

Assignment One

Diploma in Public Health

PUBH 742: Global Health and International Health Systems

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PUBH742 Assignment 1

Introduction

Healthcare systems worldwide face the challenge of delivering high-quality care while controlling costs, yet countries take very different approaches. The United States spends about \$12,400 per person annually (1), yet life expectancy and infant mortality often lag behind other wealthy nations (2). Singapore, in contrast, spends about \$4,300 per person (1) while achieving some of the world's highest life expectancy and lowest infant mortality rates (3).

This analysis examines how these two systems function within their political, economic, and social contexts. The U.S. follows a market-oriented model emphasising individual choice, private insurance, and competition between providers. (2) Singapore adopts a state-coordinated approach, balancing government planning with market mechanisms through its "3M" system of Medisave, MediShield, and Medifund. (3)

This essay is structured to explore key aspects of each system: geography and demographics, socio-economic and political context, health status and system performance, and health system overview. By assessing these areas, the analysis highlights how national values and governance shape healthcare design and effectiveness, providing insights into the different ways countries achieve health system goals.

Part 1: USA Health Situation Analysis

Geography & Demographics

The United States, covers 9.8 million squares kilometres, making it the world's third-largest country. (4) Its varied geography and climates-from tropical areas to polar regions, mountains, desert, and coastlines-create unique health challenges that require specialised care and emergency planning. (5)

Geographic diversity exposes U.S. communities to different health risk. Heat affects the Southwest, cold impacts the North, and hurricanes impact the Gulf Coast. Wildfires, earthquakes, and floods add further pressure, requiring region-specific, expertise, equipment and emergency planning across the country. (6)

The vast scale of the U.S. contributes to major healthcare access gaps. Around 80% of American counties face healthcare deserts¹ with limited access to pharmacies, clinics, or hospitals, and rural communities are especially affected, with higher mortality rates and fewer specialists than urban areas (7).

The U.S. population of 347 million is highly diverse, with immigration and internal migration shaping local healthcare needs. (8) An ageing population and frequent movement of people put uneven pressure on regional health systems, while population changes and geographic barriers make it harder to deliver care. (8)

Socio-Economic Profile

The United States operates a market-oriented economy that directly shapes healthcare access through its complex mixture of public and private insurance systems. The healthcare system reflects the country's broader economic structure, where market mechanisms drive most healthcare decisions whilst government programmes serve specific populations including the elderly (Medicare) and low-income Americans (Medicaid). (9)

Despite being one of the world's wealthiest nations, approximately 30 million Americans remained uninsured in 2019, highlighting fundamental gaps in coverage (9). This creates a two-tiered system where healthcare access depends heavily on employment status, income level, and insurance coverage. The employment-based insurance model means that job loss can result in immediate healthcare coverage loss, creating vulnerabilities particularly during economic downturns. (10)

Income inequality significantly impacts healthcare access and outcomes. The USA has high levels of income inequality, with a Gini coefficient of 0.418 (1), and the healthcare

¹ Area where people have inadequate access to essential healthcare services such as pharmacies, primary care providers, hospitals, hospital beds, trauma centres, and low-cost health centres, often increased by personal and financial barriers that deepen health inequalities. (5)

system demonstrates these disparities. (11) Wealthy Americans can access world-class medical care, advanced treatments, and preventive services through premium insurance plans and direct payment options. However, the system struggles to deliver equitable access and affordable services to vulnerable populations, including low-income families, unemployed individuals, and those with pre-existing conditions. (3)

Healthcare costs consume a larger proportion of household income for lower-income Americans, even when insured. Medical debt affects millions of families, with healthcare expenses contributing to personal bankruptcy even among insured populations. This economic burden creates barriers to seeking timely care, leading to delayed treatment and worse health outcomes for economically disadvantaged groups. (12)

Socio-Political Context

The U.S. has a federal system, which means power is shared between the national government and individual states. This makes it difficult to coordinate healthcare policies across the whole country. In addition, many powerful groups—like insurance companies, drug companies, hospitals, and employers—have a big influence on how healthcare works. Because these groups often focus on profit rather than public health, costs are high and access is unequal, particularly for lower-income households. (13)

The Affordable Care Act shows the difficulties of coordinating healthcare policy. It set national standards for coverage and protection, but outcomes varied between states depending on decisions about Medicaid expansion and marketplace participation (14). In 2012, the federal government ruled that states could expand Medicaid to those earning up to 138% of the federal poverty level. However, ten states refused, creating a coverage gap where some people earned too much for Medicaid but still could not afford subsidised plans on the national marketplace. This left millions in vulnerable socio-economic groups without affordable care. (15)

The refusal by some states to expand Medicaid shows how the two-party system makes healthcare policy highly polarised. This polarisation creates resistance to reform, leaving inefficient and unequal systems in place, and making comprehensive change difficult even when solutions exist.

Health Status & Issues

The United States provides world-class medical care, with strengths in medical innovation, specialist treatment, and complex procedures such as cancer care and emergency trauma. Academic medical centres combine research, education, and patient care to a globally recognised standard. (16)

Despite these strengths, overall population health lags behind comparable nations. Life expectancy is lower, infant mortality higher, and preventable deaths remain common, showing gaps in primary care and prevention. (17) Health outcomes are uneven, with racial, ethnic, and socioeconomic groups experiencing persistent disparities. Mental health services are poorly integrated, leaving many needs unmet. Rising costs and limited access create further challenges, particularly for those in underserved or uninsured populations. (17)

Fragmented services and payment systems that prioritise volume over value make care coordination difficult, especially for patients with multiple chronic conditions. Additional pressures come from an ageing population, workforce shortages, political polarisation, and emerging threats such as climate change. (18)

Innovations such as telemedicine could expand access and improve coordination. (18) Strengthening preventive policies, investing in primary care, and developing a more diverse healthcare workforce could reduce disparities and improve population health (18).

The U.S. healthcare system shows a large contrast: it delivers some of the most advanced medical care in the world, yet overall population health remains poor, reflecting inequalities, fragmented services, and underinvestment in the social determinants of health (19).

These health status issues are shaped by the complex U.S. healthcare system, which combines private insurance, government programmes, and out-of-pocket payments.

(20) Around 68% of people have employer-based insurance, while Medicare, Medicaid, and smaller programmes cover seniors, low-income individuals, veterans, and federal employees. (20)

The multi-payer system adds complexity and coverage gaps. Differences in plans, prior authorisations, network limits, and cost-sharing create barriers, while the lack of unified quality standards limits efficiency and equity. (21) Fee-for-service payment models prioritise volume over value, encouraging overuse of costly services and underinvestment in prevention. (22).

Care is delivered through a mix of independent practices, integrated systems, academic centres, and community clinics, causing variation in quality and access. Rural areas face additional challenges from hospital closures and physician shortages. (23)

Fragmentation makes care coordination difficult, especially for patients with complex chronic conditions, and electronic health records often fail to communicate across systems (24).

Overall, the system's organisation and funding contribute to inequalities, inefficiencies, and uneven health outcomes, reflecting the challenges highlighted in previous sections.

Part 2: Singapore Health Situation

Geography & Demographics

Singapore's compact geography, covering just over 700 km² (4) provides unique advantages in organising and delivering healthcare. (3) With the entire population concentrated in an urban setting, the system avoids rural–urban disparities common in larger countries. This density allows centralised planning, efficient coordination of services, and rapid access to specialist care across the city-state. Singapore's tropical climate offers stable environmental conditions, facilitating predictable resource allocation, though urban density also brings challenges such as traffic- and industry-

related air pollution, heat island effects, and higher risks of infectious disease transmission (25).

As an island nation, Singapore depends heavily on imported medical supplies and food, requiring strong border health controls and strategic stockpiles to ensure resilience against disruptions in global supply chains, especially in the event of emergency outbreaks like COVID-19. (26) The population of 5.9 million is ethnically diverse, comprising approximately 74% Chinese, 13% Malay and 9% Indian. (27) This diversity requires culturally sensitive services, multilingual communication, and awareness of varying health beliefs. Rapid population ageing, with 14% over the age of 65 (1), is increasing demand for long-term care services. High population density, over 8,000 people per square kilometre (4), enhances the effectiveness of healthcare infrastructure and supports efficient delivery of population-level interventions, including disease surveillance, health promotion and preventive campaigns (which may be via billboards or other means).

Socio-Economic Profile

Singapore operates a developmental state model, strategically integrating healthcare policy with broader economic planning. As a high-income economy with GDP per capita of \$90,674 (28), it can invest in healthcare infrastructure while being fiscally discipline. Singapore treats healthcare as an investment in human capital, promoting national competitiveness and long-term development by combining government oversight with individual responsibility through schemes like Medisave, Medishield, and Medifund. Market mechanisms are encouraged to drive efficiency and innovation, while centralised regulation ensures equitable access and prevents market failures. (29)

Healthcare financing relies on the “3M” system: Medisave (individual savings accounts), MediShield (insurance coverage), and Medifund (government subsidies) (3). Workers contribute 8–10.5% of their income to Medisave, creating personal investment in healthcare while ensuring funds are available for medical expenses. MediShield protects against major medical costs, and Medifund provides a safety net for those unable to afford care despite other support mechanisms. This system encourages

responsible healthcare utilisation while maintaining universal coverage and financial protection for those in need. (30)

Socio-Political Context

Singapore's parliamentary system, characterised by strong executive authority, allows healthcare policies to be implemented quickly and consistently. Long-term rule by the People's Action Party provides political stability, enabling strategic health system development that extends beyond short electoral cycles. (3) Governance is technocratic and evidence-based, prioritising detailed civil service analysis and expert consultation. While public involvement in policy discussions is comparatively limited, this approach facilitates long-term planning and the implementation of initiatives such as preventive health programmes, health promotion, and infrastructure development. (3)

In Singapore, the government maintains accountability through careful regulation and oversight of the health system, using evidence-informed policies to ensure healthcare outcomes reflect efficiency, equity, and responsiveness to public needs. (29) Regulatory oversight spans all aspects of the health system, including public and private providers, medicines, and professional standards. Continuous adaptation is required to maintain efficiency while encouraging innovation (31).

Health Status & Issues

Singapore has very good health outcomes. Life expectancy is 81.6 years for males and 86.3 years for females, infant mortality is 2.1 per 1,000 live births, and maternal mortality is 6 per 100,000. (1) These outcomes reflect high-quality maternal and child health services, strong preventive care, and comprehensive disease management. (26) National campaigns and screening programmes support early detection, while primary care coordination through polyclinics and general practitioners ensures effective referrals and continuity of care.

Healthcare spending is efficient, at just 5.57% of GDP (28), while universal coverage and cost-sharing mechanisms maintain financial protection and optimise use of the healthcare system (30).

Despite achieving good health outcomes, Singapore's healthcare system faces increased pressures. Since 2011, hospital bed shortages have caused high occupancy rates and long waiting times. Out-of-pocket expenses comprised 40% of total health expenditure in 2011, with affordability concerns particularly for lower-income groups. (30) Primary care struggles with capacity—85% of private GP clinics are small practices that don't have resources for complex care, whilst public polyclinics manage 41% of chronic disease patients with only 22% of physicians. Intermediate and long-term care capacity lags demand, with the pool of family caregivers shrinking as Singapore becomes one of the world's fastest ageing societies. (30)

To address these strains, Singapore has launched the "Three Beyonds" transformation strategy. Mass participation programmes like the National Steps Challenge have attracted 1.7 million people, whilst the Healthier Dining Programme now includes 40% of food outlets. (30) In 2018, aged-care services were integrated under the Ministry of Health to better coordinate health and social support. Primary care is being strengthened—subsidies now cover 1.3 million users across 1,650 clinics, with new polyclinics being built and support programmes helping GP practices develop their capabilities. Digital tools and mental health web apps are being piloted to encourage healthier lifestyles and reduce stigma around seeking help. The government has committed \$200 million for research into ageing-related innovations. (30)

Health System Overview

Singapore's healthcare delivery is integrated through the 3M framework, balancing personal responsibility with social protection. Medisave funds individual medical expenses, MediShield provides catastrophic insurance, and Medifund ensures access for low-income patients (3). This approach enables universal coverage while promoting cost awareness and responsible utilisation.

Healthcare is delivered through public and private providers. Public hospitals offer acute and specialist care, while private providers expand capacity and choice. Primary care is structured through polyclinics and general practitioners, supported by referral systems that maintain continuity across service levels. Preventive care and health promotion are emphasised through community programmes, workplace initiatives, and individual health monitoring.

Quality assurance is maintained via national standards, performance monitoring, and continuous improvement programmes. This integrated system allows rapid adoption of best practices and ensures consistent, high-quality care across providers, while remaining cost-conscious and responsive to population needs.

Table 1 – Health Situation Analysis Key Indicators for Singapore and the USA

	USA	Singapore
Population (millions)	347,276,000	5,870,750
% population >65 yrs	19.4%	14.1%
% population 15-64 yrs	72.4%	80.8%
% population 0-14 yrs	8.2%	5.1%
Area (km ²)	9,400,000	710
Density (population / km ²)	38	8,177
GDP/capita (USD PPP)	85,810	90,674
Gini Coefficient	41.8	-
Fertility rate	1.79	1.26
Infant mortality per 1,000 live births	6.5	2.1
Maternal Mortality per 100,000 live births	17	6
Life expectancy (m/f)	73.7 / 79.1	81.6 / 86.3
GDP health expenditure (%)	17.36	5.57
Total health expenditure per capita (USD at PPP)	12,434.43	4,320.52
Practising physicians per thousand population	2.6	3.6

Obesity prevalence % population (BMI > 30)	41.64	16.09
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Sources: (1, 4, 28, 32)

Indicators are from 2022 – 2025 depending on the source (see references for exact dates)

Self-Reflection

1.) Understanding of Global Health and Health Systems

Working through this assignment deepened my understanding of global health by showing me that health system performance depends on more than resources—it reflects politics, institutions, and social context. Comparing different health systems showed me that each country reflects national values and governance approaches, which made me realise that practical, evidence-based health policies must be contextually appropriate and aligned with a country's broader frameworks.

2.) Challenges

The most challenging aspect was analysing two countries with completely different political systems and settings at the same time. The USA's federal, market-driven approach was very different to Singapore's centralised, state-coordinated model. However, this was interesting as I could see that each system's context shapes both its strengths and weaknesses—the USA's innovation alongside deep inequalities, Singapore's efficiency balanced with individual responsibility. This showed me that health system assessments require looking at more than basic indicators and understanding countries underlying structures and environments.

3.) Knowledge & Theories Gained from the Literature

This assignment challenged my assumption that good health systems follow the same best practices. Through the research I learned that countries achieve universal coverage and equity goals in different ways depending on their politics, institutions, and resources. I learnt that theoretical frameworks are useful starting points, but real-world implementation is difficult and more context-dependent than theory would assume. What works in one country might not work in another because of different political systems, funding models, and social values. This taught me the importance of

understanding how different designs involve trade-offs between efficiency, equity, and what's politically possible in that specific context.

4.) Future Writing and Research

This assignment changed how I would approach health policy analysis. Rather than comparing systems against ideal standards (or best practices), I understand the importance of political, economic, and institutional constraints that determine what's achievable for a country. In the future, I'll apply this systems-thinking approach by examining health outcomes and with the underlying structures that produce them. This means choosing context-appropriate indicators, using different sources of information, and acknowledging that policies must be technically appropriate and politically feasible. These skills will strengthen my research and help me contribute to evidence-informed policy discussions in an academic and professional setting.

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