Oregon's HIT environment and opportunities for high-value data

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How does Health IT support the Coordinated Care Model?

Selected characteristics of the coordinated care model:

- Care coordination, population management throughout the system
- Integration of physical, behavioral, oral health
- Accountability, quality improvement and metrics
- Alternative payment models
- Patient engagement

Coordinated care model relies on access to patient information and the HIT infrastructure to share and analyze data

Goals of HIT-Optimized Health Care

1. Sharing Patient Information Across the Care Team

- Oregonians have their core health information available where needed so their care team can deliver person-centered, coordinated care.

2. Using Aggregated Data for System Improvement

- Clinical and administrative data are efficiently collected and used to support quality improvement, population health management, and incentivize improved health outcomes.
- Aggregated data and metrics are also used by policymakers and others to monitor performance and inform policy development.

3. Patient Access to Their Own Health Information

- Individuals and their families access, use and contribute their clinical information to understand and improve their health and collaborate with their providers.

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Robust HIEs support care coordination

Core HIE services

- Community Health Record
- Integrated eReferrals
- Hospital/Clinical Event Notifications
- Results/reports from Lab, Pathology, Discharge summaries, etc.

Connecting across sectors and data sources:

- Dental, mental health and addictions treatment information
- Spreading into post-acute, EMS, long term services and supports, social services hubs, corrections
- Managing consent for specially protected data and non-health data

Data for payers, value based payment

- Source of clinical data for payers,
- Some adding claims data for providers

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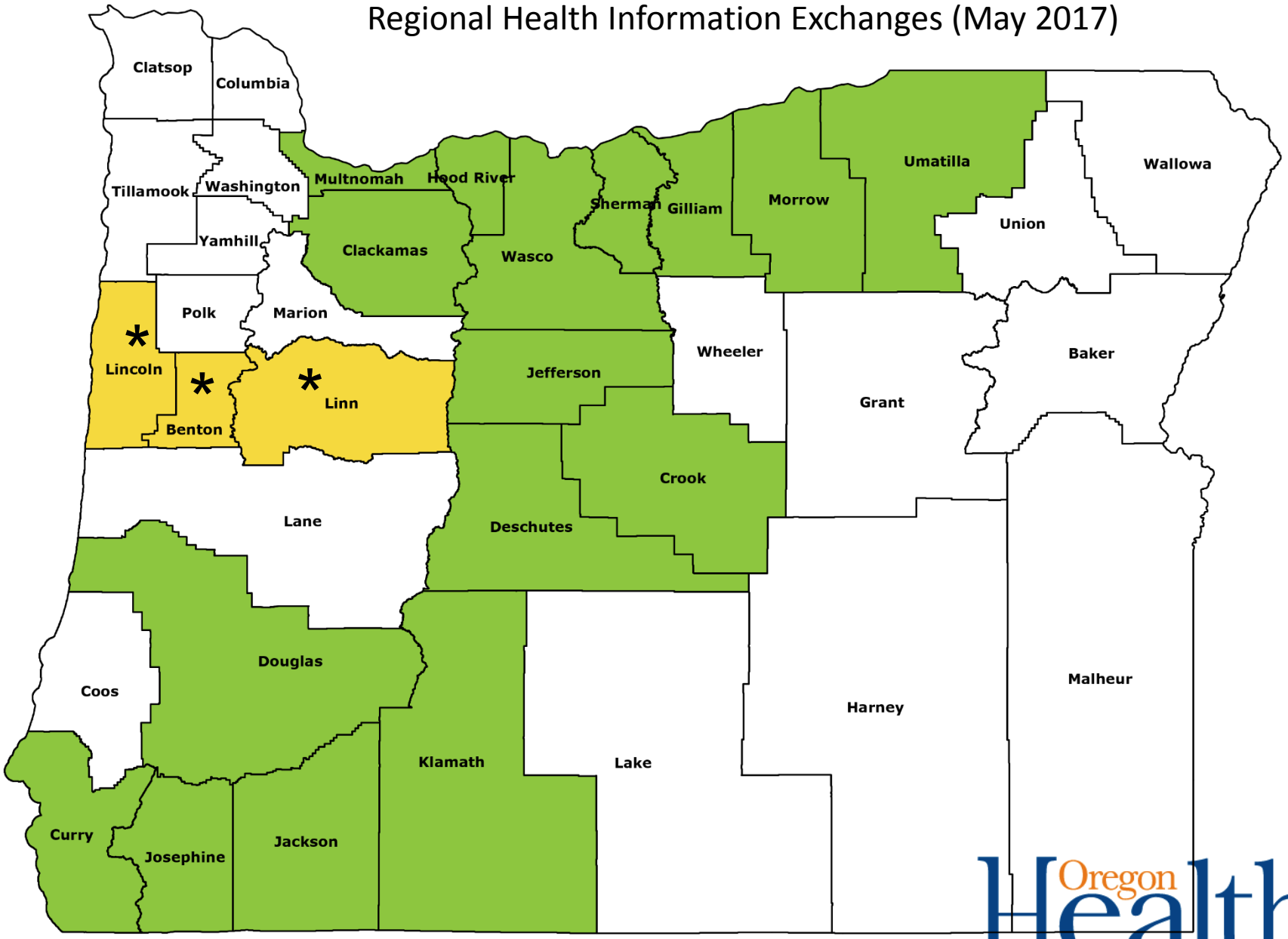
Regional Health Information Exchanges (May 2017)



Spread of HIE: EDIE/PreManage

- The Emergency Department Information Exchange (EDIE) Utility
  - Collaborative effort led by the Oregon Health Leadership Council with OHA and other partners
  - Launched with support from CMMI/SIM grant
  - Provides critical hospital event information for ED
- PreManage
  - Leverages EDIE data to provide real-time notifications to subscribers when their patient/member has a hospital event
  - Dashboards provide real-time population-level view
  - Subscribers add key care guidelines

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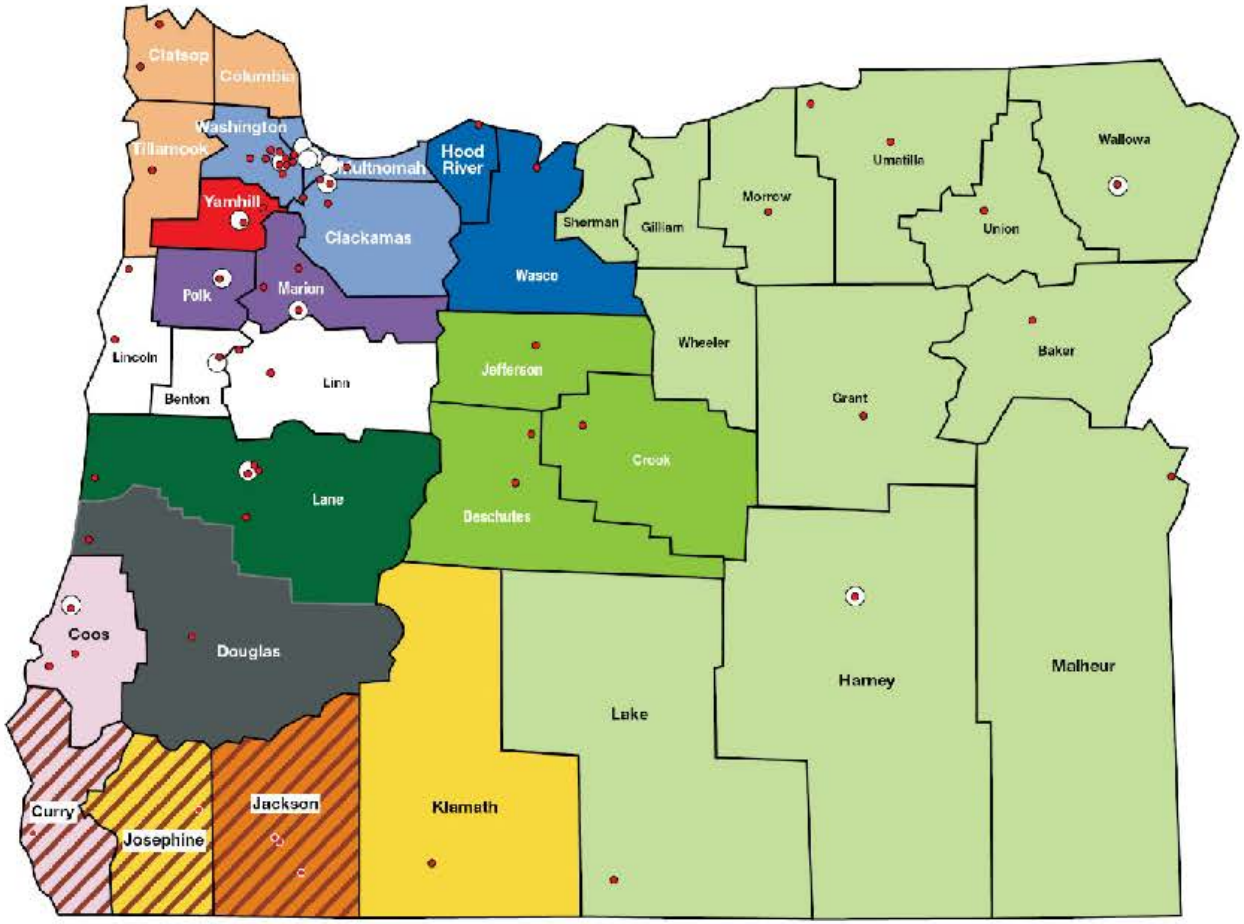
Adoption of EDIE/PreManage by CCOs, hospitals, and ACT teams



Legend

Hospitals on EDIE

Assertive Community Treatment teams subscribed to PreManage

CCOs Subscribed to PreManage (Live)

- AllCare CCO
- Columbia Pacific CCO
- Eastern Oregon CCO
- FarnilyCare Health and Health Share of Oregon
- Jackson Care Connect
- PacificSource Community Solutions - Central
- PacificSource Community Solutions - Gorge
- Trillium Community Health Plan
- Umpqua Health Alliance
- Western Oregon Advanced Health
- Willamette Valley Community Health
- Yamhill Community Care Organization

CCOs receiving hospital alerts only

(Notifications received through Reliance eHealth Collaborative)

- Cascade Health Alliance
- Primary Health of Josephine County

CCO geographic coverage is adjusted to county level but does not depict exact service areas by ZIP code.

Counties with Hospitals on EDIE: Baker, Benton, Clackamas (4), Clatsop (2), Coos (3) , Crook, Curry, Deschutes (2), Douglas (2), Grant, Harney, Hood River, Jackson (3), Jefferson, Josephine, Klamath, Lake, Lane (5), Lincoln (2), Linn, Malheur, Marion (2), Morrow, Multinomah, Polk, Tillamook, Umatillo (2), Union, Wallowa, Wasco, Washington (10). **Assertive Community Treatment teams subscribed to PreManage.** Teams located in Benton, Multinomah (4), Clackamas, Marion, Polk and Washington Counties. **CCOs Subscribed to PreManage (Live).** Note: None indicated for Lincoln, Benton and Linn counties. AllCare CCO: Curry County; Columbia Pacific CCO: Clatsop, Columbia, Tillamook Counties; Eastern Oregon CCO: Baker, Gilliam, Grant, Harney, Lake, Malheur, Morrow, Sherman, Umatilla, Union, Wallowa, Wheeler Counties; Family Care Health and Health Share of Oregon: Clackamas, Multnomah, Washington Counties; Jackson Care Connect: Jackson; Pacific Source Community Solutions – Central: Crook, Deschutes, Jefferson Counties; Pacific Source Community Solutions – Gorge: Hood River, Wasco Counties; Trillium Community Health Plan: Lane County; Umpqua Health Alliance: Douglas County; Western Oregon Advanced Health: Coos County; Willamette Valley Community Health: Marion and Polk Counties; Yamhill Community Care Organization: Yamhill County; CCOs receiving hospital alerts only; (Notifications received through Reliance eHealth Collaborative); Cascade Health Alliance: Klamath County; Primary Health of Josephine County: Josephine County;

EDIE Utility 2017 Evaluation/Evolution

- Evaluation shows value:
  - ED high utilizers with a care recommendation developed in EDIE/PreManage had a subsequent 10% reduction in ED visits
  - Users consistently report real time information has greatly improved the efficiency and effectiveness of their care
  - EDIE Utility model has been a successful governance model for a public private partnership
- Evolution:
  - Public health – PDMP and POLST forms
  - State social services, starting with LTSS field offices
  - Data extracts for incorporating into risk modeling, quality improvement, ROI analysis, state ED psych boarding analysis
  - Value of care team, patient contact information

EDIE Evaluation Report:
http://www.orhealthleadershipcouncil.org/edie/

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2018: Transitioning to "HIT Commons"

- Public-private partnership to support and spread statewide HIT efforts in Oregon
- Key objectives:
  - Establish neutral governing and decision-making process for investing in HIT efforts
  - Leverage opportunities for shared funding of HIT with statewide impact to "raise all boats"
  - Coordinate efforts for the adoption and spread of HIT initiatives
- Focus (crawl, walk, run):
  - EDIE/PreManage
  - PDMP HIT Gateway – launch statewide subscription, adoption/spread
  - Evaluation opportunity for "network of networks" for HIE

HIT Commons Business Plan available online:
http://www.orhealthleadershipcouncil.org/edie/

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Prescription Drug Monitoring Program (PDMP) integration with HIT systems

- Improves informed prescribing:
  - Ensure prescribers, pharmacists and their delegates have accurate, relevant and timely PDMP information at the point of care to make better informed clinical decisions
- Integration of the PDMP with health IT systems
  - Legislation in 2016, 2017 recognized integration with health IT systems
  - OHA launched “Gateway” service in summer 2017, early adopters in process
    - Pushing PDMP data via EDIE alerts – triggered when prescriptions exceed statewide prescribing guidelines
    - Query via EHR or HIE
    - 2018 – connecting to other states’ PDMPs
- Cost/Funding:
  - Statewide subscription at significant discount; eligible for significant Medicaid 90% Federal funding with private funding partners
  - Launching under HIT Commons in 2018

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Leveraging State Data to help address Social Determinants

- To impact children's future health & preventable chronic conditions, we need to address predictive social determinants of health and build resilience
  - Understand system-level indicators about the needs of children at state and regional levels; informing shared conversations across departments and stakeholders
  - Complexity indicators help prioritize who would benefit from **further assessments and information**
    - about health complexity and complex care and/or care coordination needs
    - gathered from the **provider and patient/family**.

  Combined with this assessment information:
  - Propose the best match team for that child/family and best match outreach approach
  - Determine and track resource investments

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Children We Are Focusing On: Some Definitions

- **Medical Complexity**
  - Utilize the Pediatric Medical Complexity Algorithm (PMCA)
- **Social Complexity:**
  - Defined by The Center of Excellence on Quality of Care Measures for Children with Complex Needs (COE4CCN) as *"A set of co-occurring individual, family or community characteristics that can have a direct impact on health outcomes or an indirect impact by affecting a child's access to care and/or a family's ability to engage in recommended medical and mental health treatments".*
  - Operationalizing factors identified by ***COE4CCN*** as predictive of a **high-cost health care event** (e.g. emergency room use).
- **Health Complexity:** Combines medical and social complexity to create global score.
  - COE4CCN findings of greatest impact and lower costs through complex care management are those with:
    - Both medical AND social complexity risk factors

Rita Mangione-Smith, MD, MPH. Development of Innovative Methods to Stratify Children with Complex Needs for Tiered Care: Assessing both Medical and Social Complexity. Center of Excellence on Quality of Care Measures for Children with Complex Needs (COE4CCN); University of Washington and Seattle Children's Research

http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/

Social Complexity (SC) Risk Factors (from COE4CCN)

- 12 SC risk factors from literature review related to **worse outcomes**
  1. Parent domestic violence
  2. **Parent mental illness**
  3. Parent physical disability
  4. **Child abuse/neglect**
  5. **Poverty**
  6. **Low English proficiency**
  7. Foreign born parent
  8. Low parent educational attainment
  9. Adolescent exposure to intimate partner violence
  10. **Parent substance abuse**
  11. Discontinuous insurance coverage
  12. Foster care

- COE4CCN Identified an additional 6 SC risk factors that may be associated with **worse outcomes**:
  1. Parent death
  2. **Parent criminal justice involvement**
  3. **Homelessness**
  4. **Child mental illness**
  5. **Child substance abuse treatment need**
  6. **Child criminal justice involvement**

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Oregon Initial Indicators of Social Complexity (preliminary based on feasibility):

1. Poverty
   - Child or child's parent(s) have history on SNAP caseload
   - Severe Poverty- child or child's parent(s) have a history on TANF caseload
2. Mental Health - Child has any history of interaction with mental health services
3. Mental Health - Parent of child has any history of interaction with mental health services
4. Parental Incarceration (state-level felonies only)
5. Foster Care placement in Oregon (includes kinship care)
6. Death of parent or primary caregiver (in Oregon)

NOTE: 16 year look back time period available
OHA will be updating, potentially adding other factors
Leveraging OHA/DHS Integrated Client Services Warehouse

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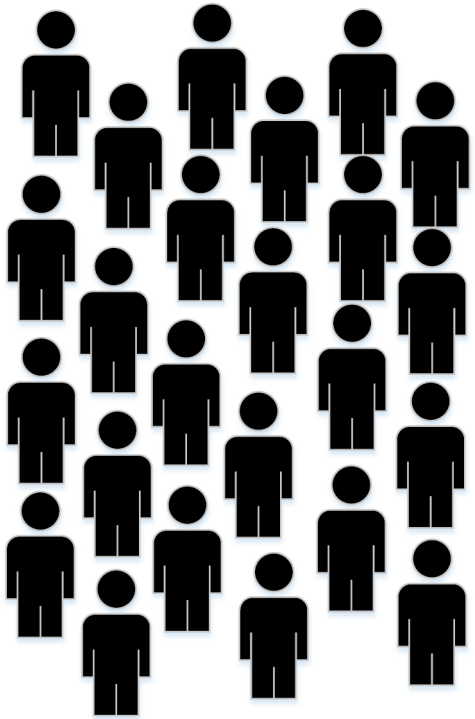
Children

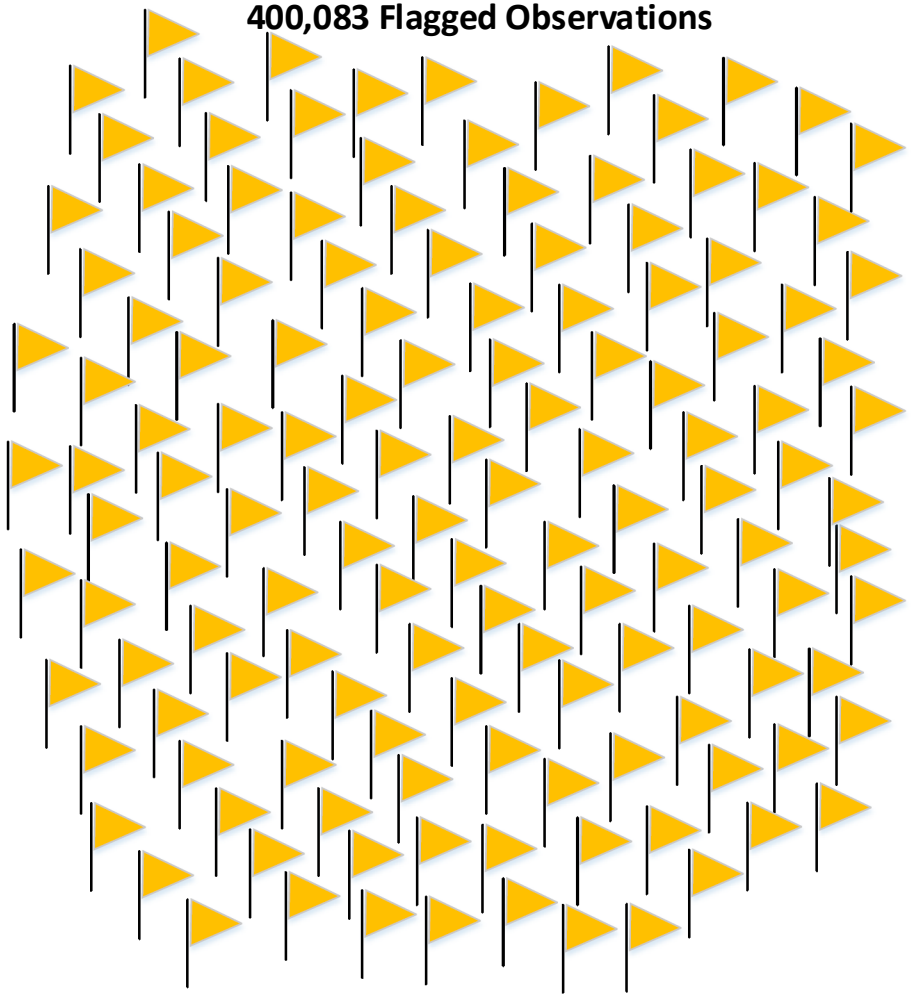
Observations

Integral Process of Linking and Attributing Observations to Specific Children

232,622 Individual Children



400,083 Flagged Observations



PRELIMINARY DRAFT ANALYSIS

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Breakdown of Social Risk Factors

More than one service per child possible

PRELIMINARY DRAFT ANALYSIS

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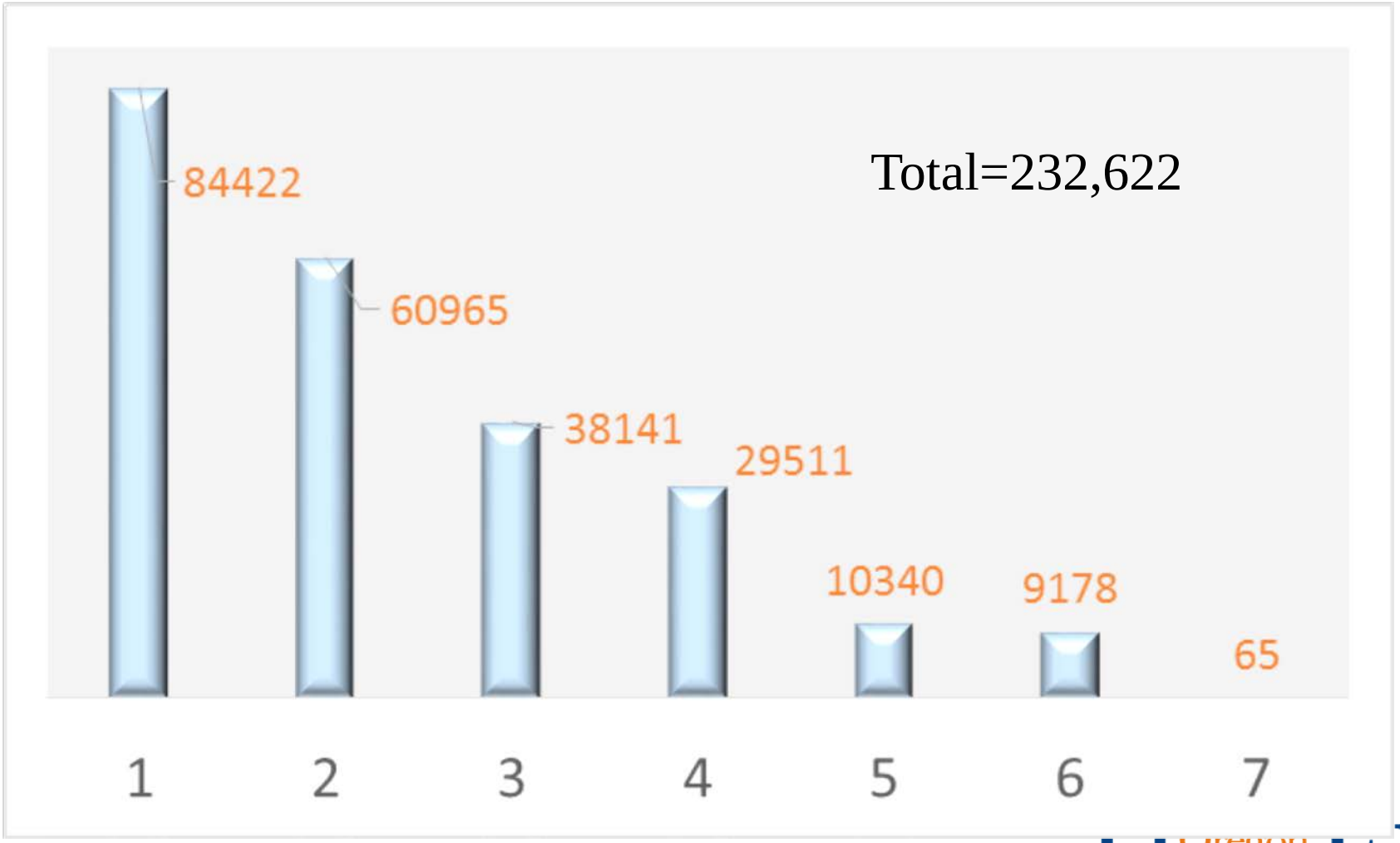
Risk Factor Count Per Child
Preliminary Exploratory Analysis Findings



PRELIMINARY DRAFT ANALYSIS

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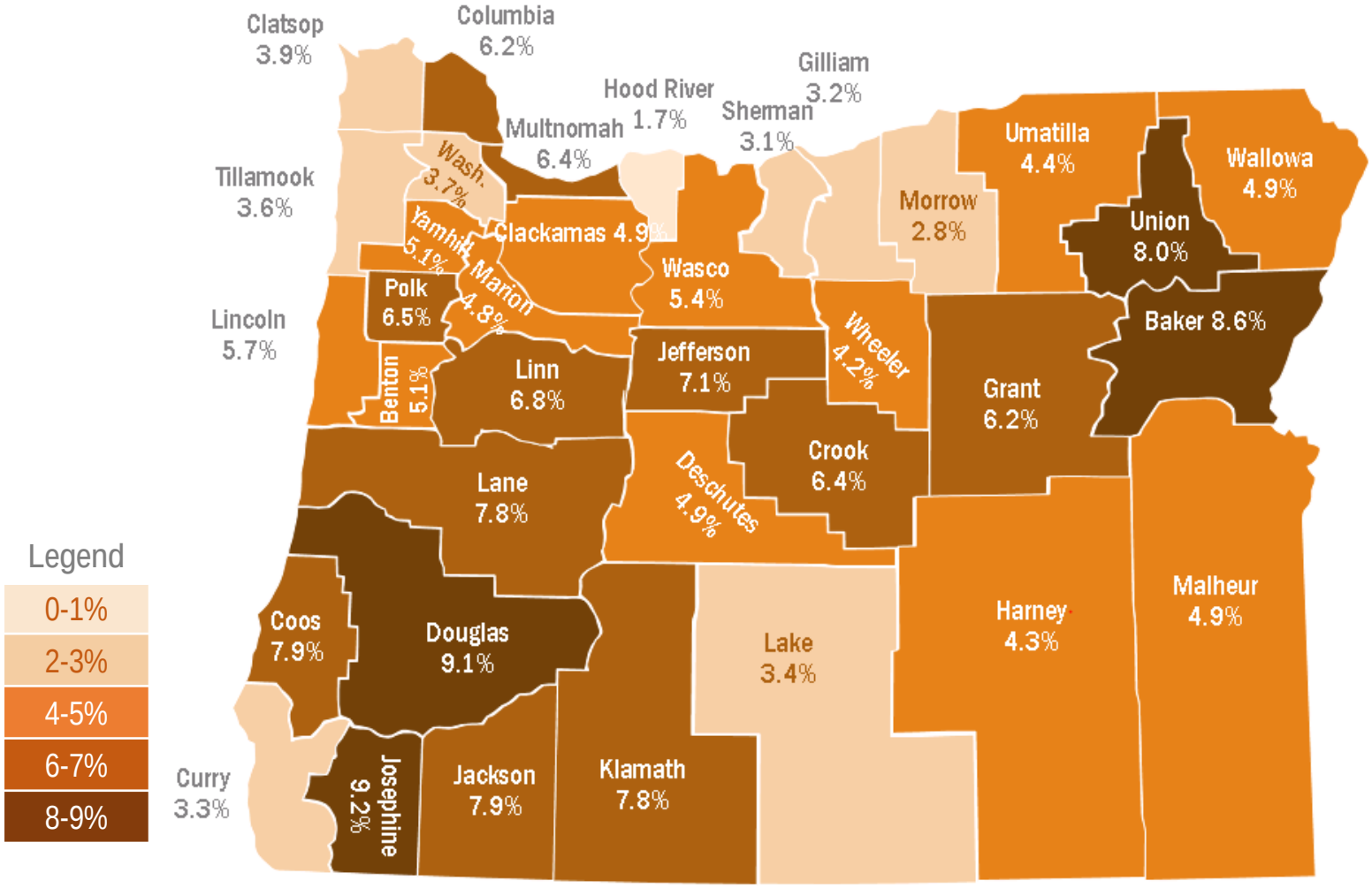
Percent of children with 5+ social risk factors



PRELIMINARY DRAFT ANALYSIS

Social Complexity: Next Steps

Next steps:

- Developing further specifications for complexity indicators and approach for combining social and medical complexity
- Plan for sharing with CCOs – likely annually:
  a) Global Rates: CCO rate and comparisons to other CCO
     – Overall, Snapshots by Age Groups, Race-Ethnicity, County
  b) Child-level indicator score to CCOs
     – Total Score Only, not why they scored that way

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Resources

- Office of HIT, OHA: http://healthit.Oregon.gov
- Center of Excellence on Quality of Care Measures for Children with Complex Needs (COE4CCN); University of Washington and Seattle Children's Research
  - Rita Mangione-Smith, MD, MPH. Development of Innovative Methods to Stratify Children with Complex Needs for Tiered Care: Assessing both Medical and Social Complexity.
  - Pediatric Medical Complexity Algorithm: Developed by a team at Seattle Children's, Validated by Center of Excellence on Quality of Care Measures for Children with Complex Needs (COE4CCN)
  - http://www.seattlechildrens.org/research/child-health-behavior-and-development/mangione-smith-lab/measurement-tools/
- Oregon Pediatric Improvement Partnership:
  - System-Level Approaches to Identify Children with Health Complexity and Develop Models for Complex Care Management: Supported by the Lucile Packard Foundation for Children's Health
  - http://www.oregon-pip.org/projects/Packard.html

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