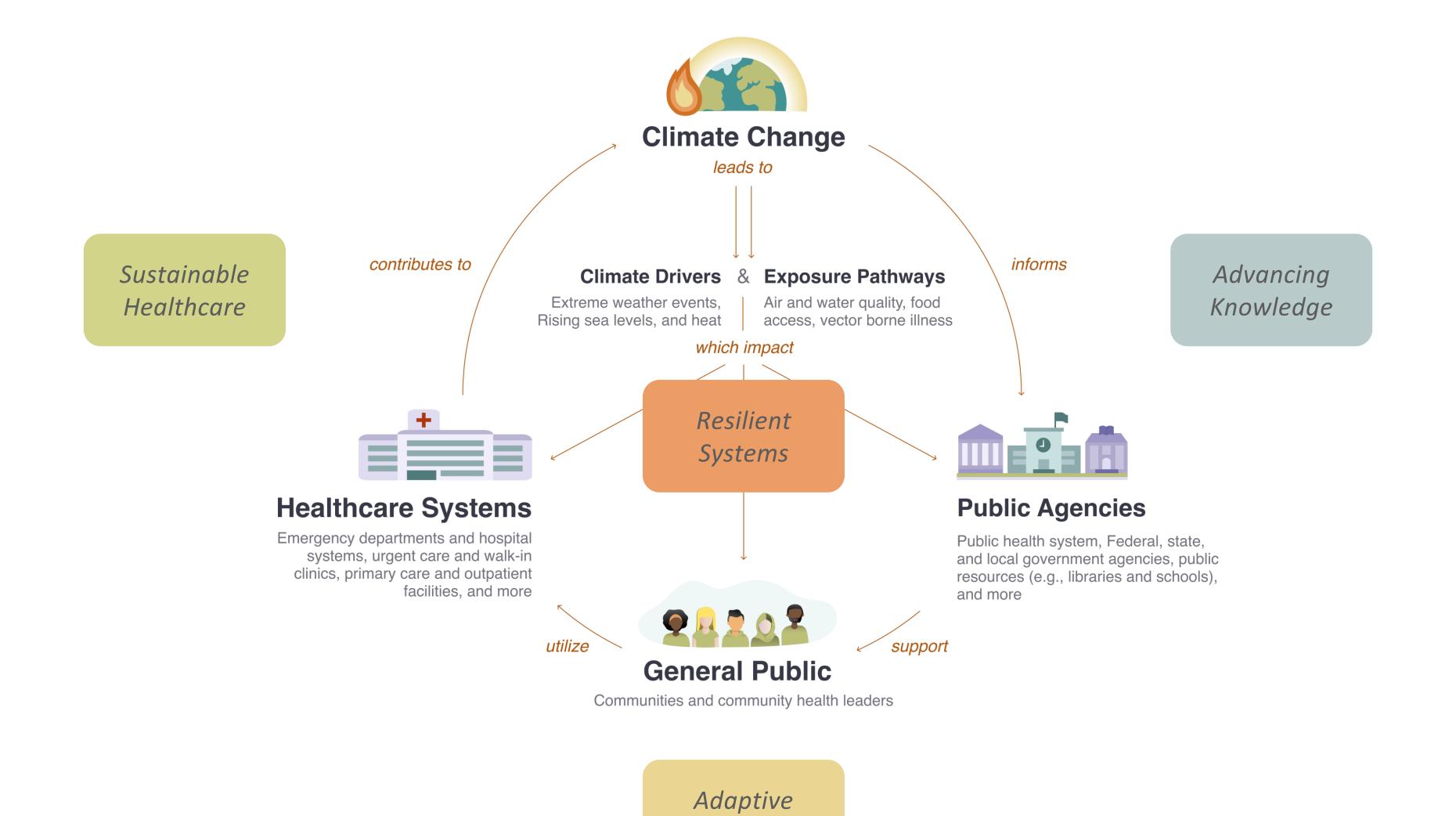
Climate Health through an Informatics lens

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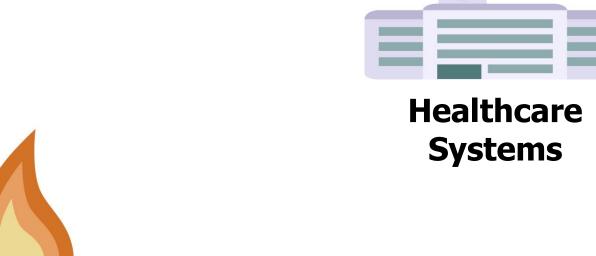
Clinical Assistant Professor Stanford Medicine



Care

People — Process — Technology

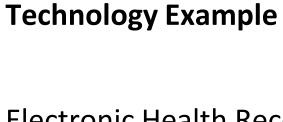
Illustrative Example of the Informatics Lens



Predicte

Heat

Wave



Electronic Health Records

Heat data warning connected to patients at risk



Flow of information

Who is this data going to?

People Example

Administrators Clinicians Front line staff



Public Agencies

Public health data systems

Heat index data standardized and shared with all agencies

Timeliness of information

Time information arrives impacts actionability

Decision makers Agency heads Front line staffers



General Public

Digital health apps and services

Heat data coming into digital health app

Who is empowered to act

What actions can be taken?

Community leaders Individuals

An informatics lens enables

Scenario Scoping, Sizing, and Scaling

- Breaking down the complex interactions of climate and health into a more tangible scope
- Scaling impact, developing interventions and connections that allow for a multiplicative effect.

Connecting the dots, doers, and data

- Doers Connecting clinicians and builders along with the investor, government, and advocacy communities.
- Data Bridging data silos between environmental health and human health

Measuring micro + macro

- Micro quantifying small shifts, data standards
- Macro aggregating trends to understand greater collective impact

Catalyzing change-makers

- Part of the power of technology is to connect for greater impact.
- Visibility of work across fields from climate and health which are often separate sectors and not as directly linked.

Opportunity Area	Description	Core Informatics Challenges and Opportunities
Sustainable Healthcare	Reducing the greenhouse gas (GHG) impact of the healthcare system	 Data standards around GHG emissions Nudges (ie: clinical decision support) for sustainable care choices Dashboards to display broader progress
Adaptive Care	Utilizing environmental data and predictive analytics to personalize care guidance (ie: care optimization for heat waves, poor air quality, etc)	 Data standards around environmental information Interoperability of environmental information and health information Predictive model creation, validation, implementation Personalization of models with care delivery recommendations either through CDS (clinician facing) or digital health tools (patient facing)
Resilient Systems	Connecting public health and healthcare systems	 Data standards around environmental information with a greater eye towards interoperability across systems from public health to individual clinics Connectedness of emergency preparedness plans to how data is used in warning systems for healthcare systems and individuals
Advancing Knowledge	Research to identify and better link healthcare outcomes to climate driven change	 Utilizing existing code sets (ICD, SNOMED, etc) for better identifying environmental factors Developing new code sets with existing data standards Training on how coding of these environmental factors impact health in documentation and assessments

Thank you

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