

# A Model for a 3- County Regional Health Assessment

Linn, Benton, and Lincoln County

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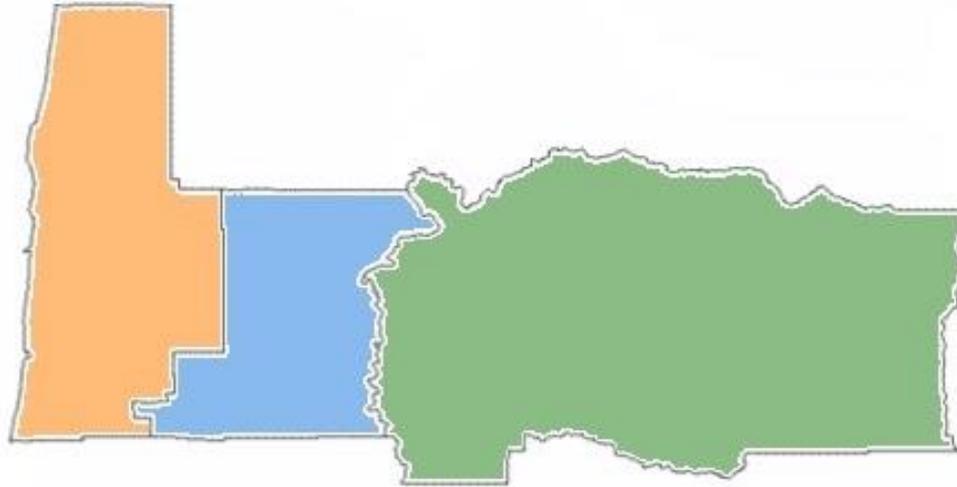
OPHA | October 12, 2015

# What We Will Cover

- Who we are
- The assessment cycle and regional picture
- Timeline
- RHA model walkthrough
  - RHA report
  - Data warehouse
- Challenges and opportunities

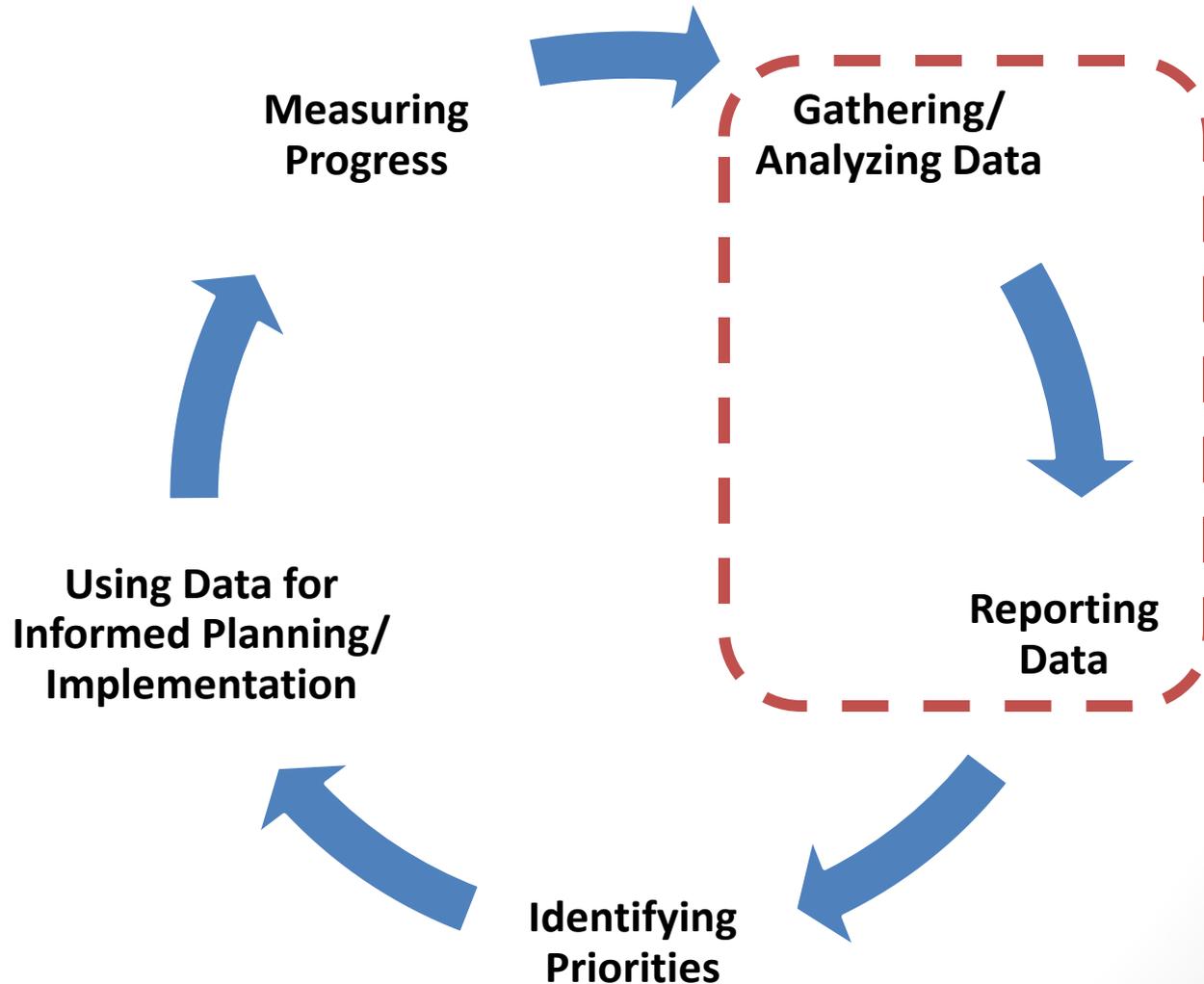
# Who We Are

- Linn, Benton, and Lincoln County Regional Health Assessment (RHA)

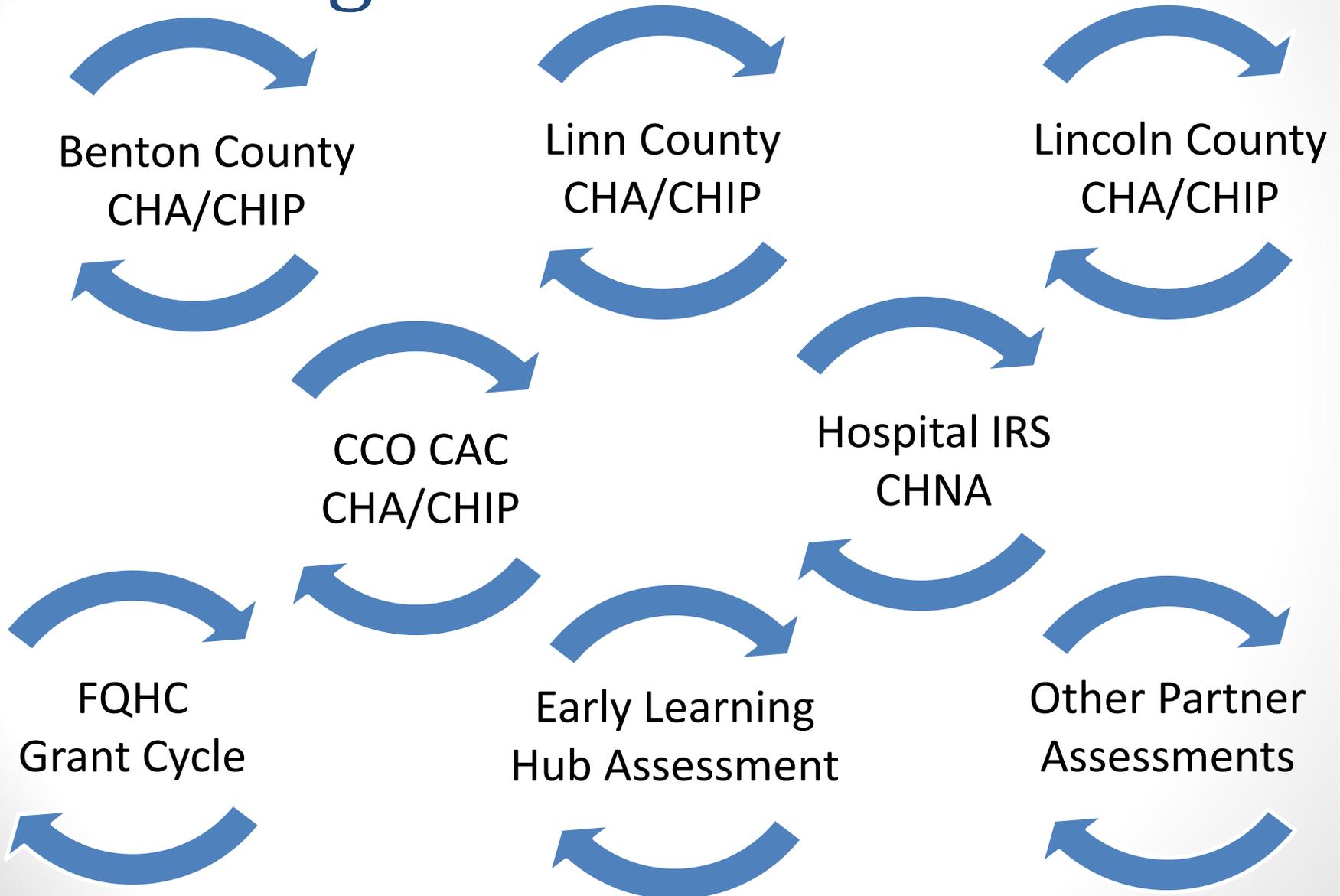


InterCommunity  
Health Network CCO

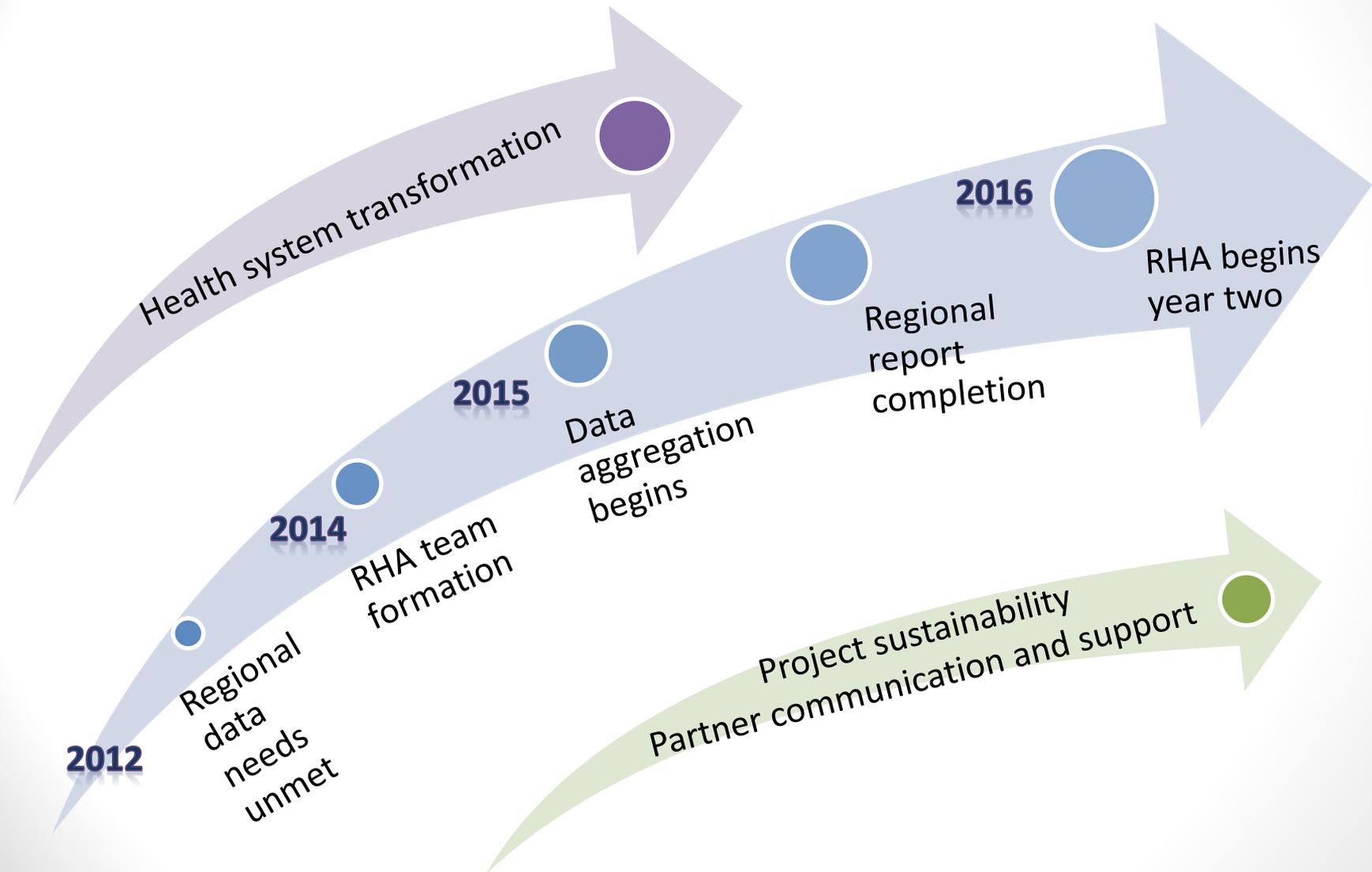
# The Assessment Cycle



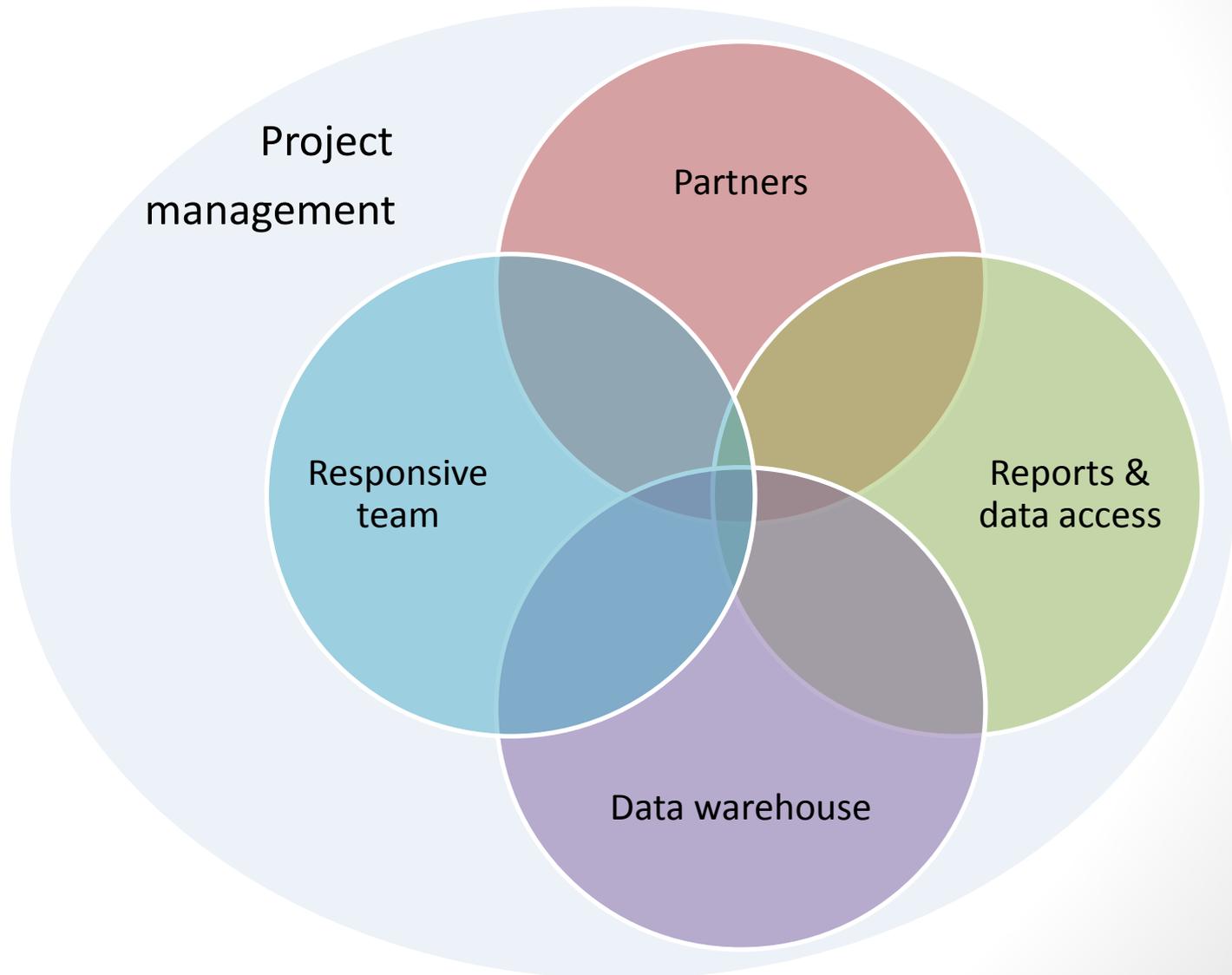
# The Regional Picture



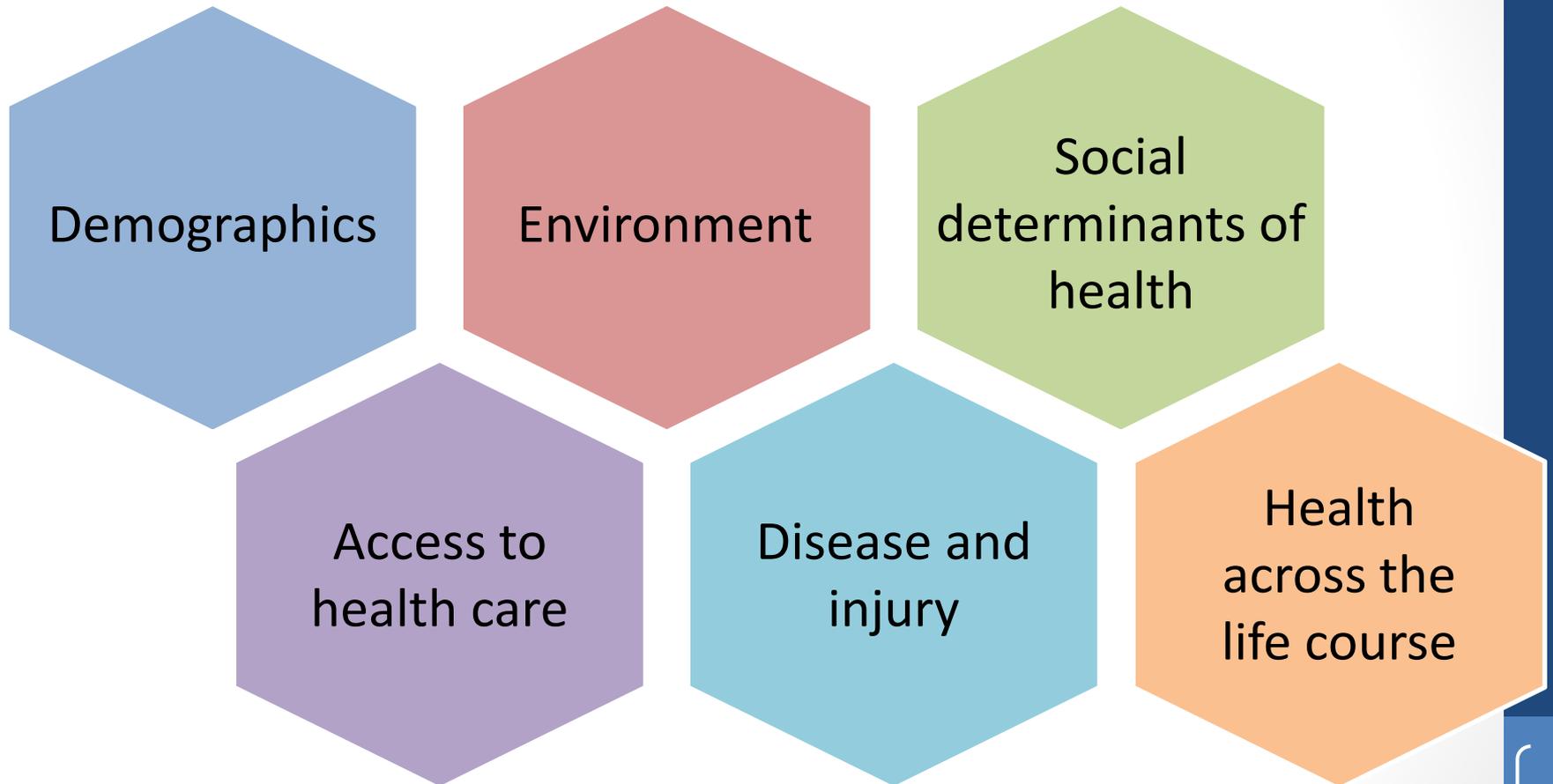
# Team Formation and Steps



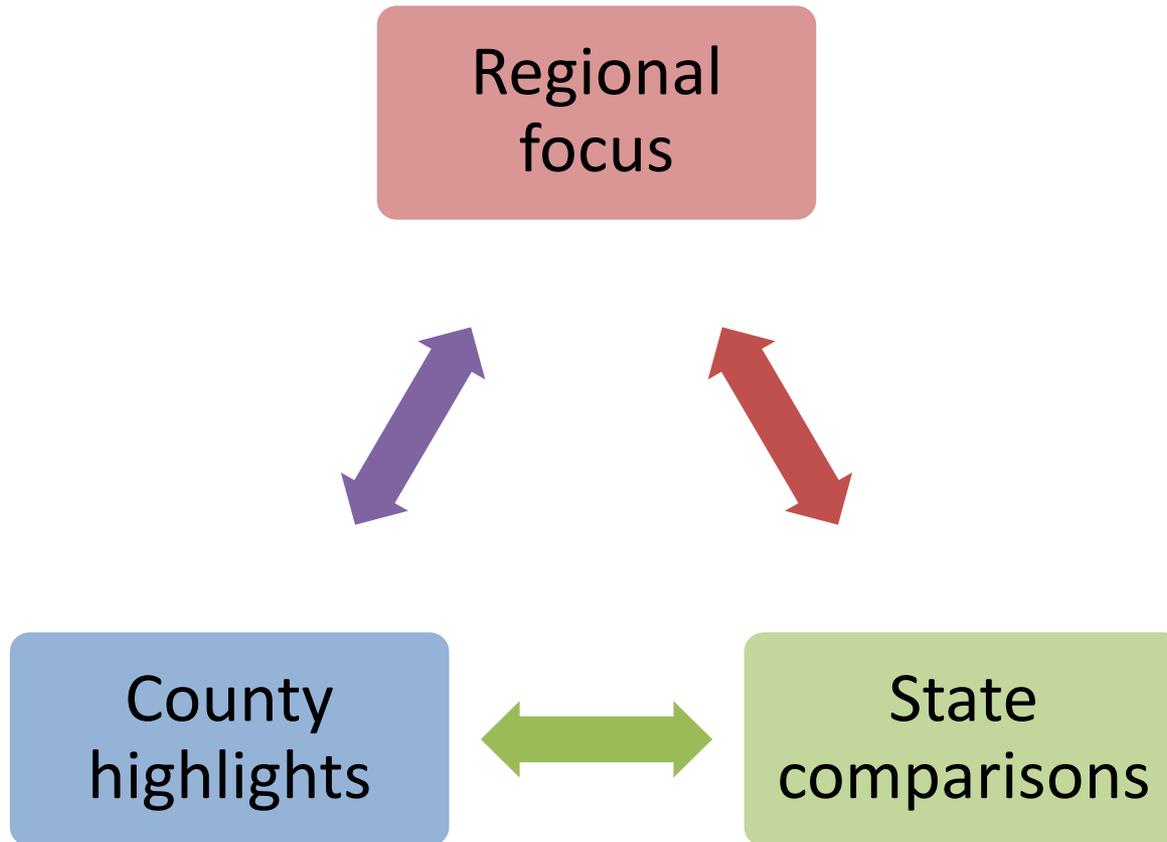
# Regional Health Assessment



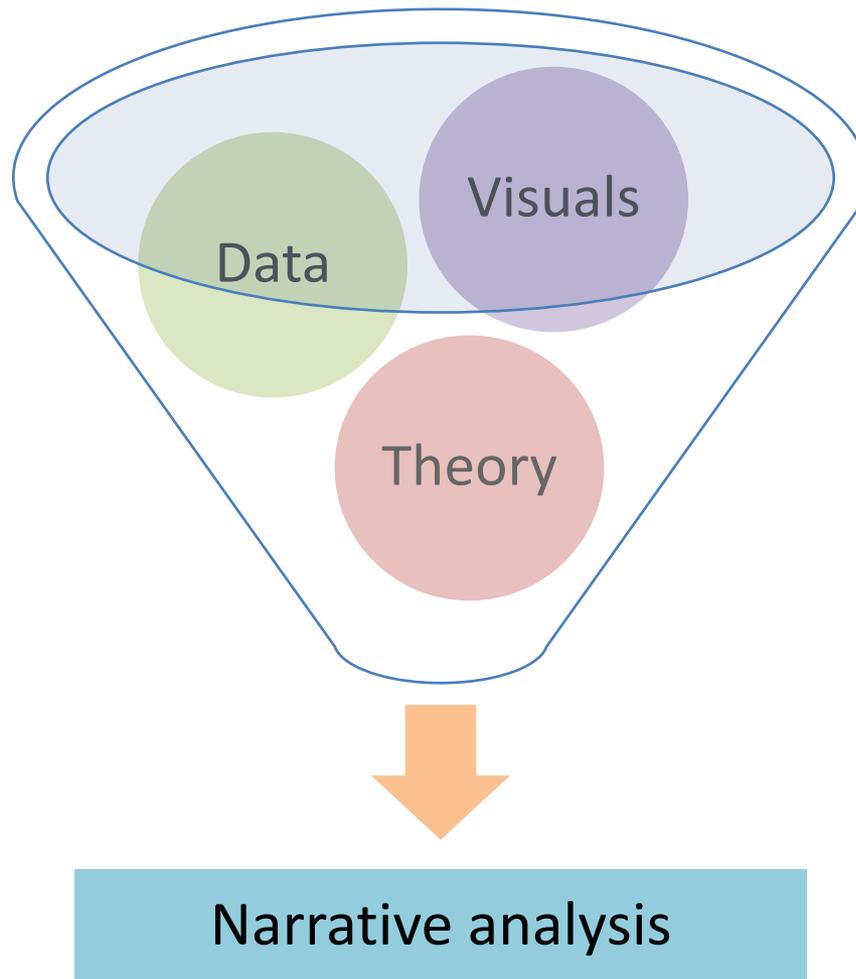
# Themes of the RHA



# RHA Report

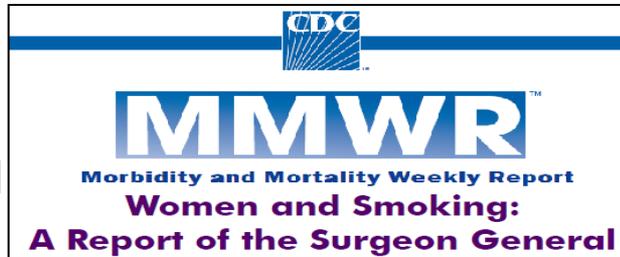


# Writing the RHA Report

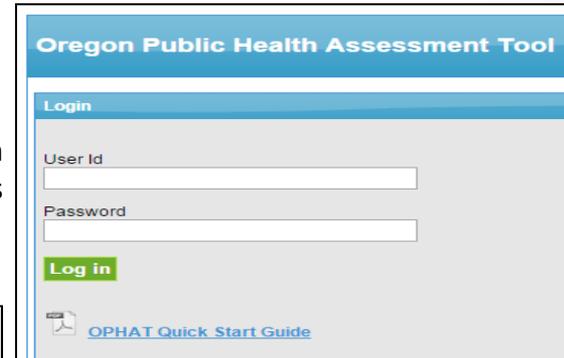


# Narrative Report

Theoretical background



Data sources



Data tables

| Percent of mothers who smoked during pregnancy |        |           |         |  |
|--|--------|-----------|---------|--|
| Year   | Place  | Age Group | Percent |  |
| 2011 - 2013                                    | Region | 15 to 17  | 18.852  |  |
| 2011 - 2013                                    | Region | 18 to 19  | 29.793  |  |
| 2011 - 2013                                    | Region | 20 to 24  | 23.288  |  |
| 2011 - 2013                                    | Region | 25 to 29  | 13.014  |  |
| 2011 - 2013                                    | Region | 30 to 34  | 8.85    |  |
| 2011 - 2013                                    | Region | 35 to 39  | 8.301   |  |
| 2011 - 2013                                    | Region | 40 to 44  | 9.091   |  |



Benchmarks

Smoking during pregnancy is the single most preventable cause of illness and death among mothers and infants. Smoking during pregnancy increases the risk of stillbirth, low birth weight, sudden infant death syndrome (SIDS), preterm birth, cognitive and behavioral problems, and respiratory problems in both mother and child.

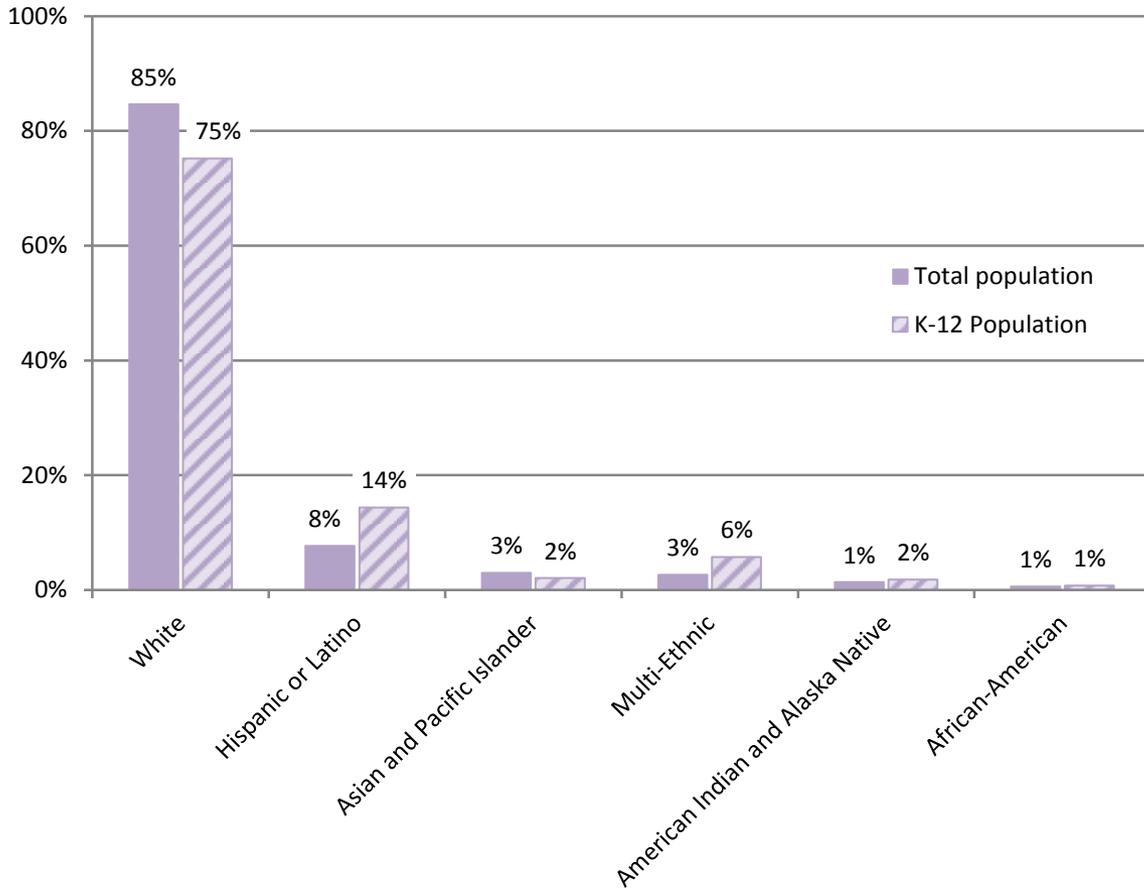
Children exposed to tobacco before birth are more than twice as likely to become regular smokers themselves later in life, compared with children not exposed to tobacco in utero. Women who quit smoking before pregnancy or early in pregnancy also significantly reduce their risk of prenatal complications.

On average in 2011-2013, 14.9 percent of mothers smoked during pregnancy in the region. This percentage is higher than both the state average of 10.5 percent and the Healthy People 2020 target of 1.4 percent. The age group of 18 to 19 years has the highest prevalence of maternal smoking during pregnancy at 29.8 percent, and the prevalence of smoking during pregnancy generally declines as the age of the mother increases.

Among the counties, the percentage of mothers who smoked during pregnancy varies, ranging from 7.8 percent in Benton County to 17.1 percent in Linn County and 19.2 percent in Lincoln County. While the overall rate of maternal smoking during pregnancy is higher in Lincoln County than in the other two counties, Linn County comprises the highest count of mothers who smoked during pregnancy, with a total of 737 mothers, compared with 249 mothers in Lincoln County and 169 mothers in Benton County.

# Data Warehouse

Race and ethnicity of regional population versus K-12 population



RHA Chapter 2 Data Te  
Entry

Veteran Population - Ta

Population of metro are

Number of schools

K-12 Population

K-12 White

K-12 African-America

K-12 Hispanic/Latino

K-12 Asian Pacific Isla

K-12 American Indian

K-12 Multi-Ethnic

K-12 Total Minority

K-12 Population chan

Population 5 years and

Speak only English

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|          |         |             |
|----------|---------|-------------|
| 7/1/2014 | Benton  | Corvallis S |
| 7/1/2014 | Benton  | Monroe SE   |
| 7/1/2014 | Benton  | Philomath   |
| 7/1/2014 | Lincoln | Lincoln Co  |
| 7/1/2014 | Linn    | Central Lin |
| 7/1/2014 | Linn    | Greater All |
| 7/1/2014 | Linn    | Harrisburg  |
| 7/1/2014 | Linn    | Lebanon C   |
| 7/1/2014 | Linn    | Linn Bento  |
| 7/1/2014 | Linn    | Santiam C   |
| 7/1/2014 | Linn    | Scio SD 9   |
| 7/1/2014 | Linn    | Sweet Hor   |

|      |      |       |    |      |     |      |    |      |    |      |     |   |      |
|------|------|-------|----|------|-----|------|----|------|----|------|-----|---|------|
| 4329 | 3477 | 80.32 | 50 | 1.16 | 388 | 8.96 | 54 | 1.25 | 67 | 1.55 | 293 | 0 | 6.77 |
| 2402 | 2084 | 86.76 | 9  | 0.37 | 136 | 5.66 | 26 | 1.08 | 29 | 1.21 | 118 | 0 | 4.91 |

| Region | Region   |         |
|--------|----------|---------|
|        | Estimate | Percent |
| 8.15%  | 23,101   | 11.7%   |
| 8.71%  | 152,722  | 60.9%   |
|        | 88 (X)   |         |
| 0.00%  | 36,677   | 100.0%  |
| 8.24%  | 27,588   | 75.2%   |
| 0.69%  | 282      | 0.8%    |
| 3.50%  | 5,277    | 14.4%   |
| 1.13%  | 762      | 2.1%    |
| 1.12%  | 662      | 1.8%    |
| 5.31%  | 2,106    | 5.7%    |
| 1.76%  | 9,089    | 24.8%   |
| 5.80%  | 1,264    | 3.6%    |
| 0.00%  | 237,040  | 100.0%  |
| 2.46%  | 215,902  | 91.1%   |

|   |      |       |
|---|------|-------|
| 0 | 2058 | 31.06 |
| 0 | 104  | 23.69 |
| 0 | 230  | 14.34 |
| 0 | 1762 | 33.65 |
| 0 | 100  | 15.38 |
| 0 | 2582 | 27.47 |
| 0 | 149  | 17.37 |
| 0 | 800  | 18.38 |
| 0 | 22   | 32.35 |
| 0 | 95   | 17.56 |
| 0 | 852  | 19.68 |
| 0 | 318  | 13.24 |

# Data Warehouse: Visuals

Example: Annual count of high-temperature days

The image displays a collage of digital content related to climate data. On the left, a portion of the NOAA Climate Data Online website is visible, showing navigation links and a search bar. In the center, a Microsoft Word document titled 'T30' is open, showing a table with 23 rows of station data. On the right, three line graphs are stacked vertically, each showing the 'Number of days above the 90th temperature percentile' from 1948 to 2014. The top graph (green line) shows a steady increase from approximately 14 to 20 days. The middle graph (blue line) shows a similar trend, increasing from about 13 to 21 days. The bottom graph (orange line) shows more volatility but a clear upward trend from roughly 15 to 20 days.

| STATION | ST                |
|---------|-------------------|
| 1       | GHCND:USC00351862 |
| 2       | GHCND:USC00351862 |
| 3       | GHCND:USC00351862 |
| 4       | GHCND:USC00351862 |
| 5       | GHCND:USC00351862 |
| 6       | GHCND:USC00351862 |
| 7       | GHCND:USC00351862 |
| 8       | GHCND:USC00351862 |
| 9       | GHCND:USC00351862 |
| 10      | GHCND:USC00351862 |
| 11      | GHCND:USC00351862 |
| 12      | GHCND:USC00351862 |
| 13      | GHCND:USC00351862 |
| 14      | GHCND:USC00351862 |
| 15      | GHCND:USC00351862 |
| 16      | GHCND:USC00351862 |
| 17      | GHCND:USC00351862 |
| 18      | GHCND:USC00351862 |
| 19      | GHCND:USC00351862 |
| 20      | GHCND:USC00351862 |
| 21      | GHCND:USC00351862 |
| 22      | GHCND:USC00351862 |
| 23      | GHCND:USC00351862 |

# Data Warehouse: Protocols

## Example: Total fertility rates

### Chapter 4 data downloads and processing protocols

Updated 8/21/15 by Miyuki Blatt

#### Data management protocol by Raw\_Sheets:

##### *Fertility Rates*

##### **Raw\_TotalFR\_HispNH\_Counties**

(2011-2013 Total fertility rates per 1,000 women: by Hispanic/Non-Hispanic for Linn, Benton, and Lincoln Counties and Oregon)

- Source: Oregon Public Health Assessment Tool (OPHAT), 2011-2013
- Website: <https://ophat.public.health.oregon.gov/Account/LogOn?ReturnUrl=%2f>
- Date accessed: 07/2015
- Access Instructions: Obtain an OPHAT account and login.
  - Select “Fertility” under the Dataset tab, then select “Total Fertility Rate” under the Calculation tab.
  - Select the desired counties individually under the “County” option and check the “Include State Totals” box.
  - Select “Hispanic and NH Ethnicity” under the Race/Ethnicity tab and add all.
  - Select the average number of years (3) under the dropdown menu in the Year tab and add the desired dates.
  - Save query under your OPHAT account, if desired, and then run query.
- Standalone file: Total fertility rate\_by Hispanic NH\_LBL Counties and Oregon\_2011-2013.xls
- Processing steps: The data is processed by OPHAT with the above steps. Transpose the data to match the format of the Data Warehouse. Highlight the relevant data lines and copy them into the Master\_Sheet.
- Raw\_Sheet in Data Warehouse: Raw\_TotalFR\_HispNH\_Counties
- Data fields: xxx

# Challenges and Opportunities

- Accommodating cycles with different timelines
- Meeting data and analysis needs of different partners
- Balancing regional focus with counties' needs for specificity and population health focus with partners' needs for data on subpopulations
- Dealing with gaps in local public health data
- Creating a platform for accessible data and dynamic maps
- Using data to generate analyzable questions about the health of the region
- Eliminating redundancy among different health system entities
- Strengthening regional partnerships in community health
- Sealing gaps in local public health data

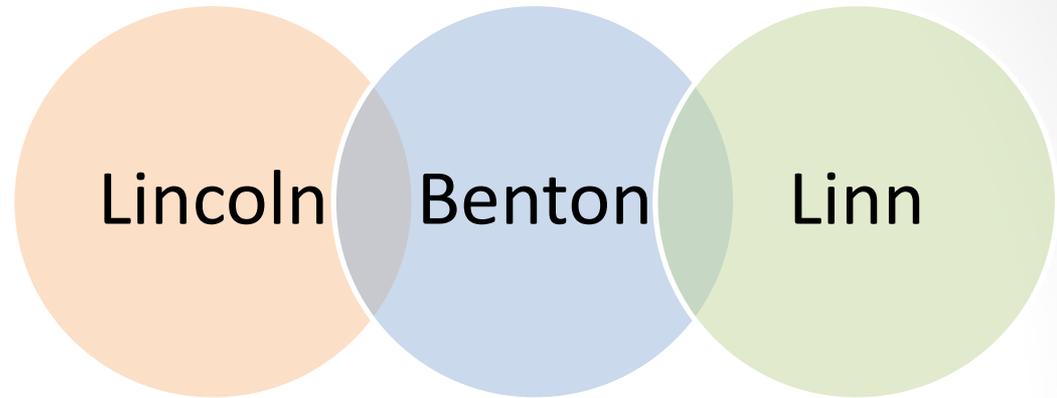


# Challenges and Opportunities

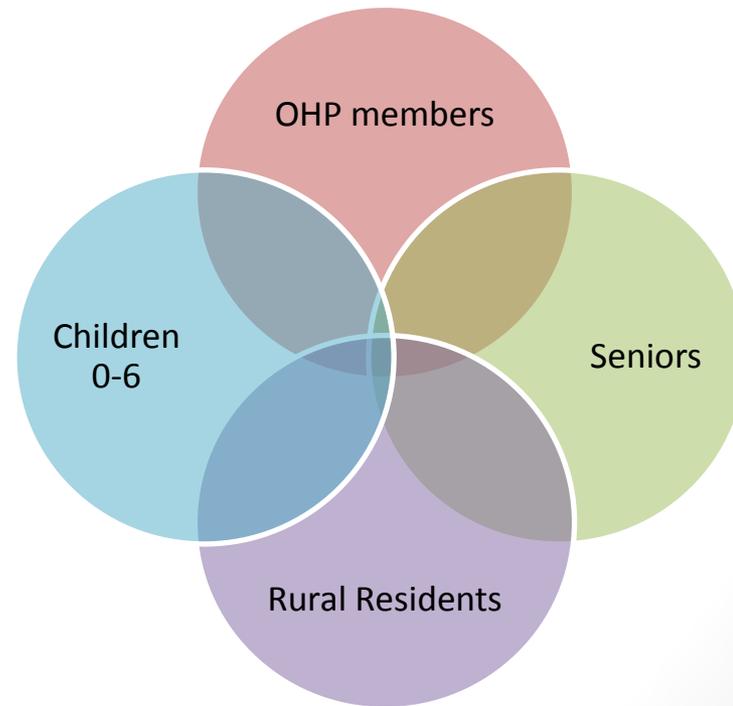
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# RHA Partner Needs

Geographic  
variation



Different  
populations  
served



(among others)

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# Thank You!

## Questions?

Contact us at

**LBLRHA@Co.Benton.OR.US**



InterCommunity   
Health Network CCO