

Home > U.S. Manufacturing and Healthcare: How 5G Can Give U.S. Companies an Edge

U.S. Manufacturing and Healthcare: How 5G Can Give U.S. Companies an Edge

Originally posted at: <https://cbpp.georgetown.edu/events/us-manufacturing-and-healthcare-how-5g-can-give-us-companies-edge>

Date:

Thursday, November 1, 2018 -
9:30am to 12:00pm

Location:

Georgetown's metro-accessible downtown location at 640 Massachusetts Avenue NW, Washington, DC 20001

High-speed mobile broadband networks are being deployed across the United States, creating transformative opportunities for all parts of the U.S. economy. Two sectors in particular are likely to benefit from the increased capacity, high reliability, and minimal latency that 5G networks offer: digital manufacturing and the provision of state-of-the-art healthcare.

The sixth annual spectrum technology and policy workshop will examine how 5G technology can enable new methods of healthcare delivery while also bringing new digital manufacturing jobs to areas nationwide. Opening keynote remarks will be presented by Commissioner Brendan Carr of the Federal Communications Commission. Two moderated expert panel discussions will examine how 5G differs from previous generations of wireless technologies, the network characteristics most beneficial to manufacturers and health care providers, and the role of complementary technologies such as artificial intelligence (AI).

Discussion topics include:

- How mission-critical, ultra-reliable, low-latency communication networks can spur the proliferation of remote and robotic surgery;
- Ways in which 5G networks can support telemedicine solutions in rural areas;
- Opportunities for 5G networks to catalyze medical research;
- Scenarios in which 5G and AI can make the provision and consumption of healthcare services more efficient;
- How 5G networks can produce a more efficient manufacturing process; more closely linking customers, suppliers, and manufacturers through artificial intelligence, data analytics, and real time machine learning;
- The unique, industry-specific functionalities 5G network slicing can create in combination with cloud-based platforms that support design, production, sales, and distribution;
- The public policy framework needed to harness the power of 5G for both the U.S. healthcare and manufacturing sectors.

Agenda:

9:30 a.m. - 10:00 a.m. Registration

10:00 a.m. - 10:20 a.m. Opening Keynote Remarks by **Commissioner Brendan Carr**, Federal Communications Commission

10:20 a.m. - 11:15 a.m. Panel Discussion - How will technology advances, such as 5G and AI, benefit healthcare and manufacturing? An assessment of technology roadmaps, dependence on spectrum and other items, and comparison between countries.

This panel will examine the specific capabilities, architectures (including different spectrum bands), and standards of emerging technologies and their application to manufacturing and healthcare. The panel will also consider specific use cases and how these will expand as the technology becomes more powerful.

Panelists:

- *Moderator:* **Peter Rysavy**, President, Rysavy Research
- **Amitava Ghosh**, Head, Radio Interface Group, Nokia Bell Labs
- **Derek Johnston**, Head of Marketing & 5G Business Development, Samsung Networks
- **William Lehr**, Research Associate, Computer Science and Artificial Intelligence Laboratory, MIT
- **Jeff Stewart**, Assistant Vice President, Global Public Policy, AT&T

11:15 a.m. - 12:00 p.m. Panel Discussion - Can Existing Federal Policies Keep Pace with Technology Innovation in the U.S.? An Evaluation of the U.S. Policy Framework for 5G and Complementary Technologies

High-speed mobile broadband networks and technologies such as AI are being deployed across the U.S., creating transformative opportunities for all parts of the U.S. economy. This panel will explore whether federal policies for spectrum allocation and licensing, infrastructure deployment and competition, and policies related to complementary technologies will enable or thwart these opportunities to increase the U.S.' competitiveness and economic growth.

Panelists:

- *Moderator:* **Carolyn Brandon**, Senior Industry and Innovation Fellow, Georgetown Center for Business and Public Policy
- **Neil Chilson**, former Chief Technologist for the Federal Trade Commission, and Senior Research Fellow for Technology and Innovation, Charles Koch Institute
- **Michael Mandel**, Chief Economic Strategist, Progressive Policy Institute
- **Jacqueline McCarthy**, Assistant Vice President, Regulatory Affairs, CTIA

THE EVOLUTION OF INNOVATION, COMPETITION, AND REGULATION

The Georgetown Center for Business and Public Policy is an academic research center within the McDonough School of Business. Our mission is to engage scholars, industry practitioners, and policymakers in inquiry and dialogue and to disseminate knowledge on issues at the nexus of business and public policy. Across diverse industries and economic sectors, we investigate the evolution of innovation, competition, and regulation. We conduct empirical economic analysis, keep abreast of relevant issues, and inform policies that promote economic welfare.