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## POSTER ABSTRACT

# Assessment Of A Rapid Referral Cancer Colorectal Pathway With Process Mining In An Integrated Area In Galicia (Spain)

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1. Colorectal cancer (CRC) is one of the most common form of cancer. Data Mining [DM] has potential for examining and analyzing the vague data of the medical domains. We study with DM the results achieved with a rapid referral pathway (RRF) for suspected colorectal cancer (CRC) in a Integrated Area in Galicia.

2 Structured variable data (time stamps for all health activities and coded data for each event) were extracted from databases, The moment of extraction of the pathological biopsy was taken as a reference. Process mining analysis, comparing processes according to whether or not they were included in the diagnostic pathway.

3 From Jan.2016 to 12. 2018, we find 444 casses of CCR; 30% included in RRF and 312 no included 38%. Primary Care was referral 38%;10% from Emergency and 52% Hospital

The median times from the request for a colonoscopy was 6 days in RRF vs 7 days in non-RRF.

We identify two patterns: one, ""consultation with a specialist"" to ""colonoscopy"" is repeated 21% in the VDR, compared to 7% of the cases in the non-VDR and, another, the patterns "Emergency Department "in the 12% of the VDR cases.

4 Process mining makes it possible to describe the complete care process along the time axis without limitations based on levels of care. The results shows that the use of RRF does not show great differences with respect to non RRF.

We identifying the most frequent usage patterns in VDR. So we next step is an algorithm in the Electronic Clinical History.

5 Process mining helps to know the real performance of the rapid diagnostic pathways, providing new information with the data registered in the digital electronic health information systems

6 The advantages of using DM in medical approach are unbounded and it has abundant applications, the most important: it leads to better medical treatment with a more effectivity .

7 A more Long-term studies should also examine the survival and quality of life of patients to determine the impact of DM in RRF in clinical practice and on health related outcomes.

8 We identifying the most frequent usage patterns in VDR. So, next step is an algorithm in the Electronic Clinical History.