April 13, 2019

Marlene H. Dortch,

Secretary

Federal Communications Commission

445 12th Street, S.W.

Washington, DC 20554

Re: Comments in Support of Massachusetts Institute of Technology Request for Waiver of the UWB Operation Rules described in **ET Docket No DA 19-89**

Dear Ms. Dortch,

Allow me to present my credentials, as it is from this vantage point that I can attest to the benefits of the Witrack device in changing healthcare, especially for the elderly. I am the chief of the Division of Geriatric Psychiatry at McLean Hospital and medical director for Behavioral Health at Partners Population Health. I am an expert in geriatric psychiatry, specializing in the treatment of older adults with depression, bipolar disorder, and the behavioral complications of Alzheimer’s disease and related dementias. I am currently President-elect of the American Association for Geriatric Psychiatry, distinguished fellow of the American Psychiatric Association and have previously served on the board of directors of the American Association for Geriatric Psychiatry and the Alzheimer’s Association of Massachusetts/New Hampshire.

Driven by advances in medicine and an increased lifespan, societies are now aging at an alarming rate. This fact presents societies with a host of new challenges - many seniors live alone and are subject to falls, accidental injuries, chronic disease exacerbations, and depression. In the United States, 13 million seniors live alone, vulnerable to all of these complications. Moreover, the aging population is only projected to grow – by 2030, one in every five Americans will be of retirement age. Health challenges associated with aging already place an alarming burden on our health care system and society more generally. Chronic diseases account for two thirds of the current $3 trillion dollars of annual health care costs in the United States. The overwhelming majority of these costs are incurred by seniors, with over 90% of seniors suffering from one or more chronic diseases.

Furthermore, Alzheimer’s disease and related dementias currently affect 5.8 million Americans with prevalence numbers expeted to nearly triple by the year 2050. The behavioral symtpoms of dementia, including agitation, aggression, depression and psychosis, are nearly universal over the course of illness, drive morbidity and mortality associated with dementia, increase long term care placement and hospitalizations and contribute greatly to caregiver burden and stress.

In Witrack, MIT has developed a revolutionary technology for in-home health monitoring, which cuts across science, engineering and medicine. By creating a first–of-its-kind touchless monitoring system, Witrack directly improves patient monitoring, particularly for older patients, since traditional monitoring methods, which often require the patient to regularly charge and wear one or more devices on their body, are ill suited to their needs.

With my colleagues at Harvard Medical School, and in collaboration with the Witrack team, we have explored the use of the Witrack device in monitoring patients with advanced dementia. In our studies, we were able to use Witrack’s passive measurement to detect and quantify repetitive pacing which is associated with anxiety and agitation, commonly exhibited in patients with dementia and Alzheimer’s. We are looking further into the potential use of this device in improving care for such patients.

Witrack fills a crucial gap in treatment and care for older adults with psychiatric illness and neurodegnerative diseases. A key difficulty in providing care for such patients is getting reliable information about their health status and activities to understand their condition and progress. Today, doctors have to rely on incomplete, and often inaccurate, information from patients and caregivers. Witrack’s ability to provide accurate and objective measurements without encumbering patients in any way will allow doctors to make more informed decisions, and ultimately improve healthcare outcomes for the U.S’s aging population.

It is for these reasons that I strongly support MIT’s petition regarding the Witrack device.

Sincerely,



Brent P. Forester, MD, MSc.

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Chief, [Division of Geriatric Psychiatry, McLean Hospital](https://www.mcleanhospital.org/older-adult-mental-health)

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