September 5, 2013

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
455 12th Street SW
Washington, DC 20554

Re: Notice of *Ex Parte* Communication, WC Docket No. 02-60

Dear Ms. Dortch:

On June 26, 2013, Greg Alexander, Associate Professor, University of Missouri Sinclair School of Nursing, and Christel Anderson, Director of Clinical Informatics, Healthcare Information and Management Systems Society (HIMSS), and liaison to the Alliance for Nursing Informatics (ANI) participated in a conference call with Christiana Barnhart, Mark Walker, and Jay Schwarz of the Wireline Competition Bureau, and Jaimie Douglas and Erica Larson, interns at the Wireline Competition Bureau. The purpose of the call was for Professor Alexander and Ms. Anderson to acquaint Commission staff with the broadband needs of skilled nursing facilities (SNFs) to help inform the Commission on the design of a SNF Pilot Program.

The parties made the following observations during the call:

University of Missouri SNF Research. The group discussed an on-going project run by the University of Missouri School of Nursing and funded by Centers for Medicare & Medicaid Services (CMS). Professor Alexander explained that the project involves sixteen SNFs in the St. Louis area, and has the goal of improving the information exchange between SNFs, hospitals, and doctors and ultimately reducing avoidable re-hospitalization of nursing home patients. The project is collecting data on a multitude of different variables, including, for example: number of patient visits to a physician, number of antipsychotic medications a patient is on, and number of hospital readmissions. Some of the variables collected are quality indicators required by CMS, and others collected are beyond what is required, but are of interest to the researchers. As part of the project, an advanced practice registered nurse (APRN) has been placed in each SNF to facilitate quality improvement processes and improve communication through a secure, encrypted electronic information exchange.

Phase 1 of the project is the implementation of a secure email system that will enable the electronic exchange of data on patient conditions. Currently, the secure email system has been deployed, and the researchers are working to educate SNF staff on how to use the system. Researchers are also seeking to better understand the workflow at each SNF in order to embed the system more fully in the daily routine. The project is focused on getting doctors connected to and using the secure email system. Some issues raised by physicians is that they do not want to be inundated with emails. One way to maximize responsiveness is to receive time-sensitive information involving acute situations by phone rather than through the secure email system. These concerns have been taken into account in order to encourage greater doctor participation.

Phase 2, which has not been implemented, will involve the addition of a “clinical viewer” for use at each SNF facility that has an electronic medical record. The clinical viewer will provide SNF personnel with the ability to review, but not add information to, the hospital’s electronic medical records. Likewise, the SNF with permission, should be able to view the patient’s medical record through the hospital’s electronic medical record. Currently, the researchers are working on acquiring permission from the

hospitals to access these records and are evaluating who should be included in the clinical viewer network.

Current Broadband Use. The group discussed the varying levels of broadband use in SNFs throughout Missouri. Professor Alexander described his recent technology survey, which included 40 percent of Missouri SNFs. Of the SNFs surveyed, five stood out, with their high-level of broadband use relative to the other SNFs. These five SNFs are mostly rural, but have dedicated broadband connections with local hospitals, robust Internet connectivity, EHR systems designed specifically for the SNF environment, and portable computers for clinical use throughout the facility. More typically, SNFs have Wi-Fi connection in some areas of the facility for patient use, rather than clinical use, and have hardwired connections available only in the administrative offices. In some cases, SNF clinical staff members are provided with tablet computers and mobile broadband connectivity. Professor Alexander also explained that a high percentage of the SNFs surveyed have no broadband connectivity, except for the connectivity necessary for the electronic submission of the Minimum Data Set (MDS) required for Medicare and Medicaid reimbursements. The connection required for MDS submission is typically located in the administrative office and is not for clinical use.

Study on Sensor Systems within Assisted Living Facilities. Professor Alexander has also participated as a co-investigator in a study involving sensor systems in assisted living facilities that are designed to detect motion and send alerts to caregivers within the facility. These sensor systems can detect changes in movement patterns and in other activities that provide an early indication of a change in a patient's health status that may otherwise go undetected. For example, the sensor systems can monitor bed restlessness, changes in breathing activity, and in bathroom activity. Professor Alexander and the team of researchers at the University of Missouri have observed that patients and their families feel safer knowing the sensors are in place and that similar sensor systems could be used in care coordination of frail elders living in the community.

Future Broadband Needs. The group discussed the key drivers of future technology adoption and broadband needs at SNFs. Professor Alexander explained that "remote care coordination" is a central goal of SNFs and other post-acute and long-term care facilities. Achieving this will likely require greater adoption of EHR systems and the necessary broadband connectivity to support such systems at these facilities. Remote care coordination may also drive increased use of telemedicine at SNFs, especially when there are less-skilled nurses working at the facility. Even where the facilities have the technological capabilities to conduct telemedicine (for example, at the University of Missouri), there are still other hurdles to overcome, including privacy and security issues, before telemedicine will be increasingly used at SNFs.

Respectfully Submitted,

/s/

Mark A. Walker
Attorney Advisor, Telecommunications Access Policy Division, Wireline Competition Bureau