

Disclaimer I am not an expert in physical therapy education



- I did chair a department of PT at the MGH Institute early in my career
- I did serve as a Dean of a Health & Rehabilitation Sciences School at Boston University for almost 8 years where I did teach entry level students in the rehabilitation professions.
- I have held a faculty appointment in the BU School of Public Health for almost 25 years where I taught and directed a disability research institute.

My Focus within The Quadruple Aim

- Enhance the patient experience and patient outcomes, and
- Reduce the per capita cost for care for the benefit of communities.
- Concern for care providers
- •Improve the health of populations,



What is Population Health?

Population health is

- an approach [that] focuses on interrelated conditions and determinants of the health of populations over the life course,
- identifies systematic variations in their patterns of occurrence, and
- applies the resulting knowledge to develop and implement policies and actions to improve the health and well-being of those populations."

Kindig, David & Stoddard, Greg. (2003). What is Public Health? American Journal of Public Health, 93(3): 380–383.

Population Health....

 Identifies interrelated conditions and <u>determinants</u>,

 identifies <u>systematic variations</u> in their patterns of occurrence, and

 applies the resulting knowledge to develop and implement policies
and actions



My Introduction to Population Health!



The Prevention Paradox

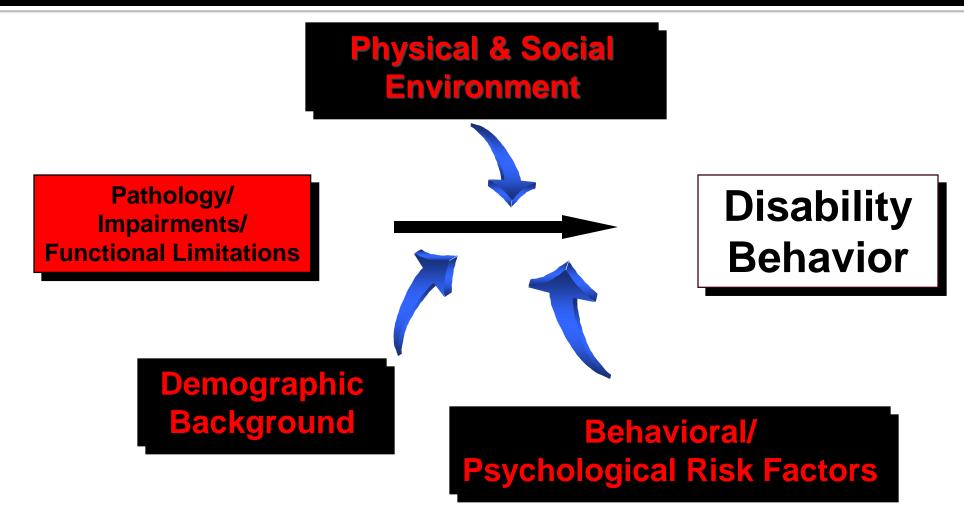
- A 'High-Risk Strategy' to prevention is a clinically oriented approach which focuses its efforts on individuals with the highest levels of a risk factor: a targeted focus on vulnerable individuals.
 - an intervention which brings much benefit to an individual will have a small impact in the population.
- A 'Population Health Strategy' focuses instead on shifting the population distribution of a risk factor.
 - a preventive measure that brings large benefits to the community may offer little to each participating person

Disablement Model

Pathology/ Impairments/ Functional Limitations



Disablement Model



Adapted from Verbrugge & Jette, 1994

A Population Perspective

- •The disablement process recognized that the process of disablement is not only influenced by the health conditions, impairments and functional limitations but also by individual factors and the environment.
- This understanding was codified in the WHO's ICF model.



Take the Example of Smoking in the US

of American adults smoked

Tobacco use was glamorous

You could smoke most anywhere





- Mass-reach health communication campaigns
- Restrictions on marketing
- Non-Smoking curricula in schools
- De-normalising smoking
- Increases in the unit price for tobacco products
- Comprehensive smoke-free policies that present involuntary exposure to secondhand smoke

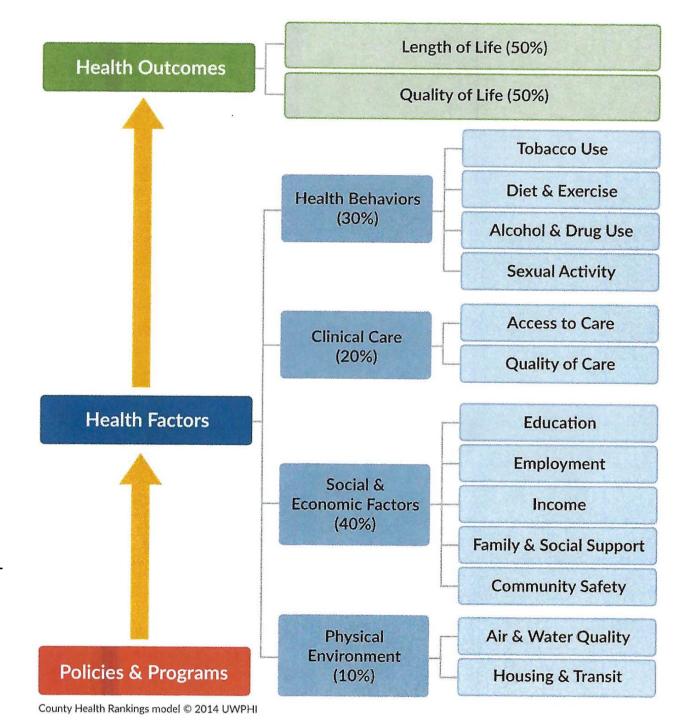
A Radical Vision for the PT Profession:

Transforming society by optimizing movement to improve the human experience.

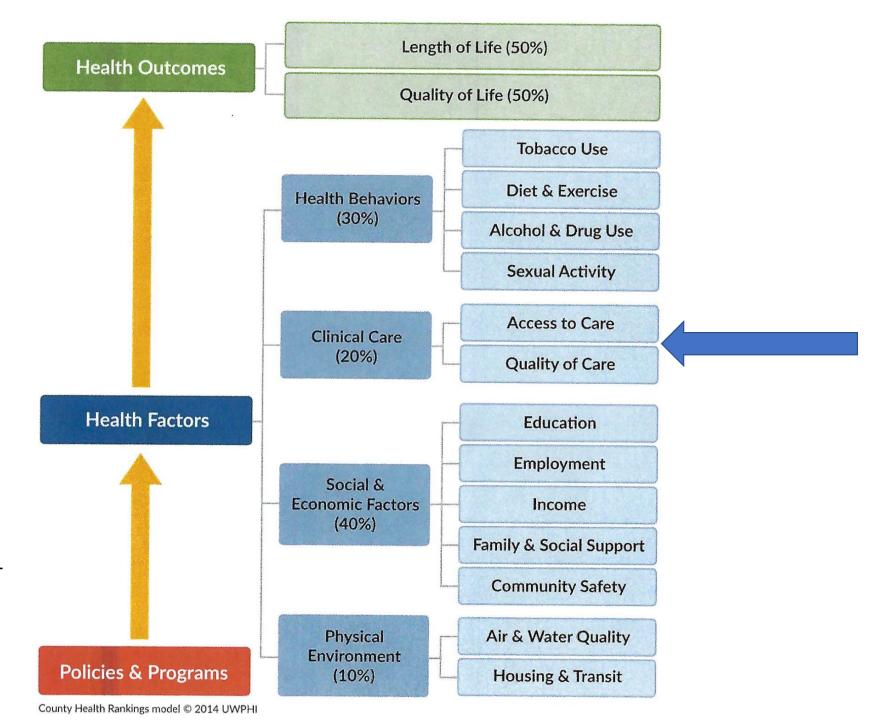
Mission: Building a community that advances the profession of physical therapy to improve the health of society.

How does our vision to 'transform society' relate to what we know about the determinants of population health?

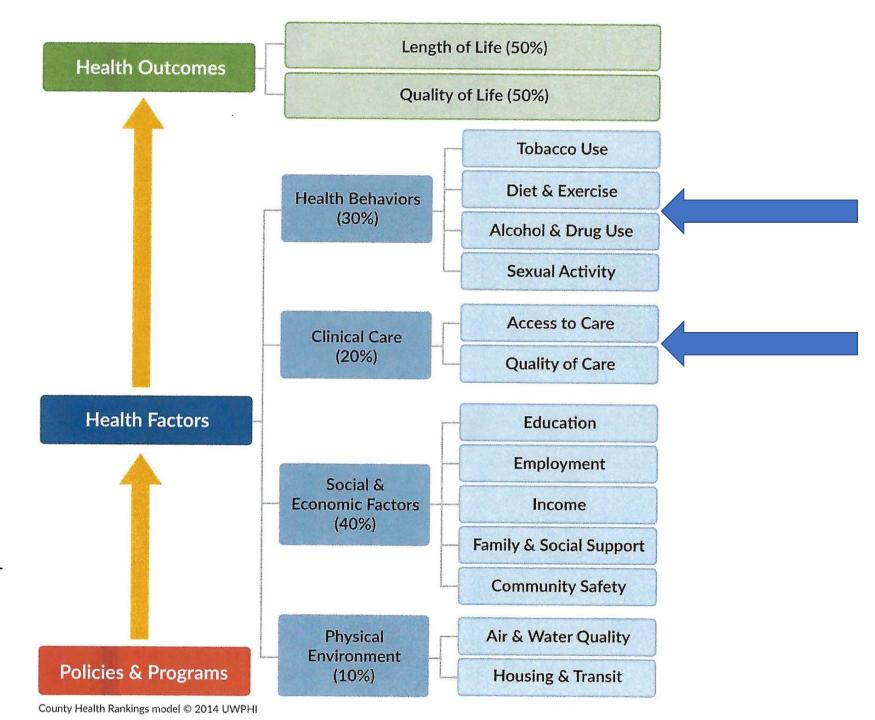
University of Wisconsin Population Health Institute. Strategies to Build a Culture of Health: A Moment in Time Review of RWJF Culture of Health Prize-Winning Communities 2013-2017. August 2018.



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Clinical Care (20%)**Health Factors** University of Wisconsin Population Social & **Economic Factors** Health Institute. Strategies to Build a (40%)Culture of Health: A Moment in Time Review of RWJF Culture of Health Prize-Winning Communities 2013-2017. August 2018. **Physical** Environment **Policies & Programs** (10%)

Length of Life (50%) **Health Outcomes** Quality of Life (50%) Tobacco Use Diet & Exercise **Health Behaviors** (30%)Alcohol & Drug Use **Sexual Activity** Access to Care **Quality of Care** Education **Employment** Income Family & Social Support **Community Safety** Air & Water Quality **Housing & Transit** County Health Rankings model © 2014 UWPHI

What is Our Lane?

On the one hand....

 Teaching about population health and social determinants of health may distract students from necessary teaching in areas of clinical diagnosis & intervention.

What is Our Lane?

On the other hand....

- Overall clinical care only accounts for 10-20% of health outcomes
- Personal health behaviors account for 30-40%
- Social determinants account for a majority of the variation in health outcomes

What Do the Experts Think We Should be Teaching our Students?

Dean, 2009; 2020

Physical therapists need to redouble their efforts to address non communicative diseases by **assessing patients for risk factors** and manifestations and institute evidence-based **health education** (smoking cessation, wholefood plant-based nutrition, weight control, physical activity/exercise), and/or support patients' efforts when these are managed by other professionals.

Bezner, 2015

 Advocated for physical therapists as promoters of health and wellness, identifying communicable disease as a major cause of morbidity and mortality to pay routine attention to risk factors such as tobacco use, physical activity, nutrition, and weight management.



Population Health, Prevention, Health Promotion, and Wellness Competencies in Physical Therapist Professional Education: Results of a Modified Delphi Study

Dawn M Magnusson, Zachary D Rethorn, Elissa H Bradford, Jessica Maxwell, Mary Sue Ingman, Todd E Davenport, Janet R Bezner

Physical Therapy, Volume 100, Issue 9, September 2020, Pages 1645-1658,

• a panel of experts (N = 37) used a 3-round Delphi process to inform the development of population health, prevention, health promotion, and wellness competencies for physical therapist professional education.

• Twenty-five competencies achieved final consensus in 3 broad domains: preventive services and health promotion (n = 18), foundations of population health (n = 4), and health systems and policy (n = 3).

- The majority of competencies (18/27) focused on **clinical preventive services and health promotion**, consistent with more individualized and patient-centered approaches in physical therapist practice.
- Participants endorsed the need to **define population health**, recognize how multiple determinants of health interact to influence health, identify key health indicators used to monitor population health, and access sources of population health data.
- Participants perceived **health system and policy** competencies as being relevant to physical therapist practice but **beyond entry-level**!

Competencies NOT Endorsed (Pop'n Health Strategies)

- Consider balancing societal needs and economic efficiency in the delivery of prevention and health promotion programs
- Summarize the process of prevention/health promotion policy-making at all organizational levels
- Support policy initiatives that promote individual health behaviors

- Support policy initiatives that promote healthy communities
- Support community designs that promote opportunities for safe physical activity and active transportation for all people
- Advocate for the coordination of data and services within and across sectors
- Define and advocate for the physical therapist's role within an inter-professional disaster preparedness team

Preparing the Next Generation of Physical Therapists for Transformative Practice and Population Management: Example From Macquarie University

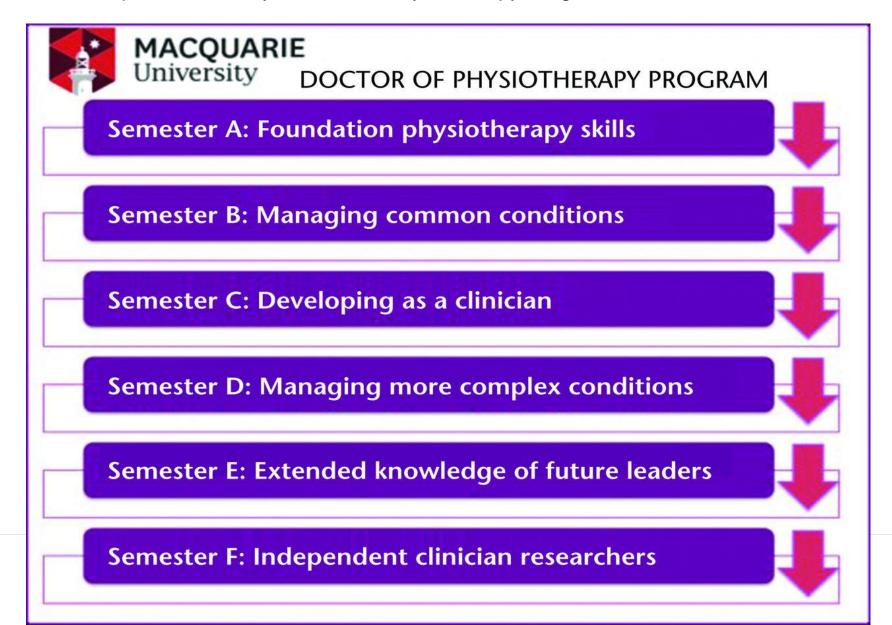
Catherine M. Dean, Pamela W. Duncan

Physical Therapy, Volume 96, Issue 3, 1 March 2016, Pages 272–274,

Dean & Duncan, 2016, PTJ

The next generation of solutions will require new skills among physical therapists to be partners in the treatment of populations of patients across the continuum of health care settings and coach patients and families in lifestyle management and be accountable for sustaining and improving functional status.

Figure 1 Outline of the progressive 6-semester structure of Macquarie University's Doctor of Physiotherapy Program. ...



A Radical Alternative...Berwick JAMANetwork, 324(3), July 2020.

• "Healers are called to heal. When the fabric of communities upon which health depends is torn, then healers are called to mend it".

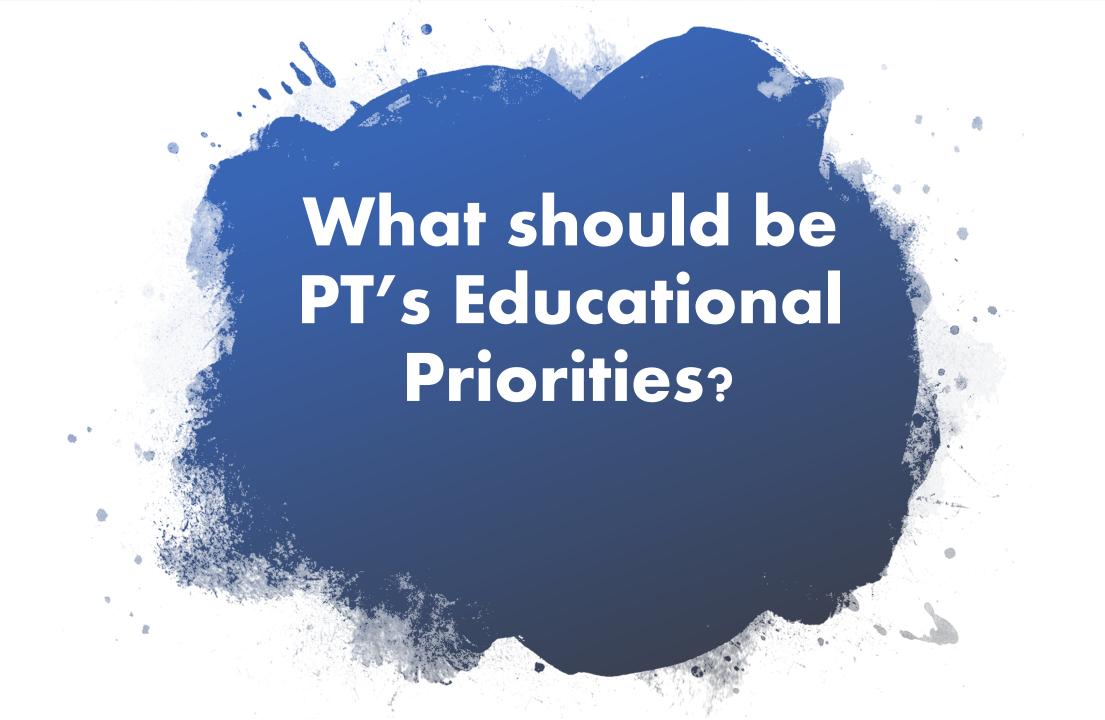


The Moral Determinants of Health

Speak out	Speak out, write opinion pieces, work with community organizations devoted to these issues
Develop	Organizations can develop programs to ensure proper care for incarcerated people
Help	Help create paths for return to work and society for those leaving incarceration
Become	Become engaged identifying needs for housing and food security
Help	Help develop community resources that encourage physical activity
Lobby	Lobby for universal health care coverage
Work	Work against implicit and structural racism in our society

• "Honest and compassionate people disagree about health care's proper role in improving social conditions, countering inequality, and fighting against structural racism" (Berwick, 2020)

- Some believe we should focus on traditional caring for illness
- Other argue for expanding the role of clinicians and health organizations to demand and support societal reform





Primary focus: Our students must be prepared to provide high quality clinical care to their patients

A Focus on Behavior Change

Students must be prepared to practice sophisticated behavior change:

- With their patients within our scope of practice, and
- At the organizational and policy level!
- This means going well beyond patient education with our patients (high risk)

This means understanding and skill in applying the various major theories behind behavior and behavior change (e.g., Social cognitive theory, Theory of planned behavior, transtheoretical model, self determination theory, cognitive behavioral strategies, etc)

Preparing a Generation of Leaders in Population Health

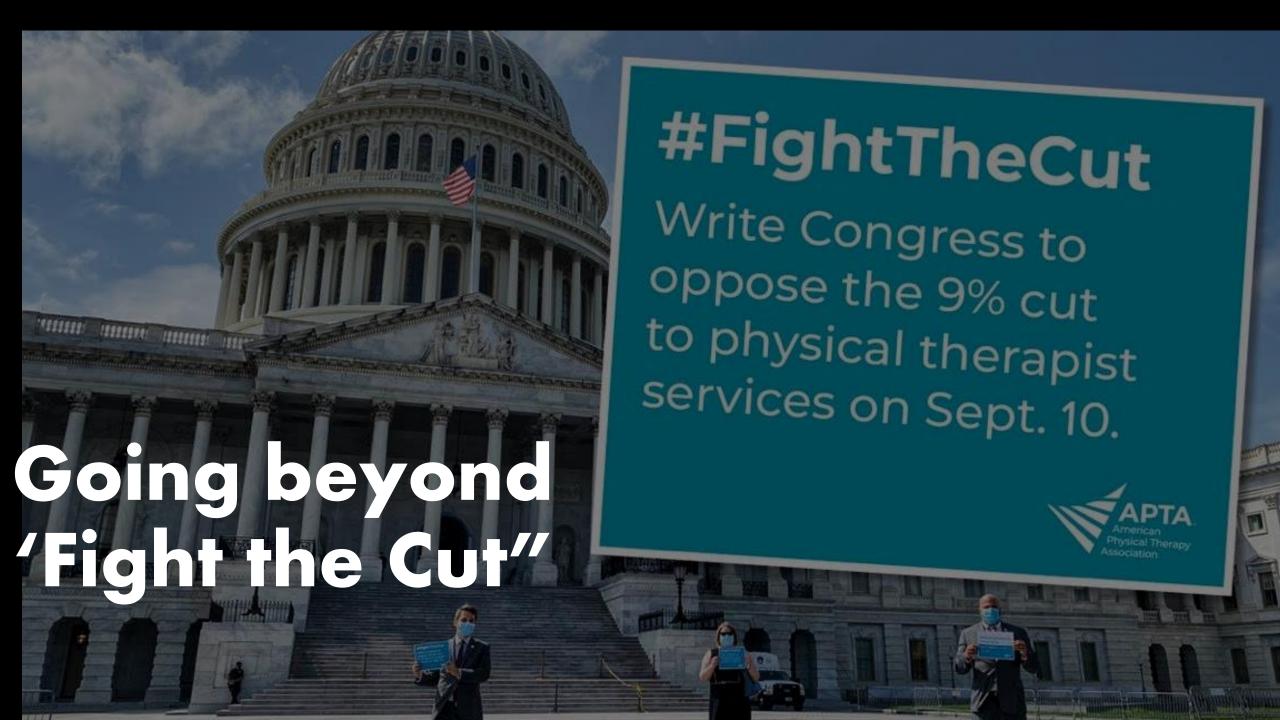
Develop a Leadership, Policy, and Advocacy Curricula....

To help students develop the necessary attributes, knowledge, and skills in health leadership, policy, advocacy, to transform policy related to health.

Skills for Transformative Practice

- Function within an interprofessional team
- Able to coordinate care across health care settings
- Ability to collect and analyze data to guide practice & continuous practice improvement
- Learn strategies to accelerate the adoption of evidence-based practice (ie., reduce practice ineptitude)
- Advocacy to reduce health care inequities
- Advocacy for health care policy reforms
- Advocacy for social policy changes

Provide Opportunities for Further Study in Pop'n Health **DPT/MPH Degree**



We have to expand our lane beyond clinical care if the vision espoused by our professional association is to be achieved.

Transforming society by optimizing movement to improve the human experience.