

Thesis propositions

Economic Evaluation of Early Warning Systems for Chronic Disease Management

The Case of Heart Failure

Fernando Albuquerque de Almeida | Thursday, 28 October 2021 at 15:30 hrs

1. In order to fully grasp the potential value of home telemonitoring and early warning systems for patients and patient outcomes, modelling studies should better account for the diversity in patient characteristics, especially when these change over time. (this thesis)
2. The ensemble algorithm appears to be a tool with high potential for improving clinical decision-making and reducing readmissions of patients with heart failure under home telemonitoring programmes. (this thesis)
3. Hospitalisations due to respiratory/chest infection and ventricular tachycardia showed an improvement in quality of life when considering utilities measured before and after admission, while hospital admissions due to atrial fibrillation and myocardial infarction showed a decrease in utilities measured before and after hospitalisation. (this thesis)
4. Although increased costs of adopting home telemonitoring and diagnostic algorithms in the management of heart failure seem to be an additional strain on scarce health care resources, the use of these technologies may be seen as an investment as they generate additional quality-adjusted life years when compared to the standard of care. (this thesis)
5. Medical devices are traditionally less regulated than drugs and the standards of evidence generation before market access are generally lower, which complicates the accurate assessment of the cost-effectiveness of home telemonitoring and early warning systems. (this thesis)
6. Society should be prepared to empower patients and involve them in taking decisions regarding transformations of healthcare systems.
7. One of the key lessons from the COVID-19 pandemic is that we must invest in data and health information systems, as part of our overall public health capacity, before a crisis strikes. To emerge from this crisis stronger, we must be able to monitor progress with real-time, reliable and actionable data. (Dr. Tedros Adhanom Ghebreyesus, Director-General of the WHO)
8. The fact is that a man who wants to act virtuously in every way necessarily comes to grief among so many who are not virtuous. (*The Prince*, Machiavelli)
9. We should not fall into the trap of using bad quantitative studies in detriment of logical and rational arguments based on good rhetorical principles.
10. Both to an individual privately and to all people generally there is one goal [*skopos*] at which they aim in what they choose to do and in what they avoid. (*Rhetoric*, Aristotle)
11. Oh, sometimes I grow so tired, but I know I've got one thing I got to do. (Robert Plant / Jimmy Page)