COVID-19 & Health Equity

A Research Agenda
Purpose

- Create a Research Agenda to:
  - Guide the work of the two Health Equity Specialists funded by the ELC CARES Act
  - Guide the additional COVID-19 Health Equity research
  - Potential to evolve past COVID-19
Agenda

Overall

• Introductory Meeting/Brainstorming
• Follow-up Survey (By the end of the week)
• 2nd Meeting/Discussion (two weeks)
• Final Survey (if needed)
• Follow-up meetings of workgroup
Agenda

Today

• Overview
  • Context
  • Purpose
  • Framing

• Health Equity Specialists
  • Priya Pattath
  • Helen Tazelaar

• Survey Results

• Discussion
Three Circles of the Hedgehog Concept

What Are You Deeply Passionate About?

What You Can Be The Best In The World At

What Drives Your Economic Engine
Division of Social Epi
What are we passionate about?

Vision
Information with Impact.

Mission
To provide information and insight to the public, stakeholders and policy-makers that inspires them to take actions that improve the lives of vulnerable Virginians

Strategic Priorities
- Engage stakeholders, policymakers and the public with actionable information.
- Cultivate a stable workforce with diverse academic backgrounds, experiences and skills.
- Develop high quality data products and continuously improve existing products.
- Translate social epidemiology research to the Commonwealth.

Leading with Data
“A leader...is like a shepherd. He stays behind the flock, letting the most nimble go out ahead, when upon the others follow, not realizing that all along they are being directed from behind.”
-Nelson Mandela
# Upstream Approach

<table>
<thead>
<tr>
<th>Community (total population)</th>
<th>Clinical (health care)</th>
<th>Nonclinical (health/wellness)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand access to health care</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Example: Shift from in-patient to community-based services</td>
<td></td>
<td>Create opportunity</td>
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<tr>
<td></td>
<td></td>
<td>Examples: jobs, public transport</td>
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<tr>
<td></td>
<td></td>
<td>Improve conditions</td>
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<tr>
<td></td>
<td></td>
<td>Examples: air pollution, complete streets, green space</td>
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<tr>
<td></td>
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<td>Change policies</td>
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<tr>
<td></td>
<td></td>
<td>Examples: housing, food security</td>
</tr>
<tr>
<td>Emphasize outreach; prevention, early detection</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Examples: mobile mammogram screening vans, visiting nurses</td>
<td></td>
<td>Target nonclinical preventive actions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Examples: lead or mold remediation</td>
</tr>
<tr>
<td>Reorganize care delivery</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Examples: medical homes, health IT, care coordination, patient-centered care</td>
<td></td>
<td>Integrate social services</td>
</tr>
<tr>
<td></td>
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<td>Examples: provide referrals or transit passes, write prescriptions for fresh food</td>
</tr>
</tbody>
</table>

ELC CARES Act

What drives our economic engine?

- **ELC CARES Act**
  - ELC = Epidemiology and Laboratory Capacity for Prevention and Control of Emerging Infectious Diseases (ELC) Program
  - CARES = Coronavirus Aid, Relief, and Economic Security Act

- **Activities:**
  1. Establish or enhance ability to aggressively identify cases, conduct contact tracing and follow up, as well as implement recommended containment measures.
  2. Improve morbidity and mortality surveillance.
  3. Enhance laboratory testing and reporting capacity.
  4. Prevent and control COVID-19 in healthcare settings and protect other vulnerable or high-risk populations.
  5. Monitor and mitigate COVID-19 introductions from connected jurisdictions.
  6. Work with healthcare system to manage and monitor system capacity.
ELC CARES Act

What drives our economic engine?

ELC CARES Act

Activities:

7. Improve understanding of jurisdictional communities with respect to COVID-19 risk:
   a. Build understanding of population density and high-risk population density (i.e. population of >65 yrs., proportion of population with underlying conditions, households with limited English fluency, healthcare seeking behavior, populations without insurance and below poverty level).
   b. Monitor compliance indicators (Number of Violations / complaints related to mandatory or recommended community mitigation).
Fund 2 Health Equity Analysts

• The Senior Health Equity Analysts will be responsible for the following activities:
  • Real-time analysis of COVID-19 data for health equity issues;
  • Advise UVA modeling team about incorporating health equity into models;
  • Advise the OEpi staff about data and reporting needs for at risk populations;
  • Missing data analysis, particularly in regards to at risk populations;
  • In-depth analysis of outbreaks in correctional facilities;
  • Research and analysis of social determinants of COVID-19 pandemic;
  • Ensure data structure is sufficient to inform long-term health equity research.
Finding our Niche
What can we do better than anyone else?

- Equity Focus in OEpi
  - Surveillance & Informatics Work
    - Tiered Race/Eth
    - ESSENCE Surveillance
  - Equity and Inclusion Action Committee
- Existing OHE Work
  - Advising Modeling
  - Imputation of Race/Eth
- Work inside and outside of the agency—growing list.
Research Agenda Purpose

- Guide the work of 2 Health Equity Specialists.
- Guidance for broader efforts to improve surveillance and data systems?
- Foundation for similar, agency-wide work?
- Others?
Research Agenda Objectives

- Identifies research priorities
- Identifies/guides research questions & projects
- Fill a gap in existing knowledge base
- Coherent: Sum should be greater than parts
  - Linear agenda
  - Topical agenda
  - Purpose-driven agenda
  - Gap-filling (Burning Questions) agenda
Types of Research

• Descriptive
  • Trends, rates, baselines, case studies, disparities

• Correlational
  • Relationships among variables, differences among groups

• Causal
  • Studies causal relationships
  • Impact of policy, program, decision, or practice

• Organizational/Operational (Problems of Practice)
  • Understand/improve processes
  • Understand/improve decision-making
Research Goal

Improve Health Equity in...

- Current pandemic?
  - Surveillance?
  - Response?

- Future pandemics?
  - Surveillance?
  - Response?

- Pandemic Impacts?
  - Health Impacts?
  - Behavior Impacts?
  - SDOH Impacts?

- Impact of
  - COVID-19 itself?
  - Response?
    - Policies?
    - Operations?
Topic Areas

Groups?
- Race/Ethnicity?
- Origin/documentation?
- Socioeconomic Status?
- Geography?
- Ability?
- Vulnerable groups?
  - (i.e., incarcerated, homeless, essential workers, direct care workers)
- Others?

Social Determinants?
- Economic Stability?
- Healthcare Access/Quality?
- Neighborhood & Built Environment?
- Social & Community Context?
- Education?
- Others?
Topic Areas

Operational?
• Informatics?
• Communications?
• Decision-processes?
• Information flow?
• Testing?
• Vaccine deployment?
• HEWG Programs?
• Others?

Policy
• Strategy?
• Community Mitigation?
• Economic Relief?
• Others?
Health Equity Specialists

Priya Pattath, Ph.D., MPH

- Doctorate in Urban Services Leadership from VCU & Master’s in Public Health from Virginia Tech.
- Translational research to address health disparities in the Commonwealth
- Experience in designing quantitative, qualitative and mixed methods research designs, statistical techniques to identify high priority target areas, related to the social determinants of health, assess regional and state datasets for health disparities and social demographics
- Supports research & analysis in the State Office of Rural Health & Division of Multicultural health & Community Engagement - Danville Youth Health Equity Leadership Institute (YHELI) with survey development and implementation, monitoring and evaluation
- Support & analyze epidemiological data related to COVID-19 - Missing race/ethnicity, Hotspot analysis
Health Equity Specialists

Helen Tazelaar

- Monitoring & evaluation for USAID, DFID, WHO, WFP, UNHCR programs
  - Performance management systems and reporting, field activity assessments, logical models, applied learning/KM
- Partners in Health, Global Health Equity Fellow
  - Quality improvement of pharmacy supply chain systems
  - Standardized procedures for warehouse/inventory management, analyzing data from EMR/inventory systems
- B.A. in Political Science, minor in French, University of Minnesota Twin Cities
COVID-19 HERA Survey

**Actionable:** Research on this topic will provide actionable information to policy-makers, VDH programs, and stakeholders.

**Upstream Approach:** This topic follows OHE’s upstream approach to improving health outcomes.

**Strategic Plan:** This topic aligns with the 5 goals of VDH’s strategic plan:

- Maintain a competent and valued workforce
- Foster healthy, connected, and resilient communities
- Be a trusted source of public health information and services
- Assure the conditions that improve health opportunity
- Provide internal systems that deliver consistent and responsive support
Topics

Community Impact

Economic Impact

COVID-19 Response

Health Impacts of COVID-19

Communication/Education

Data & Reporting

Mental Health

Vulnerable Populations
## Topics ranked in order of importance:

8 = Most important, 1 = Least Important

<table>
<thead>
<tr>
<th>Topic</th>
<th>Average Ranking of Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Vulnerable Populations</td>
<td>6.93</td>
</tr>
<tr>
<td>2. Community Impact</td>
<td>6.36</td>
</tr>
<tr>
<td>3. Health Impacts of COVID-19</td>
<td>5.14</td>
</tr>
<tr>
<td>4. Mental Health</td>
<td>4.93</td>
</tr>
<tr>
<td>5. Economic Impact</td>
<td>3.64</td>
</tr>
<tr>
<td>6. Public Communication/Education</td>
<td>3.50</td>
</tr>
<tr>
<td>7. Data &amp; Reporting</td>
<td>3.29</td>
</tr>
<tr>
<td>8. COVID-19 Response</td>
<td>2.21</td>
</tr>
<tr>
<td>Topic</td>
<td>Actionability (avg ranking)</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>1. Vulnerable Populations</td>
<td>4.43</td>
</tr>
<tr>
<td>2. Community Impact</td>
<td>4.21</td>
</tr>
<tr>
<td>4. Mental Health</td>
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<tr>
<td>7. Data &amp; Reporting</td>
<td>4.23</td>
</tr>
<tr>
<td>8. COVID-19 Response</td>
<td>4.31</td>
</tr>
</tbody>
</table>
General research goals ranked in order of importance:
4 = Most important, 1 = Least Important

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<th>Topic</th>
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<tr>
<td>1. Health outcomes from pandemic and the response</td>
<td>3.50</td>
</tr>
<tr>
<td>2. SDOH outcomes</td>
<td>2.71</td>
</tr>
<tr>
<td>3. Future pandemic preparation</td>
<td>2.14</td>
</tr>
<tr>
<td>4. Current pandemic response</td>
<td>1.64</td>
</tr>
</tbody>
</table>
## Survey Results Overview

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<tr>
<th></th>
<th>1. Health Outcomes</th>
<th>2. SDOH Outcomes</th>
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<td>1. Vulnerable Populations</td>
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Subtopics

- Vulnerable Populations
  - Impact of racism on COVID cases
  - Ensuring representation of tribal communities in research and public communications
  - Impact on the LTCF workforce
  - Immigration status impact on contact tracing
  - Impact of COVID on veterans
  - COVID within correctional facilities
  - Homeless populations
  - Rural communities
  - Impact among persons of different ability

- Community Impact
  - Food insecurity
  - Impact of school closures across communities
  - Engagement & social support across different faith practices
  - Faith community impact on the response
  - Housing density and quality

- Health Impacts of COVID-19
  - STD testing & care
  - Disability as a result of COVID-19
  - Attack rate of COVID-19 increased with certain conditions (Hepatitis B and C)
  - COVID-19 health disparities - pregnancy and outcomes
  - Effect of job loss on health behaviors
  - Environmental health impacts

- Mental Health
  - Impact on mental health (substance abuse, self-harm, suicide, mental health related visits, hospitalization, etc.)
  - Health provider & public health professional burnout/employee retention
  - Impact of COVID-19 and social justice movement on health, work, and stress

Office of Health Equity

Health equity for all Virginians
Thank you!