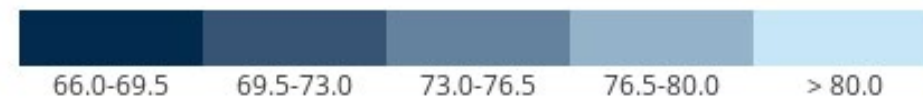
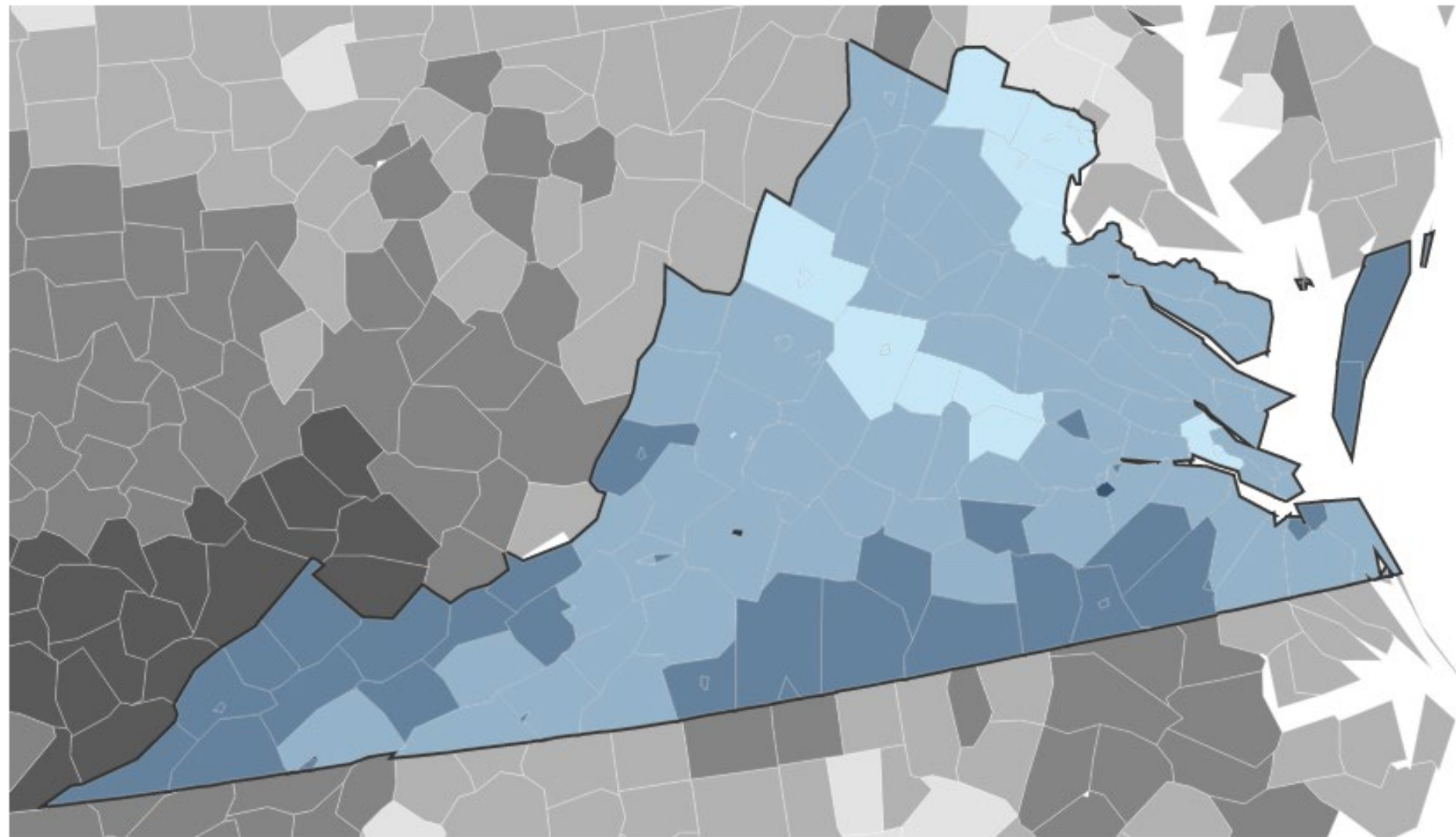


# Using Technology to Improve Life Expectancy by Better Addressing Health Disparities

A Study Proposal by the Virginia Academy of Science, Engineering and  
Medicine and the Virginia Center for Health Innovation

# Life Expectancy by County



# Problem Statement

- WHEREAS, life expectancy in the Commonwealth varies by as much as forty years among populations of different regions; and
- WHEREAS, more than half of the counties in the Commonwealth have life expectancies in the lower two quintiles (56.9 to 75.1 years and 75.2 to 77.5 years) and most of such counties are in rural and agricultural areas; and
- WHEREAS, other states are using data and technology tools to improve understanding of these differences in order to develop better approaches to improving life outcomes; and
- WHEREAS, current data used to inform policy solutions is liable to be accidentally or intentionally misinterpreted; now, therefore, be it
- RESOLVED by the House of Delegates, the Senate concurring, That the Joint Commission on Technology and Science (Commission) be directed to study the extreme differences in life expectancy in Virginia and potential technological approaches to monitoring and resolving these differences.

# Recommended Study Parameters

## the Commission shall examine:

- (i) current and alternative data sources to understand life expectancy variation, drivers of these differences, and technological solutions for monitoring efforts to reduce variation;
- (ii) technological and policy solutions for improving life outcomes that consider racial and geographic differences as part of the analysis;
- (iii) alternative actions available to remedy or mitigate negative impacts on life expectancy and their expected cost;
- (iv) the degree of certainty to which each of these impacts on life expectancy and alternative actions may reliably be known; and
- (v) the technical resources available, either in-state or otherwise, to effect such alternative actions and improve knowledge of their effectiveness and cost.

## Proposed Approach

- The Joint Commission on Technology and Science has asked the Virginia Academy of Science, Engineering and Medicine (VASEM) to conduct the proposed study described in proposed House Joint Resolution No. 535.
- The Virginia Academy will partner with the Virginia Center for Health Innovation (VCHI) to convene the study.
- Planning and research support will be provided by Community Health Solutions, the Center for Professionalism and Value in Health Care, and the VCU Department of Family Medicine & Population Health, the VCU Center on Society & Health, and Virginia Health Information.
- Together, VASEM and VCHI will host a series of three virtual convenings with key stakeholders and prepare a written report that includes recommendations for improving the health outcomes of the citizens of the Commonwealth through the comprehensive distribution and use of technology.

## **Planning Committee:**

**Chair:** Beth A. Bortz, MPP (PI, Virginia Center for Health Innovation)

## **Co-Chairs:**

James H. Aylor, PhD (VASEM)

Robert Phillips, MD, MSPH (Center for Professionalism and Value in Health Care, VASEM member)

Stephen A. Horan, PhD (Community Health Solutions)

Alex Krist, MD, MPH (Virginia Commonwealth University)

Anthony Keck, MPH (Ballad Health)

Kyle Russell (Virginia Health Information)

## **Advisory Committee:**

The 30-member committee will include representatives from health policy and health services research; health information technology and data analytics; organized medicine and practicing clinicians; pharmacy and laboratory services; health plans; business; state government; and patient advocates.

## Format

- This convening will be very similar in structure to the recent Starfield Summit V led by VCHI (<http://www.starfieldsummit.com/starfieldv>).
- All work will be conducted virtually via Zoom and supported via the Virginia Primary Care Innovation Hub (<https://pcinnovationhub.mn.co>).
- The Hub allows all summit participants to have easy access to meeting documents and to share ideas in a secure setting with their fellow advisory committee members.
- The proposed format presents what we believe may be a unique advantage, as the work can take place in a series of shorter structured meetings, allowing for thoughtful follow-up and exchange between sessions.

# Timeline

Activities and Timeframes	Pre-Work (June-July 2023)	Session I (Early August)	Between-meeting survey	Session II (Early September)	Between-meeting survey	Session III (Early October)	Final Report (October 31)
1. Convene the Planning Committee, engage the Advisory Committee, develop conference content, survey Advisory Committee for initial ideas.	*						
2. Examine current and alternative data sources to understand life expectancy variation, drivers of these differences, and technological solutions for monitoring efforts to reduce variation.		*	*				
3. Explore technological and policy solutions for improving life outcomes that consider racial and geographic differences as part of the analysis		*	*				
4. Identify alternative actions available to remedy or mitigate negative impacts on life expectancy and their expected cost (and the degree of certainty to which each of these impacts on life expectancy and alternative actions may reliably be known).			*	*	*		
5. Identify the technical resources available, either in-state or otherwise, to effect such alternative actions and improve knowledge of their effectiveness and cost.			*	*	*		
6. Recommend options and criteria for prioritizing potential technological approaches to monitoring and resolving extreme differences in life expectancy in Virginia.					*	*	
7. Develop and deliver final report						*	*



## Demonstration Reports

- Additional demonstration reports to demonstrate the use of data and technology applied to specific health conditions
- Gives JCOTS a sense of the types of information and solution options could be generated by the capacity proposed in the VASEM study
- Uses existing data from across Virginia
- Same timeline

- **Prostate Cancer**

- Black men are nearly 2x more likely to die from prostate cancer
- Access to current testing and treatment does not reach all Virginians
- New life-saving technologies have even less available

- **Adults with Sickle Cell Anemia**

- Children with Sickle Cell Anemia have much better access to treatment than adults
- Adults in crisis, severe pain often cannot get care or go to places not prepared to treat them
- Newport News and Hampton Roads especially experiencing inadequate care

- **Prostate Cancer**
  - Map inadequate testing, diagnosis, increased death = locate the greatest need
  - Show differences in types of testing and treatments across Virginia
  - Show options for increasing access to effective technologies
- **Adults with Sickle Cell Anemia**
  - Map where adults with sickle cell are that have least access to effective treatment options
  - Explore telehealth options for crisis care
  - Use data and mapping to evaluate changes in appropriate care