Multi-state EHR-based Network for Disease Surveillance

How MENDS Works

1. Health care encounter by patient
2. Health care professional records patient data in EHR
3. Data Partner* extracts clinical data
4. ESP Software puts data in standardized tables and runs disease detection algorithms nightly
5. Deidentified data prepared monthly by ESP for use by RiskScape
6. ESP awaits custom queries from PopMedNet Data Mart Client
7. RiskScape analyzes data outside firewall
   - RiskScape is an interactive, web-based data visualization platform with pre-programmed and custom analyses.
   - PopMedNet Web Portal aggregates data from partners
   - Authorized users create visual analyses with RiskScape or send custom queries through the portal
   - PopMedNet accepts custom queries and distributes them to data partners. Data partners must approve all queries.

Steps 1 and 2 performed by each clinical organization.

Step 3 performed by data partner.

Steps 4, 5, and 6 performed by ESP, an open-source software platform that organizes and maps EHR data.

DATA PARTNER’S FIREWALL

chronicdisease.org

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*Data partners can be clinical organizations, health information exchanges or networks, or any other group holding EHR data.