



Business Analytics Components for Public Health Institution - Clinical Decision Area

João Abreu^a, Tiago Guimarães^a ✉, António Abelha^a, Manuel Filipe Santos^a

Show more ▾

☰ Outline | 🔗 Share | 🗣️ Cite

<https://doi.org/10.1016/j.procs.2021.12.250> ↗

[Get rights and content](#) ↗

Under a Creative Commons [license](#) ↗

open access

Abstract

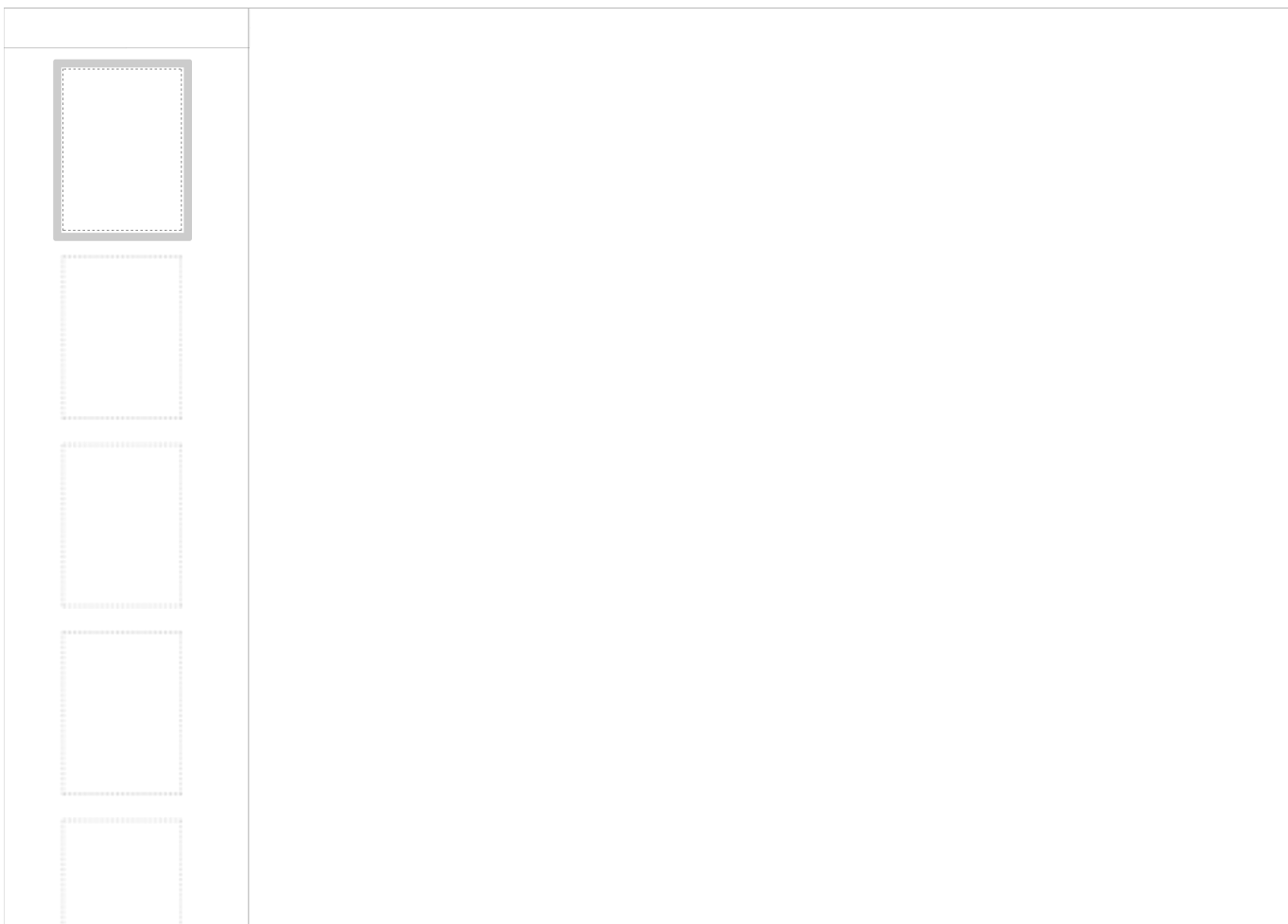
The practice of evidence-based medicine has been gaining ground in the most diverse health institutions and consequently in the work of their health professionals. Thus, the Clinical Decision Support Systems appear, which aim to ensure that health professionals are supported with the best evidence in order to improve the clinical decision-making process, reducing the occurrence of adverse events through the availability and sharing of quality information by health professionals. Business Intelligence (BI) and Business Analytics (BA) technologies are increasingly being used to extract knowledge and turn it into useful information and analytical tools for healthcare professionals. This article is part of a dissertation that has as main objective the extraction of knowledge from the hospital data of the obstetrics service in *Centro Materno-Infantil do Norte* (CMIN) from *Centro Hospitalar Universitário do Porto* (CHUP) with focus on the area of clinical decision.

◀ Previous

Next ▶

Keywords


Clinical Decision Support Systems; Business Intelligence; Business Analytics; Data Warehouse; KPI



 [View PDF](#) ↗

[Special issue articles](#) [Recommended articles](#)

References

- 1 de Vasconcelos, José Braga, Álvaro Rocha, and Rui Gomes. (2004) "Sistemas de Informação de Apoio à Decisão Clínica Estudo de um caso de uma Instituição de Saúde."
[Google Scholar](#) ↗
- 2 de Vasconcelos, José Braga, Álvaro Rocha Henriques, and A. Rocha. (2006) "Modelo para o desenvolvimento de Sistemas de Apoio à Decisão Clínica para a prática da Medicina Baseada na Evidência." Anais do X Congresso Brasileiro de Informática em Saúde (CBIS 2006).
[Google Scholar](#) ↗
- 3 El-Sappagh Shaker H. Ali, Abdeltawab M. Ahmed Hendawi, Ali Hamed El Bastawissy
"A proposed model for data warehouse ETL processes."
Journal of King Saud University-Computer and Information Sciences, 23 (2) (2011), pp. 91-104
 [View PDF](#) [View article](#) [Google Scholar](#) ↗
- 4 Silva, Eva, et al. 2015 "Business intelligence and nosocomial infection decision making." Integration of Data Mining in Business Intelligence Systems. IGI Global, 193-215.
[Google Scholar](#) ↗
- 5 Foshay Neil, Craig Kuziemsy
"Towards an implementation framework for business intelligence in healthcare."
International Journal of Information Management, 34 (1) (2014), pp. 20-27

 [View PDF](#) [View article](#) [View in Scopus](#) [Google Scholar](#)

- 6 Bartlett R.
"A PRACTITIONER'S GUIDE TO BUSINESS ANALYTICS: Using Data Analysis Tools to Improve Your Organization's Decision Making and Strategy",
McGraw Hill Professional (2013)
[Google Scholar](#)
- 7 Programme, World Health Organization Human Reproduction. (2015) "WHO statement on caesarean section rates.": 149-150.
[Google Scholar](#)
- 8 Kimball Ralph, Margy Ross
"The data warehouse toolkit: The definitive guide to dimensional modeling.", John Wiley & Sons (2013)
[Google Scholar](#)
- 9 Microsoft. (2020). "What is power bi?".
[Google Scholar](#)

Cited by (2)

[Enhancing Clinical Management of Bariatric Surgery Using Business Intelligence](#)

2023, Procedia Computer Science

[Show abstract](#) 

[Stunting Convergence Management Framework through System Integration Based on Regional Service Governance](#)

2023, Sustainability (Switzerland)

© 2021 Published by Elsevier B.V.



All content on this site: Copyright © 2024 Elsevier B.V., its licensors, and contributors. All rights are reserved, including those for text and data mining, AI training, and similar technologies. For all open access content, the Creative Commons licensing terms apply.

