



# Strategies for supplementing your Needs Assessment with local data



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# Objectives

Participants will understand:

- The difference between primary and secondary data
- The benefits and limitations of secondary data sources and how to access some secondary data sources
- How to supplement their Needs Assessment data with secondary data sources
- Different methods of primary data collection and the advantages and disadvantages of qualitative data collection methods





### Data collection methods

• **Primary data** - is collected for the first time by the researcher (or local MCAH program)

 Secondary data - is the data already collected or produced by others (e.g., Community Health Status Reports, DataBooks, Kidsdata.org)





# Two Ways to Supplement NA Data

- Gather additional data from secondary data sources
- Gather primary data
  - Conduct key informant interviews
  - Hold focus groups
  - Administer surveys
  - Use observational techniques (e.g., photo voice)





#### Secondary Data Sources Useful for MCAH Needs Assessment

- State and nationally collected population based health data sets
  - Vital records –Birth, death and fetal death
  - Birth-death cohort files
  - Census data
  - Hospital discharge abstracts
  - Reportable communicable disease data
  - Disease specific registries
  - Genetic disease lab results





#### **Benefits of These Data Sets**

- Uses standard definitions and methods so local and state data are comparable to national data
- Provides enough data for local health jurisdictions to look at small area patterns
- Useful for epidemiological studies
- Some utility in looking at patterns of service utilization and behavior
- Questions have been validated and wording can
  be used in local surveys

#### Secondary Survey Data Sets -National

- <u>National Health Interview Survey (NHIS)</u>
- <u>National Health & Nutrition Examination Survey</u>
- <u>National Survey of Children's Health</u>
- <u>National Survey of Family Growth</u>
- <u>National Medical Care Utilization & Expenditure Survey</u>
- PRAMS Perinatal Risk Assessment Survey
- Youth Risk Behavioral Survey (YRBS)
- <u>Behavioral Risk Factor Survey (BRFS)</u>





### Utility and Limitations of National Survey Data Sets

- ★ Standard definitions and methods
- ★ Allows for generation of synthetic estimates for states and local health jurisdictions
- ★ Provides data for epidemiological, community assessment and behavioral, and evaluation
- Not available in a timely manor
- Statistical analysis requires high level analysts and use of particular software





#### Secondary Survey Data Sets: California

- California Health Interview Survey (CHIS)
- <u>California Healthy Kids Survey</u>
- MIHA Maternal and Infant Health Assessments
- Listening to Mothers Survey





#### Benefits and Limitations of California Survey Data

- ★ Collected regularly and published in a more timely manner than national surveys
- ★ All ask many of the same questions as national surveys so they are comparable
- ★ CHIS allows LHJs to pay for oversampling
- Sample sizes can limit statistical utility of data
- Parents can opt out of the school survey so sample may not be representative





#### Administrative Data sources

Both State and National Program Data

- Child Welfare TANF, Foster Care, child abuse
- Mental Health service utilization, estimates of need
- Drug and alcohol surveys of prevalence, statistics on utilization
- Education dropouts, academic achievement, physical fitness, overweight
- Criminal justice crime rates, domestic violence
- Medicaid/MediCal utilization data, diagnoses and lab results, costs
- State licensing data



#### Problems with administrative data sets

- Purpose of data collection is often only for reporting productivity or billing so quality of health data suspect
- Measures conditions in those already in the system so not representative of the conditions in the general population





#### Other government collected health related data

- Environmental surveillance data
  - Air
  - Water
  - Soil
  - Food
- Injury/Safety
  - Death and hospital summaries
  - California Highway patrol /National Highway Traffic Safety Admin.
  - Consumer Safety Commission National Electronic Injury Surveillance System



# Data collected by private and non-profit agencies

- Foundations (e.g. Kaiser, Casey, RWJ, California Wellness, Lucile Packard)
- Advocacy Groups (e.g. Children's Now, Children's Defense Fund, March of Dimes)
- Private Insurance Companies
- Healthcare facilities (e.g. hospitals, HMOs)





#### Criteria for Assessing a Secondary Quantitative Data Source

- Data Quality
  - Complete and accurate
  - Valid
- Consistency over time
- Adequacy for local use
  - Sample size for local community
  - Contains the specificity for local needs
- Timeliness
- Accessibility
  - Cost



- Confidentiality
- Availability over time



# Secondary Data Sources at County Level or below

- <u>Kidsdata.org</u> data on more than 600 measures of child health and well being
  - program of the <u>Lucile Packard Foundation for</u> <u>Children's Health</u>,
  - Depending on data source:
  - available at county, cities, school districts, and legislative districts
  - many demographic descriptors including family income, race/ethnicity, and age





# Kidsdata.org – (Cont.)

- NOTE: data have not been tested for statistical significance, except in a few cases where noted.
  - Apparent trends over time and differences across regions and among demographic groups may or may not be statistically significant
- For more information about kidsdata.org, kidsdata@lpfch.org or call (650) 736-0676.





## Kidsdata.org Data Sources

- <u>California Breathing</u>
- <u>California Child Care Resource & Referral Network, California Child Care Portfolio</u>
- California Department of Education:
  - <u>California Basic Educational Data System (CBEDS)</u>
  - California High School Exit Examination (CAHSEE) Research Files
  - California Longitudinal Pupil Achievement Data System (CALPADS)
  - <u>DataQuest</u>

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- English Learners Data Files
- Free/Reduced Price Meals Program & CalWORKS Data Files
- Office of Homeless Education
- <u>Physical Fitness Testing Statewide Research Files</u>
- Special Education Division; Assessment, Evaluation and Support, Special Tabulation
- <u>Standardized Testing and Reporting (STAR) Results</u>
- <u>California Department of Finance, Demographic Research Unit</u>
- <u>California Department of Health Care Services</u>
- <u>California Department of Justice, California Criminal Justice Profiles</u>
  - Domestic Violence-Related Calls for Assistance Database
  - Monthly Arrest and Citation Register (MACR) Data Files



# Kidsdata.org Data Sources (cont.)

- California Department of Public Health:
  - <u>California Cancer Registry, Surveillance, Epidemiology, and End Results (SEER) Program</u>
  - <u>California Department of Public Health, Center for Health Statistics and Informatics, Vital</u> <u>Statistics Section</u>
  - <u>Center for Family Health, Genetic Disease Branch, Newborn Screening Program</u>
  - <u>Childhood Lead Poisoning Prevention Branch</u>
  - Epidemiology and Prevention for Injury Control Branch
  - Immunization Branch, Kindergarten Assessment Results
  - <u>Sexually Transmitted Disease Control Branch</u>
- <u>California Department of Social Services</u>
- <u>California Employment Development Department</u>
- <u>California Office of Statewide Health Planning and Development</u>
- <u>California School Health Centers Association</u>
- Child and Adolescent Health Measurement Initiative, Data Resource Center for Child and Adolescent Health:
  - <u>National Survey of Children's Health</u>
  - <u>National Survey of Children with Special Health Care Needs</u>
- Feeding America, Map the Meal Gap



# Kidsdata.org Data Sources (cont.)

- Insight Center for Community Economic Development and Dr. Diana Pearce, Center for Women's Welfare, School of Social Work, University of Washington
- <u>Stanford Center for Policy, Outcomes, and Prevention</u>
- University of California at Berkeley, Center for Social Services Research, Child Welfare Dynamic Report System
- University of California at Los Angeles, Center for Health Policy Research, California Health Interview Survey
- U.S. Census Bureau:
  - <u>American Community Survey</u>
  - <u>Current Population Survey</u>
- U.S. Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network
- U.S. Department of Housing and Urban Development, Fair Market Rent
- WestEd and California Department of Education
  - <u>California Healthy Kids Survey</u>
  - <u>California Student Survey</u>
  - <u>California School Climate Survey</u>





# **County Health Rankings**

- <u>County Health Rankings</u> annual measure of vital health factors, including high school graduation rates, obesity, smoking, unemployment, access to healthy foods, the quality of air and water, income inequality, and teen births
  - Most data from 2014-2016, also earlier data
  - collaboration between the <u>Robert Wood Johnson</u> <u>Foundation</u> and the <u>University of Wisconsin</u> <u>Population Health Institute</u>.



# California Health Interview Survey

- <u>California Health Interview Survey</u> (CHIS) the largest state health survey in the nation.
- Random-dial telephone survey that asks questions on a wide range of health topics
- Conducted on a continuous basis allowing the survey to generate timely one-year estimates
- Provides representative data on all 58 counties
- Approximately 20,000 Californians interviewed each year





# California Health Interview Survey (cont.)

- Easy to use data query system:
  AskCHIS<sup>™</sup> and AskCHIS<sup>™</sup> Neighborhood Edition
- Smallest counties are combined and county level data not available for them
- Depending on questions/topic, often very large confidence intervals (CIs)
- Can do stratification by race, education, and many other variable but rates may become unstable and Cls very large





#### Types of Data

- Quantitative Data numbers, rates, statistics
  - Primary-you collect it with structured instruments
  - Secondary use an existing data sources
- Qualitative Data words, thoughts, actions, descriptions
  - Focus groups
  - Open ended interview questions (e.g., Key informant interviews)
  - Observations





## Quantitative

#### **Advantages**

- Quantifies results (e.g., rates)
- Allows statistical comparisons, multivariate and trend analyses
- Allows comparisons with other groups and over time using standard measures
- Conserves resources if secondary data source available

#### Disadvantages

- Requires expertise in data analysis
- Limited use in situations where numbers are small
- Collecting primary quantitative data is often expensive and timeconsuming
- Can overlook emerging issues



#### Quantitative Data: Disadvantages (cont.)

- Presupposes you to know the significant factors
- Often lacks important variables such as geographic markers or detailed race or ethnicity categories
- May not be timely





## **Qualitative Data**

#### Advantages

- Rich data with more details and contextual information
- Can provide new insights
- Can identify emerging issues
- Usually done Face-to-face or over phone which provides opportunity to clarify questions
- Can be more timely

#### Disadvantages

- Requires expertise in staff and can be time consuming
- Possible inconsistency due to flexibility
- Difficult to make comparisons
- Transcribing and analysis of data can be costly
- Individuals may alter responses because of group environment (e.g., in focus groups)



# Factors to Consider in Choosing the Type of Data You Need

- Do I have an evidenced-based hypothesis about the cause of a problem or am I searching for new insights?
- Is this a well described and quantifiable problem?
- Do I want to compare data with known standards or other population groups?





# Factors to Consider in Choosing the Type of Data You Need (cont.)

- Do I want to understand the perspective of individuals in a community?
- Will quantitative data be meaningful? (i.e. adequate numbers)
- Are there reliable secondary data sources available?
- Are there adequate local resources for a particular method?





# Factors to consider in selecting a quantitative data set

- Are the demographic variables relevant to my population(s) of interest?
- If I want to calculate population based indicators, is there comparable denominator data available that corresponds to my population of interest?
- Is data collected over time at regular intervals?
- Is the data timely?





### Types of the assessment

- **Epidemiology** -- answers who, what when where and why of a particular condition of interest
- Community assessment Focuses on what are the needs, perceived problems and capacity
- Behavioral assessment queries individuals about social behavioral and cultural influences
- Evaluation or monitoring explores the impact of a program or policy on a population
- Health system assessment services, utilization, resources/costs



#### Considerations for Primary Quantitative Data Collection (surveys)

- Existence of a validated instrument or set of questions for area(s) of interest
- Potential sample size
- Potential for random sample
- Resource availability \$ and expertise





# Considerations for Primary Quantitative Data Collection

- Potential partners
- Possibility of using web based surveys
  - Free or low cost
  - Generates summaries
  - Can promote via social media
  - Access and receptivity of target population to web





#### **Choosing a Qualitative Method**

- Determining the objectives for the study and identifying the type of information needed
- Identifying local expertise in both conducting the data collection and analyzing the data collected
- Identifying resources





## **Qualitative Methods**

- Open-ended Questionnaires
- Interviews
- Focus Groups
- Case Studies (not going to discuss)
- Observations (not going to discuss)





### Questionnaires

- Series of written questions on a topic
- Two types of questions:
  - 1. Open-Ended Questions asks a question but provides no answer
  - 2. Closed-Ended Questions provides a list of possible answers

Example related to breastfeeding:

- Open-ended qualitative question: "Can you tell be about why you chose breast or bottle feeding for your baby"
- Closed ended quantitative question: "Which of the following are reasons why you chose to breast feed/bottle feed your





## Questionnaires

#### Advantages

- Generally more economical than interviews since they may not require trained interviewers
- Self administered questionnaires can be anonymous, so they may be desirable for investigating sensitive attitudes or behavior

### Disadvantages:

- More time consuming than close ended questionnaires
- Require that subjects can understand written language and write a response
- Very subjective



## Interviews

- Completed by a trained interviewer who records responses from each subject
- More personal than self-administered questionnaires
- 2 types of interview:
  - Structured Interviews emphasis is on obtaining answers to carefully worded questions
  - In-depth Interviews interviewer does not follow a rigid form, but rather it is a dialogue between a skilled interviewer and the person being interviewed

# Interviews (cont.)

Use In-depth interviews when:

- It is about a complex matter
- In need of detailed information
- It is a highly sensitive matter
- Respondents are busy or of "high status"





# Interviews (cont.)

### **Advantages**

- Rich data and more details
- New insights
- Face-to-face contact
- Opportunity to clarify questions

### Disadvantages

- Expensive and time consuming
- Possible inconsistency due to flexibility
- Difficulty in transcribing and reducing data
- Need qualified and well-trained interviewers



## Focus Groups

- A small, facilitated, group discussion where about 5-12 people are brought together to explore attitudes about a particular topic of interest
- Uses group dynamics to generate data and insights that would be unlikely to emerge without that group interaction





When to use:

- As part of a needs assessment
- During a program
- At the end of a program
- Months after a program to gather perceptions on the outcome of that program





Use focus groups to:

- Identify and define the needs of a specific group
- Assist with interpretation of quantitative findings
- Obtain perceptions of project outcomes and impacts
- Identify what people know or don't know
- Identify barriers people experience
- Identify problems in project implementation





## Also use:

• when interested in understanding some issue from the perspective of a specific population

## OR

 when you have reason to believe that previous treatments of that issue have not sufficiently included that essential perspective





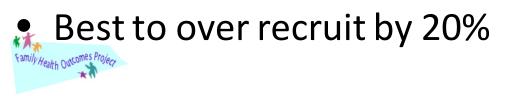
Design Tips:

- Number of participants : 5 minimum to 12 maximum
- Have a guide for the Group Facilitator that includes ground rules, objectives and questions
- Assure confidentiality
- Make sure the participants are comfortable
- Remember two things: Flow + Focus
- Minimum of 2 groups for each population segment





- The participants selected for the focus group must be:
  - representative of the intended audience
  - representative of various subgroups of the intended audience
- Establish criteria for selecting participants ahead of time
- Select the participants in advance and remind them one or two days prior to focus group date





- Focus groups should be conducted by an experienced moderator/facilitator
- The focus group should take place in comfortable setting and at a location that is easily accessible to your target audience
- A session should last between 1 and 2 1/2 hours





- Beginning the focus group sessions:
  - A list of guidelines and ground rules must be the first thing before the focus group begins
  - -"Break the Ice"





**Recording Information:** 

- Use a tape recorder
- Check prior to session to make sure everything is working
- Let the participants know that you are tape recording and be sure they are comfortable
- Have a note taker
- Make field notes after session
- Be sure to have informed consent of the participants





#### **Advantages**

- In-depth insight into how the participants feel about a specific topic
- More cost effective than individual interviews
- Findings are presented in a narrative form with actual participant quotations
- Participants are free to volunteer information on points that are important to them

### Disadvantages

- Narrative form can make summary and interpretation time consuming and difficult
- Respondents may hesitate to express concerns in a group setting
- Interaction between participants and facilitator may bias opinions
- Small number of respondents and the lack of random selection limits the ability to generalize to a larger population

## Take Home Points

- Collect data that is meaningful for your jurisdiction/population
- Use quantitative data and qualitative data where feasible to tell your story
- Be aware of the limitations of your data sets





# Questions?







# **Contact Information**

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