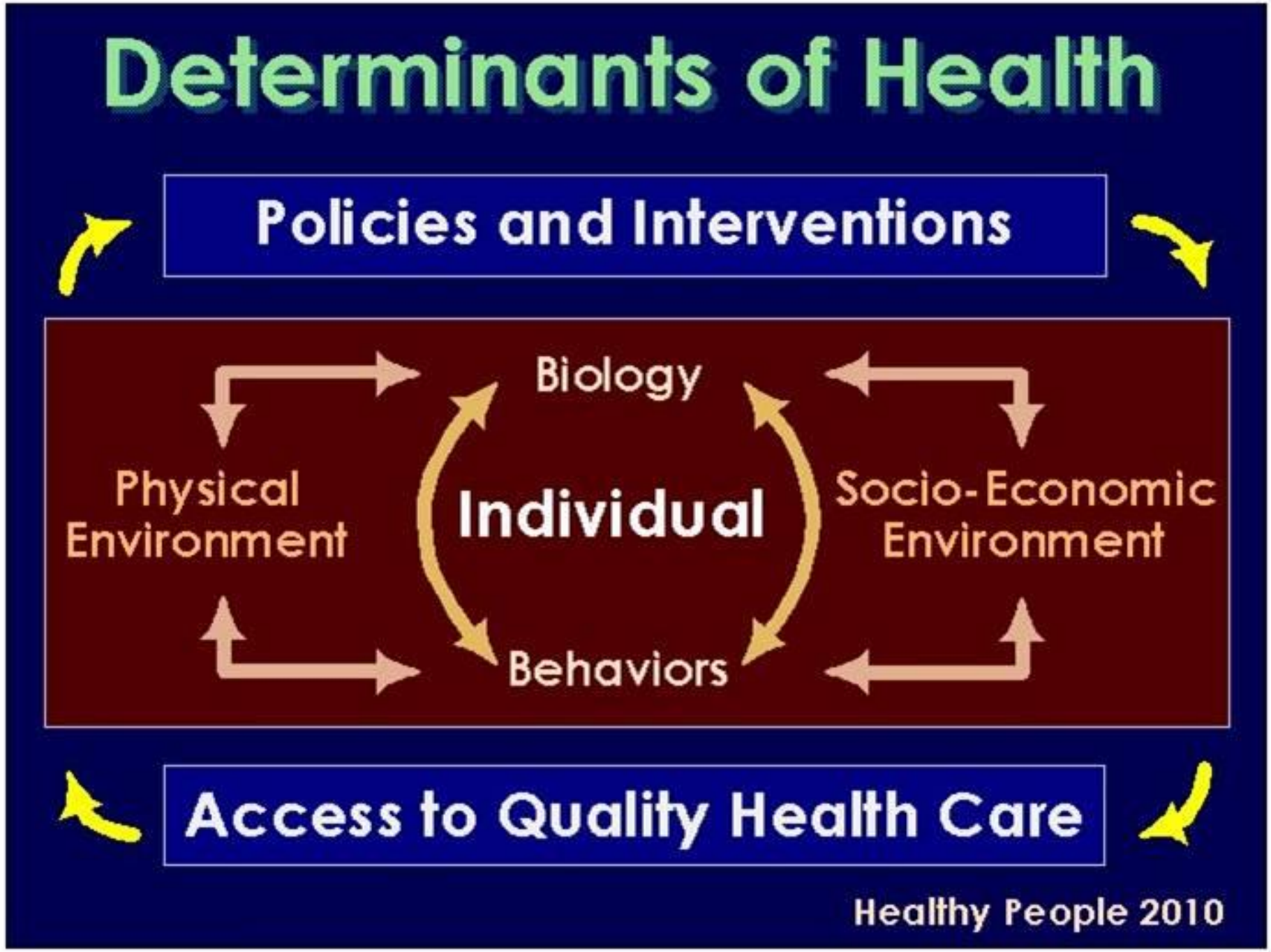


The circumstances in which people are born, grow up, live, work and age, and the systems put in place to deal with illness.

These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics.

--World Health Organization

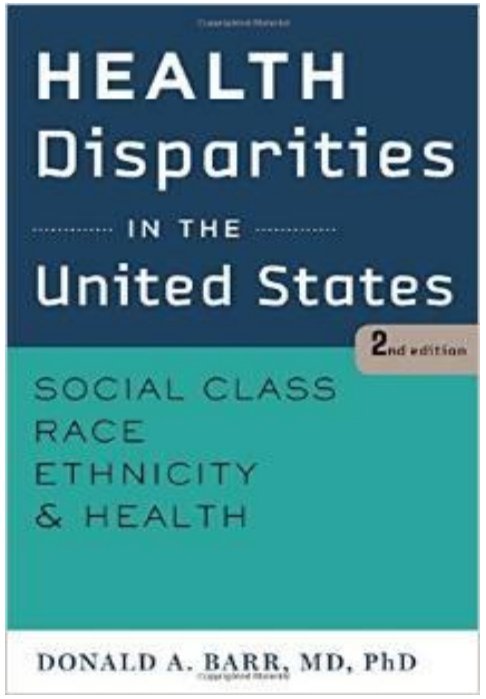
Public Health Reports November/December 2013 supplement (Volume 128, supplement 3)

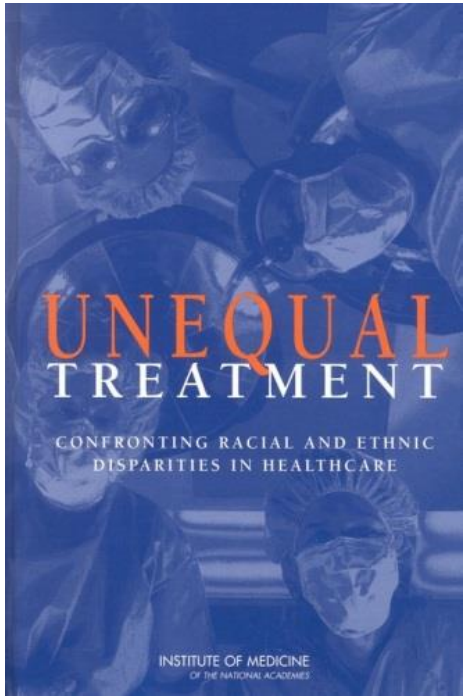

Determinants of Health
Policies and Interventions
Biology
Physical Environment
Individual
Socio-Economic Environment
Behaviors
Access to Quality Health Care
Healthy People 2010

Health Disparities

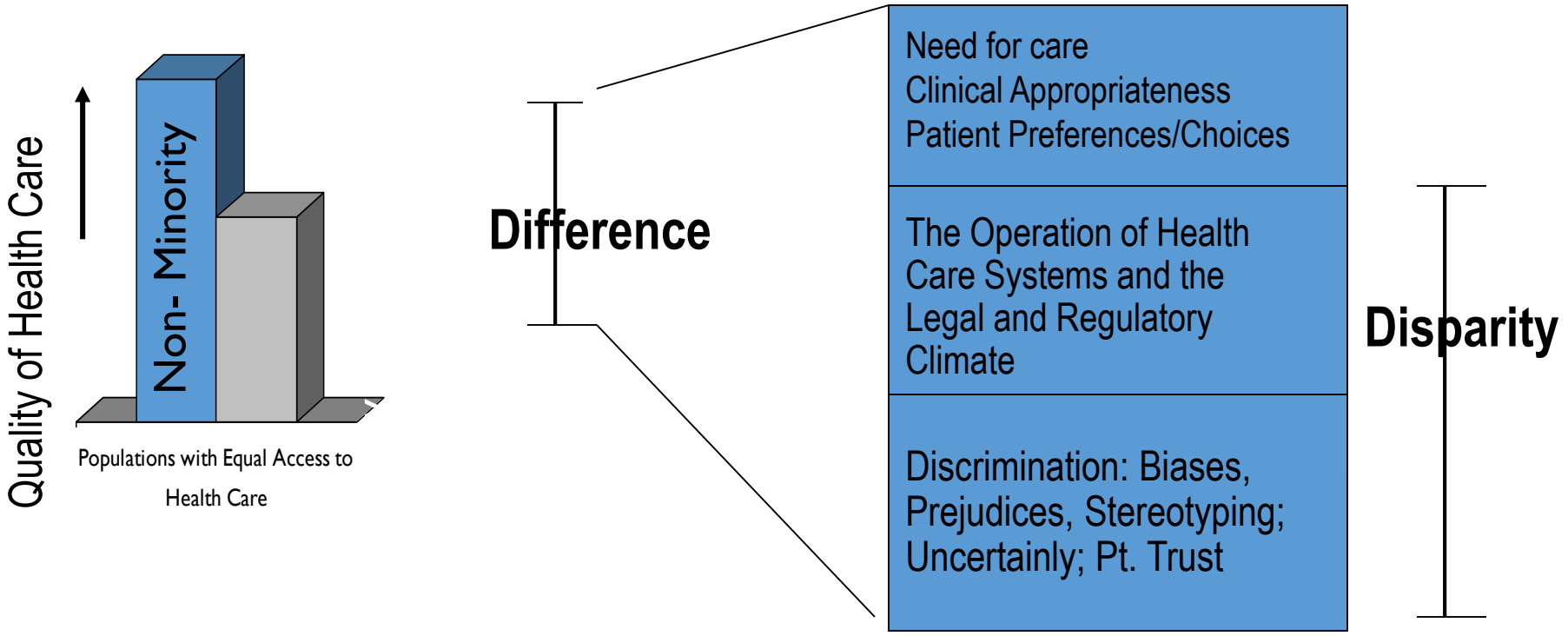
- Gaps in the quality of health and health care across racial, ethnic, and socioeconomic groups.

- "population-specific differences in the presence of disease, health outcomes, or access to health care.“ HRSA





Sources of Unequal Healthcare Quality and Outcomes

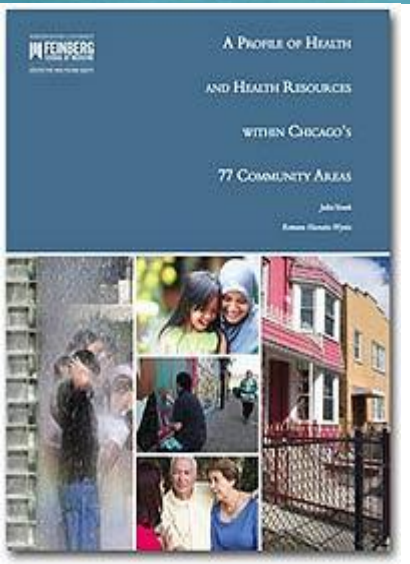


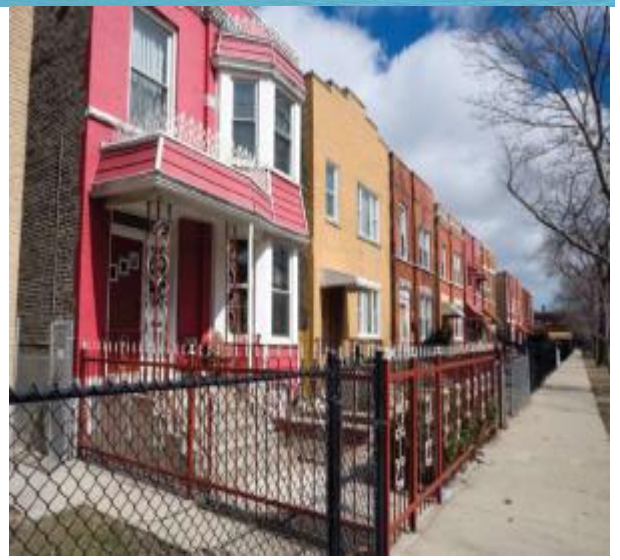
Source: Gomes and McGuire (2001) Model of Difference, Disparities and Discrimination

Health Disparities in Chicago

This map shows the distribution of Chicago's 36 hospitals by health system planning region. Hospitals were categorized as general acute care, long-term care, psychiatric, children's specialty, rehabilitation, and released.

The spatial distribution of hospitals is unevenly distributed across the city. The greatest concentration of general acute care facilities are found in the north, west and south regions of the city. In contrast, the northwest, southwest, and far south region each had fewer than three general acute care hospitals.



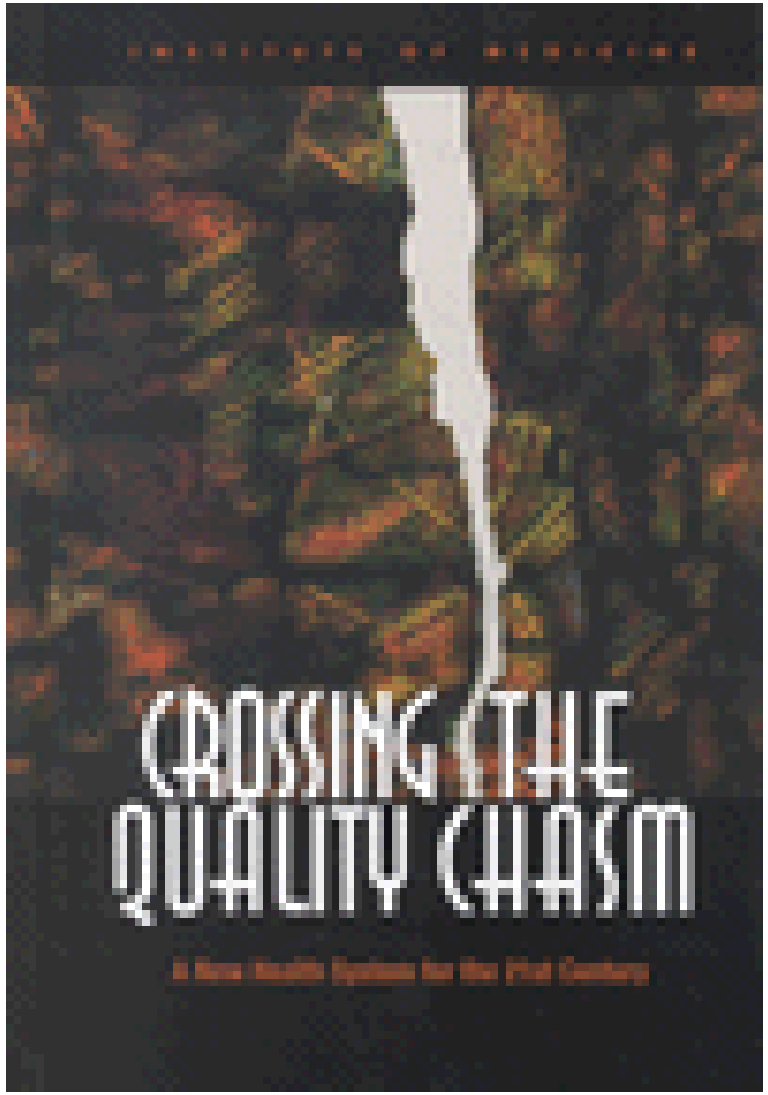


IOM's Quality Chasm Report

Six aims: ……..care should be: safe, effective, patient-centered, timely, efficient and equitable

Numerous calls to reform the health care system and health professions education

Emphasis on the need for integrating medical education with public health training



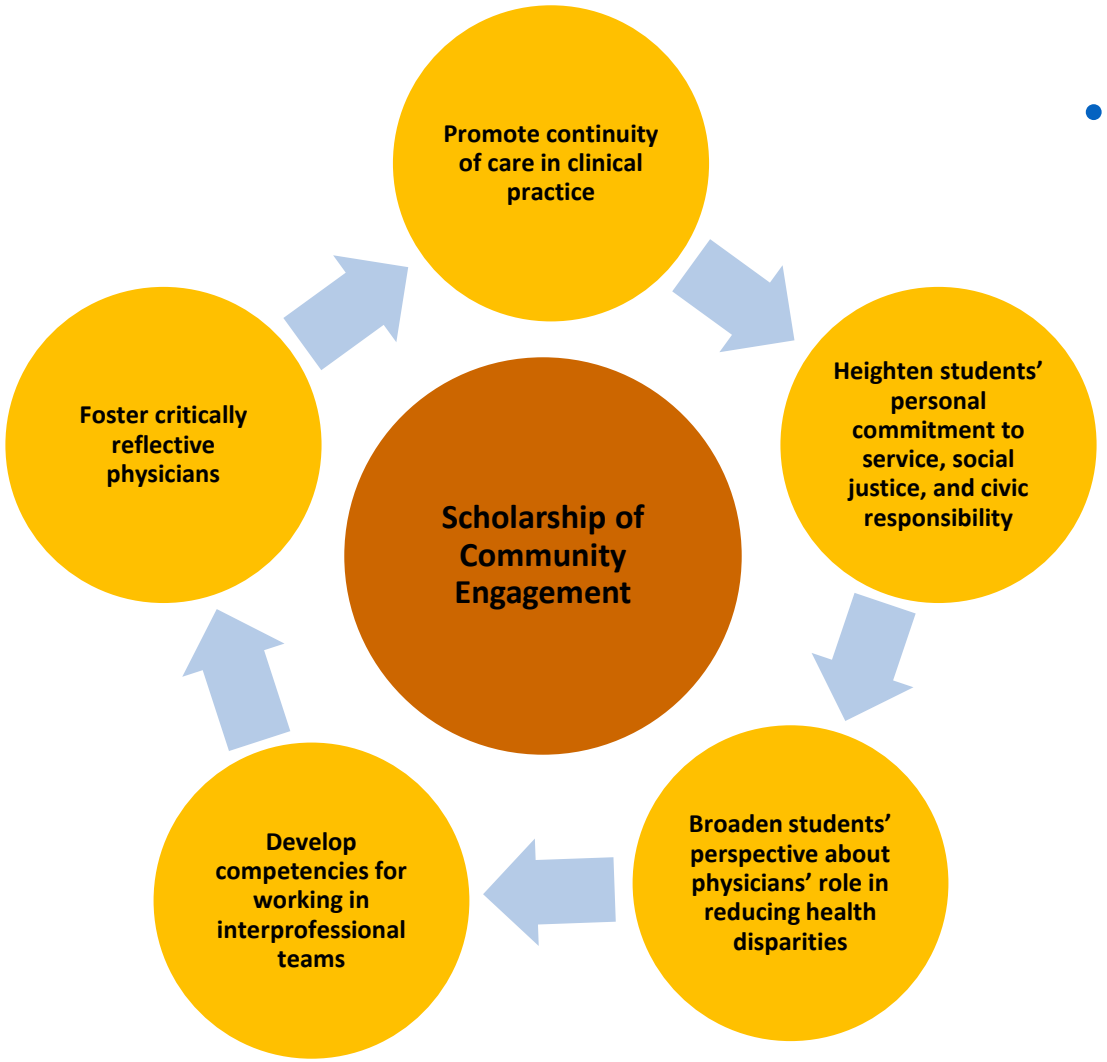
Changing Needs for Health Professions Training

Revisiting the Medical School Mission at a Time of Expansion **Josiah Macy Jr. Foundation – 2008**	*Educating Physicians: A Call for Reform of Medical School and Residency* **Carnegie Foundation - 2010**
Need for… ■ Acceleration in the pace of change in order to prepare future physicians to meet the public's increasingly demanding needs and expectations; ■ Medical educators to ensure that physicians have more backgrounds in population health and the role social factors play in effecting health change; and ■ More frequent use of community-based settings as learning environments and less frequent use of hospital settings.	**Need for…** ■ Standardization of learning outcomes and individualization of the learning process ■ Integration of formal knowledge and clinical experience ■ Development of habits of inquiry and innovation ■ Focus on professional identity formation

Our Journey in Program Development

Training Culturally Responsive Physicians (2005-2007)	• American Medical Student Association (AMSA) Foundation, Health Resources and Services Administration, US Department of Health and Human Services
An Interdisciplinary Service Learning Experience to Prepare Tomorrow's Health Care Professionals (2007-2008)	• Association for Prevention Teaching and Research (APTR)
A Longitudinal Continuity of Care Predoctoral Curriculum to Promote Patient-centered Medicine (2007-2010)	• Health Resources and Services Administration, US Department of Health and Human Services.
Training Family Medicine Residents in Underserved Medicine (2010-2015)	• Affordable Care Act: Primary Care Residency Expansion Health Resources and Services Administration, US Department of Health and Human Services.
Longitudinal Team-based Interprofessional Education to Care for Special Needs Populations (2013-2015)	• Macy Faculty Scholars Award, Josiah Macy Jr. Foundation

New Beginnings in Education, Service & Research

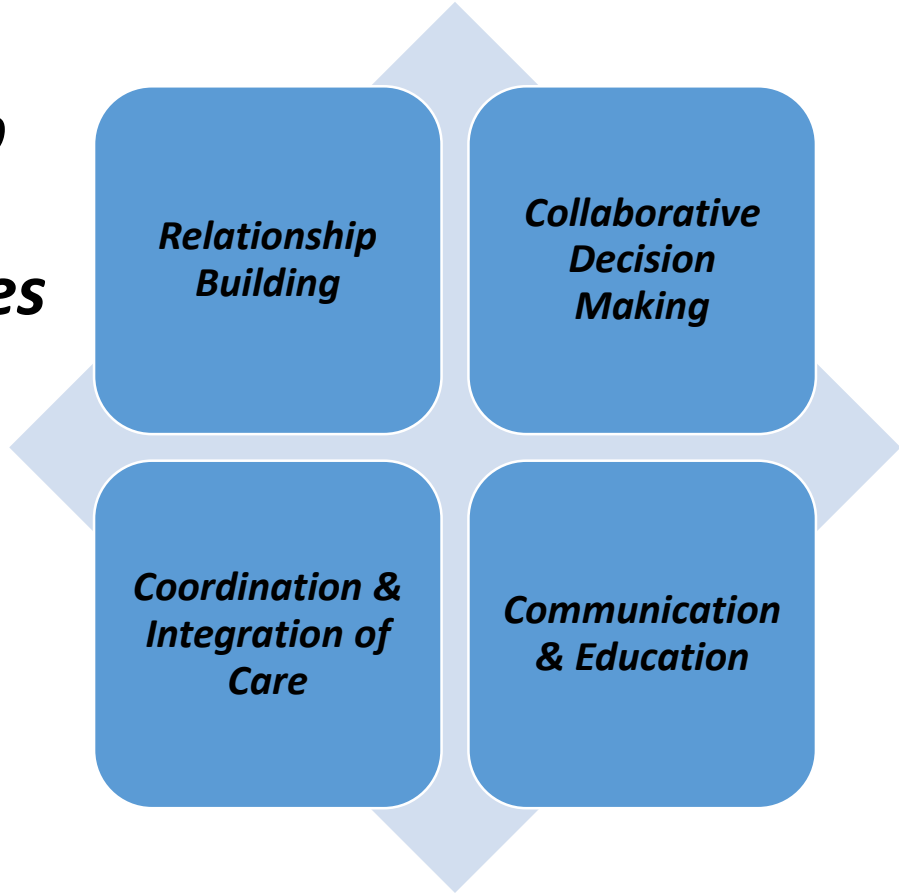


- Service Learning...a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities.

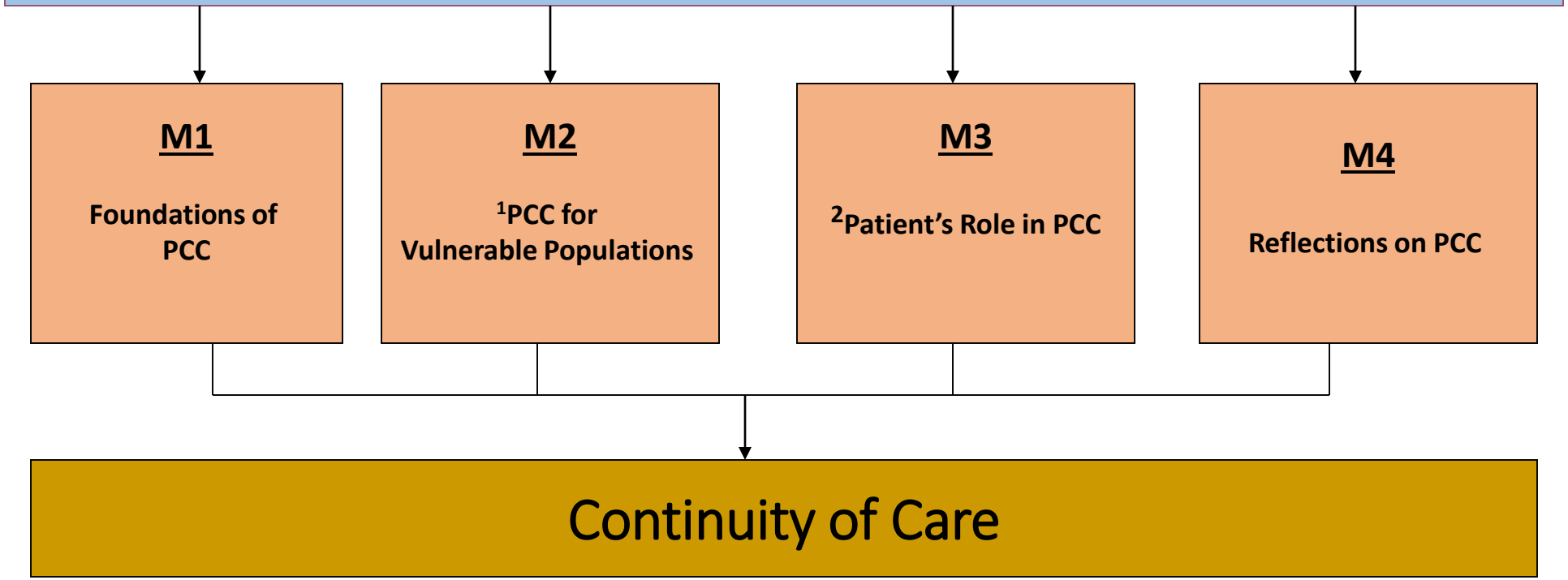
Patient-centered Care

…health care that establishes a partnership among practitioners, patients and their families (when appropriate) to ensure that decisions respect patients' wants, needs and preferences…IOM

Model for Patient-centered Delivery of Care



Patient-centered Medicine Scholars Program



[1] Domestic Violence, Geriatrics, HIV/AIDS, Homelessness, Immigrant & Refugee Health
[2]Chronic Disease Self-management, Home visits, Group Visits, Special Topics in PCM

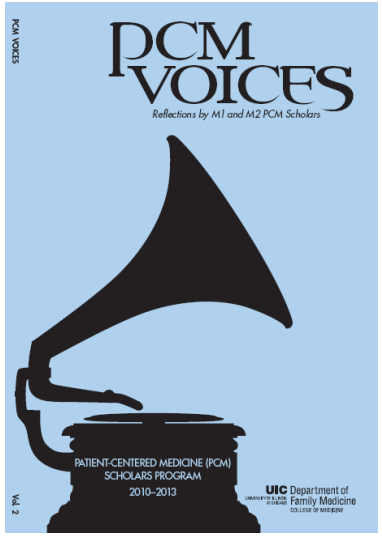
PCM Scholars who successfully complete Program Years 1 through 3, or 2 through 4 receive a certificate of accomplishment

Theoretical Foundation

Education in Action Philosophy

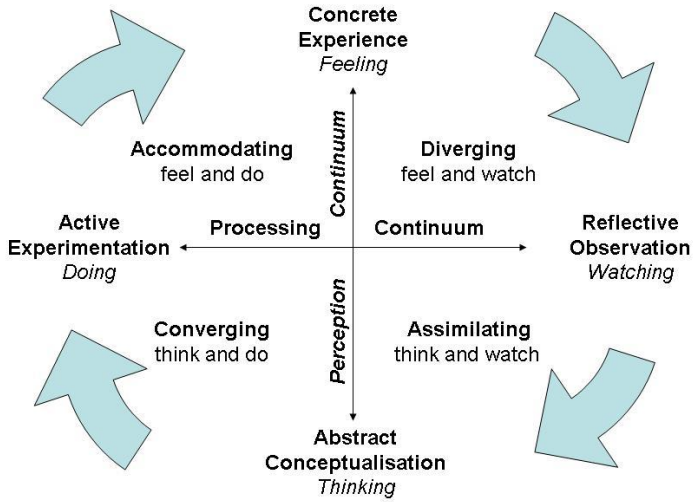
Drawing from the wisdom of…

John Dewey, Earnest Boyer, David Kolb and other educators and philosophers

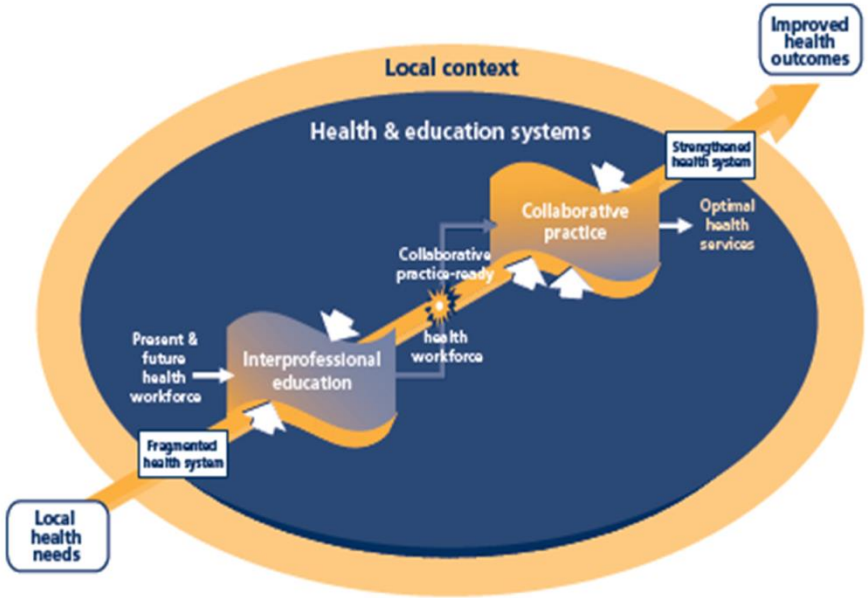


- Active-experiential learning
- Reflection
- Application
- Integration

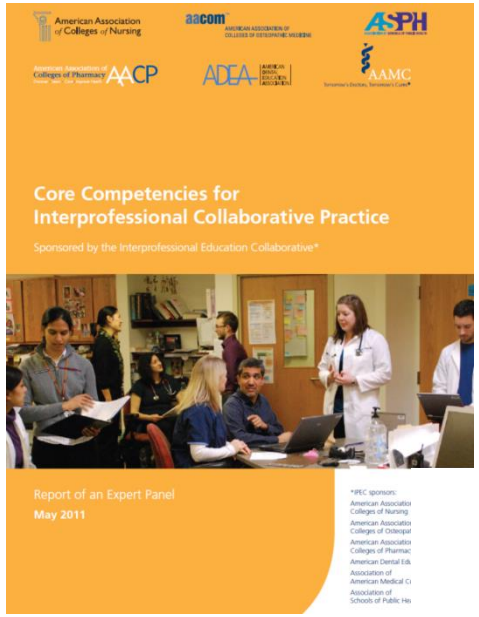
Kolb's Model

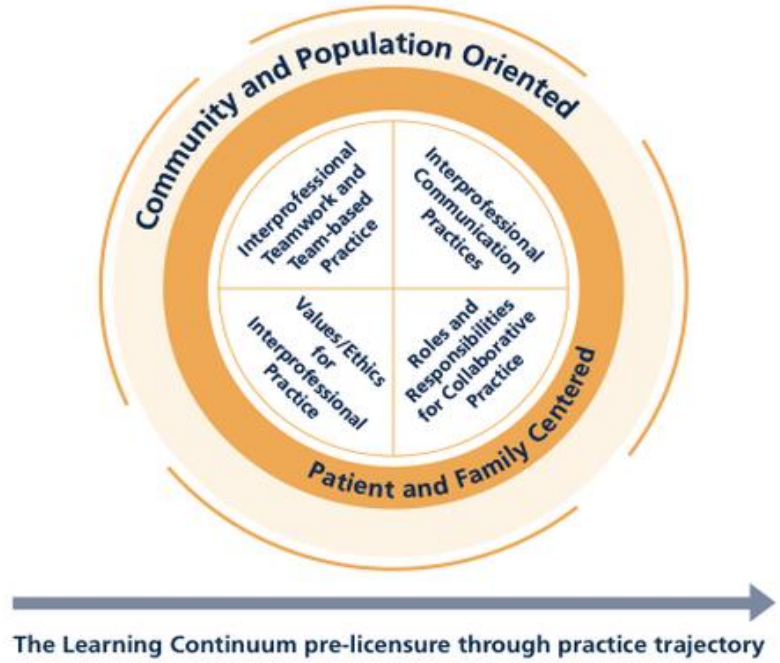


Time to Pause & Reflect



Framework for Interprofessional Education & Collaborative Practice – WHO 2010





[Interprofessional Education Collaborative 2011]

Recommendations

"All health professionals should be educated to deliver patient-centered care as members of an interprofessional team, emphasizing evidence-based practice, quality improvement approaches and informatics."

IOM Report

"If we acknowledge the growing body of evidence that healthcare delivered by well-functioning teams produces better results, there is a serious disconnect with the educational system that is still structured in silos"

George Thibault, MD
President Macy Foundation
2012

Accreditation Requirements

The core curriculum of a medical education program must prepare medical students to function collaboratively on healthcare teams that include other health professionals.

LCME: Standard 19

Pilot Work

Training Future Health Providers to Care for the Underserved: A Pilot Interprofessional Experience

Memoona Hasnain[1], Michael J. Koronkowski[2], Diane M. Kondratowicz[1], Kristen L. Goliak[2]

[1] *Department of Family Medicine, College of Medicine, University of Illinois at Chicago, USA*
[2] *Department of Pharmacy Practice, College of Pharmacy, University of Illinois at Chicago, USA*

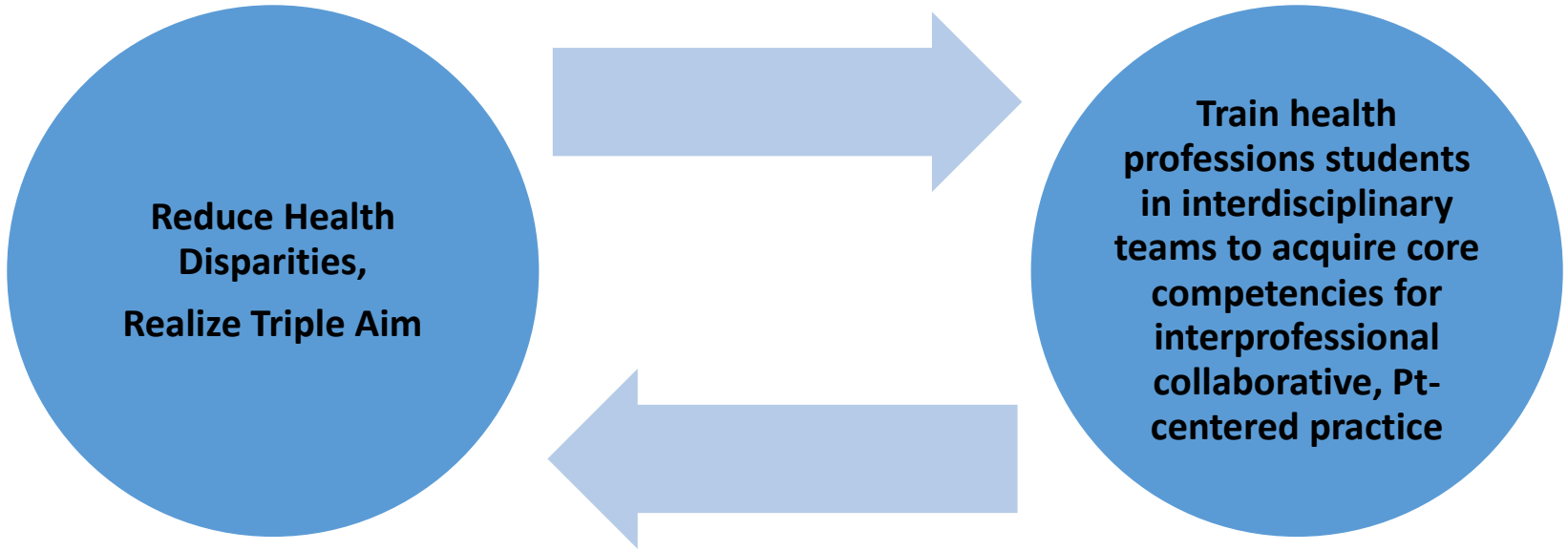
ABSTRACT

Introduction: Interprofessional teamwork is essential for effective delivery of health care to all patients, particularly the vulnerable and underserved. This brief communication describes a pilot interprofessional learning experience designed to introduce medicine and pharmacy students to critical health issues affecting at-risk, vulnerable patients and helping students learn the value of functioning effectively in interprofessional teams. **Methods:** With reflective practice as an overarching principle, readings, writing assignments, a community-based immersion experience, discussion seminars, and presentations were organized to cultivate students' insights into key issues impacting the health and well-being of vulnerable patients. A written program evaluation form was used to gather students' feedback about this learning experience. **Results:** Participating students evaluated this learning experience positively. Both quantitative and qualitative input indicated the usefulness of this learning experience in stimulating learners' thinking and helping them learn to work collaboratively with peers from another discipline to understand and address health issues for at-risk, vulnerable patients within their community. **Discussion:** This pilot educational activity helped medicine and pharmacy students learn the value of functioning effectively in interprofessional teams. Given the importance of interprofessional teamwork and the increasing need to respond to the health needs of underserved populations, integrating interprofessional learning experiences in health professions training is highly relevant, feasible, and critically needed.

Keywords: Interprofessional care, interprofessional education, interprofessional learning, underserved populations

Interprofessional Approaches to Health Disparities (IAHD)

Goal: To equip learners with essential skills to improve health care for underserved populations and transform health disparities through interprofessional education, research and collaborative practice.



Learning Objectives

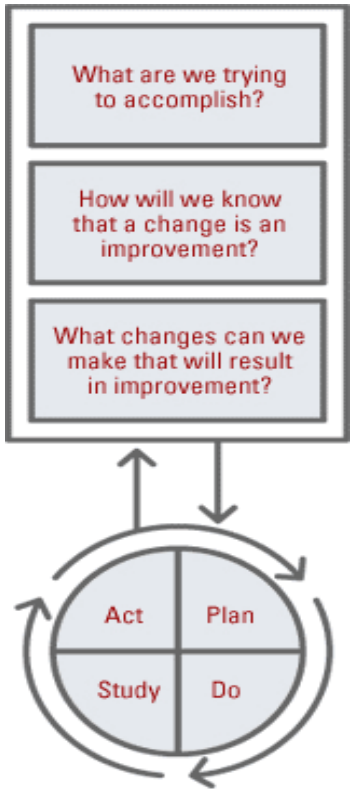
Participation in the IAHD will enable trainees to:

- Effectively engage in identifying and addressing social determinants of health impacting vulnerable populations;
- Acquire working knowledge and hands-on experience with community-based participatory research (CBPR) and quality improvement (QI) methods;
- Develop an interprofessional community-based research project designed to improve health care access, communication, care coordination, or additional priority issues for vulnerable populations;
- Develop skills for functioning as effective members of interprofessional teams; and
- Develop skills for leadership, advocacy and scholarship.

Key Learning Activities

- **CBPR & QI Training**

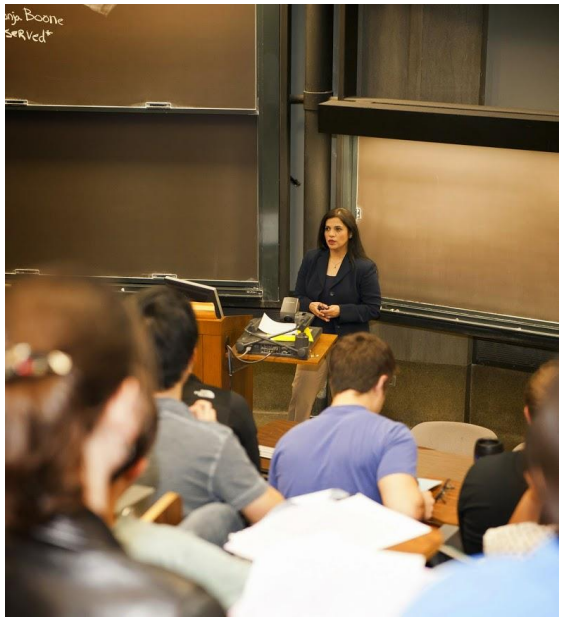
- **CBPR & QI Research**



Learning activities are grounded in reflection, self-awareness, collaborative learning and applied practice to successfully promote student acquisition of core competencies to address health needs of vulnerable populations

Educational Methods

- Orientation, student, faculty and staff development
- Community-based immersion activities
- Monthly seminars
- Online tutorials
- Team-based learning
- Reflections
- Final showcase presentations



Nuts & Bolts: Course Participation - Credit

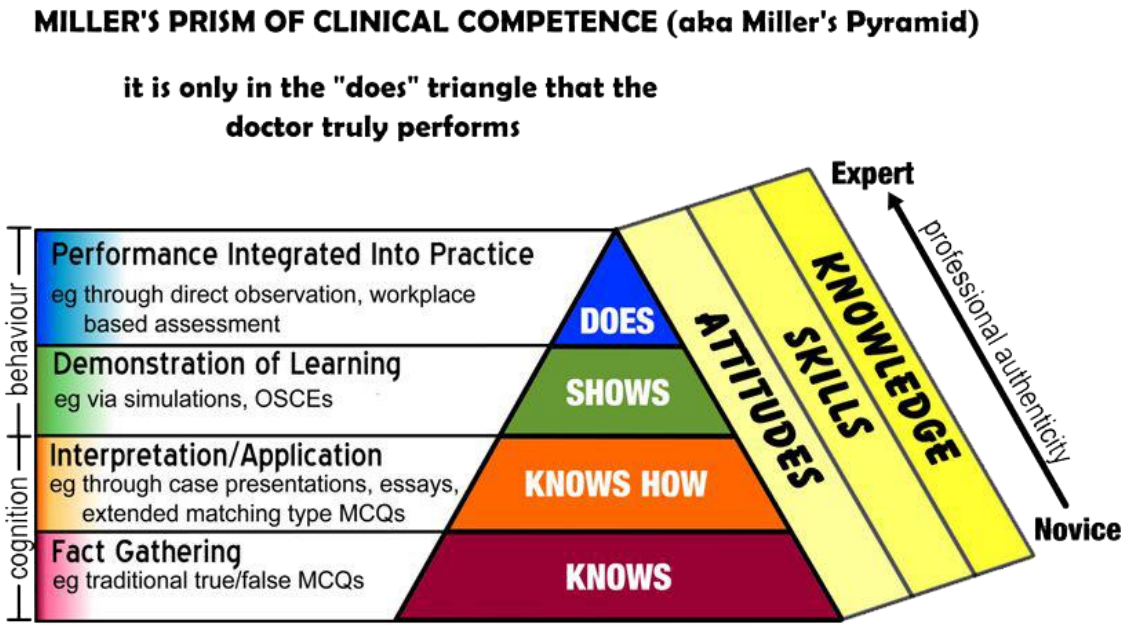
	Medicine	Nursing	Pharmacy	Social Work	Public Health
Student Level	M4	Graduate level students (e.g. ANPs)	P4	2nd year MSW students	2nd year CHS MPH students
Place in Curriculum	PCM Scholars Program	Independent study	Module embedded in Advanced Pharmacy Practice Experience	Practicum coursework	Part or all of the field practicum requirements or independent study

Assessment

- Assessment **of** Learning versus Assessment **for** Learning

- Balance between formative and summative assessment

- Mixed methods – opportunity for open ended feedback



Kirkpatrick's Four-step Evaluation

Step 1:

Reaction - How well did the learners like the learning process?

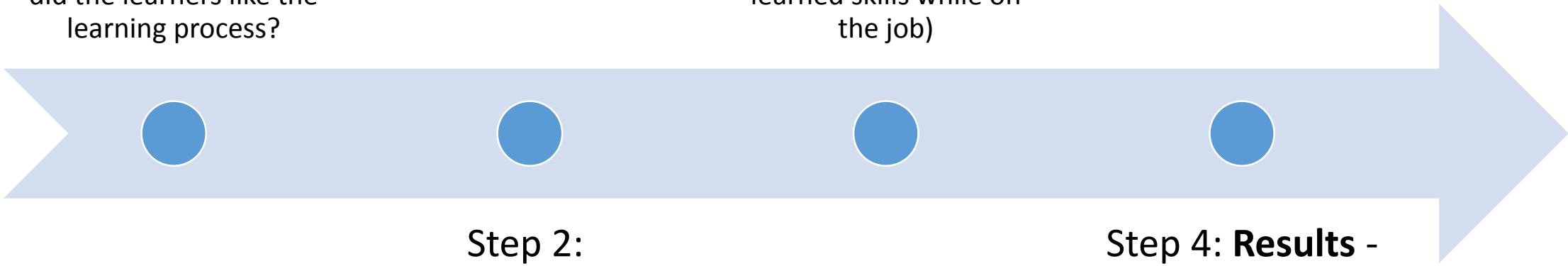
Step 2:

Learning - What did they learn? (the extent to which the learners gain knowledge and skills)

Step 3:

Behavior - (What changes in job performance resulted from the learning process? (capability to perform the newly learned skills while on the job)

Step 4: **Results** - What are the tangible results of the learning process in terms of reduced cost, improved quality, increased production, efficiency, patient outcomes?



A systematic review of the effectiveness of interprofessional education in health professional programs☆

Samuel Lapkin [a,*], Tracy Levett-Jones [a,1], Conor Gilligan [b,2]

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Keywords:
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Collaborative learning
Health professional education
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SUMMARY

Objective: The objective of this systematic review was to identify the best available evidence for the effectiveness of university-based interprofessional education for health students.
Background: Currently, most health professional education is delivered in a traditional, discipline specific way. This approach is limited in its ability to equip graduates with the necessary knowledge, skills and attitudes for effective interprofessional collaboration and for working as part of a complex health care team. Interprofessional education is widely seen as a way to improve communication between health professionals, ultimately leading to improved patient outcomes.
Inclusion criteria: The review included all randomised controlled trials and quasi-experimental studies in which two or more undergraduate or post-graduate health professional groups are engaged in interprofessional education.
Review methods: A three-stage comprehensive search of ten electronic databases as well as grey literature was conducted. Two independent reviewers assessed each paper prior to inclusion using the standardised critical appraisal instruments for evidence of effectiveness developed by the Joanna Briggs Institute.
Results: Nine published studies consisting of three randomised controlled trials, five controlled before and after studies and one controlled longitudinal study were included in the review.
Conclusion: Student's attitudes and perceptions towards interprofessional collaboration and clinical decision-making can be potentially enhanced through interprofessional education. However, the evidence for using interprofessional education to teach communication skills and clinical skills is inconclusive and requires further investigation.
Implications for research: Future randomised controlled studies explicitly focused on interprofessional education with rigorous randomisation procedures, allocation concealment, larger sample sizes, and control groups, would improve the evidence base for interprofessional education.

Program Outcomes - thus far

- Baseline
- Mid-year formative evaluation
- Reflections
- CBPR projects

Basic Recipe

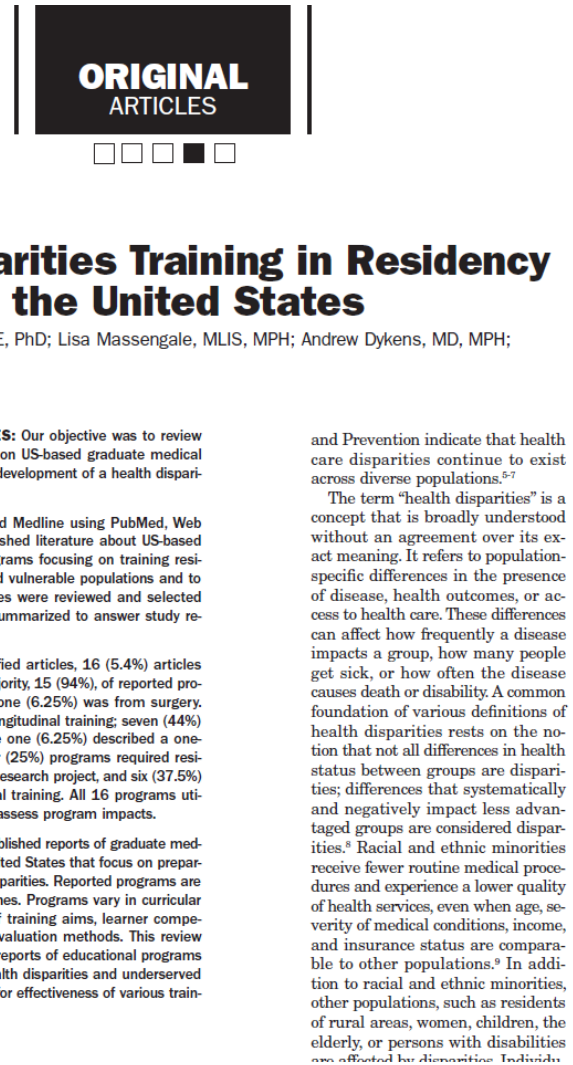
- Nurture passions – learner centered
- Help clarify feasible goals
- Link learners with the right resources and support – collaborative linkages
- Provide guidance to plan and progress systematically
- Foster self-directed inquiry and commitment – encourage learners to spend time and energy to appropriately do the ground work

Challenges & Discoveries

- Understanding change, getting buy-in – Kotter 8 steps
- Curricular transformation
- Coordination, organization, time management
- Staying true to CBPR process – training new researchers/mentors
- Avoiding hierarchal roles, developing & maintaining trust and respect for all team members
- Maintaining motivation – intrinsic versus extrinsic
- Unanticipated benefits
- Vision - big picture

Next Steps

- Program evaluation to learn for process and outcomes
- Program refinement
- Linking UGME, GME and Faculty development
- Develop ongoing program of interprofessional education, service and research/scholarship



ORIGINAL ARTICLES

Health Disparities Training in Residency Programs in the United States

Memoona Hasnain, MD, MHPE, PhD; Lisa Massengale, MLIS, MPH; Andrew Dykens, MD, MPH; Evelyn Figueroa, MD

BACKGROUND AND OBJECTIVES: Our objective was to review and summarize extant literature on US-based graduate medical education programs to guide the development of a health disparities curriculum.

METHODS: The authors searched Medline using PubMed, Web of Science, and Embase for published literature about US-based graduate medical education programs focusing on training residents to care for underserved and vulnerable populations and to address health disparities. Articles were reviewed and selected per study eligibility criteria and summarized to answer study research questions.

RESULTS: Of 302 initially identified articles, 16 (5.4%) articles met study eligibility criteria. A majority, 15 (94%), of reported programs were from primary care; one (6.25%) was from surgery. Eight (50%) programs reported longitudinal training; seven (44%) reported block experiences, while one (6.25%) described a one-time Internet-based module. Four (25%) programs required residents to develop and complete a research project, and six (37.5%) included community-based clinical training. All 16 programs utilized some form of evaluation to assess program impacts.

CONCLUSIONS: There are few published reports of graduate medical education programs in the United States that focus on preparing residents to address health disparities. Reported programs are mostly from primary care disciplines. Programs vary in curricular elements, using a wide variety of training aims, learner competencies, learning activities, and evaluation methods. This review highlights the need for published reports of educational programs aimed at training residents in health disparities and underserved medicine to include the evidence for effectiveness of various training models.

(Fam Med 2014;46(3):186-91.)

and Prevention indicate that health care disparities continue to exist across diverse populations.[5-7]

The term "health disparities" is a concept that is broadly understood without an agreement over its exact meaning. It refers to population-specific differences in the presence of disease, health outcomes, or access to health care. These differences can affect how frequently a disease impacts a group, how many people get sick, or how often the disease causes death or disability. A common foundation of various definitions of health disparities rests on the notion that not all differences in health status between groups are disparities; differences that systematically and negatively impact less advantaged groups are considered disparities.[8] Racial and ethnic minorities receive fewer routine medical procedures and experience a lower quality of health services, even when age, severity of medical conditions, income, and insurance status are comparable to other populations.[9] In addition to racial and ethnic minorities, other populations, such as residents of rural areas, women, children, the elderly, or persons with disabilities

Key Take Home Lessons

Utilize a systems approach

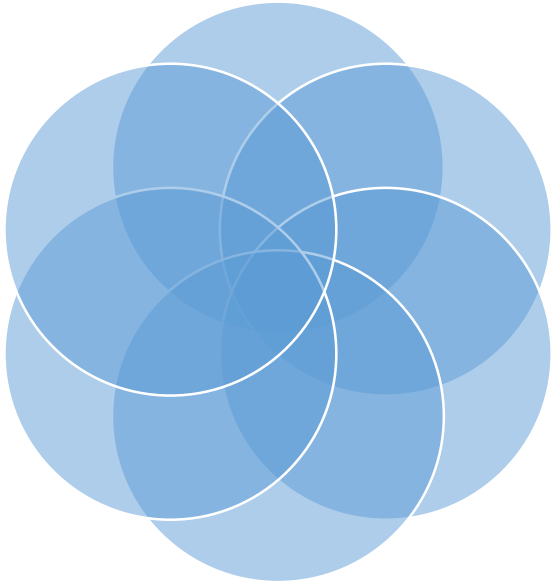
Integrate educational theory and principles

Optimize the change process

CQI - Build on incremental blocks

Don’t be paralyzed by perfection

Do everything with love, joy and gratitude



Class of 2015

“Together we can do so much.” Hellen Keller

Acknowledgements

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  - Project Vida; EdgeAlliance/ AIDSCare Progressive Services
  - Heartland Alliance
  - Housing Opportunities and Maintenance for the Elderly (H.O.M.E.)
  - Lincoln Park Community Shelter; Cathedral Shelter (now Revive)

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Interprofessional Approaches to Health Disparities

Patient-centered Medicine Scholars Program