

# MDPHnet: Real-time Public Health Surveillance

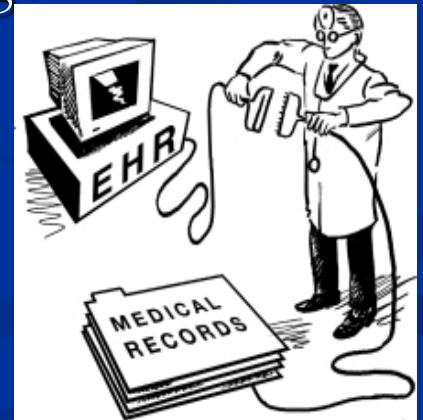
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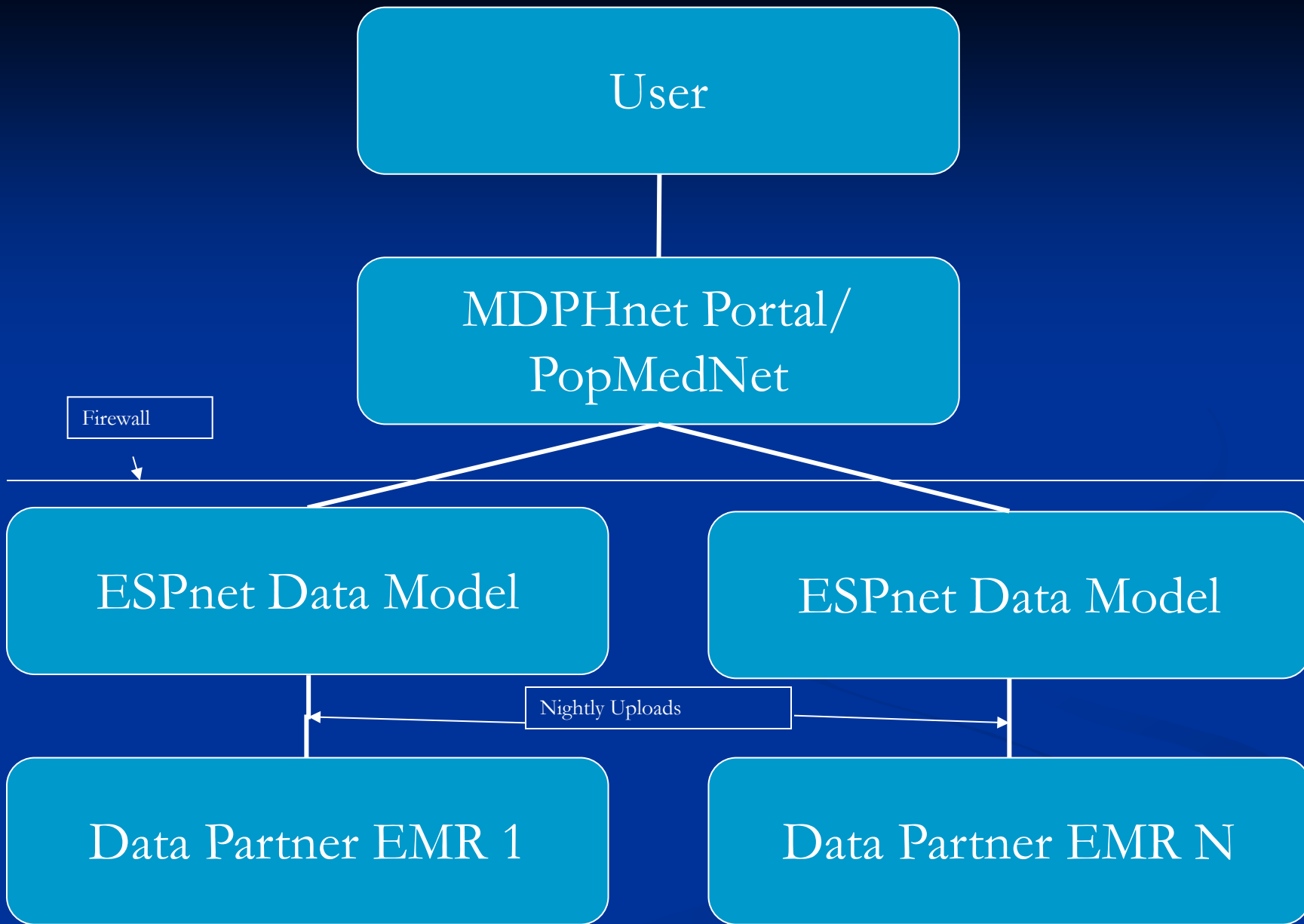
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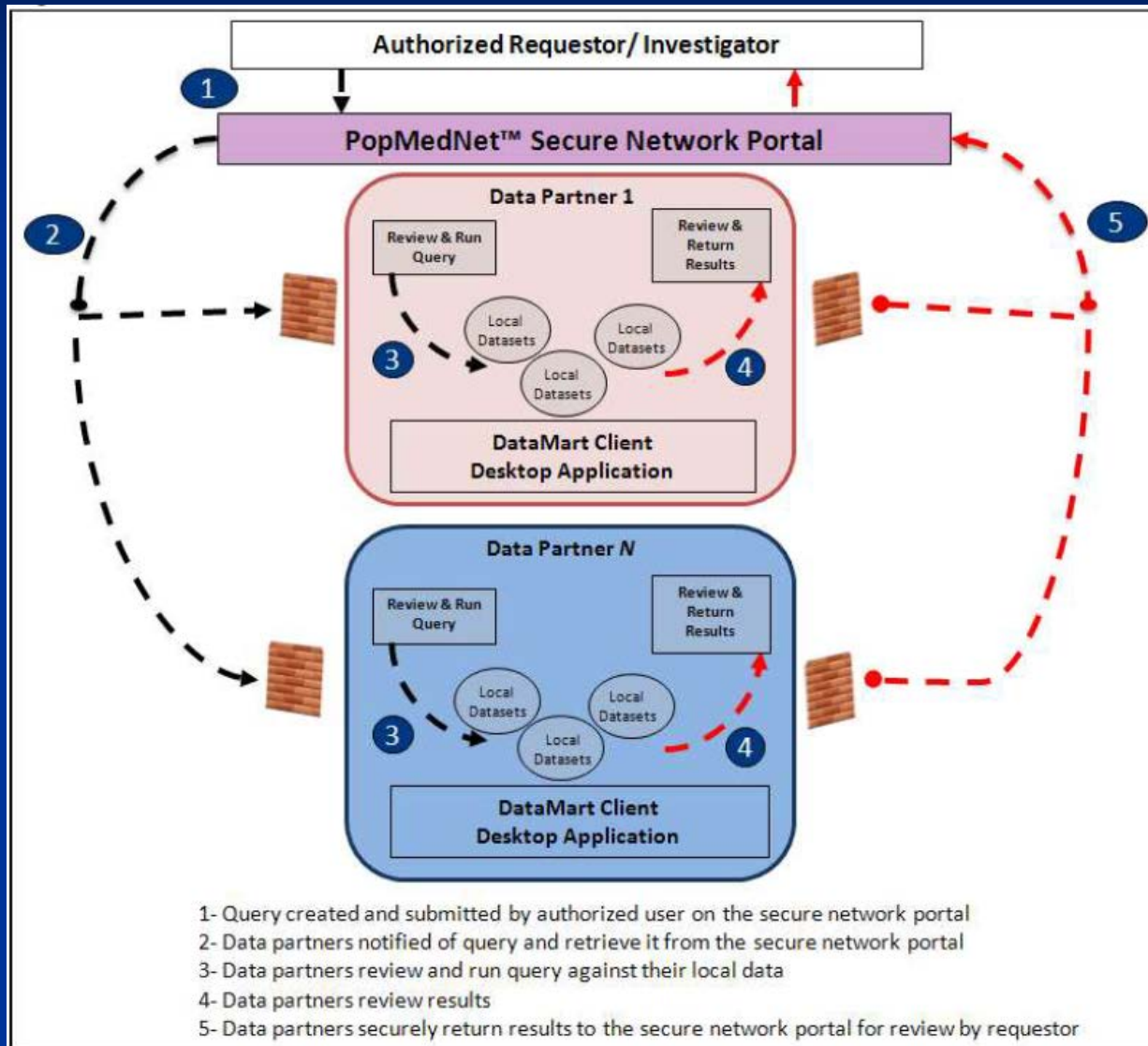
# Overview of MDPHnet

- Ambulatory data
  - Patient visits, pharmacy and labs
- Collaborative effort
  - MDPH, Atrius Health, Massachusetts League of Community Health Centers, Cambridge Health Alliance
- Online query builder tool
  - Complex querying also available





# Architecture of MDPHnet



# Features of MDPHnet

- Privacy
  - Data stays with the providers
- All ICD-9 codes available
  - Many possibilities, new information
- Reportable diseases
  - ILI and Diabetes
  - Smoking and Asthma
- SQL Submission
  - Enables querying of entire data model

# Features of MDPHnet

- Scheduled Queries
- ZIP code stratification
- Cohorts

# Interoperabilty

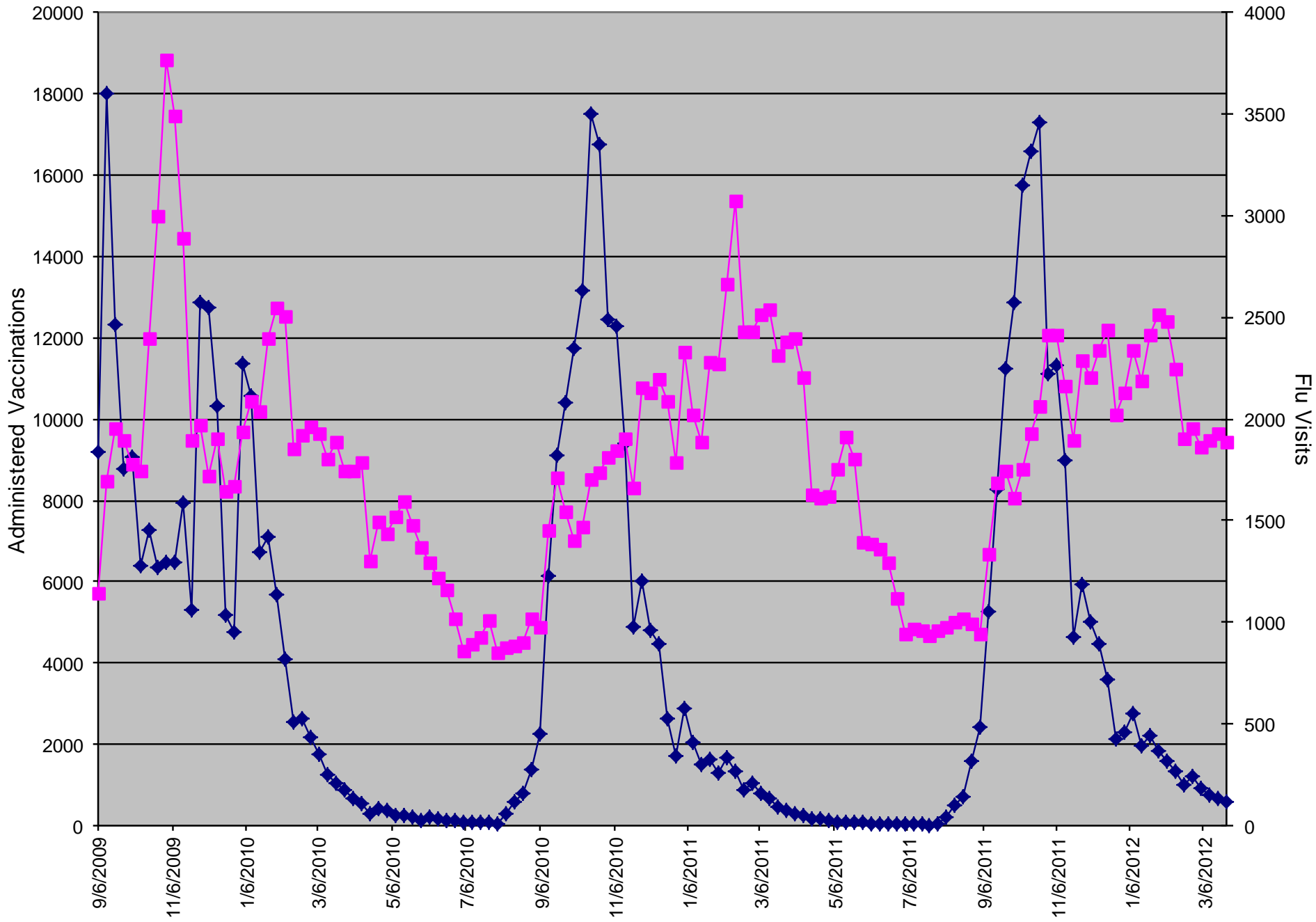
- Atrius uses different EMR system from Mass League and Cambridge Health Alliance
- Built with the Query Health standard

# MDPHnet Usage

- 15% of epidemiologists at the department registered
- Monthly usergroups
- Proof-of-Concept queries
  - Diabetes
  - ILI



# Flu vaccinations and visits based on data from MDPHnet



# Governance

- Representatives from each partner
- Monthly meetings
- Governance document
  - Response times
  - Suppression rules
- Funding and support structure

# Future

- Statistical extrapolation to state prevalences
- Linkages
- Basis for cloud-based tools at DPH

# More Information

- Systems like this have potential nationwide
- Other pilot projects are currently in various stages
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