FAQ: COVID-19 de-identified data cohort access offer for academic researchers

Background

Cerner is offering health systems free access to a COVID-19 data science workspace for academic-funded projects.

Clinical data sharing is a critical need for researchers to test and validate therapies to treat those patients living with COVID-19. In alignment with our Cerner Learning Health NetworkSM initiative, we believe health systems need a network of data that can be leveraged for research efforts.

Through the remainder of 2020, Cerner is providing approximately 45 users complimentary access to the following resources:

- A Cerner Real-World DataTM COVID-19 de-identified data cohort
- HealtheDataLabTM – the Cerner data science ecosystem, built and deployed on Amazon Web Services (AWS)

FAQs

Q1: What is the Cerner COVID-19 HealthDataLab offering?
A1: Cerner is standing up access to a de-identified COVID-19 cohort data from Cerner Real-World DataTM in a shared data-science workbench (HealtheDataLab™).

Cerner is initially offering access to approximately 45 named individual users from health systems to this cloud-computing environment, including, data scientists and clinicians, with planned COVID-19 hypotheses and research projects.

Q2: What is Cerner Real-World Data?
A2: Cerner Real-World DataTM is a national, de-identified clinical data warehouse designed to enable your organization to leverage clinical systems data across contributing organizations to create volumes of de-identified information. This information can be used for retrospective analysis and post-market surveillance to help improve health care outcomes. By examining health outcomes after they occur, researchers can identify contributing factors and risks and apply this knowledge to help advance preventative measures.

Q3: How does Cerner generate Real-World Data?
A3: Data in Cerner Real-World DataTM is extracted from the EHR of hospitals and clinics who have consented to such use. Encounters may include pharmacy, clinical and microbiology laboratory, admission and billing information from affiliated patient care locations. All admissions, medication orders and dispensing, laboratory orders and specimens are date and time stamped, providing a temporal relationship between treatment patterns and clinical information. Cerner de-identifies Cerner Real-World Data in compliance with Health Insurance Portability and Accountability Act.
Q4: What organizations are eligible to apply for this offer?
A4: Health systems. Please note, all members of the Cerner Learning Health Network℠ automatically qualify for one individual to gain access. Members of the Cerner Learning Health Network will need to complete a research application and Data Use Agreement.

Q5: What data types are included?
A5: At minimum, data types for COVID-19 patients include:
- Demographics
- Diagnoses/comorbidities
- Medications
- Immunizations
- Encounter metadata (hospital location encounter type)
- Lab results
- Clinical events/results
- Major procedures

Please note, data will be date shifted; temporal trend analyses will not be possible with these data.

Q6: Who will benefit from this offer?
A6: HealtheDataLab™ is a data science workbench with scripting tools intended for data scientists, data analysts and clinical users with advanced analytics experience. Members of the Cerner Learning Health Network℠ are automatically eligible for this offer.

Q7: What can users expect?
A7: Data scientists, data analysts and clinical users with advanced analytics experience can expect a data science workbench experience including:
- Data science workbench access to COVID-19 data
- Jupyter notebook interface with Spark infrastructure
- Python and R-like coding
- Starter notebooks

Q8: What are examples of project types with which these data could be leveraged?
A8: Observational research using data science tools, including a focus on:
- Refinement of risk and severity indices
- Regional patterns of development
- Utilization patterns
- Patient outcomes
- Comparative effectiveness of various treatment strategies

Q9: What are examples of project types with which these data are not ideally suited to address?
A9:
- COVID-19 infection rates in the general population or among health care workers
- Pre-hospital COVID-19 treatment or outcomes
- Hospital variation in care or outcomes
Q10: What are the steps to apply for this offer?
A10: There are two required steps:
   Step 1: Submit the research application in its entirety
   Step 2: If your organization is approved, a Data Use Agreement (DUA) would need to be signed prior to granting you access to the data

Q11: What is included in the Data Use Agreement?
A11: Permissions and restrictions for use of data, including:
   - Restricting any attempted re-identification of patients
   - Restricting any attempted re-identification of health care provider organizations or treating providers
   - Delivery and acknowledgement of Cerner in any white papers, publications, presentations, etc.
   - Delivery of research that results from its use of COVID data to Cerner so Cerner can disseminate the same to its clients and the Cerner Learning Health NetworkSM community

Q12: Within what timeframe and how will my research application be reviewed?
A12: Within approximately three business days of research application submission, a Cerner COVID-19 committee will review your research application and provide notice of the decision via email. Research applications will be reviewed for scientific appropriateness, novelty and ability of the database to address the researcher’s question.

Q13: If selected, what is the timeframe of the offer?
A13: Cerner will make the HealtheDataLabTM environment available toward the end of April and will terminate all access on December 31, 2020.

Q14: What is HealtheDataLab?
A14: HealtheDataLabTM is an elastic, cloud-based ecosystem, built and deployed by Amazon Web Services (AWS), that helps users answer deep and complex questions using statistical and data-science oriented tools that query data, extract and transform data sets into research-ready formats, build complex models and algorithms and validate findings.

Q15: What is the Cerner Learning Health Network?
A15: With the goal of revolutionizing research, Cerner has established a network of sites committed to cutting-edge clinical research and quality improvement. The Cerner Learning Health NetworkSM is focused on helping you achieve improved outcomes and experiences — within a shorter time frame and at a reduced cost — by leveraging the complimentary benefits. There is no exclusivity or capital investment. To learn more, contact learninghealthnetwork@cerner.com.