# Oregon APAC & Death Record (Death Certificate) Linked Data

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### Why Link APAC and Death Record Data (Death Certificate Data)?

Streamlines the request and approval process for APAC data requesters

Matched APAC-Death record data saves time and resources for data requesters, the APAC team and Oregon Center for Health Statistics

Matched APAC-Death record data supports analysis and research about health outcomes, access to health care, expenditures, continuous enrollment, equity, social determinants etc.

### APAC Data

- APAC data 2011-current (2011-2020 data available for request)
- More than 90% of the Oregon population included in APAC
- Medicaid, Medicare and commercial insurers report data to APAC (mandatory & voluntary reporters)
- Medical, pharmacy and dental claims data reported to APAC
- Monthly member enrollment/eligibility data reported to APAC
- Detailed provider data reported to APAC

# Death Data Available in APAC is Limited

- Hospital discharge status-death
  - available for all requesters

- Diagnosis codes-death
  - available for all requesters

 Centers for Medicare and Medicaid Services (CMS) reported date of death available for request by Oregon state agencies only

 No cause or underlying causes of death available in APAC

### Oregon Death Record Data

(Death Certificate Data)

- Oregon residents who died in Oregon or elsewhere
- People who died in Oregon who were not Oregon residents
- Death record data is available to request <u>only</u> for people who died in Oregon

#### Data variables available for request:

- Cause of death
- Underlying causes of death
- Place of death
- Tobacco use
- Demographics-age, gender, race, ethnicity, marital status, education etc.

# **Summary Statistics**

(Data available for request)

#### Oregon Death Record Data 2011-2020

- **358,150** total deaths
- 33k-40k annual deaths

APAC Death Data 2011-current (Release 8)

- 213,680 total deaths (CMS or discharge data)
- CMS reported **146,903** deaths (2011-2019 data only available for Oregon state agencies)
- 203,568 discharge status-deaths

# Matching Methodology:

#### Names

First name (FN)
Last name (LN)

Date of birth

Perfect match –FNLNDOB with FNLN switch or maiden LN (72% match rate)

Other match -first four letters FNLN and DOB with FNLN switch (12% match rate)

Hand match -LNDOB match with hand match first name [and gender for newborns] (0.8% match rate)

### Errors/differences in data sources

## Matching Issues

- Name changes i.e., marriage, divorce
- Spelling differences
- Nick names
- Naming conventions-cultural

26k Oregon residents in APAC with a CMS date of death did not match a death record 2011-2020

Death information available for **371,455** people in APAC (death certificate, CMS and/or discharge data)

### High Level Summary

(2011-current APAC release 8)

Death certificate data available for **324,376** people in APAC or **91%** of Oregon deaths 2011-2020 (matched)

CMS 2011-2019 date of death available for an additional **25,760 people** in APAC (no death certificate match)

Death discharge data available for an additional **21,319 people** in APAC (no death certificate and no CMS date of death match)

### Linked APAC-Death Certificate Request Process

APAC & CHS coordinate data request approval and data processing

Requesters submit request for linked data to **APAC first**:

- Part A-request linked data through APAC data request process
  - Contact APAC team <a href="mailto:apac.admin@dhsoha.state.or.us">apac.admin@dhsoha.state.or.us</a>
  - Website <a href="https://www.oregon.gov/oha/HPA/ANALYTICS/Pages/APAC-Data-Requests.aspx">https://www.oregon.gov/oha/HPA/ANALYTICS/Pages/APAC-Data-Requests.aspx</a>

#### After APAC data request approval submit request to CHS:

- Part B-request linked data through CHS data request process
  - Complete the CHS data use agreement and describe the plan for the linked data in Question 11 of the external data request application
  - https://www.oregon.gov/oha/PH/BIRTHDEATHCERTIFICATES/VITALSTATISTICS/ Pages/Data-Use-Requests.aspx