



## Artificial intelligence in Healthcare Management: An Executive Crash Course in 30 minutes

**M. TOURNIER**

*INOVAlife Data Science School for Healthcare. San Francisco, USA*

### Abstract:

The rising costs in healthcare are a deep concern worldwide. AON estimated that the healthcare inflation for 2019 will be around 7.8% (a figure almost three times higher than the global inflation predicted by the International Monetary Fund). This imposes to decision makers in healthcare management an increasingly bigger challenge to offer the best quality of care, optimizing costs and managing a complex environment. To be able to drive change in this situation, more accurate data is needed on a timely manner for healthcare leaders. On the other hand, all the innovations brought by Information Technology are increasing the collection of data from patients in a huge amount. Although, this huge data ocean is almost impossible to be analyzed using the same, traditional methods. This is where Artificial Intelligence (AI) arises as a way of helping leaders to identify opportunities to offer more value to patients. Yet, many health professionals still see AI as a “Black Box”, fearing that computers would take their roles in the near future. The purpose of this lecture is to give an understandable overview about the actual state of AI in healthcare management, highlighting its importance, shedding some light on the main algorithms (regression, classification, reinforcement), followed by an explanation about its frameworks. Finally, the Cross-industry standard process for data mining (CRISP-DM) will be explained (Image), as a practical method to apply AI in healthcare management practice.

### Biography:

Marcelo Tournier is a Tech-seasoned Physician, Product Manager and Self-taught R+Python Developer with 10+ years building technologies (apps, IoT, Artificial Intelli-



gence). Championed global strategy design for healthcare industry with data-driven projects. Now, is leading INOVAlife, an innovative startup with the purpose of teaching Data Science to healthcare professionals. Marcelo has a Medical Degree and a Master’s in Healthcare Technology Innovation. Now, he is pursuing another Masters Degree in Business Analytics at Hult International Business School, in San Francisco, California.

### Publication of speakers:

- AON. 2019 Global Medical Trend Rates Report. Available at: <https://healthresources.aon.com/global-benefits/2019-global-medical-trend-rates-report>
- Topol EJ. High-performance medicine: the convergence of human and artificial intelligence. *Nat Med.* 2019 Jan;25(1):44-56.
- Van Poucke S et al. Scalable Predictive Analysis in Critically Ill Patients Using a Visual Open Data Analysis Platform. *PLoS One.* 2016 Jan 5;11(1):e0145791.

**Patient Safety Webinar; July 28, 2020; Singapore City, Singapore**

**Citation:** M. Tournier; Artificial intelligence in Healthcare Management: An Executive Crash Course in 30 minutes; Hospital Management Conference 2019; May 23-24, 2019; Las Vegas, USA.