

Defining Public Health Systems

A critical interpretive synthesis of how public health systems are defined and classified

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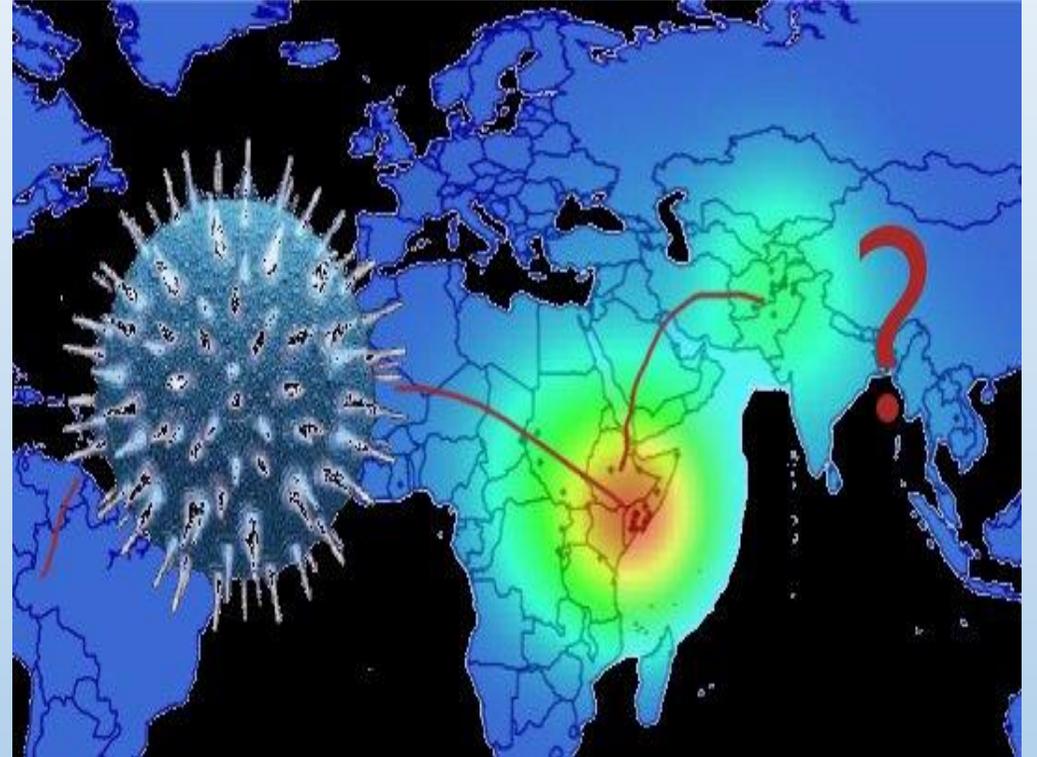
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Background

- Understanding of public health by laypeople and decision makers is limited, highlighted mostly in times of crisis
- Public health systems and policy research needed to understand how to best deliver public health and to strengthen emergency planning and response



Research Questions

Compass Question:

- How are public health systems defined and classified?

Sub-questions:

- 1) What frameworks or models exist to define or classify public health systems and how are these similar or different?
- 2) How are public health systems different than healthcare systems?
- 3) What is the interplay between public health, health care and health systems?

Methods: Theoretical frameworks

Health systems arrangements	
Key Features	
Governance arrangements	Policy authority
	Organizational authority
	Commercial authority
	Professional authority
	Consumer and stakeholder involvement
Financial arrangements	Financing systems
	Funding organizations
	Remunerating providers
	Purchasing products and services
	Incentivizing consumers
Delivery arrangements	How care is designed to meet consumers' needs
	By whom care is provided
	Where care is provided
	With what supports is care provided

3I+E framework for health policy formulation	
Key Features	
Institutions	Government structures
	Policy legacies
	Policy networks
Interests	Interest groups
	Civil society
Ideas	Values
	Personal experiences
	Research evidence
External Factors	Political change
	Economic change
	Release of major reports
	Technological change
	New diseases
	Media coverage

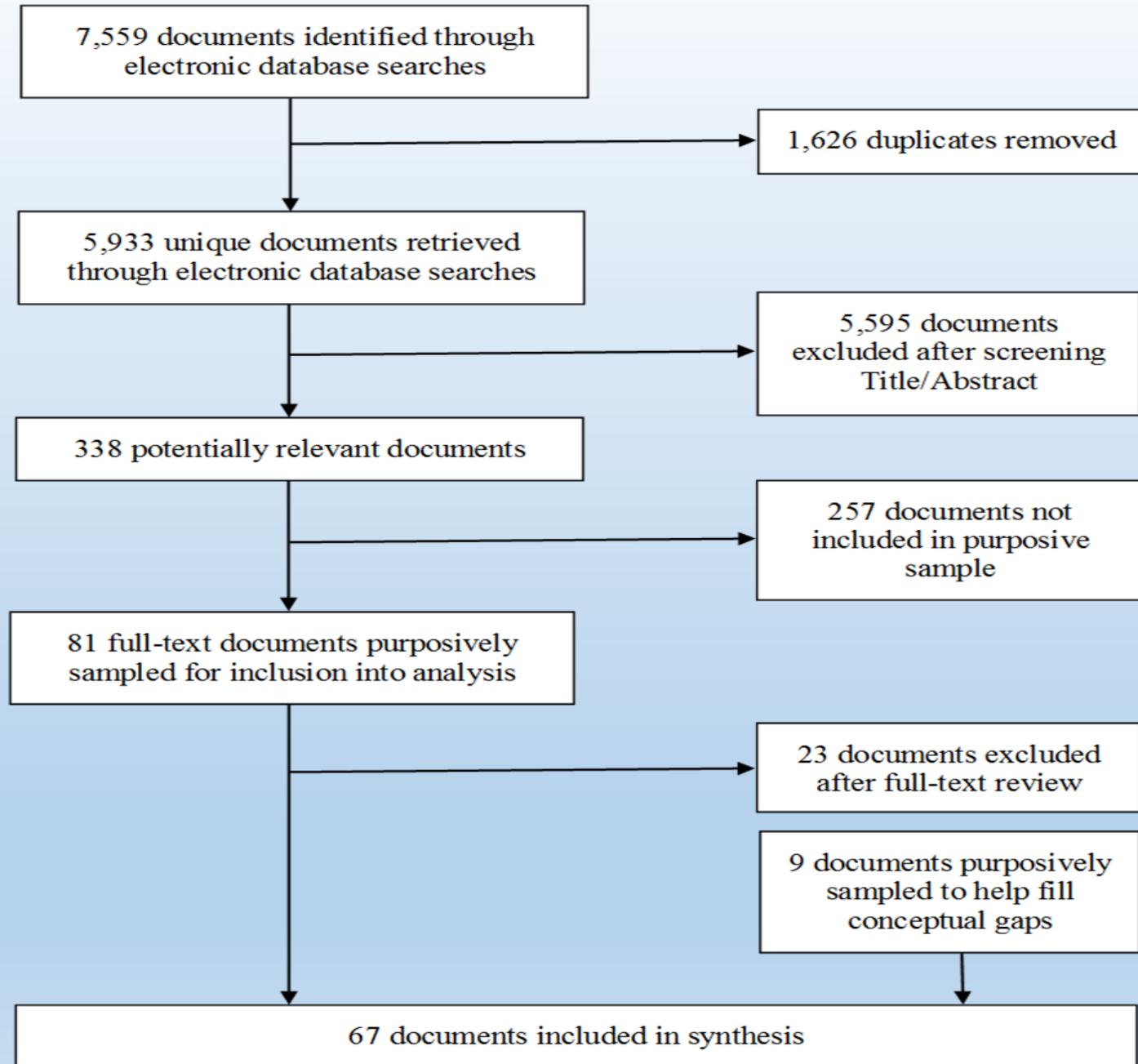
Methods

Databases	Search string
EBSCOHost	'Public health AND system* AND (deliver* OR governance OR organization OR classific* OR structure* OR manag* OR fund* OR function* OR financ* OR role OR purpose OR typology OR framework* OR model* OR component* OR definition*)'
Scholars Portal	
OVID	
Web of Science	
Cochrane Library	
Health Systems Evidence	

Exclusion criteria

1. Lacked description of a public health system, framework, or critical components
2. Focused on publicly-funded healthcare systems, unless it also addressed the role of public health
3. Focused on specific healthcare or public health interventions, programs, policies, laws, or development, implementation, monitoring or evaluation tools
4. Focused on the specific roles or training of public health or health professionals in public health
5. Documents in languages other than English, French or Spanish

Results: PRISMA Flow Chart



Results: Defining public health and public health systems

Entity	Number of definitions	Suggested definition
Public Health	7	Public health is an art and science, based on objective findings but responsive to the needs and contexts of populations, concerned with addressing the health needs of a community. It is a diverse set of organized activities aimed at improving quality of life and reducing health disparities to enable people to thrive.
Public Health System	10	A public health system is the collective capacity of governmental, private, and other public sector entities that support the mission and core functions of public health. It is the cumulative arrangement of resources, infrastructure, and policies impacting health that exist to support public health within communities.

Results: Frameworks, roles and functions of public health

Region/ Country	Framework										Established Essential Services										
	I.O.M. Three Core Functions of Public Health (U.S.A.)																				
	Assessment	Policy Development			Assurance																
	10 Essential Public Health Services (U.S.A.)																				
	Health Assessment and Monitoring	Investigate/ Surveillance	Inform/educate/ Promotion	Partner Engagement & Advocacy	Policy Development & Planning	Regulation/ Enforcement	Link & provide health services	Workforce strengthening	Evaluation of health services	Research	Communicable Disease Control	Chronic Disease & Injury Prevention	Health Protection	Emergency Planning & Response	Laboratory Services	Licensing	Program Implementation	Resource & Organization	Mgmt. Vital Statistics		
U.S.A.	X	X	X	X	X	X	X	X	X	X											
Canada	X	X	X									X	X								
Latin America	X	X	X	X	X	X		X	X	X				X				X			
India	X	X	X		X	X	X	X	X	X	X			X				X			
Israel	X			X	X	X		X	X	X		X	X	X							
Pacific	X		X		X	X		X	X	X		X						X			
Australia	X	X	X	X	X		X				X	X	X					X			
New Zealand	X	X	X				X		X				X								
European Region	X		X	X	X		X			X	X		X	X	X						
U.K.	X	X	X			X	X		X	X	X	X		X							

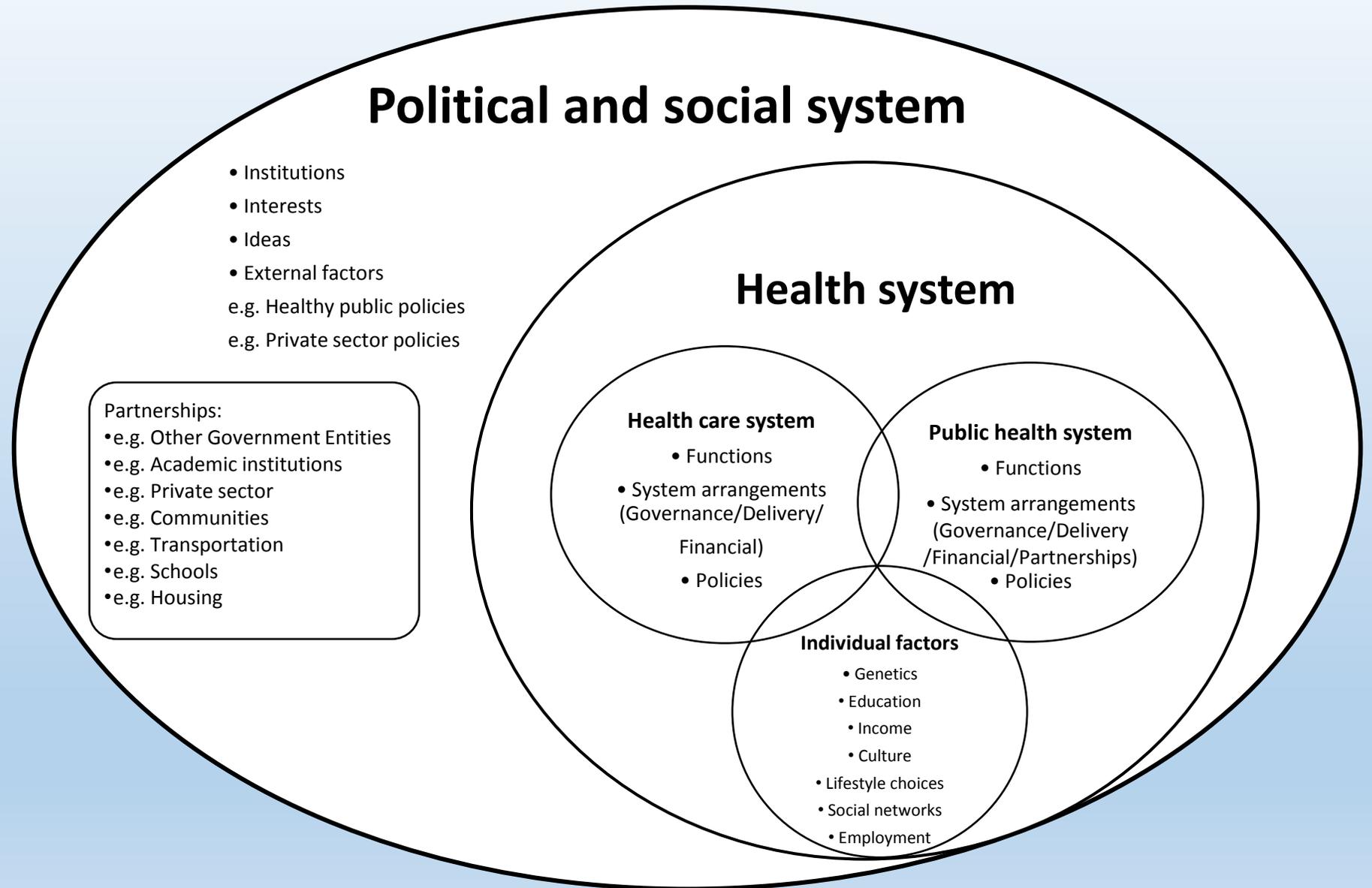
Results: Public health system arrangements

Health systems arrangements	
Key Features	
Governance arrangements	Policy authority
	Organizational authority
	Commercial authority
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Delivery arrangements	How care is designed to meet consumers' needs
	By whom care is provided
	Where care is provided
	With what supports is care provided

Public health systems arrangements		
Key Features		
Partnerships and Communication	Governance arrangements	Policy authority
		Organizational authority
		Commercial authority
		Professional authority
		Consumer and stakeholder involvement
	Financial arrangements	Financing systems
		Funding organizations
		Remunerating providers
		Purchasing products and services
		Incentivizing consumers
	Delivery arrangements	How programs/services are designed to meet consumers' needs
		By whom programs/services are provided
		Where programs/services are provided
		With what supports are programs/services provided

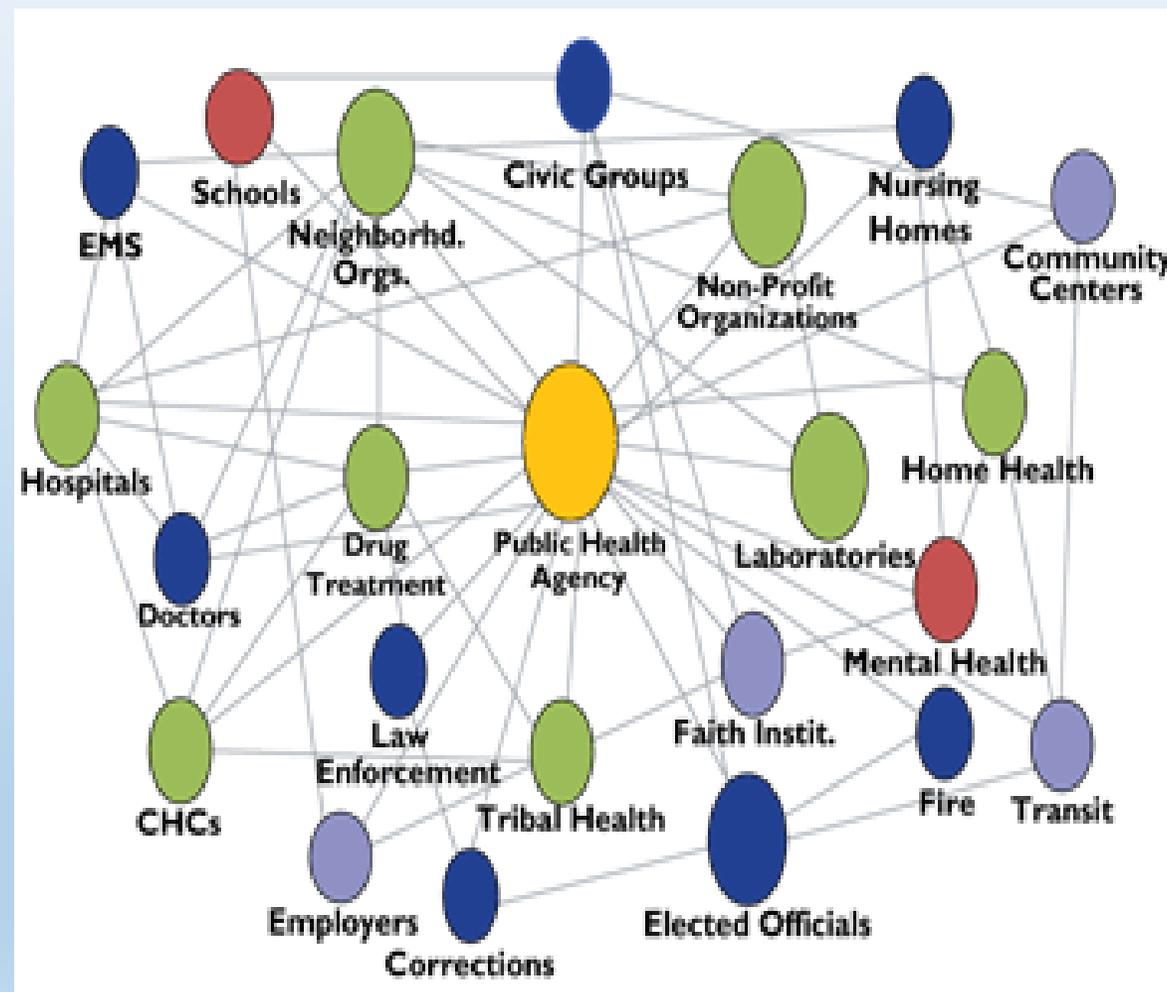
Results:

Conceptual model of a population health system



Discussion

- How can we define public health systems if public health is not understood?
- Lack of comprehensive public health frameworks
- Partnerships and communication are key features of public health systems



Discussion

- **Implications for policy and practice**

- Which functions make sense?
- Health systems integration: Patients First

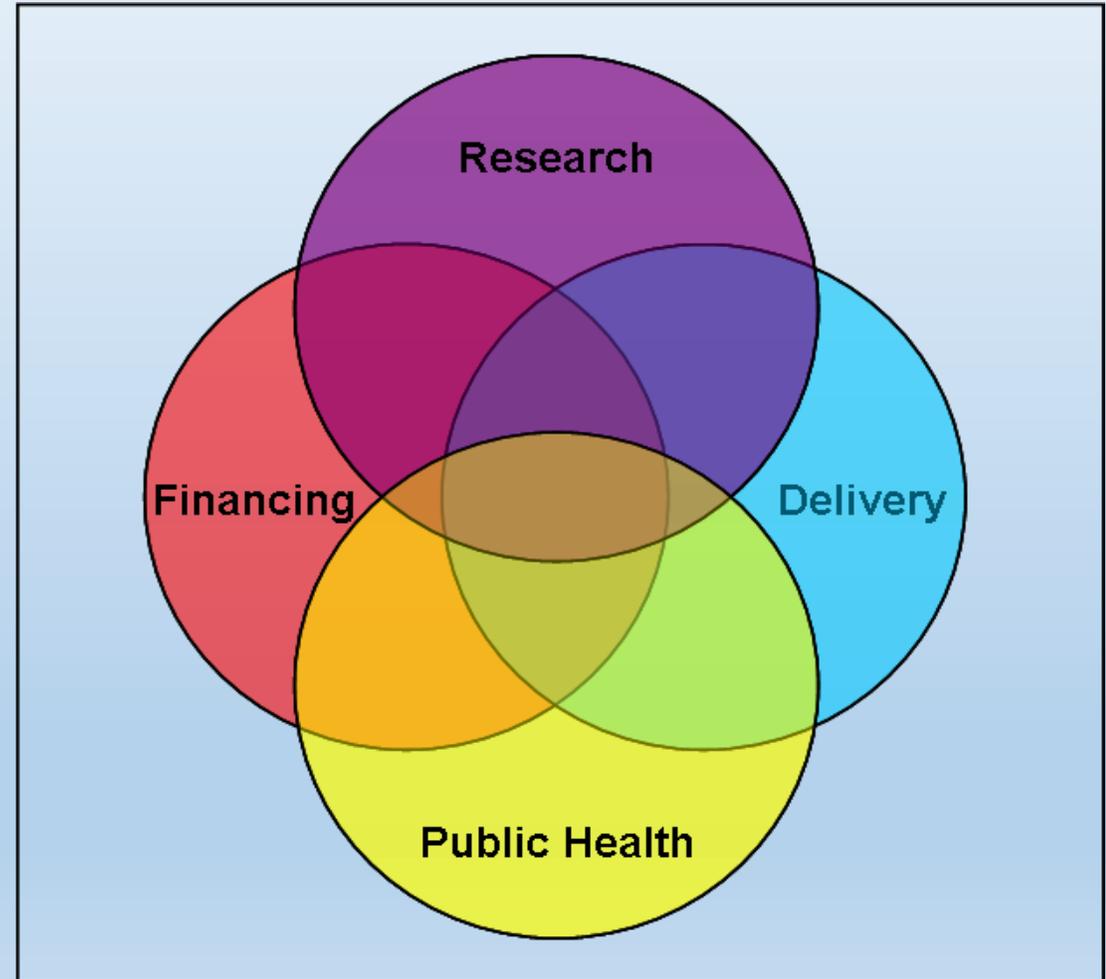
- **Implications for research**

- Provides public health systems framework to test
- Inconsistent terminology of public health, public health systems, and public health functions makes comparisons difficult
- Most literature comes from high-income countries, gap in understanding public health systems in low- and middle-income countries (LMICs)



Areas for future research

- Further refining the proposed public health systems framework
- Exploring how public health systems are defined in LMIC
- Exploring optimal organizations of public health systems and determining which system performs best



Conclusion

- This study provides more detail on a complex issue: defining and understanding public health systems
- The success of public health systems cannot be measured if there is no common understanding of public health, its functions, and system components and arrangements
- Important gap addressed in public health and provides a stepping stone for future research agenda in public health systems and policy

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THANK YOU!!!!

Questions?