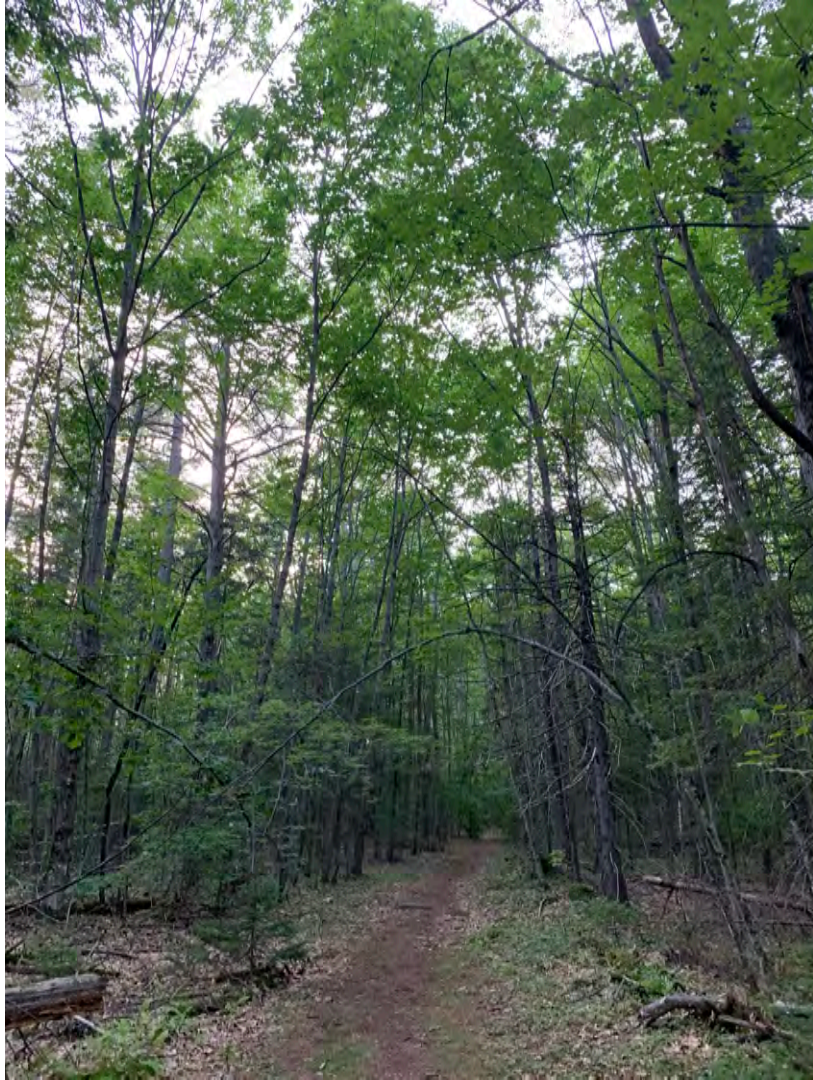# COVID-19 and Rural Health Equity in Northern New England

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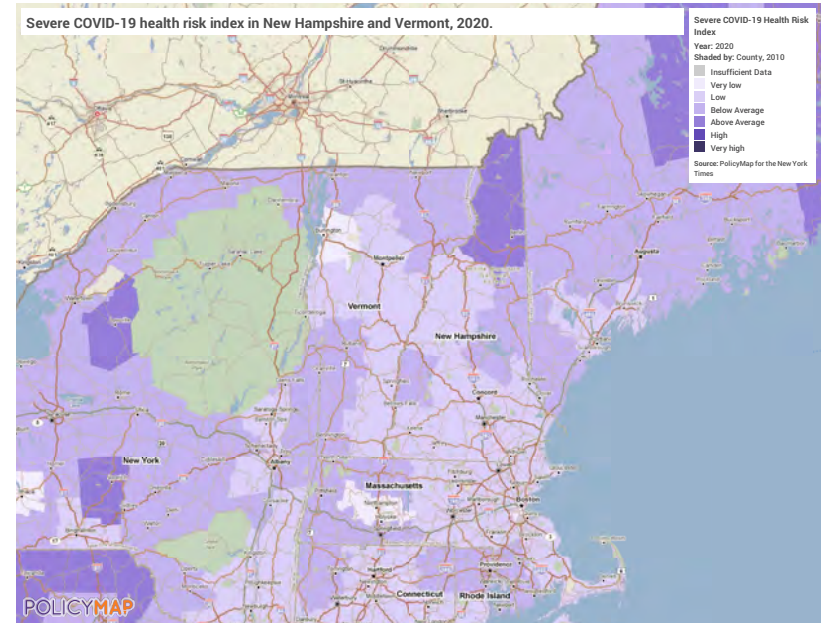Dartmouth College Center for Global Health Equity

Background: Regional Vulnerability to COVID-19

- Rural regions older and in poorer health

- Significant poverty and underlying social vulnerability

- Health systems in rural regions confront longstanding fiscal challenges and health workforce shortages and entered pandemic with limited critical care capacity

Severe COVID-19 health risk index in New Hampshire and Vermont, 2020.

Introduction ——— Study Methods ——— Key Findings ——— Discussion

Health Equity

- More than the prevalence of disease or biomedical treatment

- Robert Wood Johnson Foundation:

    "Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care."

Research Aims and Methods

Objectives:

Assess immediate impacts of the COVID-19 pandemic on rural health equity in Northern New England

Identify concerns and opportunities for rural health systems and community health

Identify priorities for future research, action, and policy

Study Methods:

Rapid phase: 50 interviews

Regions: Upper Valley, Southern Corridor, Northeast Kingdom, North Country

Key Informants from health systems, social service organizations, mutual aid groups, town/city governments

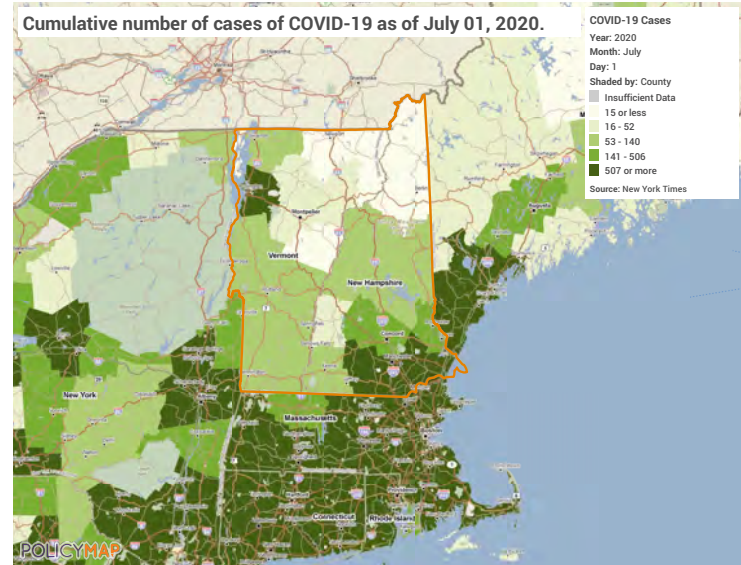| Early pandemic response	Mid-term impacts of COVID-19	Long-term impacts of COVID-19

Introduction & Study Methods — Key Findings — Discussion

COVID-19 Pandemic: Northern New England Region

- Region averted expected surge in cases of COVID-19 in mid-April despite bordering NY and MA

- Early institution of public health measures coupled with robust regional responses stemmed spread of infection

- State and local responses prevented poor outcomes in vulnerable populations seen elsewhere

- Significant immediate impacts on rural communities and health systems and mid- to long-term concerns

- Pandemic highlights rural strengths and opportunities to sustain effective response and advance rural health equity

Cumulative number of cases of COVID-19 as of July 01, 2020.

COVID-19 Cases
Year: 2020
Month: July
Day: 1
Shaded by: County
- Insufficient Data
- 15 or less
- 16 - 52
- 53 - 140
- 141 - 506
- 507 or more
Source: New York Times

Introduction & Study Methods   Key Findings   Discussion

Pandemic Response Highlights Health System Resiliency and Precarity

- Critical access and community hospitals in both states rapidly mobilized response and created critical care capacity

- Rapid adaptation of service delivery models to sustain broad spectrum of services and protect vulnerable populations

- Existing networks and structures integrating health systems, social service agencies, and communities facilitated public health and health systems response

- Rural healthcare organizations faced challenges accessing PPE, diagnostics, and other essential supplies

- Rural health workforce shortage represents significant underlying vulnerability within rural health system (exposure, childcare, burnout)

> It felt as though we had to get everybody up to speed and we had to almost build critical care nurses overnight [and] to make them respiratory therapists too. ... And then trying to make sure that we had enough staff that if we had this huge influx, do we have the people that take care of them? And I will say we've got such strong employees that most of them are willing to like just roll up their sleeves and be like, "I'll stay here as long as I can possibly work and then take a nap and come back. Do what I have to do." So that was really great to see.
>
> *Health Leader, North Country*

Introduction & Study Methods   Key Findings   Discussion

Priorities for Policy and Advocacy: Pandemic Response

| Pandemic Response | Ensuring adequate supply and quality of PPE and diagnostics as services resume
Ensuring adequate supports for health workforce in VT and NH for duration of pandemic: childcare, mental health support, isolation, and surge staffing |

Protection of Vulnerable Populations and Patients Central to Rural Response

- Regional and local responses prioritized vulnerable populations

- Rapid mobilization of regional health systems, social service organizations, and communities to protect medically vulnerable populations from infection

- Many efforts to address barriers to compliance with public health measures

- Housing support for homeless population in VT and rapid attention to congregate living facilities averted high rates of infection

- Congregate living facilities represent an area of ongoing concern

- Concern regarding sustaining and institutionalizing the protection of vulnerable patients and populations in the context of re-opening

- Concern about secondary health impacts, including deferred care, substance use, mental health

> I wonder just how many more people there are out there that aren't getting care partly because we're discouraging them from coming in, partly because they are afraid to go to the emergency room or think we're not even open, think we can't even be seen. I'm worried about the late effects, the long-term effects of deferred and delayed care.
>
> *Primary care provider, Upper Valley*

Priorities for Policy and Action: Protection of Vulnerable Populations

Pandemic Response	Ensuring adequate supply and quality of PPE and diagnostics as services resume Ensuring adequate supports for health workforce in VT and NH for duration of pandemic (childcare, mental health support, isolation, and surge staffing).
Vulnerable patients and populations	**Enhancing and sustaining protections for most vulnerable patients and populations, including congregate living facilities, socially isolated elders, and homeless population**

Pandemic Will Reshape Rural Health Landscape

- Financial impact due to abrupt drop in patient volume, cancelation of elective procedures, and costs of preparing for surge .

- Immediate financial impacts mitigated by government supports and telehealth reimbursement. Concern around adequacy of supports for longer-term pandemic (18-36 months).

- Fear of health system may have adverse impacts on financial solvency.

- Concerns about the viability of rural healthcare organizations over the long-term.

- Pandemic threatens to exacerbate workforce challenges but may offer opportunities for workforce development.

- Pandemic highlights shortages of primary care providers in VT/NH

One day I woke up and the whole world had tipped upside down. We went from a very robust organization in terms of patient flow ... to one where it was almost a ghost town and there were no patients in our waiting room and we had significant cancellations and no shows because of the fear of COVID-19 ...So at that point, initially we were very concerned about how we could keep our doors open up and then after that, how do we re-engage our patients?

Healthcare Executive, North Country

Priorities for Policy and Action: Rural Health Landscape

Pandemic Response	Ensuring adequate supply and quality of PPE and diagnostics as services resume Ensuring adequate supports for health workforce in VT and NH for duration of pandemic (childcare, mental health support, isolation, and surge staffing).
Vulnerable patients and populations	Enhancing and sustaining protections for most vulnerable patients and populations, including congregate living facilities, socially isolated elders, and homeless population
Rural Health Landscape	**Determining policy, regulatory, and financial supports needed for rural healthcare organizations for longer pandemic response** **Addressing health workforce shortage**

Introduction & Study Methods   **Key Findings**   Discussion

Telehealth Is a Tool for Advancing Health Equity

> ...thinking about going forward, I think we're all kind of excited. I know my colleagues nationally, most of us share this sort of opening up of a future of medicine that allows us more flexibility in terms of meeting people's needs via teleconference or even telephone care and actually getting paid to do that. It would be nice. So we're hopeful that continues.
>
> *Primary Care Provider, Northeast Kingdom*

- Rapid transition to telehealth enabled by regulatory relaxation received positively by health systems leaders, providers, and patients.

- Telehealth has been especially effective in reducing transportation barriers and increasing utilization of behavioral health services.

- Prioritizing in-person visits for some groups, including children and socially vulnerable populations.

- Telephone is an important component of telehealth in rural populations with limited broadband coverage.

- Telehealth most effective when embedded within continuum of care

- Achieving permanent regulatory changes to telehealth represents a key policy priority.

Priorities for Policy and Action: Telehealth

Pandemic Response	Ensuring adequate supply and quality of PPE and diagnostics as services resume Ensuring adequate supports for health workforce in VT and NH for duration of pandemic (childcare, mental health support, isolation, and surge staffing).
Vulnerable patients and populations	Enhancing and sustaining protections for most vulnerable patients and populations, including congregate living facilities, socially isolated elders, and homeless population
Rural Health Landscape	Determining policy, regulatory, and financial supports needed for rural healthcare organizations for longer pandemic response Addressing health workforce shortage
Telehealth	**Parity in reimbursement** **Reimbursement for telephone-based visits** **Ability to practice across state lines**

Pandemic Amplifies Underlying Vulnerability and Reveals Opportunities

- Immediate impacts of unemployment were somewhat blunted by short-term supports and expectations of reemployment. Concern about end of early supports.

- Vulnerability of certain sectors of the rural economy (service sector, tourism) and opportunities within other sectors (local agriculture).

- Food security is a primary concern; concern about sustaining early efforts.

- The pandemic revealed the scale of rural homelessness.

- Concern about 'hidden' consequences of the pandemic (domestic violence, child abuse/neglect, social isolation).

- Concern about loss of already limited childcare capacity.

- Concern that the rural 'digital divide' is deepening disparities in health, education.

We should really learn from what we've been through in a way that we can make lives better for our communities going forward… Mental health is the key priority. Structures for food sufficiency, how to work collaboratively between and within systems… Technology and the appropriate use thereof. Can we capitalize for those poor, frail elders who really have to struggle and are not seeking health care? How can we really maximize that telehealth component so that we can better meet their needs and their family's needs?
Health Leader, Windsor County

Introduction & Study Methods   **Key Findings**   Discussion

Priorities for Policy and Action: Community Impact and Social Vulnerability

Pandemic Response	Ensuring adequate supply and quality of PPE and diagnostics as services resume Ensuring adequate supports for health workforce in VT and NH for duration of pandemic (childcare, mental health support, isolation, and surge staffing).
Vulnerable patients and populations	Enhancing and sustaining protections for most vulnerable patients and populations, including congregate living facilities, socially isolated elders, and homeless population
Rural Health Landscape	Determining policy, regulatory, and financial supports needed for rural healthcare organizations for longer pandemic response Addressing health workforce shortage
Telehealth	Parity in reimbursement for full range of telehealth modalities Ability to practice across state lines
Broader Impacts	**Generating evidence to guide policy making to mitigate impacts and leverage opportunities.** **Ensuring representation of rural communities in decision making processes.** **Prioritizing investments in internet and communications infrastructure**

Discussion

- Our research highlights the factors that contributed to low infection rates and profound impacts of the pandemic for rural health systems and communities.

- Highlights the importance of applying community-based, qualitative research approaches to "reach the parts other methods cannot reach" (Pope & Mays 1995) as a means to gain insight into both challenges and opportunities for the health of rural New England

NH/VT Leads: Regional Strengths and Lessons

- **Integration** of health systems, public health entities, social service organizations, and community infrastructure enabled efficient collaboration

- **Equity:** Prioritization of vulnerable populations critical to overall success

- **Accountability:** Rural institutions are embedded in communities and felt accountable to them.

- **Rural Ethos:** Social values that combine pragmatism, compassion and solidarity created conditions for swift, effective responses that prioritized vulnerable populations

- **Proximity/lack of anonymity:** Connectedness within small towns facilitated efforts to identify vulnerable populations and tailor support to them

- **Community participation:** High levels of community participation and civic participation contributed to rapid and robust efforts to meet needs across the region

Introduction & Study Methods ——— Key Findings ——— **Discussion**

Looking Forward: Next Phase of the Pandemic

- National situation highlights critical threats despite early successes
- Concern that low early infection rates may result in lower perception of threat and reduced compliance to public health measures
- Increase in visitors and new residents from out of state
- Sustainability of protections for vulnerable populations, including homeless populations and congregative living facilities
- Need for attention to secondary health impacts, including mental health and substance use
- End of early government supports, including unemployment benefits, housing and nutritional assistance
- Sufficiency of federal and state assistance to rural health system
- Need for PPE, capacity for testing, contact tracing, and isolation as schools, colleges, and universities re-open in the region

Sustaining Progress: Lessons from Early Response

1. Need clear strategy for sustaining low rates of infection to avert resurgence seen elsewhere: New Hampshire/Vermont leads
2. Engagement and support of local leadership and institutions to bolster community compliance with public health measures over a long duration
3. Need for robust community education and outreach efforts to communicate ongoing risk and foster continued solidarity
4. Investments in rural healthcare organizations to implement public health functions, including testing, contact tracing, and isolation
5. Need to sustain key protections for vulnerable populations, including enhanced support for congregate living facilities and homeless populations

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Introduction & Study Methods   Key Findings   **Discussion**