

Problem Oriented Medical Record: Characterizing the Use of the Problem List at Hospital Italiano de Buenos Aires

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Abstract

Problem oriented medical record (POMR) was born in late sixties. Expecting an ordered, complete and updated medical record were some of the goals of its founder. Several healthcare institutions have included problem list into their clinical records but some concerns have been reported. These concerns are in reference to their voluminosity, incompleteness and outdatedness. This study attempts to understand how healthcare professionals are using the problem list at Hospital Italiano de Buenos Aires (HIBA). We believe it is essential to understand the local reality applied to our own applications and cultural instances of documentation. This report is the basis from which several improvements could be made in order to meet the goals of Weed's proposal.

Keywords:

Problem Oriented Medical Record; Problem List; Electronic Health Records.

Introduction

The Problem List was originally proposed by Lawrence Weed in the sixties as part of his recommendation for a POMR. The arrival of Electronic Health Records (EHRs) has suggested that it is possible to have better problem lists. Healthcare professionals at HIBA have used an electronic POMR since 1998. This paper attempts to have an understanding of the use of the problem list by professionals at HIBA as part of a plan for improvement of this instrument.

Methods

HIBA is a non-profit health care academic center. It has implemented an in-house Healthcare Information System (HIS). The hospital has an insurance plan (Plan de Salud - PS) with 150,000 members. The EHR is a fully-implemented web based, problem oriented, patient centered record with customized functionalities depending on the level of care (outpatient, inpatient, emergency care and home care). We conducted a retrospective cohort analysis. The cohort included all new problems recorded from January 1st 2012 to December 31st 2013. A secondary de-identified database administered by the area of Biostatistics and Business Intelligence from HIBA's Department of Health Informatics was consulted for this study. For the analysis of the problem list, the following criterion was agreed upon: all problems in all settings were taken into the sampling.

Results

During the period, there was a total of 2,478,545 new problems. Of these, 42.47 % were associated with at least one medical note. An average of 5.45 problems per patient was calculated. 35.6% of the total sample were created in the outpatient setting, 11.9% in inpatient hospitalization area, and 52.5% in the emergency. Regarding the status of problems, 96.87% were active, 0.70% problems were passive, and 2.12% problems were resolved. Grouping the problems studied by year, and day of charge, we found no significant differences. The twenty most common problems accounted for 30% of all problems. Among these, the 3 most used were fever, health check and malaise. From the top twenty problems, 38% were general symptoms or usual care situations, 23% respiratory diseases, and 39% represented other organs or systems. Of all newly created problems, 73% belonged to patients covered by affiliated insurers, corresponding to 34% of all visits in the period under study. The remaining new problems were generated during visits covered by PS. By analyzing the problems by age, the first segment of 0-5 years old had the largest proportion.

Conclusion

The first step to understand the difficulties is to determine how problem list is used. We conducted an analysis of our POMRs as a basis to generate our own strategies to improve their use, and that goes beyond the implementation of guidelines and institutional policies. Considering the difference in problems creation in the different age groups, we believe that this variability is because the problem list is created in our system once in a lifetime and it is reused for each query. Regarding the most frequent diagnoses, it is not uncommon that most of these instances are due to usual care or general pathologies. In this sense, we expected that the 20 most common problems covered a percentage higher than 30% that we found. We believe this could be due to the large granularity or level of detail that our EHR allows to incorporate. This generates a greater dispersion in the use of problems.

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