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# Non-Regulatory Sources of Medication Information: How Do They Compare with Regulatory Health Advisory Letters?

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## Introduction

Pharmaceutical companies and regulatory agencies communicate information regarding medications using health advisory letters. These letters usually contain information about potential safety hazards, new indications for medication use or adverse events with the use of certain medication products. Ideally, this information will be updated on a continual basis on point-of-care decision-making resources (such as UpToDate and RxFiles) which are most often used in clinical practice. However, little is known about how the information in these health advisory letters compares to the information in point of care decision making resources

## Objectives

- Evaluate and compare the presentation of drug information in three non-regulatory medication data sources commonly used in Canada: Rx Files, UpToDate and Compendium of Pharmaceuticals and Specialties (CPS)

## Methods

Criteria for inclusion of a 'point-of-care' medication information database were: 1) They had to be able to answer questions asked by health care providers in everyday patient encounters in Canada, and 2) They needed to be available online via website access or using mobile apps. Based on these selection criteria, three commonly used medication databases were selected for comparison. These included UpToDate, RxFiles, e-CPS.

A list of essential qualities for advisory letters, including aspects of structure and design, content, and format, were developed by a research team in a previous project. A tool was created using Microsoft Excel to facilitate abstractor assessment of medication information resources for these characteristics. The questions developed were within three domains, namely: Identifying information (3 items), Content (9 items) and Formatting (1 item).

Health care advisories (n=80) released in the last 5 years (2010-15) by Health Canada were identified in a previous project and were used to identify pages relevant for comparison across the three clinical information resources: UpToDate, RxFiles and e-CPS. The resources were reviewed for the three domains mentioned above (Identifying Information, Content and Formatting) to determine if the key points from the healthcare advisory were represented in the resource. Information was abstracted using a previously developed tool on Microsoft Excel.

## Results

- A total of 80 letters were selected for analysis and compared across the three drug information sources.
- The average word count was 3739 words for the UpToDate pages and 6760 words for the e-CPS pages
- The average number of characteristics found on the UpToDate pages was 8.9 (maximum score of 12)
- The average number of characteristics found on the e-CPS pages was 9.15 (maximum score of 12)
- The average number of characteristics found on the RxFiles pages was 6.73 (maximum score of 12)

Figure 1: Representation of Drug Information Across Three Drug Information Sources

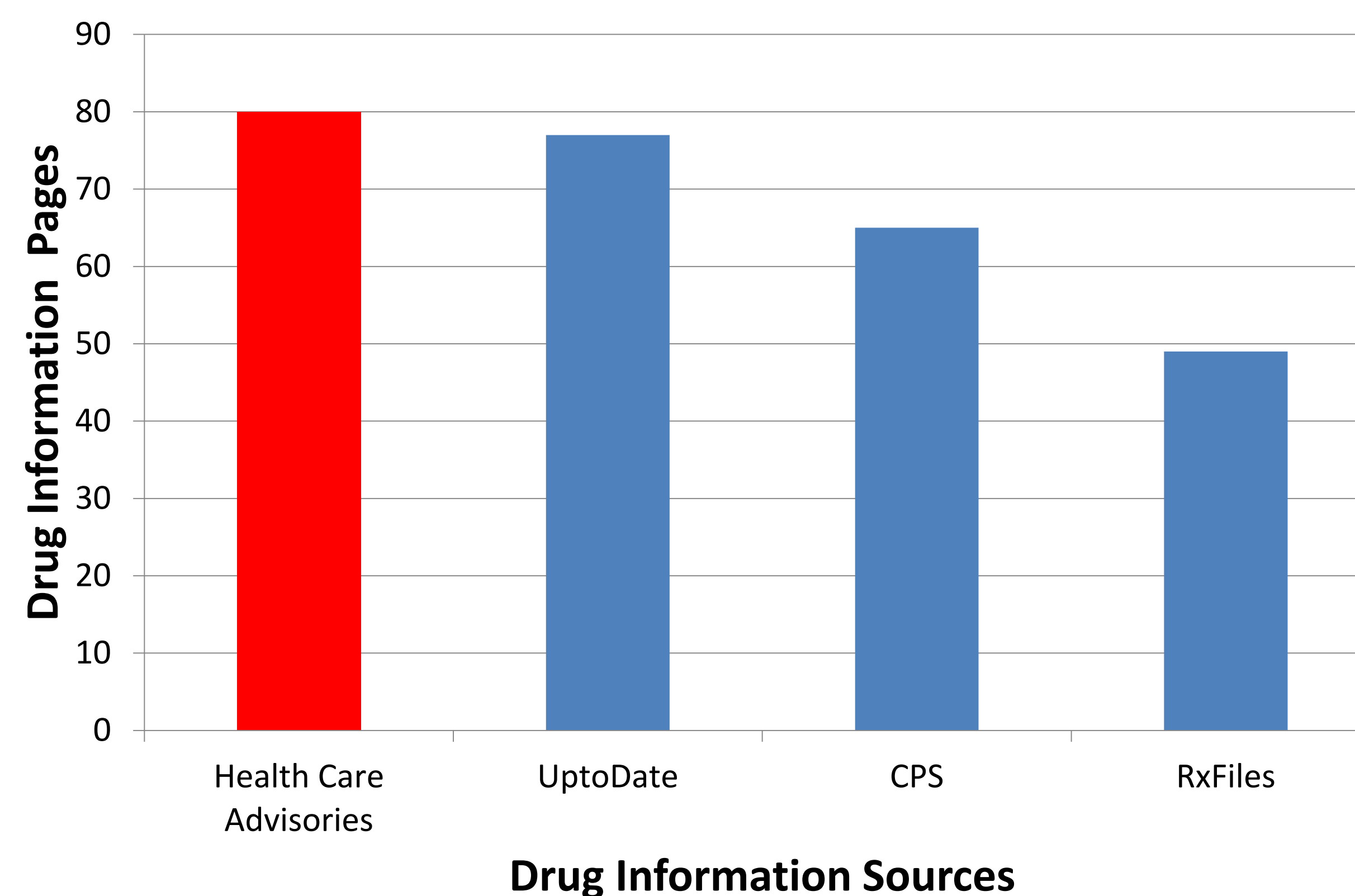
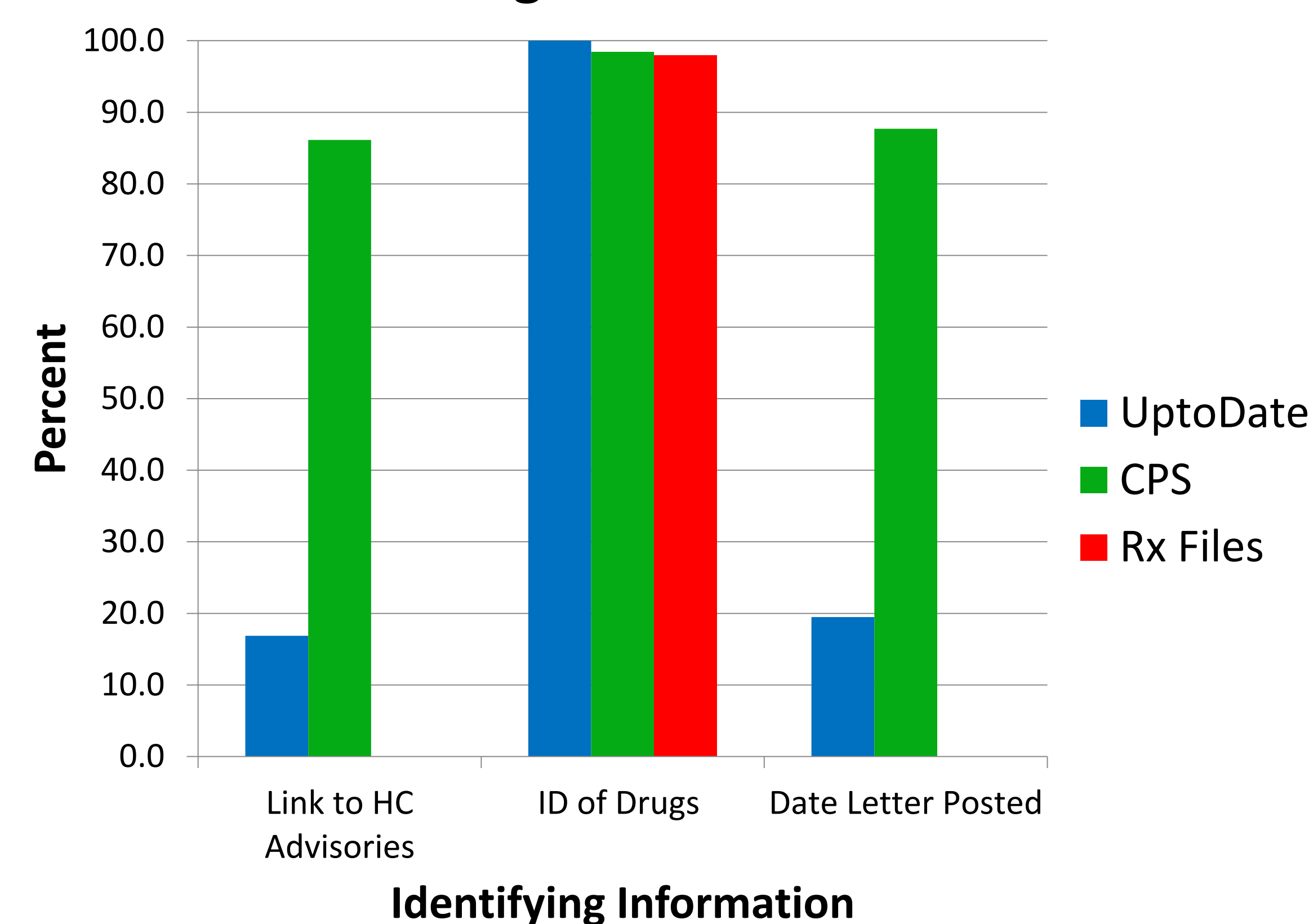
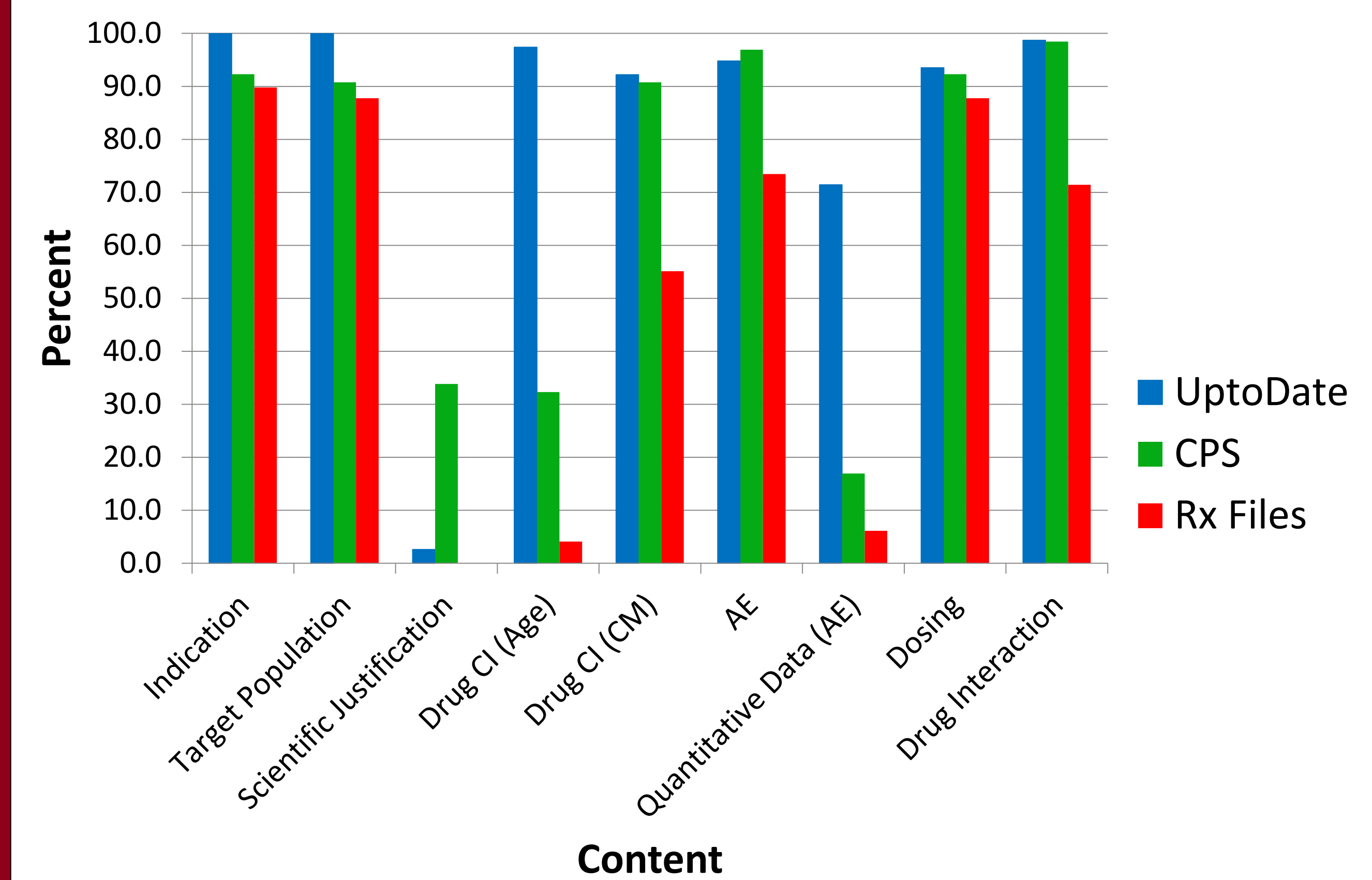


Figure 2: Identifying Information Across Three Drug Information Sources



Content Across Three Drug Information Sources



## Discussion

- Of the drugs discussed in the 80 letters selected for analysis, UpToDate had the most drug information pages (77 drugs). E-CPS had the second most (65 drugs), while RxFiles had the least (49 drugs).
- Overall, e-CPS drug information pages were longer than the UpToDate pages with more detailed explanations. Both online sources also had hyperlinks which made them easy to navigate through when accessed online.
- UpToDate had more information about the different healthcare advisories that were released over the last 5 years. This makes it a good resource for finding information about most of the drugs used by health care providers in clinical practice.
- e-CPS pages had links to the HC Advisory letters, along with more scientific justification related to the HC Advisories. Thus, it is a useful resource if providers are looking to find out more detailed information about the advisories as well as the scientific rationale for the recommendations released by the drug companies.
- Rx-Files was useful for dosing requirements and a good secondary chart based resource for use at the bedside but did not have the detail included in e-CPS and UpToDate.

## References

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