Health Services Research

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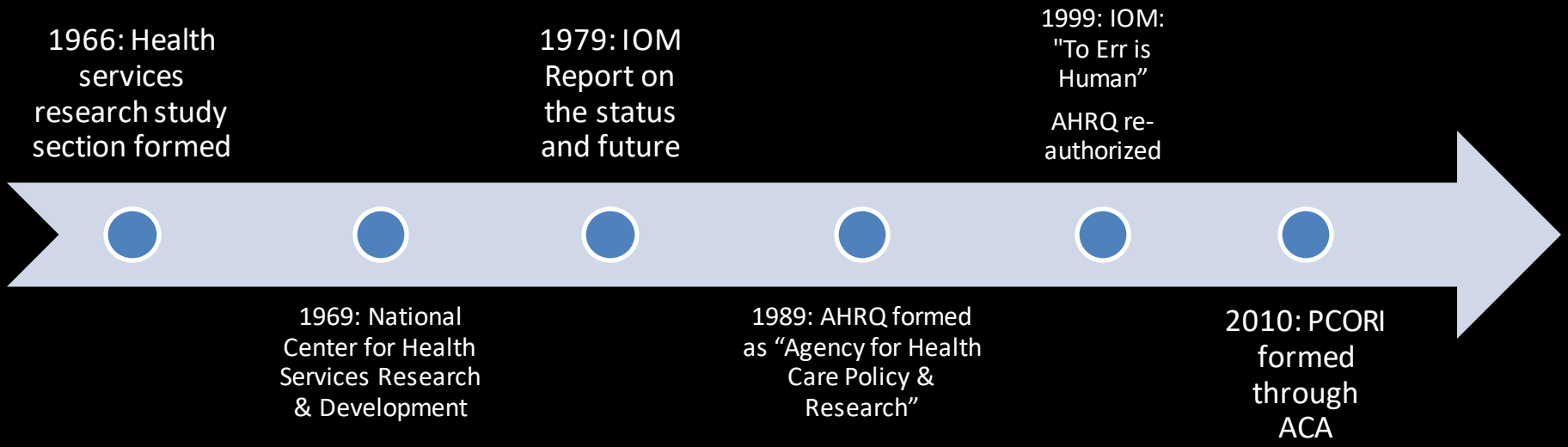
Learning Objectives – Health Services Research (HSR)

1. History of HSR
2. General Terminology
3. Current HSR Ecosystem
4. Examples of Impactful HSR
5. Future of HSR

HISTORY OF HEALTH SERVICES RESEARCH

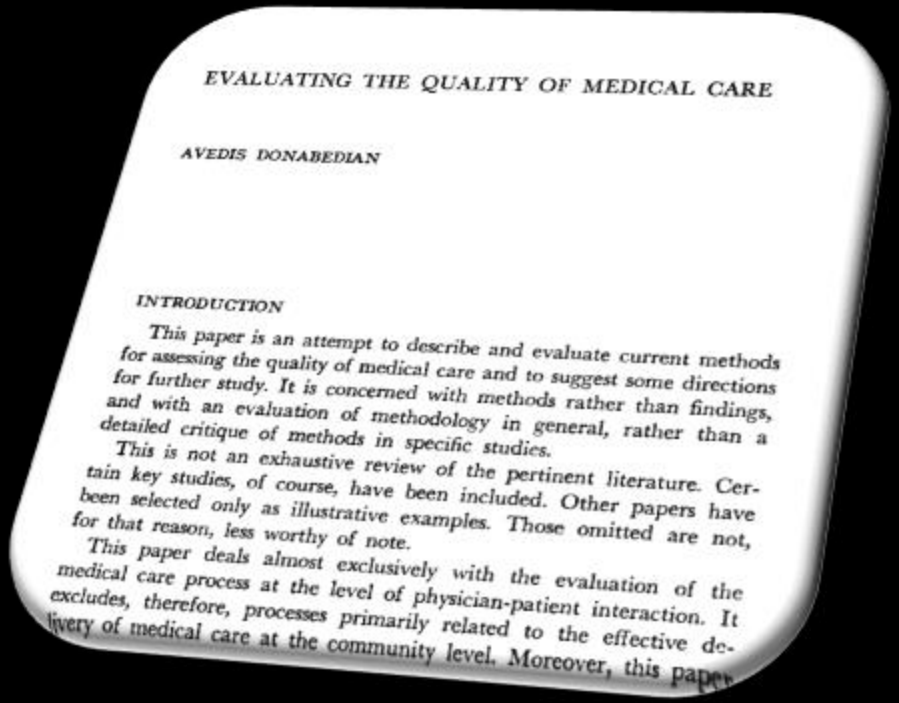
Various Milestones (1966 – Present)



Whicher et al. 2018. *National Academy of Medicine*.

The Donabedian Model of Care (1966)

- Structure
- Process
- Outcomes



EVALUATING THE QUALITY OF MEDICAL CARE

AVEDIS DONABEDIAN

INTRODUCTION

This paper is an attempt to describe and evaluate current methods for assessing the quality of medical care and to suggest some directions for further study. It is concerned with methods rather than findings, and with an evaluation of methodology in general, rather than a detailed critique of methods in specific studies.

This is not an exhaustive review of the pertinent literature. Certain key studies, of course, have been included. Other papers have been selected only as illustrative examples. Those omitted are not, for that reason, less worthy of note.

This paper deals almost exclusively with the evaluation of the medical care process at the level of physician-patient interaction. It excludes, therefore, processes primarily related to the effective delivery of medical care at the community level. Moreover, this paper

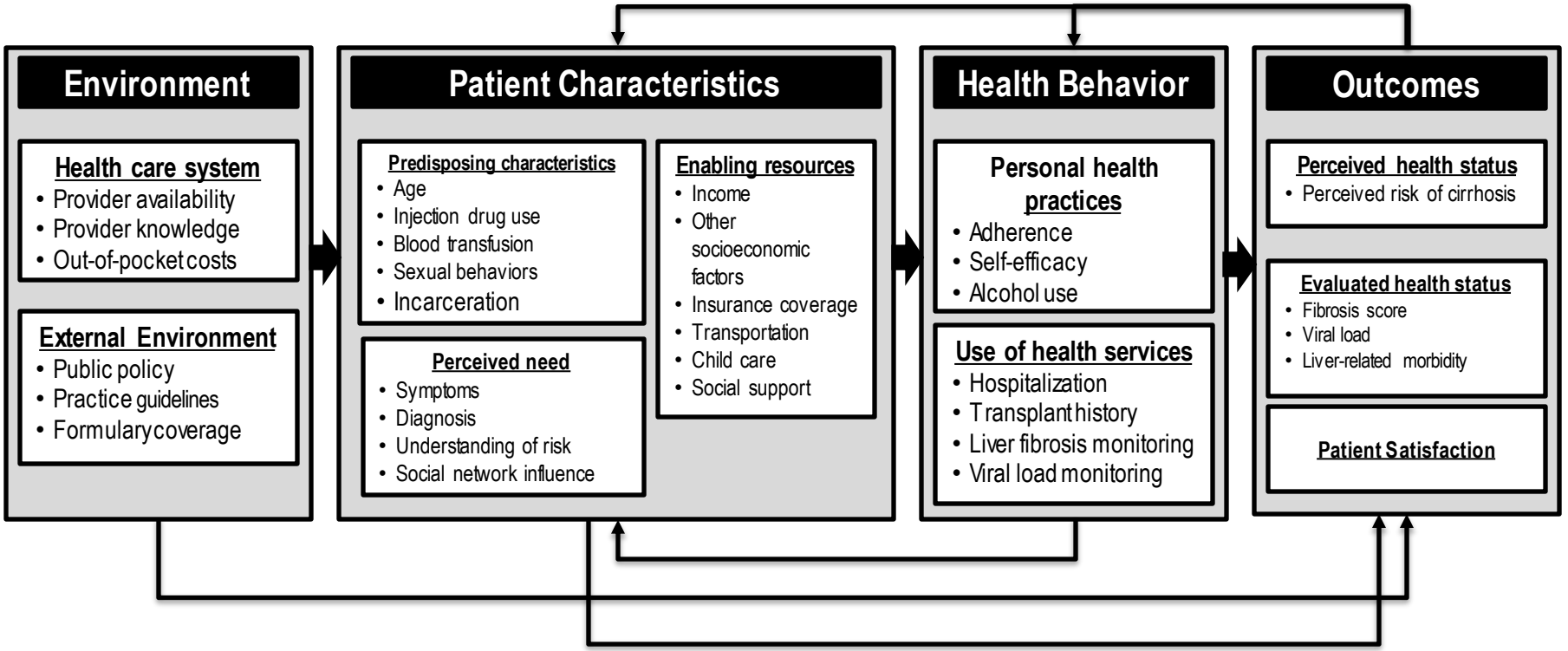
Donabedian A. *Milbank Quarterly*. 1966;44(3):166-203.

Historical Context

- Health progress shaped in 3 dimensions:
  - Causes & processes of disease
  - Approaches to ameliorate/eliminate disease
  - Effectiveness of alternative interventions and strategies for delivery

Whicher et al. 2018. *National Academy of Medicine*.

Modified Andersen Model for Hepatitis C



Anderson R. *J Health and Social Behavior*. 1995;36:1-10.

What is Health Services Research? (IOM 1995)

"HSR is a multidisciplinary field of inquiry, both basic & applied, that examines the use, cost, quality, accessibility, delivery, organization, financing, and outcomes of health care services to increase knowledge & understanding of the structure, processes, and effects of health services for individuals & populations."

Lohr et al. *Health Services Research*. 2002;37(1):15-17.

What is Health Services Research? (*AcademyHealth*)

"HSR is the science of study that determines what works, for whom, at what cost, and under what circumstances.

It studies how our health system works, how to support patients and providers in choosing the right care, and how to improve health through care delivery."

AcademyHealth. 2019. Available at: https://www.academyhealth.org/about

Diving Deeper into the Terms – Discussion

“What works?”

Diving Deeper into the Terms – Discussion

“For whom?”

Diving Deeper into the Terms – Discussion

“At what cost?”

Diving Deeper into the Terms – Discussion

“Under what circumstances?”

HSR ECOSYSTEM

Major HSR Players

Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

Robert Wood Johnson Foundation

Support for HSR

- HSR has broad implications & applications
  - Health systems
  - Private pharmaceutical companies
  - Public-private partnerships

HSR IMPACT

RAND Health Insurance Experiment

- Large scale randomized experiment between 1971-82
- Randomly assigned participants to 4 types of insurance plans
- Findings:
  - Impact of cost-sharing on utilization
  - Cost-sharing did not change the quality of care received
  - The poorest & sickest patients benefited from free care

Brook et al. *RAND Corporation*. 2006.

Oregon Medicaid Experiment

- It is typically hard (often even unethical) to randomize in HSR
- Oregon used a random lottery program for 30,000 names out of 90,000 eligible to apply for Medicaid
- Findings:
  - Medicaid had a profound effect on use of preventive services & nearly eliminated catastrophic out-of-pocket expenses

Baiker et al. *NEJM*. 2013;368(18):1713-1722.

FUTURE OF HSR

Potential Directions for HSR

- Predictive analytics
- Artificial intelligence
- Value-based care
- New methods of payment
- Patient engagement
- Beyond the “average patient”
- Connecting health and social services

Whicher et al. 2018. *National Academy of Medicine*.

What are the gaps/challenges?

- Proprietary data (cost)
- Ability to link data from different sources
- RCT-bias?

Whicher et al. 2018. *National Academy of Medicine*.

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QUESTIONS?