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PSCI 282: American Health Policy

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Application for International and Global Studies Program Grant

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Abstract:

This significantly expanded module will become part of my American Health Policy class (PSCI 282). It will substantially deepen the international health system comparative activity that students have traditionally competed at the beginning of this course. Students need to understand some of the basic workings of the social determinants of health, that is, factors that influence health outcomes above and beyond variable access to health services. If awarded, I plan to use the grant to support a week of research in Glasgow, Scotland, the home of some rather dismal public health patterns. My resulting case study will provide a point of departure for a significantly expanded class module that will ask the students to develop international case studies of their own. The students' case studies will help them to better understand patterns of poor health in the U.S. and internationally.

Within the first two weeks of my American Health Policy course (PSCI 282), students undertake an examination of the health systems of other countries. Working in small groups, they develop profiles of health system funding and facility ownership, insurance coverage provisions, limitations, and public health outcomes. This activity prompts students to think about how the American health care system functions relative to systems of other developed nations and how we in the U.S. could do better. While this activity provides a series of reference points that we refer to throughout the semester, its brevity means the students do not have the time to dig very deeply into how systemic and behavioral patterns in other countries affect health outcomes. I want to provide students with a new opportunity to examine in greater detail what are commonly referred to as the social determinants of health, that is, the social, behavioral, and environmental factors that strongly influence health, over and above people's variable access to medical services. This significant expansion of our international comparisons will help students gain such an understanding.

It turns out that certain areas of the world experience excess morbidity and mortality (higher rates of sickness and death than would be expected based solely on measurable levels of economic deprivation). One of those areas is Glasgow, Scotland, where the average life expectancy for males is 73.1 years (as of 2018). Compare this to 79 years across the United Kingdom.[1] In a few different ways, Glasgow's health deficits resemble those found, for instance, in central Appalachia in the U.S. The average life expectancy in the southern-most counties of West Virginia is more than 10 years shorter than the U.S. national average.[2] Studying these sites provides a window, albeit a painful one, into the power of the social determinants of health and how those determinants do not respect national boundaries. Part of the explanation hinges on tobacco, drug, and alcohol use, as well as obesity, poor nutrition, and social disjointedness / alienation attributable to deindustrialization. Rates of suicide are higher in such places.

Glasgow's health problems are substantial enough that public health scholars refer to this phenomenon as the Glasgow Effect. Factors specific to that city (more exactly, to certain sections of that city) correspond to significantly shortened life for its inhabitants.[3] Something similar can be said of various other places where combinations of social disjointedness, chronic stress, overcrowded housing, and environmental factors lead to terrible health outcomes for certain populations. In offering to students an explanation for the Glasgow Effect, I have an opportunity to dramatize in my class the power of the social determinants of health that are at play in many communities, in the U.S. and abroad. During my time in Scotland I also want to learn more about the public health promotion efforts that were effective in lengthening average

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[1] "Life Expectancy in Scotland, 2018-2020," National Records of Scotland, September 2021, available at: https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/life-expectancy/life-expectancy-in-scotland/2018-2020

[2] Institute for Health Metrics and Evaluation, 2014, available at: http://www.healthdata.org/sites/default/files/files/county_profiles/US/2015/County_Report_McDowell_County_West_Virginia.pdf

[3] Cowley, Kiely, and Collins. "Unraveling the Glasgow Effect: The Relationship between Cumulative Bio-psychosocial Stress, Stress Reactivity, and Scotland's Health Problems," Preventative Medicine Reports, 2016. See also "Investigating a 'Glasgow Effect': Why Do Equally Deprived UK Cities Experience Different Health Outcomes?" Walsh, Bendel, Jones, and Hanlon, Glasgow Centre for Population Health (2010).

life expectancy in Glasgow during the 1980s and 1990s but which have been much less effective since then.

I plan to spend part of June 2022 in Scotland, and I would like to extend my stay by one week in order to study the Glasgow Effect. This will allow me to develop a case study that I will incorporate into this course, which I teach each year (including in the fall of 2022). I am asking for a grant from the IGS program to help me cover the costs of this one week. I plan to focus my investigation on three areas: the government agency Public Health Scotland, with offices in Glasgow; a variety of semi-private organizations that work on drug and alcohol abuse (or misuse, as the Scots say it); and the holdings of the library at the University of Glasgow. I will not need to spend any of this grant on flights or trains. I am simply extending my stay, which allows me to make very efficient use of the financial support. One thousand dollars should cover seven nights in an AirBNB apartment plus food costs.

Once this case study is built into my class, I will ask students to develop their own, more brief case studies, focusing on social, environmental, demographic, and behavioral factors that significantly contribute to excess morbidity and mortality in many places around the world. These case studies will layer on top of the presentations of national health care systems that are already part of the course. As with the assignment I have used up till now, students will work in small groups to develop presentations. Reports from the World Health Organization, the United Nations, The Commonwealth Fund, and many national health agencies provide sufficient information to allow students to gain a basic understanding of how versions of the Glasgow Effect play out in many places. Specifically regarding learning outcomes, my students will learn how to research international health systems and statistics. They will have the opportunity to synthesize their learning into a class presentation. They will also gain a crucial understanding of how variable access to medical services is only one part (surprising to many, a *minority* part) of the larger explanation for disparities in individual health outcomes. In sum, I want students to have a more well developed framework to understand how the confluence of demographics, economic deprivation, behavior, and access to medical services together shape the lives of every person on the planet.

Because this expanded teaching module is still under development, my written descriptions of the assignment and grading rubric are still in draft form. Attached you will find the assignment and rubric for this two-part international comparison activity. The first part describes the comparison of health systems that I have used successfully in the past and which will continue to be part of this larger assignment. In class this takes the form of template presented in PowerPoint showing a description of one country's health care delivery systems, financing arrangements, and a brief overview of population health outcomes. See attached PP slides for the descriptions of Germany and Singapore. The second part describes this newly developed examination of the social determinants of health in a cross-national context. As the latter part of this activity develops I will elaborate and clarify the expectations and grading dimensions.

Thank you for your consideration.

DRAFT - International case study assignment and grading rubric

What country is your team examining? _____

Part 1: Description of health care system

Describe the health care system (nationalized, federalist, a social insurance model, individual-privatized, etc.). Who owns the facilities? Who employs the workers? How is the system financed? You should be able to accomplish this in 6-8 PowerPoint slides. Follow the example offered in class.

Demonstrate an understanding of the system's major strengths and weaknesses. Explain briefly what works well and where residents of your selected country still express frustration (ex. waiting times)

Identify health care spending as a percentage of GDP (ex. see The Commonwealth Fund)

Given the available evidence, document as many of these factors as you can:

- Per capita health care spending
- Average life expectancy (including for groups by gender, race, etc.)
- Percent of children receiving the standard range of vaccinations (available data will vary by country)
- Rate of mortality amenable to health care provision (those who died unnecessarily)
- Other relevant metrics that are available

Compare and contrast your case to that of the U.S. Develop an explanation of how Americans might learn from your international case. Be specific. Cite evidence. Be prepared to explain.

Part 2: Understanding of the influence of the social determinants of health

Develop a brief case study that illustrates how the social and environmental contexts in your selected country likely affect public health. This will take the form of a written narrative running between 4 and 5 pages, double-spaced. This should be co-written by your team members. Cite sources. Your narrative should address the following:

Identify rates of death by major category of cause. Don't forget to include suicide rates.

Rate of institutionalization of the non-elderly population

Change in life expectancy over the past few decades (depending on data availability)

Identify as many of these indicators as you can:

- Rate of loss of worker productivity due to illness or injury
- Tobacco use rate
- Mortality rate associated with substance abuse
- Percent of the population reporting a standing relationship with a health care provider
- Percent of the population lacking health insurance

- Percent of the population having ready access to clean water
- Rates of employment volatility / turnover (these indicators will vary by country)
- Self-reporting of happiness (see United Nations Sustainable Development Solutions Network)
- If your selected country is in Europe, see the Eurobarometer study for measures of social trust. If your selected country is not in Europe, consult the World Values Survey for similar measures. Briefly describe what you found. Explain why you selected the specific measures you did.
- Rates of social group memberships (clubs, churches, civic organizations, etc.). Recall that the indicators in these last two bullet points speak to the robustness of social capital, an important indicator of reciprocity and civic voluntarism.

Finally, draw conclusions from your group's findings. Consider the report we read ("Investigating the 'Glasgow Effect'" by Walsh, Bendel, Jones and Hanlon) and how your case study can leverage similar types of lines of evidence.

Your overall grade based on a weighting of each of the elements above (details to be determined).

GERMANY

- Germany was the first country to have a national health program
- Health insurance has been mandatory since the days of Chancellor Otto von Bismarck in 1883
- Access to services is widely regarded as a right for every German
- The system is a combination of government organization and private systems, a social insurance model
- A system of 125 government-regulated insurance plans cover ~90% of the population
  - A separate set of 40 private, substitute insurance plans cover the remainder of the population (~10% of the population has private insurance)
  - This diversity of plans and funding streams means the German system is NOT a single-payer system
- Germans have a great deal of personal choice about which insurance plan to enroll in and which providers to use; patients generally don't encounter the gate-keeper physicians found in many other countries (such as the UK)

GERMANY

- Most service providers are private, though they work within a framework negotiated between professional associations and the various sickness / insurance funds
- Authority for health care is shared across the federal government, states, and non-governmental corporations
  - The federal gov't sets basic parameters of coverage
  - States and NGOs (about 125 of them) implement policies (about half of the NGOs are non-profit)
- States own most but not all of the university hospitals
- Cities own about half of the local hospitals
- Hospitals are primarily staffed with salaried doctors

GERMANY

- Sickness funds are financed through mandatory paycheck withholding (taxed at 8.2% of one's earnings up to a ceiling of the equivalent of $62,000, as of 2014); employers also contribute another 7.3% of each worker's gross wages
  - This is the fundamental attribute that makes it a social insurance system
  - BTW, there is a somewhat redistributive element to the tax system
- The 40 private insurance plans are allowed to charge a risk-adjusted premium, set at entry, then locked in for life
  - For Germans who take this option, employers pay a premium equal to the government system, but not to exceed ½ of the total premium
  - Premiums are regulated so as to not rise (beyond inflation rate) as one ages
- Since the early-2000s Germans have had to pay nominal co-payments (10 Euros per calendar quarter) to see a general practitioner
- Germans spent 11.3% of GDP on health care in 2016

GERMANY

- Infant mortality (2019): 3.2 per 1,000 live births
- Childhood vaccination (2015): rates for common illnesses ranged from 89% to 99% (not mandatory after reunification in 1990)
- Life expectancy: 80.64 years, for a child born in 2016

SINGAPORE

- Singapore grew dramatically in its wealth following independence from the UK in 1959. This allowed it to make significant investments in its health care system, especially since the early-1980s
- Singapore's system is a combination of individual responsibility and government control; the national government manages a universal coverage system involving significant subsidies along side principles of individual responsibility and affordable services
- The nation's health program was created in 1984 and requires citizens and permanent residents to save in individual accounts that, together with gov't subsidies and layered payment systems, cover the costs of private insurance and out-of-pocket expenses. Employers must also contribute to these accounts.
  - These contributions are tax-exempt for individuals and employers

SINGAPORE

- The set of recently reformed policies, coordinated by the national government, includes 3 components:
  - **MediShield Life**: a universal basic health care insurance. It's mandatory and pays for major hospital bills and some outpatient treatments. MediShield Life was created in 2015 and replaced the earlier program, which had allowed citizens to purchase only catastrophic illness insurance
  - **MediSave**: This national medical savings program assists with some out-of-pocket expenses. Individual and employer contributions – ranging from 8%–10.5%, varies with age – go into MediSave accounts. This is mandatory for all working citizens. These tax-exempt, interest-bearing accounts can reimburse various health care expenses
  - **MediFund**: This is the government's safety net for low-income persons who need more help than either MediShield Life or Medisave provides

SINGAPORE

- These contributions to individual accounts (out-of-pocket) cover ~57% of total health care costs (2017)
- Insurance plans are reviewed and approved by the gov't and must involve copayments and deductibles
- Supplemental insurance is available but cannot be paid for by Medisave funds (individuals must instead pay for this out of pocket)
- About half of the nation's hospitals are privately owned, and nearly all of the clinics are private
- The vast majority of doctors and nurses are private actors paid on a regulated fee-for-service basis
- Government subsidies for certain services incentivize efficient behavior
  - Example: a hospital stay in an open ward involves a government subsidy of ~80%, compared to a stay in a private room where the patient pays the entire bill out of pocket
- During the 20-teens the national government boosted its payments to individual accounts in order to make insurance plans more affordable. Thus keep in mind that Singapore's plan is NOT a free-market plan, even though it bears some of these hallmarks.

SINGAPORE

Don't let the private money lead you to envision this as a program with a small-government footprint. As a Commonwealth Fund document describes it:

"The government relies on competition and market forces to improve service and raise efficiency but intervenes directly when the market fails to keep health care costs down. … the Ministry of Health performs workforce planning to determine the number of health care professionals required, coordinates the training capacity, and dictates land availability for hospital and other health care facility development. … The Ministry of Health has centralized certain functions to prevent fragmentation and to encourage economies of scale." (see source slide at end)

SINGAPORE

- Infant mortality: 1.7 per 1,000 live births (2019)
- Life expectancy: 84.68 (3rd best in the world)
- GDP spent on health care: 4.47% (2016)
- Government efforts to stop smoking include making nicotine replacement therapy being considered a necessary drug (eligible for subsidies), and a tax rate that accounts for ~75% of the cost of a pack of cigarettes (compare to 44% as of 2016 in the U.S.)