

# Partnering with Hospitals through PreManage to Drive Population Health Management at a FQHC

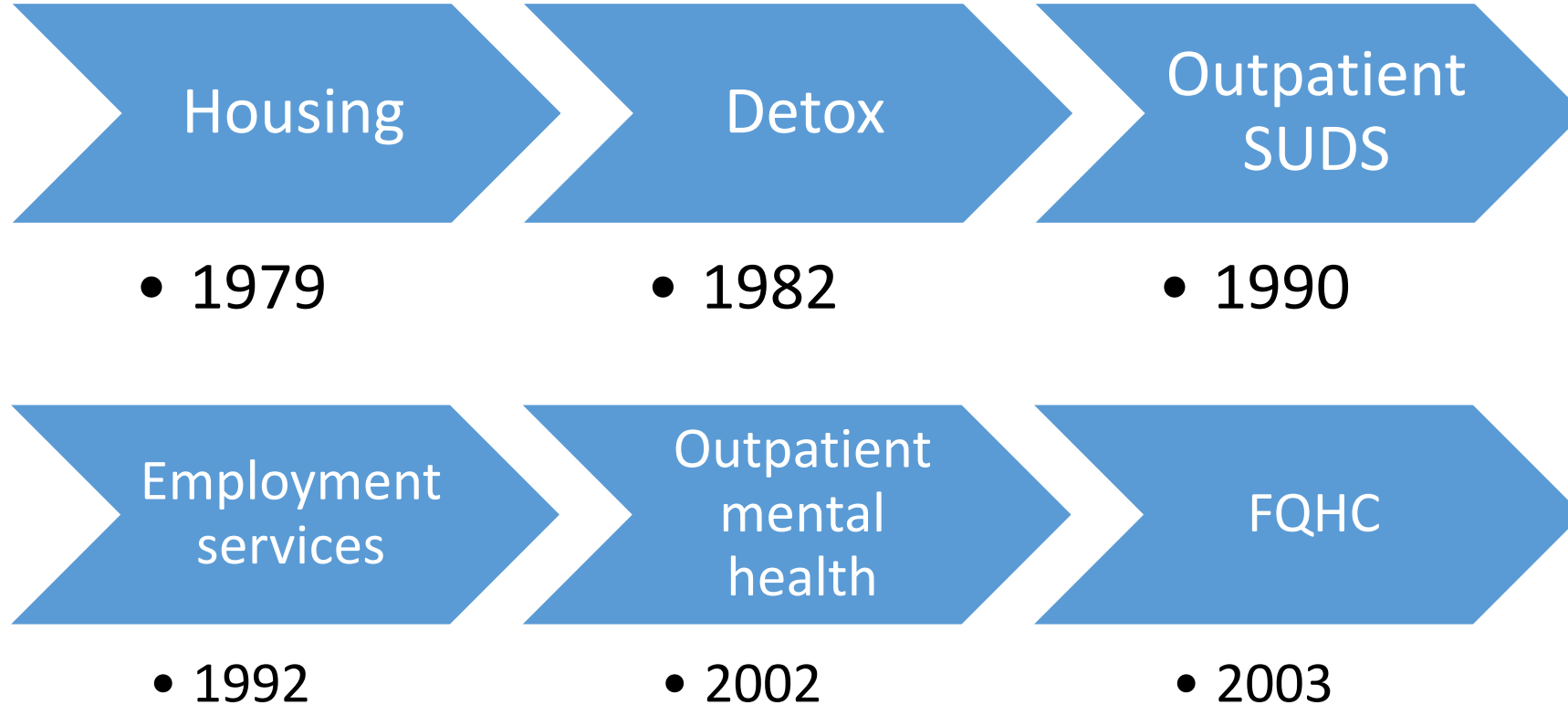
*David Caress, MBA, LMSW, CPHQ*  
*Director of Quality Management*

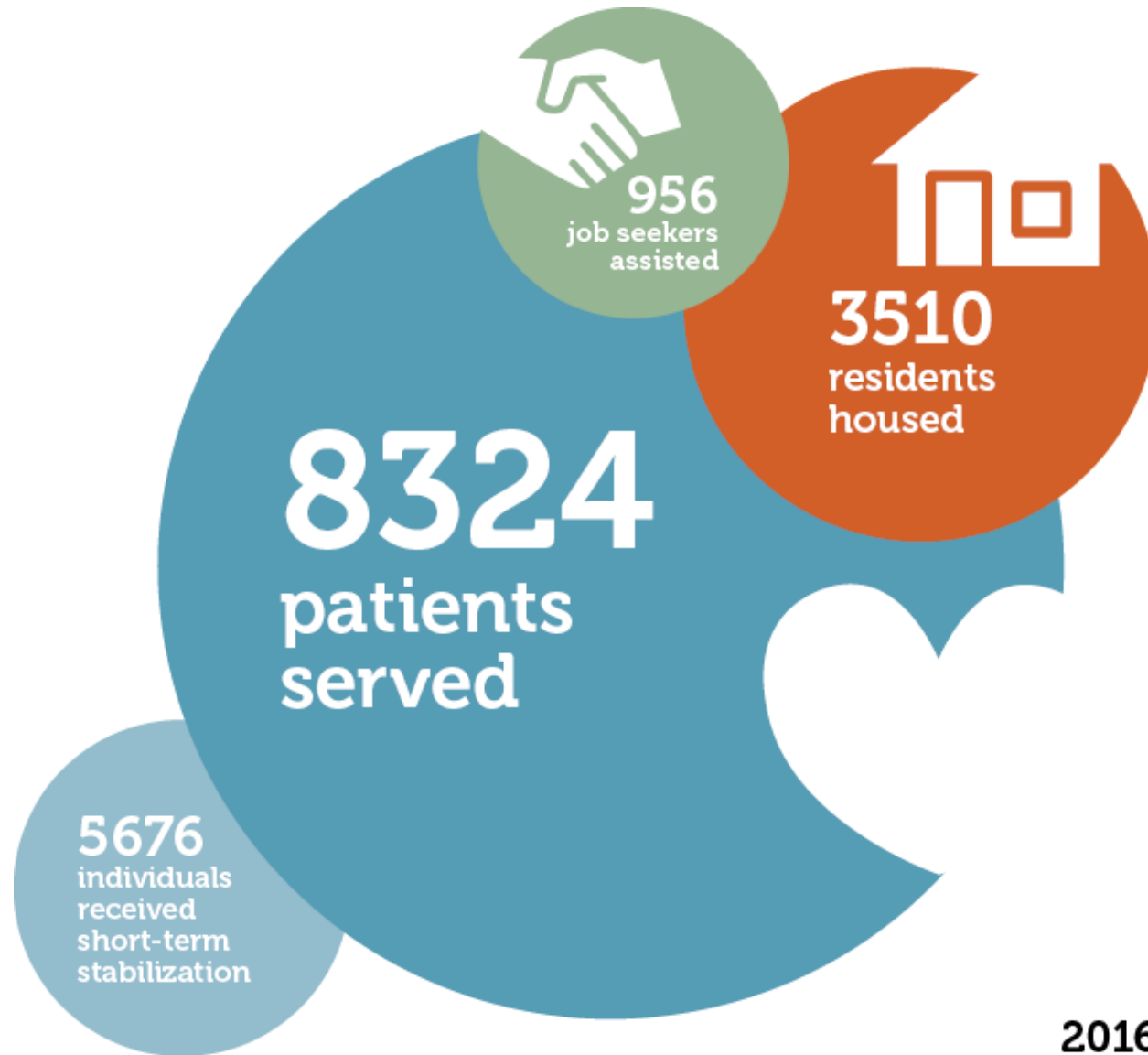


# Agenda

- Who is Central City Concern?
- How patient attribution is assigned
- How can PreManage Support an FQHC?
- Utilizing PreManage to drive Quality Improvement
- Using a DataWarehouse to knit together disparate data
- Risk Stratification, Population Segmentation
- Addressing ED utilization
- Community Driven Solutions

# Central City Concern





**2016**

**1700 APARTMENTS IN 24 BUILDINGS** 

- Transitional housing
- Permanent supportive housing
- Family housing
- Housing first and harm reduction programs

**13 FEDERALLY QUALIFIED HEALTH CENTER SITES** 

- Integrated primary & behavioral health care
- Community mental health services
- Subacute detoxification
- Inpatient and outpatient recovery services
- Acupuncture & naturopathic treatments
- Pharmacy

**EMPLOYMENT SERVICES** 

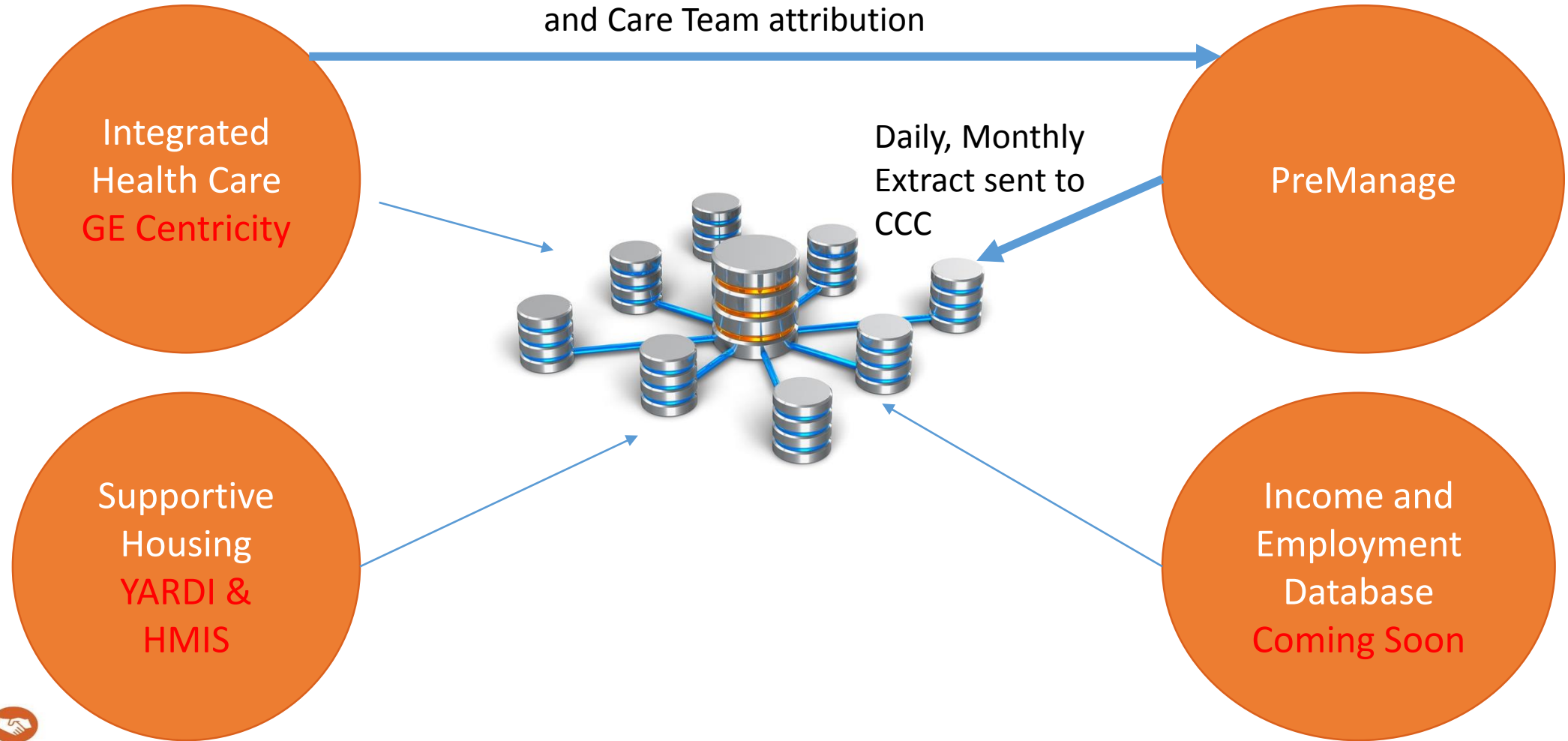
- One-on-one supported employment services specific to individual and community needs
- Volunteer opportunities that build confidence and work skills
- Training through transitional jobs in social enterprises

**SOBERING SERVICES** 

- Transportation and stabilization services that protect the health and safety of the downtown community
- Harm reduction for individuals experiencing public intoxication

# Patient Attribution

Weekly extract sent to Premanage for CCC  
and Care Team attribution



Navigation bar with three empty input fields and navigation arrows.

Personal information form with fields for name, DOB, address, and phone.

Care Providers

Provider	Type	Service Dates
[Redacted]		

Summary: Show 3 Months From [Redacted]

Visit Date	Location	City	State	Type	Major Type	Diagnoses or Chief Complaint	E.D. Visit Count (1 Yr.)	Visits
[Redacted]	Legacy Good Samaritan	Portland	OR	Emergency	Emergency	- back pain	Legacy Emanuel	2
[Redacted]	Legacy Good Samaritan	Portland	OR	Emergency	Emergency	- AMS - Alcohol abuse with	Legacy Good Samaritan	3
							Oregon Health and Science University	3
							<b>Total</b>	<b>8</b>

Note: Visits indicate total known visits.

**VISIT DETAILS**

May [redacted] 2017 [redacted] [redacted]  
Portland OR

**Visit Type**  
Emergency

**Discharge Date**  
[redacted]

**Chief Complaint**

**Discharge Disposition**  
Urgent Care

**Attending Physician**

**Discharge Diagnosis**

**Billing Account Number**  
[redacted]

**Diagnoses**  
• back pain

**Major Visit Type History**  
Emergency - [redacted]

**Insurance**  
• [redacted]

**Notifications**

None  
HL7: This visit was created on [redacted]

Review Visit

▶ Expand to add details to review

[REDACTED]

#### Suggested Care Recommendations

Author: [REDACTED]

Author Phone Number: [REDACTED]

Latest Update: [REDACTED]/2016

#### Significant Medical Conditions and Treatment:

- This patient often presents to ED with alcohol use.
- it is unclear if he has established PCP of not.

-in [REDACTED] 2016, OHSU ED transitional care SW (New directions) [REDACTED] met him in ED and attempted to do follow up. All outreach attempts to engage him were unsuccessful.

#### Community Supports

-Primary care provider/clinic: He is assigned to Old Town Clinic 503-228-4533 through [REDACTED]. Unclear if he has established care.

#### Care Coordination:

When the patient presents to the ED, meet with the patient, follow up on any outstanding issues, and contact the following people or programs for care coordination:

- Should he represent to ED and express any interest in follow up care coordination or services, he can be encouraged to contact me at [REDACTED] be re-screened for outreach services through New Directions.
- please consider contacting Old Town Clinic 503-228-4533 to see if he is established for care there.

These are guidelines and the provider should exercise clinical judgment when providing care.



# How can PreManage Support an FQHC?

- Care Coordination
  - Summit, Assertive Community Treatment (ACT)
- Engagement
  - Community Health Outreach Workers – Assigned but unengaged
- Information Gathering
- Risk Stratification, Predictive Analysis and Population Segmentation
- Quality Improvement

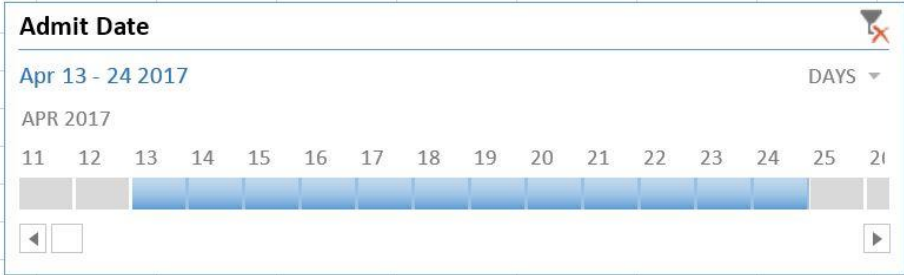
# Team Based Complex Care

Weekly High Risk Huddle to coordinate care for highest risk inpatients:

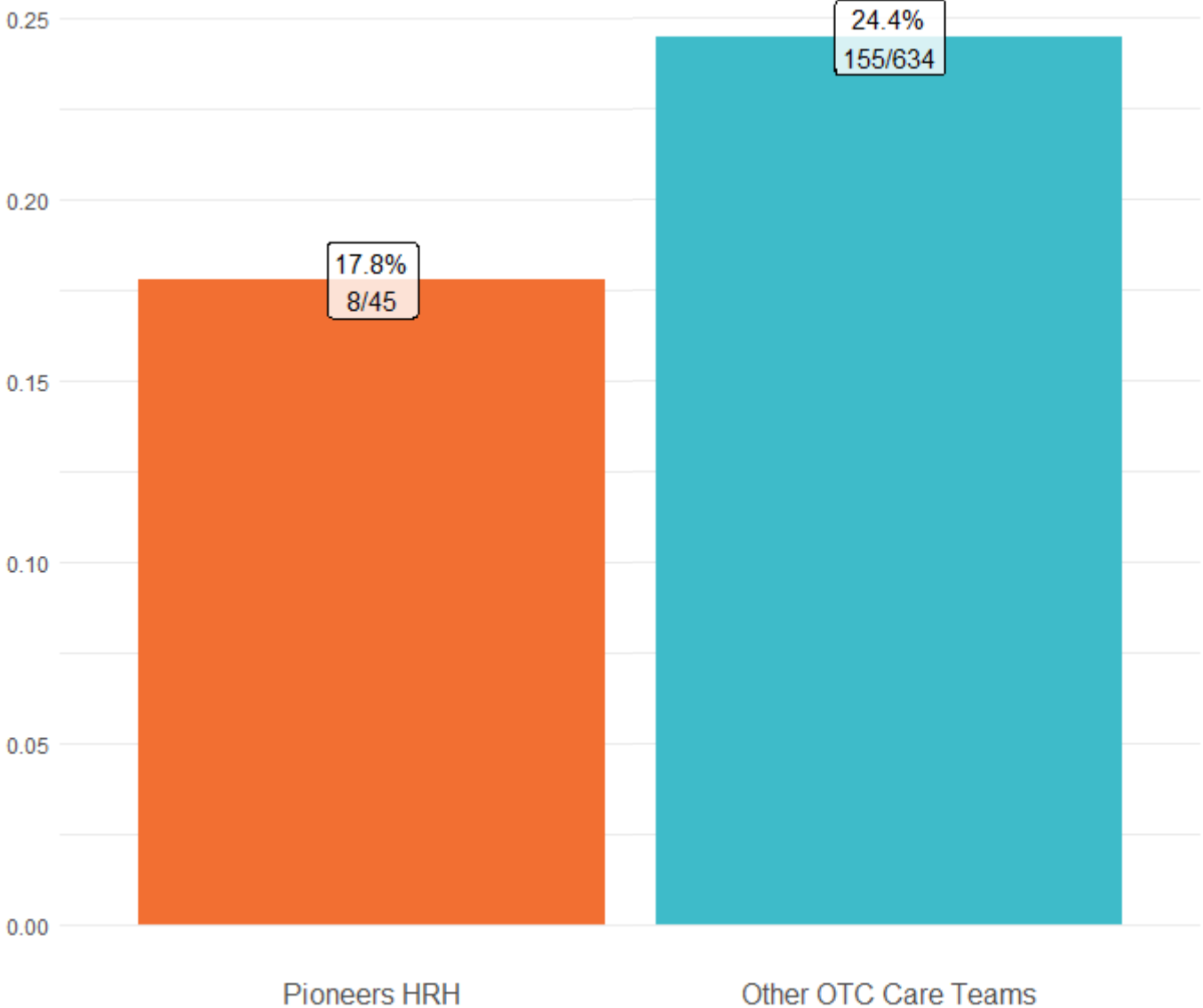
PCP, Pharmacist, Health Resilience Specialist, Health Assistant

Row Labels	Last Admit Date	Avg PC Complex Score
	4/23/2017	1.47
	4/14/2017	1.58
	4/24/2017	1.89
	4/20/2017	2.26
	4/22/2017	2.30
	4/13/2017	1.27
	4/23/2017	1.92
	4/24/2017	1.71
	4/14/2017	1.44
<b>Grand Total</b>	<b>4/24/2017</b>	<b>1.73</b>

Select admit date range from timeline below.  
(List automatically sorts by complexity score.)



# Early results of 30 Day Readmissions



# Data Warehouse

- Brings together multiple data sources
  - More effective reporting
  - Fuller picture of clients' lives
- Leverages robust data to create insight
  - Program level: drives quality improvement
  - Department level : fosters resource stewardship
  - Organization level: enables strategic planning

# Data Warehouse Roadmap

*What are we building? How will we get there?*

## Strategy

*Produce analysis to drive change*

**Focus:** Leadership's vision shapes the development of each level of the data warehouse. Analysis from the data warehouse shapes decisions about the future of CCC.

**Key players:** Senior and departmental leadership and QM

## Operations

*Develop reports that deliver insight*

**Focus:** Leadership accesses reports that are highly tailored to operational needs. Data informs key decisions.

**Key players:** Departmental leadership and QM

## Reporting

*Develop basics metrics to make reporting efficient*

**Focus:** Timely, accurate reports of basic metrics

**Key players:** QM, data warehouse developers, IS/IT, BBIS, program staff (as needed)

## Infrastructure

*Build and validate a database to make data easy to use*

**Focus:** Validated, easy-to-use database; "source of truth"

**Key players:** Data warehouse developers, QM (as needed)



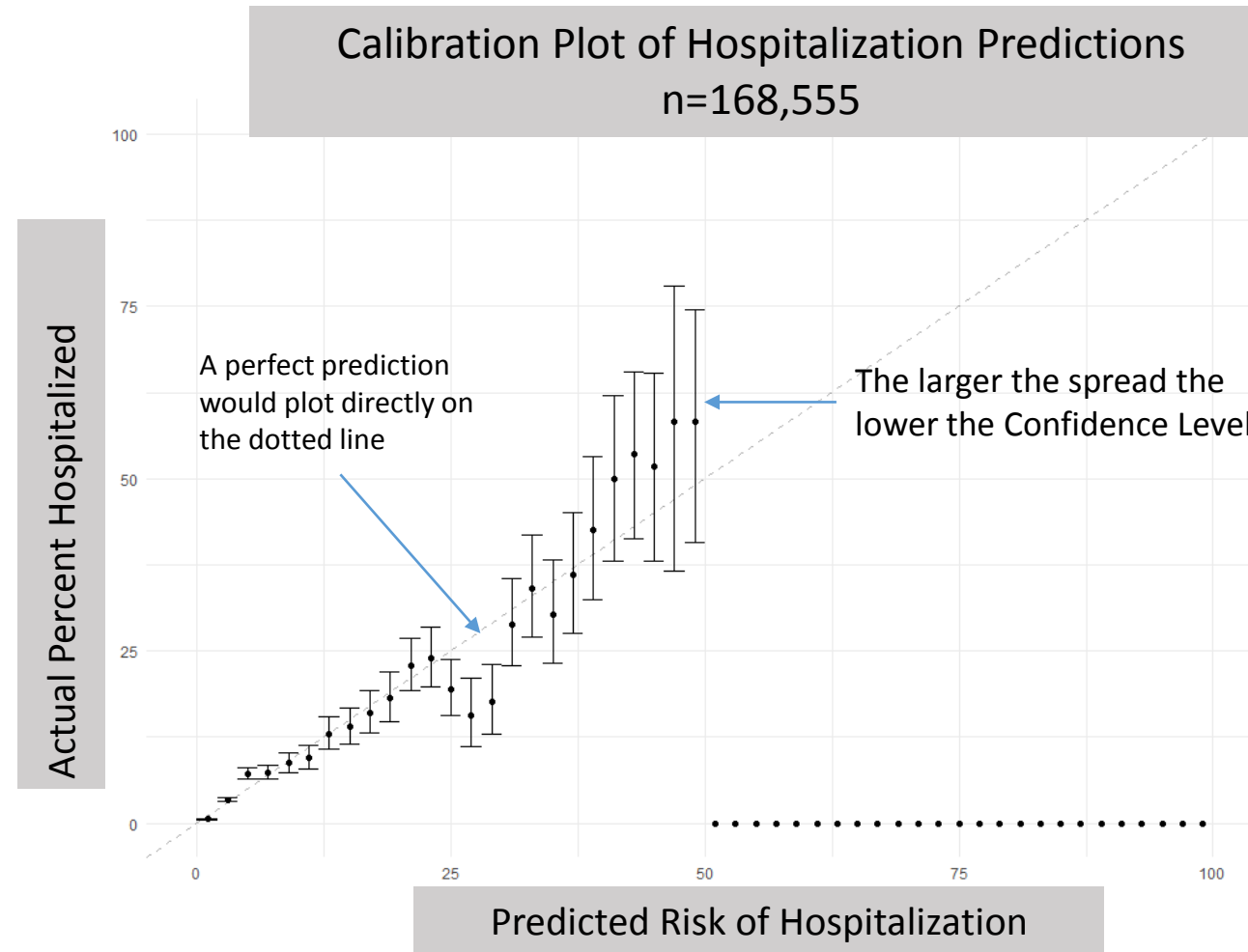
# Program Analysis and Outcomes

- Put actionable data into the hands of leadership
- New paradigm: self-service analytics
  - Provides greater access to data
  - Enhances capacity for deep-dives

# Comparison of Risk Scores

	HCC Risk Adjustment Score	OTC Complexity Score	OTC Hospitalization Risk
Predicts:	Future health care costs	Clinical complexity (by proxy)	Hospitalizations in next 30 days
Tailored to:	Community Medicaid population	OTC patients	OTC patients
Method:	Regression	Regression	Machine learning
Variables:	<ul style="list-style-type: none"> <li>• Age</li> <li>• Sex at birth</li> <li>• Diagnosis groups</li> </ul>	<ul style="list-style-type: none"> <li>• Homelessness</li> <li>• Age</li> <li>• Diagnosis groups                             <ul style="list-style-type: none"> <li>• Summit diagnoses</li> <li>• Chronic pain</li> <li>• Cancer</li> <li>• Mental illness</li> <li>• Self-harm behaviors</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Homelessness</li> <li>• Prior hospitalizations</li> <li>• Prior ED visits</li> <li>• 3 “hypotheses” include:                             <ul style="list-style-type: none"> <li>• Diagnosis groups</li> <li>• Prior GM visits</li> <li>• Prior MH/SUDS visits</li> </ul> </li> </ul>

# Predictive Modeling to assess Risk of Inpatient Hospitalization



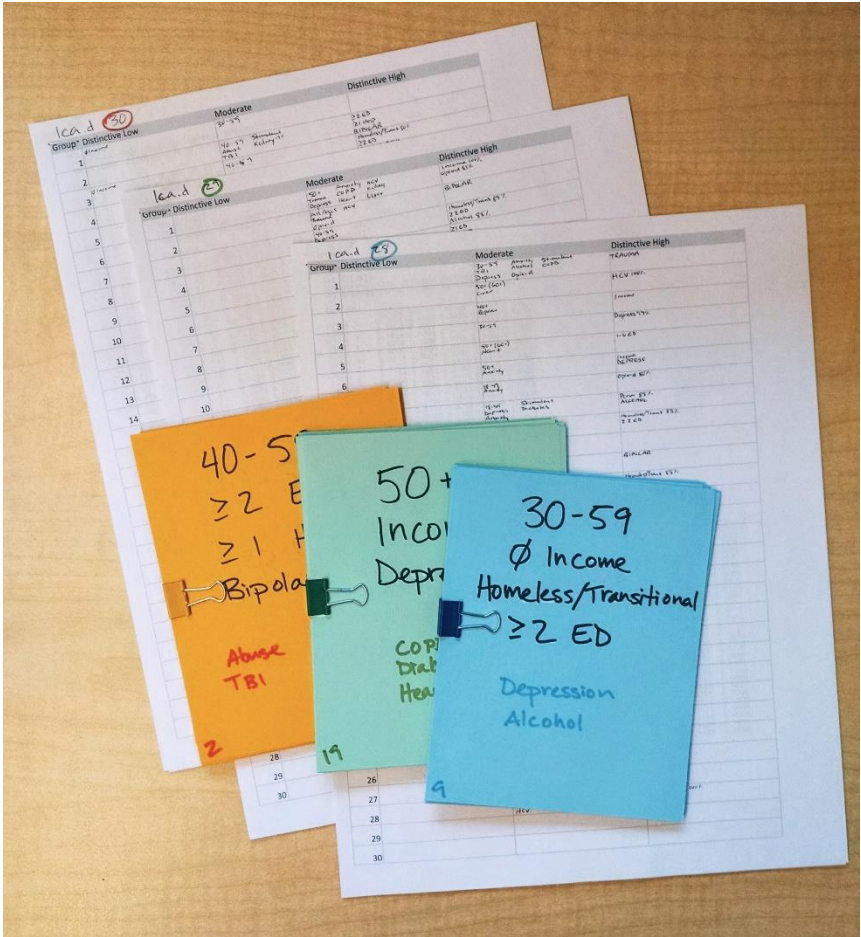


# Population Segmentation

- Target the right *services* to the right *people* at the right *time*
- Combination of statistical analysis and staff insight
- Project will lay groundwork for:
  - Streamlined service delivery
  - Improved outcomes



# Population Segmentation



# Root Causes for Homeless Population utilizing Emergency Departments

- Homelessness
- Addictions
- Untreated mental health
- Chronic conditions
- Safety
- Food Insecurity
- Unemployment
- Social Isolation
- PTSD

## Ego Depletion \*

How do these root causes impact a person's self-control to make an appointment with PCP rather than get immediate care at a ER?



\* Kahneman, D. Thinking, Fast and Slow. Farrar, Straus and Giroux, NY, 2011

# Increasing Access for Primary Care

- Old Town Clinic Urgent Care
  - Open Evenings and Saturdays
- Expanded Stand-By model to four largest Care Teams
  - 50% of patients with a Stand-By appointment said they would have gone to ED



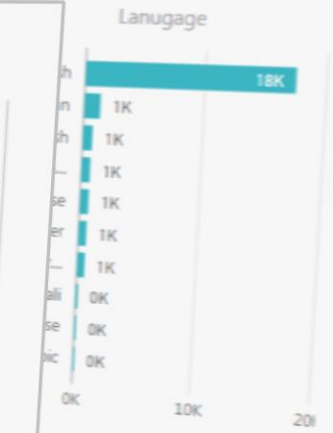
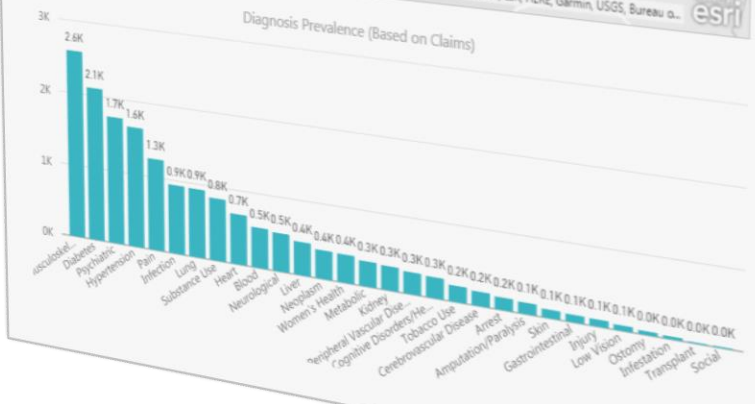
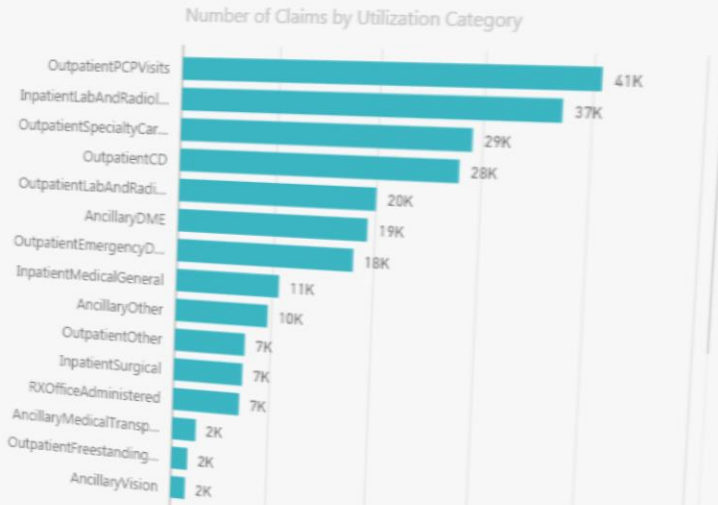
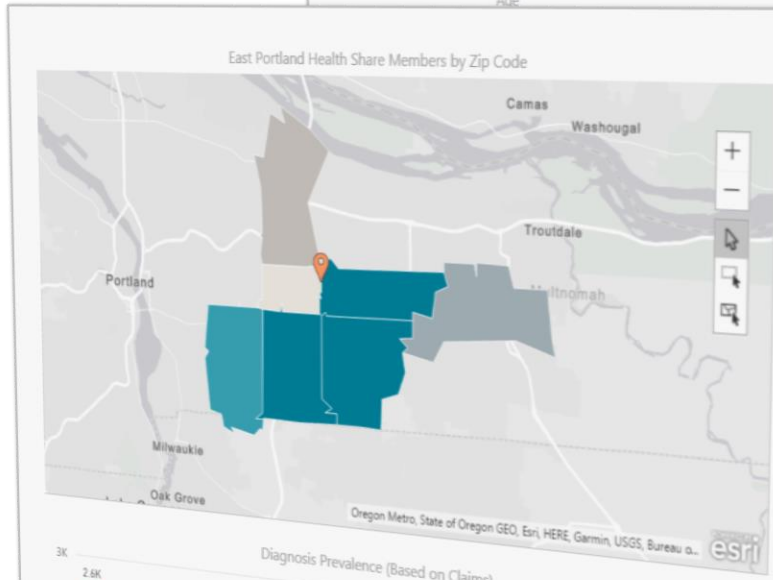
# Community Driven Solutions

**“Oregon health organizations invest \$21 million in affordable housing, medical services” Oregonian 9/23/16**

- Adventist Health Portland,
- CareOregon,
- Kaiser Permanente Northwest,
- Legacy Health,
- OHSU and
- Providence Health & Services - Oregon



# Data Informed Community Assessment



- Select All
  - Alcohol
  - Anxiety
  - Bipolar
  - Cancer
  - CHF
  - ChronicPain
  - COPD
  - DegenDisc
  - Depression
  - Diabetes
  - Infection
  - Kidney
  - Opioid
  - Schizophrenia
  - SelfHarmSuicidal
  - Stimulant
  - Trauma
- 
- AncillaryDME
  - AncillaryLongTermCare
  - AncillaryMedicalTransport
  - AncillaryOther
  - AncillaryVision
  - InpatientNonPreventative
  - InpatientPreventative
  - InpatientLabAndRadiology
  - InpatientMaternityCSection
  - InpatientMaternityNonDeliver
  - InpatientMaternityNormalDeliv
  - InpatientMaternityOtherPro
  - InpatientMedicalGeneral
  - InpatientMedicalRehabilitator
  - InpatientMentalHealthCD
  - InpatientMentalHealthPsychia
  - InpatientSurgical
  - InpatientEmergencyTransportation
  - InpatientCD
  - InpatientEmergencyDept
  - InpatientFreestandingASC
  - InpatientLabAndRadiology
  - InpatientMentalHealthCD
- 
- Select Cost Types to Model
  - Select All
  - Ancillary
  - Dental
  - ED
  - InpatientMedSurg
  - InpatientMH
  - InpatientOB
  - InpatientSUDS
  - OtherServices
  - OutpatientCD
  - OutpatientMH
  - OutpatientSpecialty
  - PCP

# How can we learn from the narratives of our community?

“It’s really intimidating, difficult and exhausting to have to deal with 15 different places to address my health”

May 5, 2017 "Ending Homelessness for People with Addictions: A Forum on Recovery Housing"



# Many organizations provide case management to address ED “frequent flyers”

- Coordinated Care Organizations
- County Office of Health
- Hospital programs
- Pharmacy programs
- Community Health Workers
- Primary Care Providers

Change happens at the speed of trust

What's the impact on trust if these are not coordinated?

Can PreManage be a tool to better coordinate these programs?



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