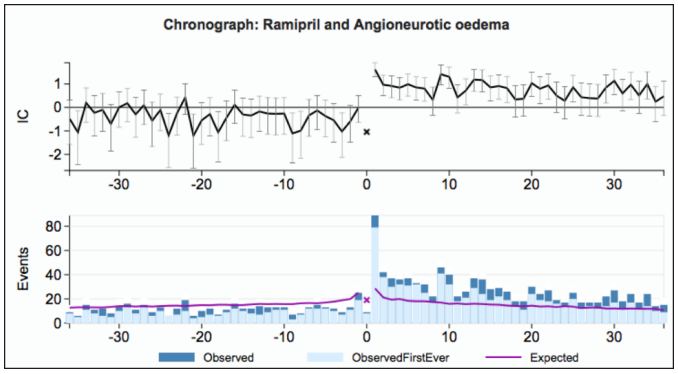
Commonwealth Informatics

Commonwealth Vigilance Workbench (CVW) Longitudinal: Act on Safety Signals Faster and with Deeper Insight

The Commonwealth Vigilance Workbench (CVW) is an integrated technology platform which allows medical product developers to detect, track and refine safety signals using evidence across numerous data sources. CVW Longitudinal helps medical safety teams analyze signals in large observational healthcare datasets. It complements signal detection and safety reviews based on spontaneous reports and is developed and supported by the safety and signal detection experts at Commonwealth Informatics. The application implements methods developed by the Uppsala Monitoring Centre (UMC) Research Department.

Key Features

1. **Chronograph**[1] – The Chronograph is a statistical graphic that summarizes the occurrence of medical observations before and after exposure to a medical intervention such as the prescription of a drug.
2. **Screening by IC-delta signal score –** The IC-delta statistic provides an efficient method to screen for associations between interventions and outcomes where the outcome occurs more frequently following the intervention.
3. **Rapid drill down to patient level data** – Work through the data quickly with drill-down from screening results to patient profiles and detailed patient histories.
4. **Zero footprint** – CVW Longitudinal is cloud based with no IT infrastructure required, just login and begin your analyses.

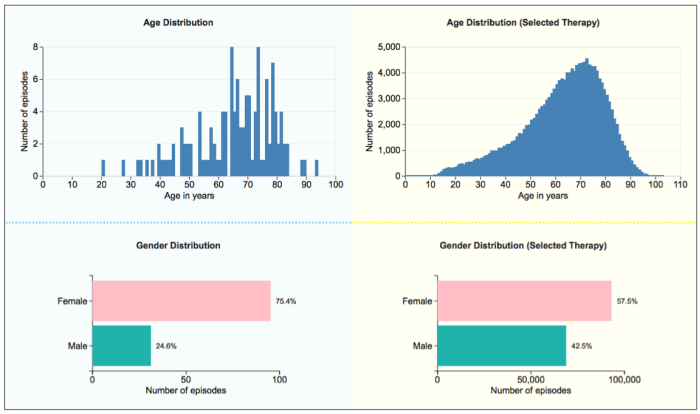


In a Chronograph, "the top graph displays IC values with 95% credibility intervals for different time periods relative to prescriptions of the drug of interest. The IC value for the occurrence of the medical event on the same day as the prescription is marked with an asterisk… The bottom graph displays the observed (bar chart) and expected (line graph and asterisk) numbers of events." Uppsala Monitoring Centre, Temporal Pattern Discovery http://www.who-UMC.org

[1] Cederholm, S., Hill, G., Asiimwe, A., Bate, A., Bhayat, F., Brobert, G. P., ... & Norén, G. N. (2014). Structured Assessment for Prospective Identification of Safety Signals in Electronic Medical Records: Evaluation in the Health Improvement Network. Drug safety, 38(1), 87-100.

More information earlier for safety signal refinement

CVW Longitudinal provides out of the box analytics on multiple electronic medical record and health insurance claims databases.



A CVW Longitudinal therapy and event analysis for the 1-30 day period post prescription

Key Benefits

1. Reach closure on safety signals earlier and with greater confidence through access to electronic healthcare data
2. Optimize resources through rapid prioritization of signals
3. Develop deeper insights into the clinical context and potential confounding factors surrounding potential signals

Proven & Tested

The statistical methods and data visualization techniques implemented in CVW Longitudinal have been successfully evaluated in projects within the IMI-PROTECT project and the OMOP experiment[3]. To learn more or schedule a demonstration, contact us at sales@commoninf.com.

---

[3] Norén, G. N., Bergvall, T., Ryan, P. B., Juhlin, K., Schuemie, M. J., & Madigan, D. (2013). Empirical performance of the calibrated self-controlled cohort analysis within temporal pattern discovery: lessons for developing a risk identification and analysis system. Drug safety, 36(1), 107-121.

Commonwealth Informatics

Commonwealth Informatics
260 Charles Street, Suite 401
Waltham, MA 02453
781.209.5015
sales@commoninfo.com