PHAROS: Platform for Harmonizing and Accessing Data in Real-time on Infectious Disease Surveillance Based on OMOP-CDM in South Korea

Chungsoo Kim, PharmD1, Byungjeon Choi, MD2, Juhnyuk Chang, PharmD2, Jimyung Park2, Seongwon Lee, PhD2, Rae Woong Park, MD, PhD1,2
1Department of Biomedical Science, Ajou University Graduate School of Medicine, Suwon, South Korea
2Department of Biomedical Informatics, Ajou University School of Medicine, Suwon, South Korea

Introduction

• It is difficult to collect comprehensive clinical characteristics of infected patients as in the current infectious disease reporting system.
• We initiate a new project for developing an integrated infectious disease data managing system based on OMOP-CDM in Republic of Korea, named "PHAROS".

Methods

1. Infectious disease CDM network
   Infectious disease-specific data (culture, susceptibility test etc.) is converted to CDM through near-real time conversion

2. Information Management System
   The PHAROS system can access infectious disease patient data in two different ways in peacetime and pandemic

3. Applications
   A. Geographic Information
   B. Time-series analytics
   C. Data profiling
   D. Named Entity Recognition
   E. Predictive modeling

Results

• Awarded US $2 million contract for 3 years from the Ministry of Health & Welfare, Republic of Korea
• Fifty researchers are participating and developing our platform for this project

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Collaborative opportunities

• We are open to collaborating with anyone who is interested in the data standardization and utilization of infectious diseases
• Please contact us via rwpark99@gmail.com (Prof. Rae Woong Park)