

# L.A.U.N.C.H: Catalyzing A New Era in Connected Cancer Care for Appalachia

*Everyone connected . . . to the people, services, and information  
they need to get well and stay healthy.*

According to the Centers for Disease Control and Prevention, Americans living in rural areas are more likely to carry a higher burden of cancer than their counterparts in urban settings. These rural “cancer hotspots” also face major gaps in broadband access and adoption, often putting promising connected care solutions far out of reach. Recent data shows that cancer patients who are provided with a real-time mechanism to report their symptoms—triggering clinicians to intervene if necessary—have better outcomes, including improved survival rates (Basch et al., 2017).

**The Challenge.** How do we take current insights about rural cancer care and leverage ubiquitous connectivity to improve outcomes for patients living in rural and underserved communities? And how do we develop connected cancer care solutions that can be scaled nationally?

**What is L.A.U.N.C.H.?** In 2017, the National Cancer Institute and the Connect2Health<sup>FCC</sup> Task Force joined forces to address these challenges, and the L.A.U.N.C.H. initiative—*Linking & Amplifying User-Centered Networks through Connected Health: A Demonstration of Broadband-Enabled Connected Health and Community-Based Co-Design*—was born. L.A.U.N.C.H. is a multi-stakeholder collaborative that seeks to address one of the key challenges of rural cancer care: quality symptom management. The goal is to improve the lives of cancer patients living in rural areas, who bear the double burden of having the highest cancer mortality rates and lowest levels of broadband access. L.A.U.N.C.H. has five core ingredients:

- **Cutting-edge symptom management enabled by broadband.** This demonstration project will focus on how ubiquitous broadband connectivity can be leveraged to improve symptom management for rural cancer patients, one of the key priorities of the [2016 Blue Ribbon Panel](#). Early deliverables will include a Platform for Agile Development (the “L.A.U.N.C.H. PAD”) to help communities codesign better cancer symptom management tools and practices using connectivity.
- **Robust cross-sector collaboration.** In the 2016 President’s Cancer Panel report, *Improving Cancer-Related Outcomes with Connected Health*, cross-sector collaboration was viewed as essential to the future of cancer care. Harnessing the power of the collective, this unique coalition combines government, academia, and private sector partners who each bring a unique perspective and skillset to bear on solving this difficult problem.
- **User-centered design methodologies.** Who better to solve health problems in rural communities than rural residents . . . provided they are supported with the right tools and are empowered to act? This human-centered way of thinking is what sets this project apart. Empowering rural communities is not just about the deployment of new technologies; to be successful long term, this effort must include a process of ground-level inquiry and listening. What are the real, last-mile problems that patients, providers, and communities face? What solutions have already been tried, and what made those successful or unsuccessful? The L.A.U.N.C.H. project will couple this type of field-based, empirical inquiry with a bold, imaginative vision of the future of connected cancer care.
- **Sustainability and scalability.** By thinking nationally and acting locally, we can find sustainable, scalable solutions for solving local health challenges through the power of connectivity. By succeeding



in Kentucky, the project aims to show that connectivity can improve access to needed healthcare services anywhere in the country.

- **Improved broadband access and adoption for health.** The L.A.U.N.C.H. project will focus on areas that face the dual challenge of higher cancer mortality rates and lower levels of broadband access and adoption.

**Why Appalachian Kentucky?** Appalachian Kentucky represents a unique opportunity for leveraging connected health solutions both because of heightened need in the region and the regional ethos of community solidarity and grassroots problem solving. In Appalachia, cancer incidence and mortality are higher than other rural regions of the country; patients may also present younger and at more advanced stages. Patients diagnosed with cancer in rural Appalachia often face additional challenges to managing their symptoms and receiving care, including economic insecurity, geographic isolation, transportation challenges, other health concerns, and limited specialty care. Meanwhile, lower rates of broadband availability and adoption (40% of the Kentuckians in rural areas lack access to high-speed Internet) relative to other parts of the country limit the reach of connected health solutions that may have the potential to address these challenges.

### Current Collaborators

- **The National Cancer Institute**

The National Cancer Institute (NCI) is the Presidentially-appointed steward of the nation's war on cancer and, as part of the National Institutes of Health, is the nation's premier funding agency for cancer research. In 2016, the U.S. Congress passed legislation to fund the Cancer Moonshot<sup>SM</sup>, which challenged the NCI to accomplish in five years what would normally take 10 years in terms of reducing the nation's burden from cancer.

- **Federal Communications Commission — Connect2Health<sup>FCC</sup> Task Force**

The Federal Communications Commission (FCC) is the United States' primary authority for communications law, regulation and technological innovation. Founded on the vision of "Everyone *connected* . . . to the people, information and resources they need to get healthy and stay well," the Connect2Health<sup>FCC</sup> Task Force is working to bridge the digital broadband health gap and promote broadband access and adoption for health.

- **Amgen**

Amgen is a large biotechnology company that has been working in oncology for over 30 years. Acutely aware of the impact of cancer side-effects and the importance of supporting patients throughout their cancer journey, Amgen will bring its expertise in navigating healthcare systems to advance innovative ideas and deliver them into the hands of patients.

- **The Design Lab at UCSD**

The Design Lab is the epicenter of people-centered design. Its role in L.A.U.N.C.H. is to bring this people-centered thinking to address cancer symptom management.

- **University of Kentucky Markey Cancer Center**

The NCI-designated University of Kentucky Markey Cancer Center has been at the forefront of combatting cancer and its related disparities in Kentucky for over 40 years. With a special focus on Appalachian Kentucky, the Markey Cancer Center is dedicated to working hand-in-hand with communities to bring research, clinical care, provider education, and cancer education and services to its constituents.

**Questions?** To learn more about how you can participate or join our mailing list, visit [www.fcc.gov/health/cancer](http://www.fcc.gov/health/cancer) or contact David Ahern at [launch@fcc.gov](mailto:launch@fcc.gov) or [david.ahern@fcc.gov](mailto:david.ahern@fcc.gov).