Public-private partnerships for Environmental Public Health Tracking

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Traditional public health surveillance

- **Structure:** Health care providers and analytical laboratories report to state-based registry systems

- **Topics of interest:**
  - Cancer
  - Birth defects
  - Occupationally-related illnesses
  - Blood lead levels

Environmental Public Health Tracking

- Interest extends beyond this short list of topics

- Even when dealing solely with disease surveillance, we recognize in EPHT that alternative sources of data are potentially useful

Public-private partnerships in EPHT

- In the information age, many large databases contain health information in the private sector
- Utilization of these databases for EPHT requires the creation of alternative models for disease surveillance
- Issues:
  - Confidentiality (for patients *and* corporate entities) and HIPAA
  - Data ownership
  - Data quality assurance
  - Adaptability to objectives of population disease surveillance

Public-private partnerships in EPHT

- We analyzed four databases covering physician office practice in California:
  - Pacific Business Group on Health (PBGH), San Francisco
  - Integrated Healthcare Association (IHA), Walnut Creek
  - California Public Employees Retirement System (PERS), Sacramento
  - Kaiser-Permanente of Northern California (KPNC), Oakland
- Specific focus on asthma for this analysis

Database characteristics of interest

- Adaptability to EPHT
  - Numerator variables
    - Seek a wide variety of diseases
    - Date of birth, gender, race/ethnicity, address
    - Occupation
    - Dates and types of service (ER visit, prescription purchasing, etc)
  - Denominator variables—can we define a population at risk?
- Barriers to use for EPHT

PBGH and IHA

- Pacific Business Group on Health
  - A voluntary coalition of 48 purchasers of health benefits, including large firms and public agencies
  - Main purpose is aggregation of buying power
  - Covers approximately 3 million enrollees
- Integrated Healthcare Association
  - A group composed of California health plans, physician groups, and health care systems
  - Interested in policy development, health services research
  - Data collection project involving 6 health plans with over 8 million enrollees

PBGH and IHA: Data collection

- PBGH monitors only patients with diagnoses of interest—not suitable for prevalence calculations

- Public health surveillance aligned with IHA interests but not PBGH interests

- Both oriented towards HEDIS measures
  - All screening and chronic disease management measures
  - Limited to 3 diseases for monitoring purposes (asthma, diabetes, coronary artery disease)

California Public Employees Retirement System

- A state government agency purchasing health insurance on behalf of 1.2 million government employees, retirees, and dependants

- Largest employer purchaser in the state

- A member of PBGH

California Public Employees Retirement System

- Developing "data warehouse" by requiring standardized claims forms (UB-82)

- Managed care organizations to develop encounter forms that are compatible with this format

- Both numerator and denominator data easily adaptable to Tracking purposes

- Policies to govern external access to PERS data are under development; HIPAA a large concern for this issue

Kaiser-Permanente of Northern California

- Regional HMO with nearly 3.2 million members
- Ongoing monitoring of both beneficiary pool and all transactions related to patient care
- Extensive history of research collaboration
  - Maintains Oakland campus Division of Research
  - Both business and public health interests
  - Interaction with EHTP governed by collaborative research model

Summary of data sources

	Variables of interest?	Valid denominator data?	Access for EPHT?
PBCH	Few (HEDIS)	No	No incentive for participation
IHA	Few (HEDIS)	Yes	Interested; currently lacks demographic data
PERS	Many	Yes	Policies under development
KPNC	Many	Yes	Through research collaborator model

Alameda County Demonstration Project in EPHT

- A single, urban county in Northern California

- Calendar year 2001

- Monitoring

  – Birth outcomes

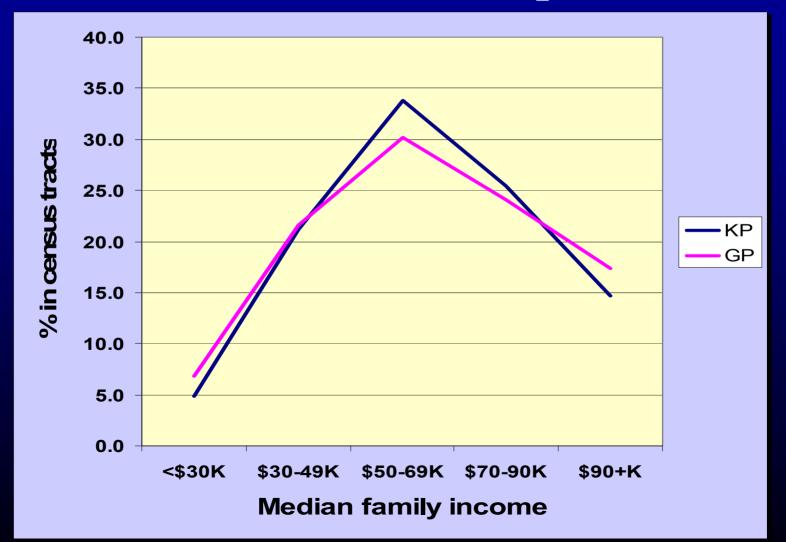 – Asthma-related health care utilization

  – Traffic exposure

Asthma-related health care utilization

- Sources: Kaiser Permanente of Northern California and Medi-Cal (part of DHS)
- Relationship with KP Division of Research
  – Collaborators on grant (2); require both funding and some control of findings
  – Sophisticated IT support, clinical epidemiologists
  – Seen from their end as a *research* project; less interested in ongoing system development, policy implications
  – Understood that ongoing system would require re-negotiation of relationship

Asthma-related health care utilization

- Implications for tracking:
  - 6.1 million person-months for Alameda County in 2001 (Medi-Cal added 1.2 million person-months to this)
  - About 35% of county population

Income group representation of Kaiser vs. General Population

KPNC asthma-related events, Alameda County 2001

- Core EPH Indicators for asthma burden (CSTE/CDC)
  - 587 hospitalizations
  - 2,694 ER visits
- EPHI under development
  - 51,087 outpatient clinic visits
  - 218,205 prescription fills (asthma only)

Conclusions

- Data collection efforts in the private sector vary in their adaptability for EPHT

- Some are inclined towards collaboration for public health policy development, while some are not

- Collaboration with private sector health providers and purchasers can make available
  - Very large sample sizes
  - A wide variety of outcomes for monitoring

Thank you…

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