Using *Shared Medical Decision-Making Model* to eliminate *Aging Disparities* in Health Care

11-05-07

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Overview

- Objectives
- Healthcare disparity
- Aging population
- Shared medical decision-making
- The proposed model
- Reconstructions
- Bridge Laws
- Conclusions

Objectives

1. Develop a theoretical framework that explains the phenomenon of aging disparities in health care

2. Apply two rigorous scientific inquiry tools: Reconstruction and Bridge Laws to the process of theory development

Healthcare Disparity

- 3 relevant concepts (Carter-Pokras and Baquet, 2002)

Disparity

Inequality

= *"lack of equality as of opportunity, treatment, or status"*

Inequity = *"an instance of unjustness or unfairness"*

Healthcare Disparity

- 4 components of health disparity (Carter-Pokras and Baquet, 2002)

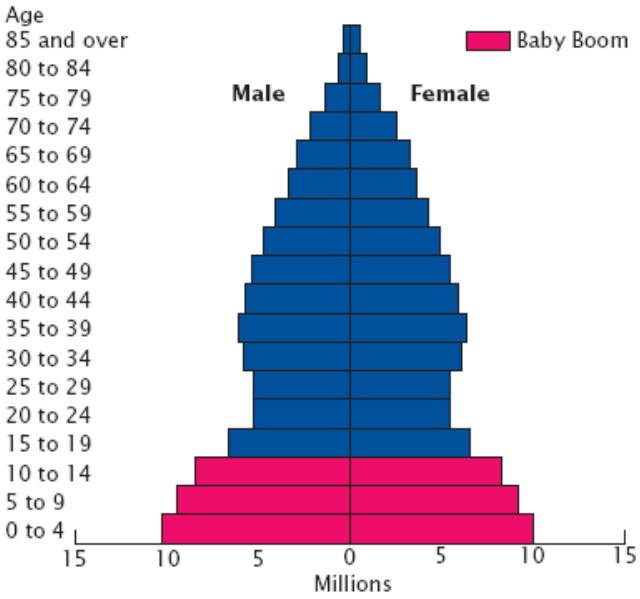
Environment

Access, Utilization, & Quality

Health Status

Health Outcomes

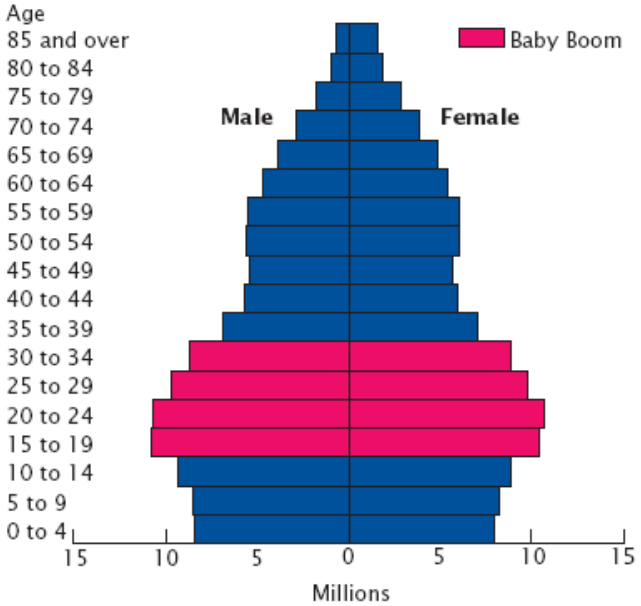
1960



Note: The reference population for these data is the resident population.

Source: U.S. Bureau of the Census, 1964, Table 156. For full citation, see references at end of chapter.

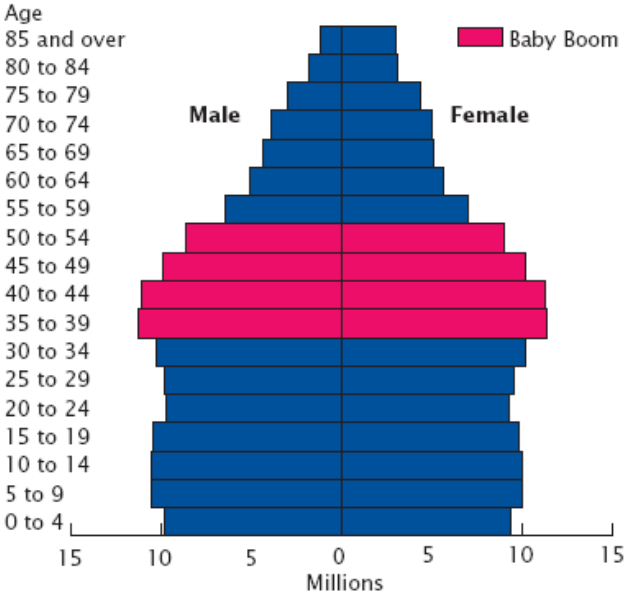
1980



Note: The reference population for these data is the resident population.

Source: U.S. Bureau of the Census, 1983, Table 44. For full citation, see references at end of chapter.

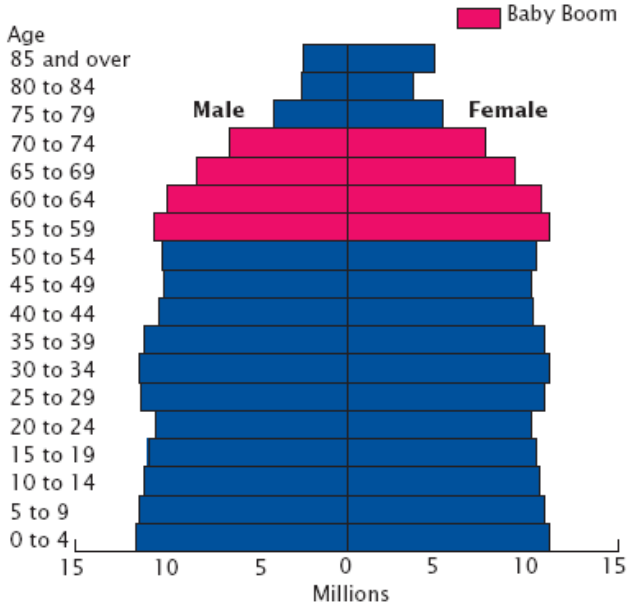
2000



Note: The reference population for these data is the resident population.

Source: U.S. Census Bureau, 2001, Table PCT12. For full citation, see references at end of chapter.

2020

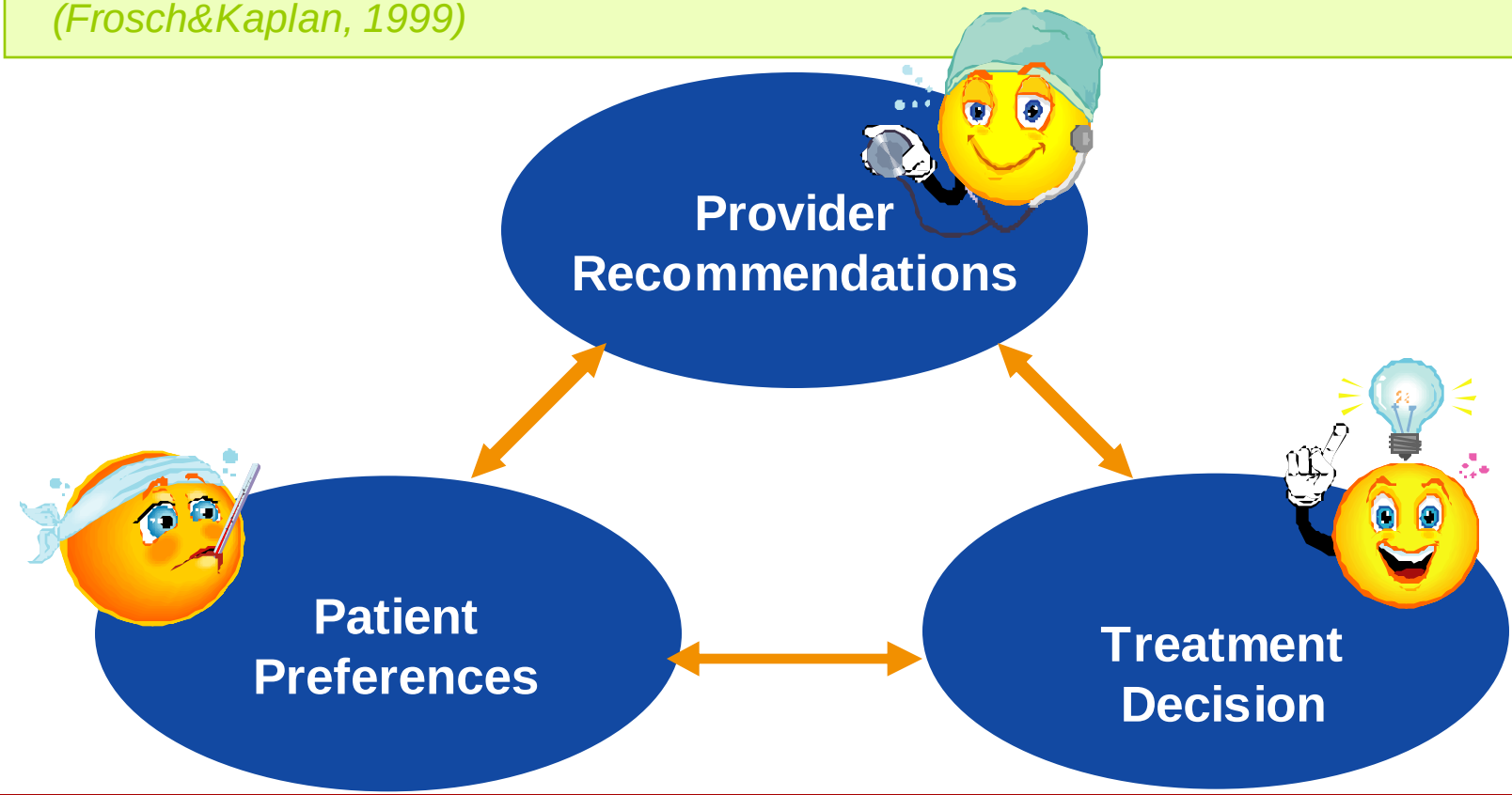


Note: The reference population for these data is the resident population.

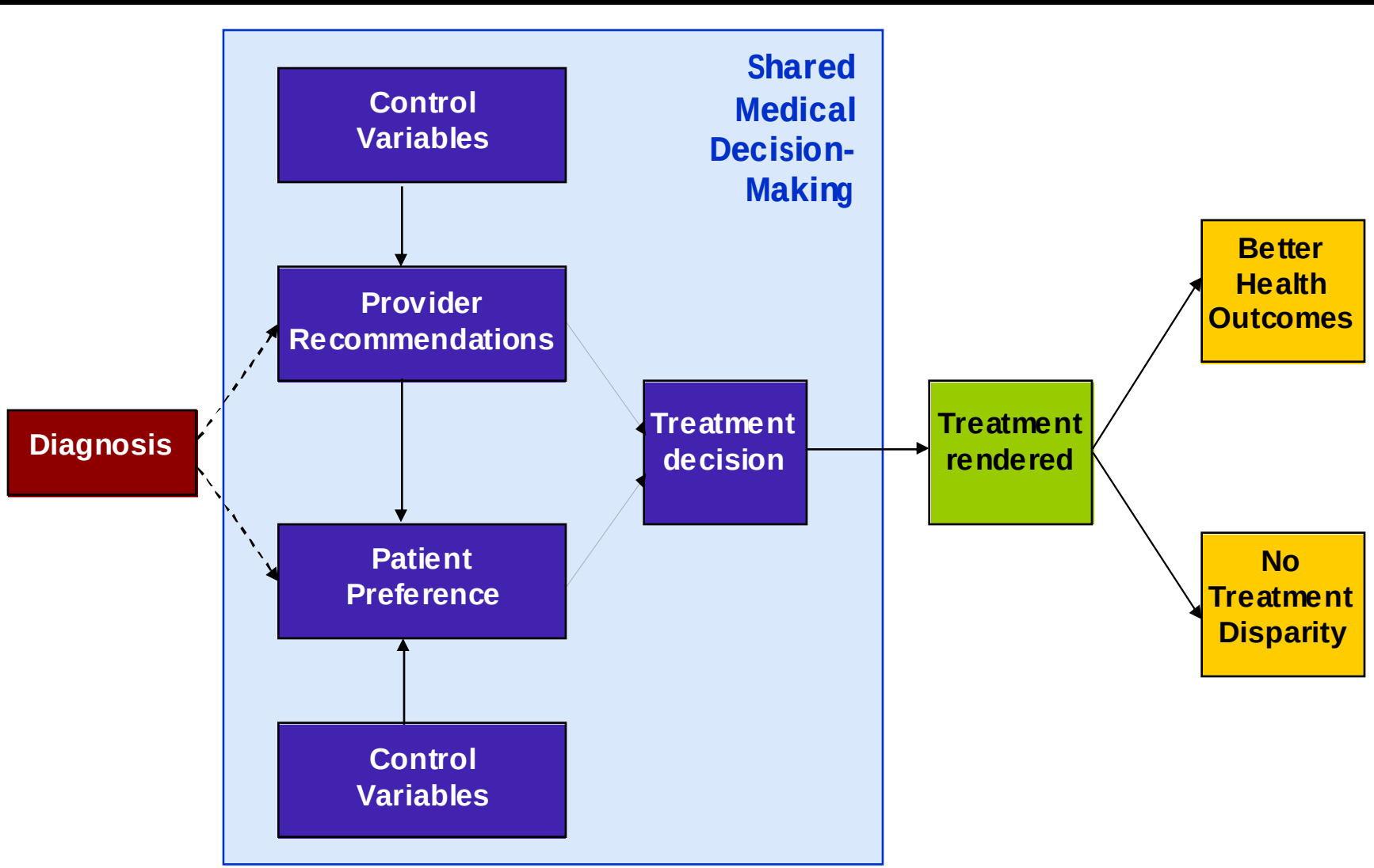
Source: U.S. Census Bureau, 2004. For full citation, see references at end of chapter.

Shared Medical Decision-Making (SMDM)

"A process by which patients and providers consider outcome probabilities and patient preferences and reach a health care decision based on mutual agreement"
(Frosch&Kaplan, 1999)



The Proposed Model



Tools for theory development

- Reconstruction
- Bridge Laws

Reconstruction of Explanations

What is it?

a process that "attempts to accurately summarize the underlying logic of the explanation" (Hunt, 2002, p. 137)

Purposes

- ***capture the essence of the explanation***
- ***show specifically how the explanation relates to the model, and***
- ***lend itself more readily to structural analysis and evaluation (Hunt, 2002, p.136)***

Reconstruction (SMDM – Aging Health Disparity)

The symbolic form of reconstruction
A exist. (observation)
B → A (observation)
In the SDM model, (B and C) → A (classification)
D are associated with B → A (law-like generalization)
However, E are associated with (B and C) → A (logical classification)
Therefore, there exists difference in utilization of treatment procedures between the younger and older adults because of the different level of involvement in SDM. (hypothesis)

Alphabetical symbols

A = various treatment alternatives

B = physician judgments based on severity and health status

C = patient preferences and involvement

D = older patients

E = younger patients

SMD = shared decision model

Bridge Laws

What is it?

One set of derivative laws that "indicate how the processes envisaged by the theory are related to empirical phenomena with which we are already acquainted, and which the theory may then explain, predict, or retrodict…" (Hempel, 1966, pp. 72-75)

Bridge Laws and Hypotheses

The symbolic form of reconstruction	Bridge Laws
A exist. (observation)	A_{bs} exist. (observation)
B → A (observation)	B_{bs} → A_{bs} (observation)
In the SDM model, (B and C) → A (classification)	In the SDM model, (B_{bs} and C_{bs}) → A_{bs} (classification)
D are associated with B → A (law-like generalization)	D_{bs} are associated with B_{bs} → A_{bs} (law-like generalization)
However, E are associated with (B and C) → A (logical classification)	However, E_{bs} are associated with (B_{bs} and C_{bs}) → A_{bs} (logical classification)
Therefore, there exists difference in utilization of treatment procedures between the younger and older adults because of the different level of involvement in SDM. (hypothesis)	Therefore, there exists difference in utilization of back surgery procedures between the younger and older adults because of the different level of involvement in SDM. (hypothesis)

Note: bs = Back Surgery

Conclusions

- Reconstruction of explanations and bridge laws provide a logical linkage between a theoretical model or framework and an empirical setting, resulting in structural analysis and evaluation.
- The proposed model provides researchers a framework to study the relationship between patient preferences through participation in the SMDM model and the two outcomes of the model: disparity and health outcomes.
- The model may explicate the utilization of shared medical decision-making as a means to reach the end of healthcare disparity.
- The model can be extended to observe other types of healthcare disparities as well.

THANK YOU

Questions or Comments