Discussion to: Remote Telemonitoring is Associated With Improved Patient Safety and Decreased Workload of Nurses

Presenter: Marijana Zubrinic, RN, NP

Invited Discussant: Dr. Chi-Fu Yang, MD

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Disclosures: None

Unidentified Speaker 1:

We have an invited discussant, Dr. Yang, from Massachusetts General Hospital. Thank you.

Dr. Chi-Fu Yang (Boston, MA):

Great. Thank you. I'd like to congratulate Dr. Zubrinic and her colleagues for an outstanding presentation. I'd like to thank ATS for the privilege of discussing this paper. And also, I'd like to thank the authors for sending the manuscript ahead of time. The authors report their experience with remote video monitoring at the University of Toronto, University Health Network. This is a program initially launched in 2016 as a pilot and has since expanded to all five hospital sites in the network over a three-year period. The system comprises an in-house developed mobile device, featuring two-way audio/video
communication and continuous O2 sat monitoring placed in the patient’s room. A total of 2,087 patients were monitored. And the outcomes of this invention were very impressive with decreases in fall rates, decreases in number of unnecessary nurse's visits, significant decreases in the number of bedside hours measured, and substantial cost-savings. These results really highlight how remote video monitoring can be used effectively to improve outcomes and would like to, again, congratulate the authors for an incredible accomplishment. I have the following questions: For centers that would like to start this remote video monitoring program, what are the steps that are needed? How many people do you need to hire and train? For example, you noted that a single technician can remotely monitor eight patients simultaneously across all of the network hospital sites. At MGH where I practice, there are about 1,000 beds. Roughly, how many new technicians are needed? And how much does each remote monitoring device costs? Thank you.

Ms. Marijana Zubrinic (Toronto, Canada):

Thank you. Just for clarification, I am a nurse practitioner. But I'm honored that you [laughter] think I'm a physician. In terms of implementing, it's a really good question. And it can be simplified, but also, I think, sometimes it can get complicated. The first thing that is necessary is to develop a working group, a committee with various different individuals. So, you need to have your IT, your digital infrastructure, privacy risk but also the clinical people. There needs to be a director who's going to be the champion of this. Otherwise, it's just a really fun project in the hospital. There needs to be someone from administration driving it. And also, the nurse managers on the inpatient units need to be involved. So recently, there was a study where they looked at this, and they found that with remote monitoring, whether you had a manager that was engaged and involved made all the difference and whether it took off. In addition to that, then it's about what's your ultimate goal: Are you looking to reduce falls, reduce cost, or are you looking to address your workforce shortage? And that will determine which inpatient units, you decide how many, is it the whole organization. And following that, then it requires an infrastructure assessment. So, do you want to go wireless, is your Wi-Fi strong enough, do you need to increase bandwidth and put access points, are you going to hardwire it? We chose mobile. We're a socialized medicine in Canada. And so having mobile devices that you can move around in rooms just made more sense than installing one in every room. So that's the starting point that I could do a whole talk if you're interested on how to do that. [laughter]

Dr. Yang:

Great. Well, thank you. And congratulations, again.

Ms. Zubrinic:
Thank you.

Unidentified Speaker 1:

Okay. Thank you.