

AUTHOR

Lianne Ohayon

RESEARCH SUPERVISOR

Dr. Sara Allin

Analyzing the Effect of Healthcare System Type and Socioeconomic Status on Healthcare Access and Results During COVID-19: A Cross-Country Review

ACKNOWLEDGEMENTS

My sincerest gratitude to my research advisor, Dr. Sara Allin, the Laidlaw Foundation, the University of Toronto Laidlaw Scholars Leadership and Research Program, and the Center for International Experience at the University of Toronto. Without them, this research would not have been possible.

University of Toronto Laidlaw Scholars Cohort 2025-2026



03. Methodology

The following analysis of the healthcare systems of the United States, Canada, and Switzerland will begin by implementing the descriptive framework for country-level analysis of financing for healthcare systems outlined by Joseph Kutzin to develop each country's standard for financing and insurance coverage. Then, equity within each healthcare system will be assessed through an economic lens, narrowing the public health definition of equity (when everyone can achieve their optimal state of health and well-being) to specifically consider SES. Finally, the equity analysis will be applied to COVID-19 policies and results.

Kutzin's Health Financing Framework can be compartmentalized into four core components: revenue collection, pooling of funds, purchasing of services, and provision of services.

04. Results/Findings

United States (Private Health System)

The United States operates without universal healthcare, relying on a mix of public programs (Medicare for seniors, Medicaid for low-income individuals) and private insurance, leaving some citizens uninsured and many facing high annual costs. This fragmented structure results in inequitable access, with socioeconomic status (SES) strongly influencing health outcomes—low-income and uninsured individuals face higher mortality risks, delayed or forgone care, and, in Medicaid's case, limited provider acceptance. During COVID-19, these disparities deepened: lower-SES communities experienced higher infection and mortality rates, longer hospital stays, reduced ability to socially distance due to frontline, in-person work, and poorer access to testing. Although the CDC implemented a health equity strategy targeting vulnerable populations through data-driven interventions, support for frontline workers, and workforce diversification, its limited scope, late deployment, and lack of long-term planning underscored systemic weaknesses in ensuring equitable healthcare access during crises.

Canada (National Health Insurance)

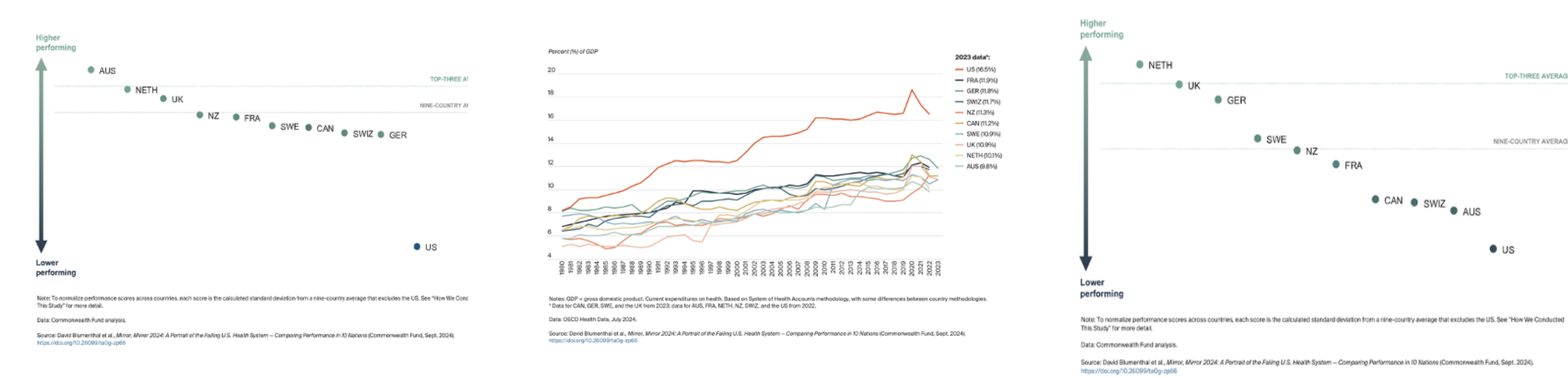
Canada's healthcare system, known as Medicare, provides access to medically necessary services at no cost under the principles of the Canada Health Act, though funding and delivery are managed provincially and territorially. While healthcare spending reached \$372 billion (about \$9,000 per person), only 70% is publicly funded, with prescription drugs, long-term care, dental, and other services either partially covered or privately funded. Despite universal coverage, inequities persist: low-income Canadians bear a disproportionate economic burden, face higher average healthcare costs, and report significant barriers to access, with those in poverty ten times more likely to experience unmet health needs. During COVID-19, Canada fared relatively well compared to other G10 countries, with the second-lowest per capita case and death rates, yet the system struggled with regional variation and disproportionate impacts on vulnerable groups. Long-term care homes accounted for nearly 80% of deaths early in the pandemic, while low-income, urban, and ethnically diverse communities faced higher mortality and transmission due to structural inequalities like frontline work and crowded housing.

Switzerland (Social Health Insurance)

Switzerland's healthcare system is uniquely characterized by extreme decentralization, with each of its 26 cantons managing its own healthcare system, enabling tailored services but risking inequities and inefficiencies. Services are purchased largely through a fee-for-service model; access to care is generally strong, with most patients able to see specialists or doctors quickly. Despite overall high performance, SES disparities persist, with lower-income areas experiencing more avoidable hospitalizations, lower educational attainment, and higher unemployment, costing the system millions annually. During COVID-19, Switzerland—despite high infection rates and 14,210 deaths—implemented strict measures such as border closures, gathering bans, and a vaccination campaign, achieving relative success but still facing inequities. Non-Swiss citizens had higher mortality, higher-income areas tested more often and had lower positive rates, and lower SES groups experienced greater hospitalization and mental health impacts. Interestingly, compliance with prevention measures was higher among lower SES groups after mid-2021, but Switzerland lacked a formal equity-focused COVID-19 strategy.

05. Comparative Analysis

The United States, Canada, and Switzerland approached the COVID-19 pandemic through different healthcare and governmental systems, with each facing challenges in addressing socioeconomic disparities in testing, resources, and vaccinations. While definitions of socioeconomic groups are broadly similar—based on income, education, and occupation—each country has distinct class structures and cultural attitudes toward inequality, with Switzerland exhibiting less overt "class consciousness" despite high wealth concentration. Healthcare system types further shaped equity outcomes: the U.S. Private Health System, though partially funded by public programs, left lower-SES groups with worse outcomes; Canada's National Health Insurance system, despite universal coverage, saw variation in provincial responses, with some equity-focused vaccination strategies; and Switzerland's Social Health Insurance system, while generally accessible, saw lower testing rates among low-income groups but higher compliance with prevention measures. These differences reflect both structural health system features and the scale of each nation, raising questions about whether models like Canada's or Switzerland's could be effectively applied to a country as large and diverse as the United States.



Healthcare system performance comparison graphs

01. Introduction

This report examines how different healthcare system structures influenced the quality and effectiveness of COVID-19 treatment in the context of socioeconomic disparities, focusing on the macro level (system-wide organization, resource mobilization, and policy) and the micro level (community-based inequalities in access to care). The COVID-19 exposed systemic weaknesses across OECD countries, including shortages of PPE, hospital space, and staffing, as well as delayed preventative and elective care, which disproportionately affected marginalized and low-SES populations. Using the Böhm et al. typology, the study compares three healthcare models—the Private Health System (United States), National Health Insurance (Canada), and Social Health Insurance (Switzerland)—through a scoping literature review and comparative analysis, with the goal of informing future pandemic preparedness, reducing inequities, and producing targeted policy recommendations.

02. Objectives

The primary objectives of my study are as follows:

1. Analyze and compare three prevalent healthcare system typologies (Private Health System, National Health Insurance System, and Social Health Insurance) through specific observation of the United States, Canada, and Switzerland, respectively.
2. Connect socioeconomic factors to accessing healthcare facilities, workers, and treatment plans during COVID-19 in the United States, Canada, and Switzerland.
3. Identify the strengths and weaknesses of each country's healthcare system in addressing the effects of COVID-19 across their respective populations.

The secondary objectives of my study are as follows:

1. Understand what socioeconomic disparities exist, how they are defined, which communities are most affected, and where they are located, in the United States, Canada, and Switzerland.
2. Propose solutions for alternative health policies and create a framework for future pandemic readiness endeavors.

06. Policy Recommendations

Based on the pre-existing COVID-19 policies and recommendations, the following policy recommendations emphasize both global and country-specific strategies to strengthen pandemic preparedness with a focus on socioeconomic status (SES) as a key social determinant of health. At the global level, the World Health Organization (WHO) should expand its pandemic prevention efforts by creating a transdisciplinary Subcommittee for Pandemic Preparedness that integrates expertise across disciplines and regions, works with national public health agencies, and implements accountability measures like drills and simulations. For the United States, priorities include directing resources to high-density, low-SES communities, enhancing Medicaid-supported services, maintaining supply chains for essential equipment, and institutionalizing equity-focused data collection. Canada should tailor preparedness plans to regional needs, foster provincial-federal collaboration through a PHAC subcommittee, and improve data systems to better capture SES impacts. Switzerland should address healthcare affordability by enforcing consistent care standards across cantons, strengthen sickness funds, and incorporate robust mental health strategies. Across all contexts, evidence-based, equity-oriented, and collaborative approaches are essential for building resilient systems ahead of future pandemics.