

# Building A Use Case: Public Health Surveillance

## NCIOM Task Force on All-Payer Claims Database

Steve Cline, Community Care of NC  
Anna Waller, UNC School of Medicine  
Aaron Fleischauer, NC Division of Public Health  
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## Agenda

- ▶ **Framing the APCD issue for Public Health**
  - ▶ *Steve Cline, Community Care of North Carolina*
- ▶ **Successful PH APCD Initiatives in other states**
  - ▶ *Anna Waller, Carolina Center for Health Informatics, UNC School of Medicine*
- ▶ **Potential NC specific PH use cases**
  - ▶ *Aaron Fleischauer, North Carolina Division of Public Health*
- ▶ **Q&A**

## Disclaimer

- ▶ The ideas and potential public health use cases for an APCD in North Carolina presented by the speakers today do not represent the official position or policy statement of the organizations they work for. They represent a sampling of public health benefits based on best practices in other states and knowledge of existing public health programs.

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## Agenda

- ▶ Framing the issue for Public Health
  - ▶ Data Gap
  - ▶ Utilization
  - ▶ Cost
  - ▶ Quality
- ▶ Examples of successful PH APCD Initiatives in other states
- ▶ Potential NC specific PH use cases
- ▶ Q&A

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## **Framing the APCD issue for Public Health: Data Gap**

- ▶ Traditional PH surveillance
- ▶ Additional data possible from an APCD
- ▶ Wider, deeper view of the population
- ▶ Better data to inform health policy
- ▶ Common nationally recognized data set allows state to state comparisons

## **Framing the issue for Public Health: Utilization**

- ▶ Analysis and reporting of utilization patterns and trends
  - ▶ Access to care
  - ▶ Geographic distribution
  - ▶ Overutilization
- ▶ Performance indicator for the healthcare system
- ▶ Target PH programs based on needs
- ▶ Better view into determinants of health

## **Framing the issue for Public Health: Cost**

- ▶ Transparency
- ▶ Consumer focused tools
- ▶ Cost comparisons across settings of care, practices, geographic regions
- ▶ Analysis of spending trends
- ▶ Evaluate interventions

## **Framing the issue for Public Health: Quality**

- ▶ Transparency
- ▶ Drive quality improvement
- ▶ Nationally recognized evidence based quality and utilization measures
- ▶ Comprehensive benchmarking
- ▶ Evaluate interventions

## Agenda

- ▶ Framing the issue for Public Health
- ▶ Examples of successful PH APCD Initiatives in other states
  - ▶ Colorado: Hepatitis C
  - ▶ New Hampshire: Injury
  - ▶ Minnesota: Chronic Disease
  - ▶ Colorado: Cesarean Section Delivery
  - ▶ Quality of Care Dashboards
- ▶ Potential NC specific PH use cases
- ▶ Q&A

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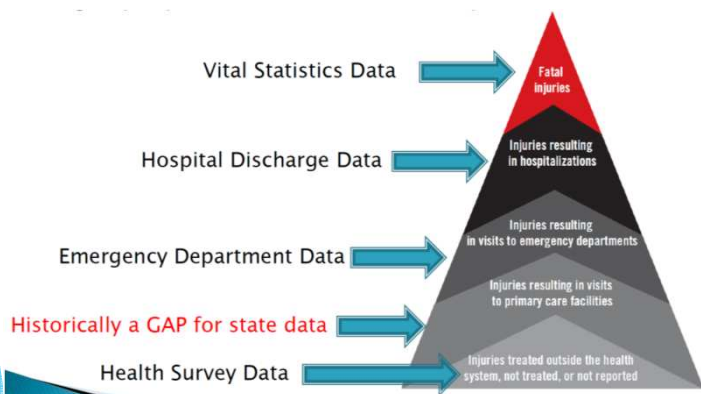
## Examples of successful PH APCD Initiatives in other states

- ▶ Colorado: Tracking Hepatitis C Prevalence and Treatment
  - ▶ Who is infected with Hepatitis C in Colorado?
    - ▶ 70% born between 1945 and 1965
    - ▶ 54% male
    - ▶ 85% urban
  - ▶ Appropriate treatment?
    - ▶ 2013: 96% getting NO treatment
    - ▶ 2014: 89% getting NO treatment
      - ▶ Only 7% getting newer, more effective treatment
  - ▶ Further work being done on costs of Hepatitis C in Colorado

From: <https://www.apcdshowcase.org/content/snapshot-hepatitis-c-colorado>

## Examples of successful PH APCD Initiatives in other states

▶ New Hampshire: Injury Pyramid Completion



From: [http://www.apcdouncil.org/sites/apcdouncil.org/files/media/apod\\_utility\\_for\\_ph\\_love.pdf](http://www.apcdouncil.org/sites/apcdouncil.org/files/media/apod_utility_for_ph_love.pdf)

## Examples of successful PH APCD Initiatives in other states

- ▶ Estimating the Prevalence, Cost and Geographic Variation of Chronic Conditions in Minnesota
  - ▶ Granular information on diagnoses and health care use for nearly all Minnesotans with health insurance coverage
  - ▶ Estimates of overall chronic disease prevalence and analysis of health care spending for people diagnosed with chronic disease.
  - ▶ In 2012, 35.4 percent of insured Minnesota residents had at least one diagnosed chronic condition and more than half of Minnesota residents with a chronic condition (57.8 percent) had multiple chronic conditions.
  - ▶ Will help identify additional opportunities to impact prevalence and cost and assess whether existing initiatives are successful.

From: <https://www.apcdshowcase.org/content/chronic-conditions-minnesota-new-estimates-prevalence-cost-and-geographic-variation-insured>



## Examples of successful PH APCD Initiatives in other states

- ▶ Colorado: Identifying incidence, trends, and costs of cesarean delivery (C-section)
  - ▶ Commercially insured patients have higher rate than Medicaid insured patients
  - ▶ Rate has decreased for commercially insured while increasing for Medicaid insured
  - ▶ Costs for C-section almost twice as much for commercial insurance as for Medicaid
  - ▶ Further geographical and demographic analyses planned
  - ▶ Recommendations made to encourage reduction in C-section deliveries

From: <https://www.apcdshowcase.org/content/opportunities-bend-cost-curve-reduce-cesarean-delivery-rates-colorado>

## Examples of successful PH APCD Initiatives in other states

- ▶ Creating Quality of Care Dashboards
  - ▶ Maine, New Hampshire, Massachusetts, Colorado, Utah and other states have created these with their APCD data
  - ▶ Consumers can compare selected diagnoses and procedures across healthcare facilities
    - ▶ Costs
    - ▶ Patient satisfaction ratings
    - ▶ Safety measures including complications and healthcare associated infection
    - ▶ Map of facility locations

## Examples of successful PH APCD Initiatives in other states

From: [http://www.apcdouncil.org/sites/apcdouncil.org/files/media/apcd\\_utility\\_for\\_ph\\_love.pdf](http://www.apcdouncil.org/sites/apcdouncil.org/files/media/apcd_utility_for_ph_love.pdf)

Quality of Care (more)	Boston Medical Center	Brigham & Women's Hospital	Massachusetts General Hospital
Quality Rating	★★★	★★★	★★★
Statistical Significance	Not different from State Average Quality	Not different from State Average Quality	Not different from State Average Quality

Cost of Care (more)	Boston Medical Center	Brigham & Women's Hospital	Massachusetts General Hospital
Cost Rating	\$	\$\$	\$\$\$
Statistical Significance	Below Median State Cost	Not Different from Median State Cost	Above Median State Cost

## Examples of successful PH APCD Initiatives in other states

- ▶ Web sites with APCD examples
  - ▶ <https://www.apcdshowcase.org/>
  - ▶ <http://www.apcdouncil.org/>
  - ▶ [http://www.apcdouncil.org/sites/apcdouncil.org/files/media/apcd\\_utility\\_for\\_ph\\_love.pdf](http://www.apcdouncil.org/sites/apcdouncil.org/files/media/apcd_utility_for_ph_love.pdf)
  - ▶ Colorado: <http://www.civhc.org/All-Payer-Claims-Database.aspx/>
  - ▶ New Hampshire: <https://nhchis.com/>
  - ▶ Minnesota: <http://www.health.state.mn.us/healthreform/allpayer/>
  - ▶ Maine: <https://mhdo.maine.gov/claims.htm>
  - ▶ Massachusetts: <http://www.chiamass.gov/ma-apcd/>
  - ▶ Utah: <http://health.utah.gov/hda/apd/>



## Agenda

- ▶ Framing the issue for Public Health
- ▶ Examples of successful PH APCD Initiatives in other states
- ▶ **Potential NC specific PH use cases**
  - ▶ **Chronic Disease**
  - ▶ **Infectious Disease**
  - ▶ **Risk**
- ▶ Q&A

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## Potential NC specific Public Health Use Cases: Chronic Diseases

- ▶ Provide a snapshot of a community's health needs by assessing the prevalence of various chronic disease conditions.
- ▶ Describe trends in health care spending for specific chronic conditions and risk factors including tobacco use, and opioid abuse and overdose.

## Potential NC specific Public Health Use Cases: Infectious Diseases

- ▶ Enable targeted public health initiatives and interventions based on strategic assessment of health care disparities including targeting screening and linkage to care for HIV, STDs and viral Hepatitis.
- ▶ Enable case finding for Public Health disease reporting.
- ▶ Understand antibiotic prescribing practices, healthcare-associated infection rates and antimicrobial resistance patterns.

## Potential NC specific Public Health Use Cases: Risk

- ▶ Describe healthcare utilization and medical needs post-disasters for public health preparedness planning.
- ▶ Assess the surveillance gap in occupational related injuries and illnesses.

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## Question & Answer

***Thank you***

[scline@n3cn.org](mailto:scline@n3cn.org)  
[anna\\_waller@med.unc.edu](mailto:anna_waller@med.unc.edu)  
[aaron.fleischauer@dhhs.nc.gov](mailto:aaron.fleischauer@dhhs.nc.gov)