# FCC TO ACT ON KEY MHEALTH TASK FORCE RECOMMENDATIONS TO SPUR ADOPTION OF WIRELESS HEALTH TECHNOLOGY

### FCC CHAIRMAN ENCOURAGES COLLABORATION TO MEET TASK FORCE GOAL: USE OF mHEALTH SHOULD BE ROUTINE MEDICAL BEST PRACTICE WITHIN 5 YEARS

#### mHEALTH TASK FORCE RELEASES NEW REPORT AND RECOMMENDATIONS

On September 24, 2012, FCC Chairman Genachowski announced FCC plans to act on recommendations from a new mHealth Task Force report unveiled at an event hosted at the Information Technology and Innovation Foundation (ITIF). Chairman Genachowski also announced that the FCC would collaborate with its federal partners and the private sector to meet the mHealth Task Force's goal that mHealth technology be a routine medical best practice within five years. At the event, the mHealth Task Force released its report outlining recommendations to the FCC, other federal agencies, and to industry, to accelerate the adoption of mHealth technologies for improved health outcomes and reduced costs across the health care system.

- I. The independent mHealth Task Force released its recommendations to the FCC, other federal agencies, and to industry, with the goal of making mHealth a routine medical best practice by 2017.
  - Recommendations include actions to increase interagency collaboration and information sharing, expand on existing programs to encourage mHealth adoption, and build on government and industry efforts to increase capacity, reliability, interoperability, and safety of mHealth technologies. The report can be accessed here: <a href="http://www.itif.org/events/recommendations-mhealth-task-force">http://www.itif.org/events/recommendations-mhealth-task-force</a>.
- II. Chairman Genachowski announced that the FCC would take the following actions based on the mHealth Task Force report:
  - <u>Five year goal</u>: Work with industry and federal partners to reach the mHealth Task Force's goal that mHealth technology become a routine medical best practice within five years.
  - <u>Wireless health test beds</u>: Consider an Order to streamline the FCC's experimental licensing rules to promote and encourage the creation of wireless health device "test beds" to permit easier testing of mHealth technologies.
  - <u>Health care broadband networks</u>: Consider an Order to comprehensively reform and modernize the Rural Health Care (RHC) Program, to include rules to permit networks of hospital and health care facilities to jointly apply for RHC Program funds to boost broadband capacity and enable electronic health records.
  - <u>Telehealth data</u>: As part of the RHC modernization Order, act to collect richer data on broadband and telehealth applications from RHC Program participants, enabling more targeted support for telemedicine.
  - <u>International MBAN spectrum</u>: The FCC's International Bureau will work with FCC counterparts in other countries to encourage them to make spectrum available for MBANs and to discuss possible spectrum harmonization efforts to allow for medically safe cross-border patient travel and better economies of scale for device makers.
  - <u>Outreach plan</u>: Develop and execute a health care stakeholder outreach plan to those who may not be aware of FCC opportunities and procedures.
  - <u>Health Care Director</u>: Renew the search for a permanent FCC Health Care Director, to function as the central point of contact to external groups on all health-related issues.

# III. The mHealth Task Force is an independent effort, bringing together academic, industry, and government leaders to make recommendations to overcome barriers to the adoption of wireless health technologies.

• In June 2012, the FCC held an mHealth Summit convening leaders from the health care technology industry, academia, and government to discuss the opportunities and challenges of mobile and wireless health products.



- An outcome of this event was the creation of the mHealth Task Force, by participants, to research the barriers to rapid deployment of mHealth technology and develop recommendations to government and industry to address those barriers.
- Representatives from Qualcomm, TheCarrot.com, and Partners HealthCare/Center for Integration of Medicine and Innovative Technology (CIMIT) served as Co-chairs for the effort to research the barriers to rapid deployment of mHealth technology and present an industry-led plan to address those barriers.
- The Task Force included participation from Alfred Mann Foundation, AT&T, CHRISTUS Health, George Washington University School of Medicine, Health Analytic Services, Inc. (The Carrot.com), iMedicalApps, Medical Imaging & Technology Alliance (MITA), Medtronic, Inc., mHIMSS, Partners HealthCare Systems, Qualcomm Incorporated, Telcare, the U.S. Department of Health and Human Services, Verizon Communications, WellDoc Inc., and West Health.
- IV. The FCC is committed to accelerating the adoption of mHealth technologies to improve health outcomes and lower health care costs.
  - Medical Body Area Networks (MBANs): In 2012, the FCC released an Order to allocate spectrum for Medical Body Area Networks (MBANs), making the U.S. the first country in the world to make spectrum available for this specific usage.<sup>1</sup> MBANs are networks of wireless sensors, often no bigger than a Band-Aid, which can transmit data on a patient's vital health indicators to their doctor or hospital.
  - **Medical Micropower Networks (MMNs):** In 2011, the FCC adopted rules to enable a new generation of wireless medical devices that can be used to restore functions to paralyzed limbs. MMNs are ultra-low power wideband networks consisting of transmitters implanted in the body that take the place of damaged nerves, restoring sensation and mobility.
  - FCC-FDA Memorandum of Understanding: In 2010, the FCC entered into an unprecedented partnership with the Food and Drug Administration, working together to ensure that communications-related medical innovations can swiftly and safely be brought to market.
  - **Rural Health Care Reform:** The FCC initiated the Rural Health Care (RHC) Pilot program to harness the potential of broadband health care networks to improve the quality and reduce the cost of health care in rural areas, and to inform the redesign of its permanent RHC program. The FCC plans to act by the end of the year on permanent reforms to the program.

### THE HEALTH CARE TECHNOLOGY REVOLUTION

# V. Mobile and wireless health technology can increase efficiency and improve care delivery throughout the health care system.

- <u>Improved quality of care:</u> Continuous monitoring gives physicians a more comprehensive view of a patient's condition. Automatic alerts allow physicians to intervene or modify treatment before a patient's condition becomes life-threatening.
  - Patients who used a mobile phone tracking system received regular, tailored self-care messages and were able to achieve significant reduction in blood sugar levels over a one-year long study.<sup>2</sup>
  - Geisinger Medical Center tested a "medical home" initiative among Medicare patients and found an 8 percent drop in hospital admissions and a 4 percent reduction in overall health costs over the first year.<sup>3</sup> The program utilizes text messaging and other technology to increase patients' adherence to their treatment regimens.

<sup>&</sup>lt;sup>3</sup> See Note 9.



<sup>&</sup>lt;sup>1</sup> Chairman's Proposal To Spur Innovation In Medical Body Area Networks: <u>http://www.fcc.gov/document/chairman-proposal-spur-innovation-medical-body-area-networks</u>.

<sup>&</sup>lt;sup>2</sup> Charlene C. Quinn, et al., Cluster-Randomized Trial of a Mobile Phone Personalized Behavioral Intervention for Blood Glucose Control, Diabetes Care, Sept. 2011: <u>http://care.diabetesjournals.org/content/34/9/1934.abstract</u>.

- A recent trial found that mobile technology contributed to increased health among participants.<sup>4</sup> Another recent study found that a diabetes smartphone app, combined with text messaging from a health care provider, significantly improved health indicators for diabetes patients.<sup>5</sup>
- <u>Increased health care cost savings:</u>
  - mHealth can reduce the costs of medical care among the elderly by 25%, by reducing the number of face to-face consultations needed, and allowing seniors to live independently and spend more time at home, instead of more expensive hospital stays.<sup>6</sup>
  - Accessing health records wirelessly and remotely increases efficiency and avoids duplication, leading to savings of up to 30% in administrative costs.<sup>7</sup>
- <u>mHealth usage is growing</u>: By 2020, "at least 160 million Americans will be monitored and treated remotely for at least one chronic condition" according to Nerac, a Connecticut research firm.
  - Increased adoption of mHealth could lead to more cost savings. Only 15 percent of the 560,000 doctors in America used digital technology to order medication for patients, as of 2010. Moving to electronic prescriptions could save \$29 billion over the next decade.<sup>8</sup>
  - Americans want to integrate technology with their health care: 77 percent said they would like to receive email reminders for doctor's visits, 75 percent would prefer to schedule a doctor's visit online, and 74 percent would like to be able to email directly with their doctor.<sup>9</sup>
  - Over 11 million Americans use home glucose monitors.<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> See Note 9.



<sup>&</sup>lt;sup>4</sup> Bonnie Spring, et al., "Multiple behavior changes in diet and activity: a randomized controlled trial using mobile technology," May 28, 2012: <u>http://www.ncbi.nlm.nih.gov/pubmed/22636824</u>.

<sup>&</sup>lt;sup>5</sup> Morwenna Kirwan, et al., Self-management SmartPhone app for Type 1 Diabetes," August 9, 2012:

<sup>&</sup>lt;sup>6</sup> Socio-Economic Impact of mHealth, Apr. 2012: <u>http://telenor.com/wp-content/uploads/2012/05/BCG-Telenor-Mobile-Health-Report-May-2012.pdf</u>.

 $<sup>\</sup>sqrt[7]{Id}$ .

<sup>&</sup>lt;sup>8</sup> See Note 9.

<sup>&</sup>lt;sup>9</sup> Darrel West, Overcoming Rural Health Care Barriers through Innovative Wireless Health Technologies, June 24, 2010: <u>http://www.brookings.edu/research/testimony/2010/06/24-health-it-west</u>.