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Tailoring Care

Delivering the Right Intervention to the Right Patients

Brian Chan, MD
Principal Investigator, SUMMIT

Matthew Mitchell
Data Strategist

Agenda

Tailoring care

- Population segmentation framework
- Advanced primary care intervention

Learning activities

- Population sorting game
- Table discussion

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Learning Objectives

By the end of the Learning Lab, you will be able to:

- Discuss the value of population segmentation
- Describe one approach to advanced care management for a specific high-need subpopulation
- Play a game for identifying patterns of intersecting patient needs
- Describe how your peers have successfully matched patient needs with an intervention

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The Big Picture

Delivering the right care to the right patients

- Interventions are only as effective as the targeting strategy
- Identifying small subsets of patients makes it easier to tailor care

Need stratification, not risk stratification

- Interventions meet patients' *needs*
- Our targeting strategy should also be focused on *needs*

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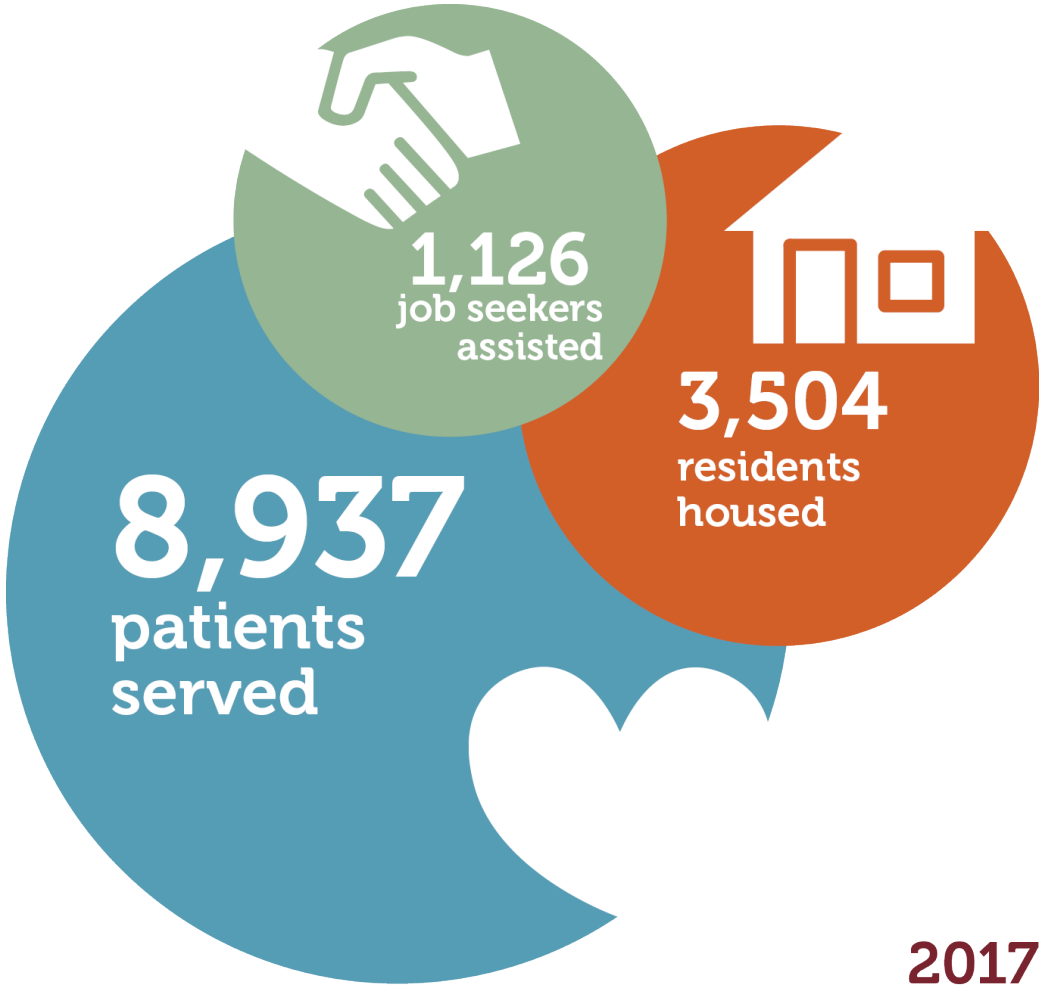

2017

1700 APARTMENTS IN 24 BUILDINGS

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

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

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

SOBERING SERVICES

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

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Know Thy Population

Central City Concern's Population Segmentation Strategy

Matthew Mitchell
Data Strategist

Why Population Segmentation?

- Population segmentation is the starting point for population health strategies
- Identifying meaningful segments within our population will help us target our resources more effectively
- Better targeted resources lead to better outcomes
- Need stratification, not risk stratification

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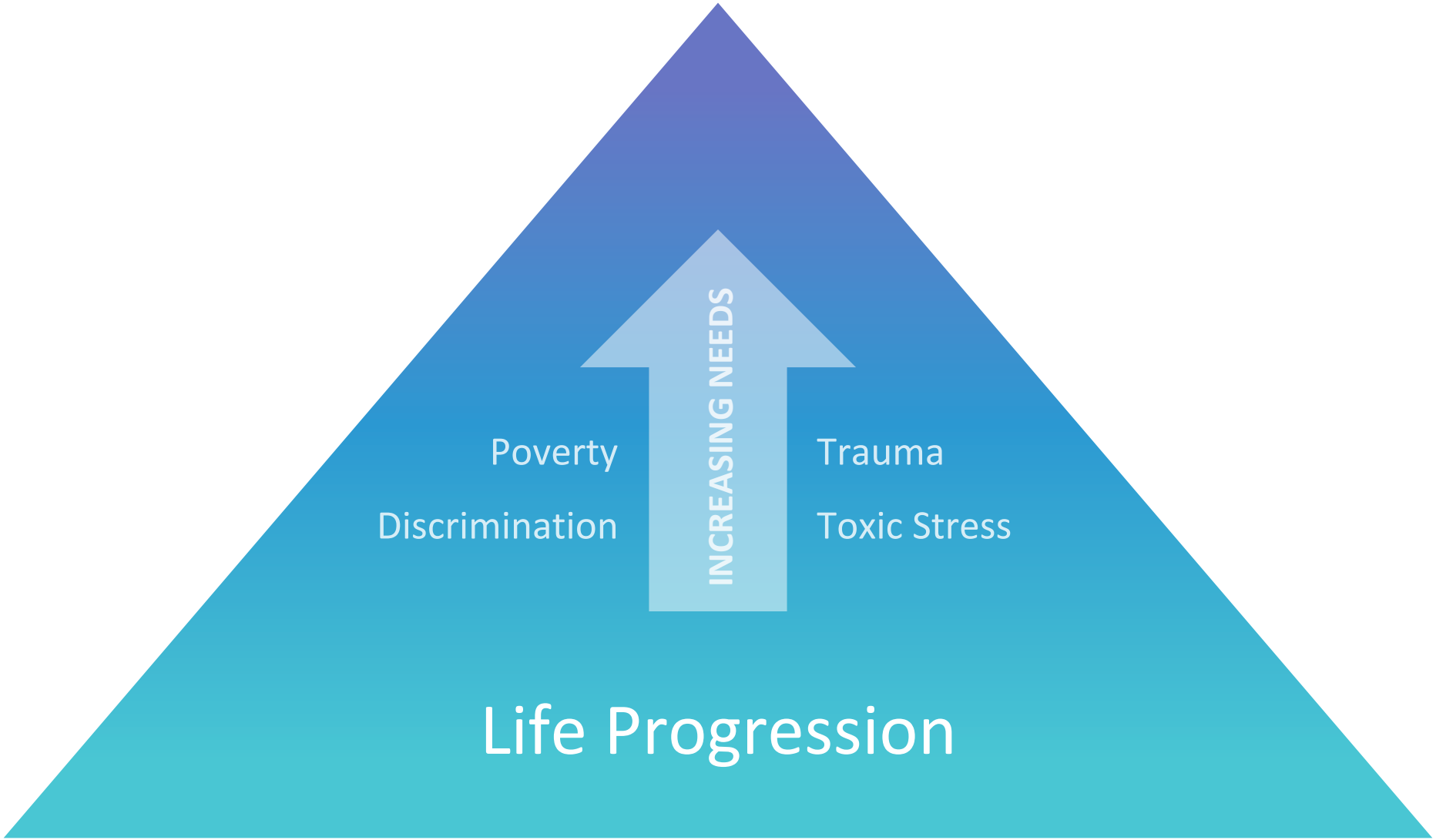

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Older, sicker,
complex needs

Younger, healthier, less complex needs

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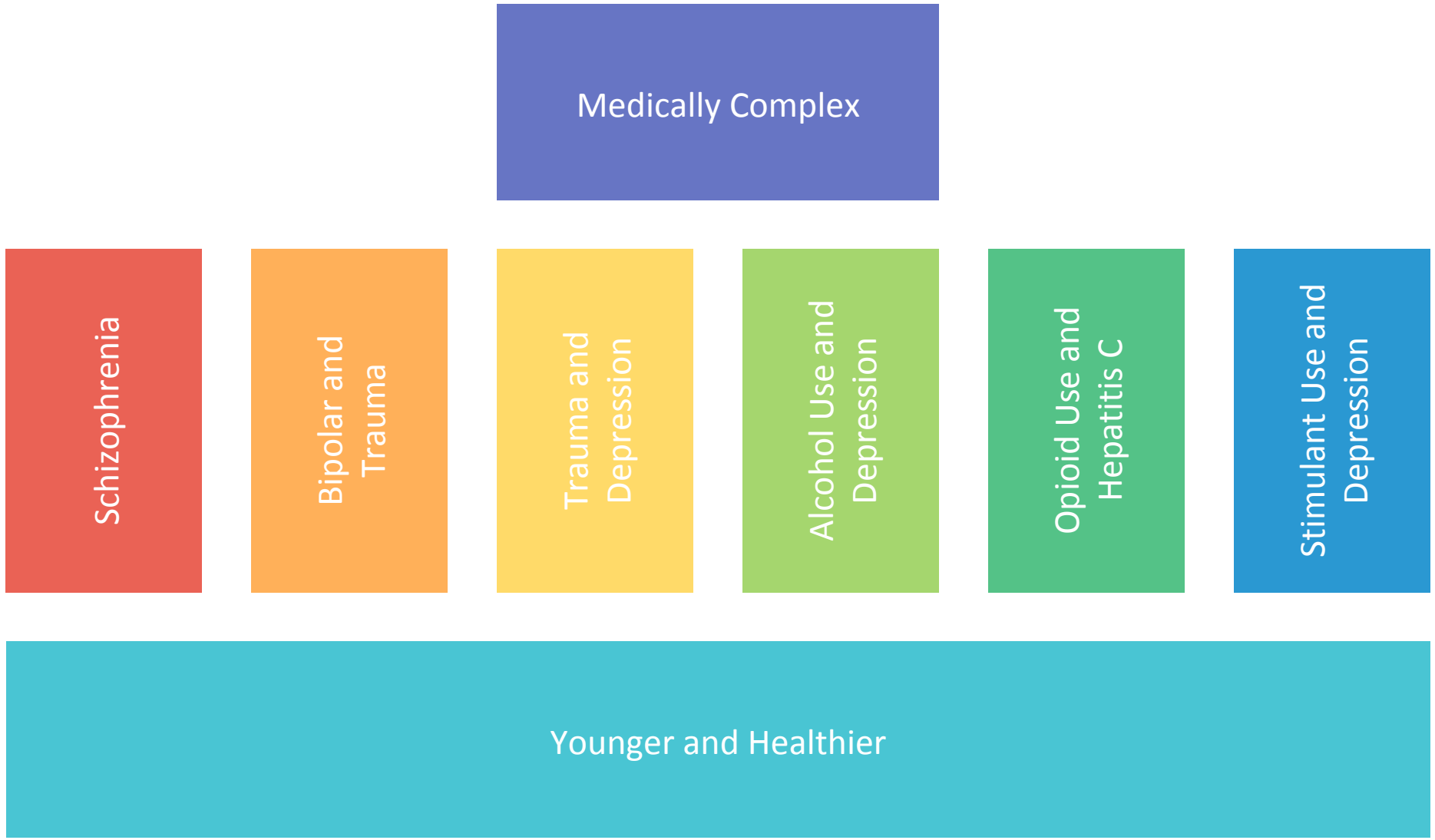

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OLDER

YOUNGER

Medically Complex

Schizophrenia Medical	Bipolar Trauma Medical	Trauma Depression Medical	Depression Alcohol Medical	Opioid Medical	Stimulant Depression Medical
Schizophrenia Stimulant	Bipolar Trauma	Trauma Depression SUD	Depression Alcohol	Opioid Hep C	Stimulant Depression

Younger and Healthier

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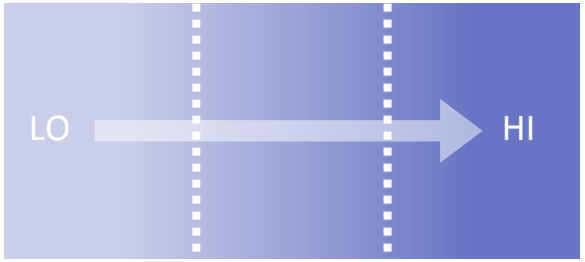
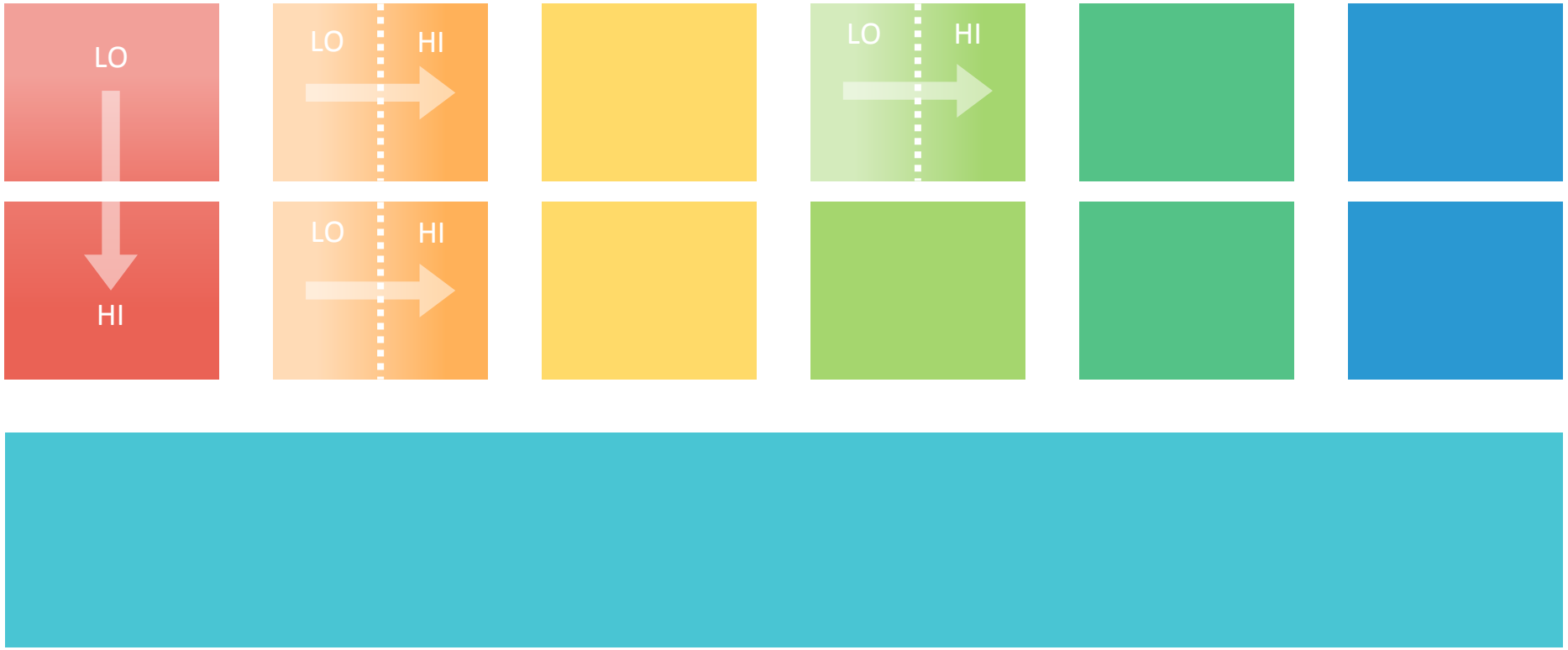
Some subgroups have high hospital utilization





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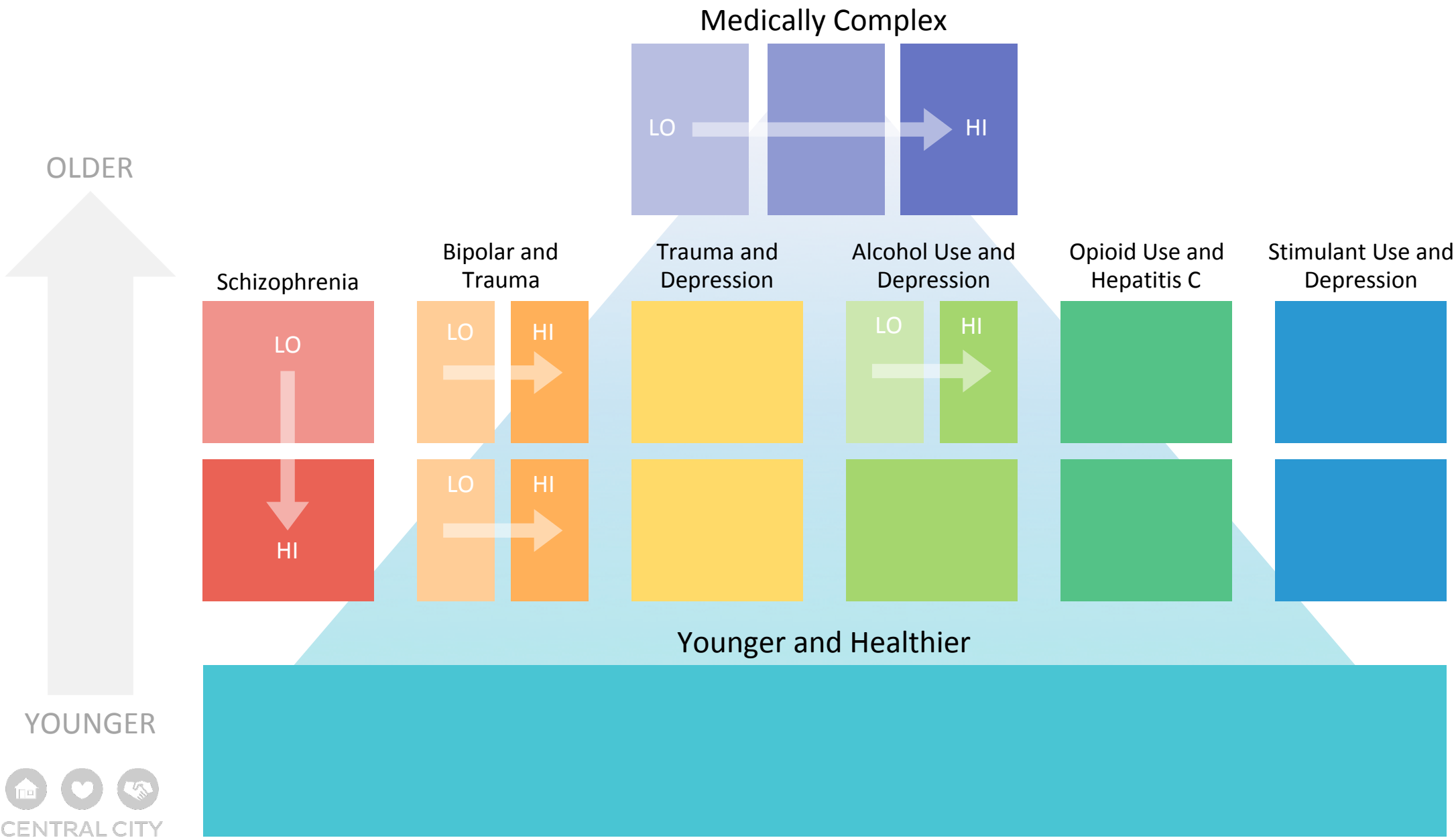

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Where do we go from here?

Framework for thinking about intersecting needs

- Develop strategies for better targeting clients with existing services
- Design new interventions around population segments

Framework for evaluating program efficacy

- Do we serve some segments better than others?
- If we struggle to serve particular segments, do we have the right resources?

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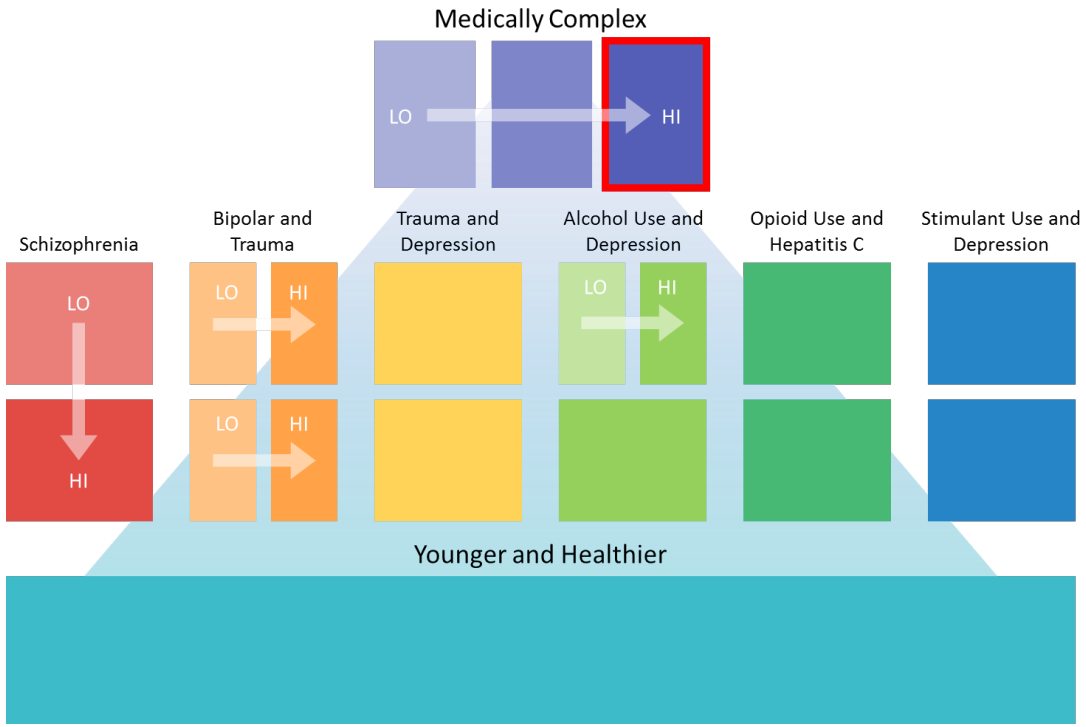
From Theory to Practice

Focus on one subgroup

- Most complex, high utilizers
- Focused intervention: ambulatory ICU



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Summit Intervention

Deep dive into Central City Concern's ambulatory ICU

Brian Chan, MD
Principal Investigator, SUMMIT

OUTLINE

- Rationale for developing A-ICU at OTC
- Describe Summit's program description vs enhanced usual care
- Detail evaluation plan and prelim results
- Discuss challenges in adapting A-ICU model to FQHC/HCH setting

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“Rickie” – 2014-2015

57-year-old homeless man recently admitted to a local hospital with respiratory failure discharged to medical respite and establishing with Old Town Clinic.

He has advanced COPD, diastolic heart failure, traumatic brain injury, cognitive impairment, generalized anxiety, opioid dependence on methadone maintenance, sedative/hypnotic use disorder, and partial blindness.

Despite multiple PC and MH visits, an outreach SW, prolonged respite support (6 month beyond target stay), housing assistance and home health/palliative care support, Rickie was poorly engaged and avoidant of prognosis believing if he “just exercised more and lost weight,” he would get better.

He was hospitalized 7 times (total of 43 days) and visited the ED 12 times over the course of one year.

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“Rickie” – 2015

“Usual Care” PCP Appointment at Old Town Clinic

Worsening dyspnea, still smoking

Hypoxic: 82% on baseline 4L

Tachycardia 177

20 minutes!

Declined recommended transfer to ED

Ongoing illicit benzo use and using heroin while on methadone

Goals of care discussion: patient resistant to accepting that he has a chronic lung disease remains convinced he just needs to “get in shape”

Was “kicked out” of pulmonary rehab due to too many no shows

Adult Protective Services report filed given concern for self neglect

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“Rickie” – Complexity Drives Utilization

Medical Conditions:
End stage COPD
Chronic diastolic heart failure
Hepatitis C
Blindness right eye
Traumatic Brain Injury
Cognitive Impairment
Generalized Anxiety Disorder
Severe opioid use disorder on MMT
Sedative/hypnotic use disorder of unclear severity

Social Complexity:
- Poor acceptance of condition
- Heavy symptom burden
- High risk substance use
  - benzos + MMT
  - tobacco + O2 dependent
- Too medically complex to access detox services
- Substance users in social circle
- Lonely, socially isolated
- Poor health literacy worsened by cognitive impairment/TBI
- Goal of independence = mismatch between care needs and resources
- Fragmented systems of care and funding
- Low “patient activation”

Utilization 2014-2015:
7 hospitalizations (43 days in hospital)
12 ED visits
26 clinic visits
Enrolled in respite care program
Enrolled with health resilience SW
Palliative care home health
Home caregiver through ADS

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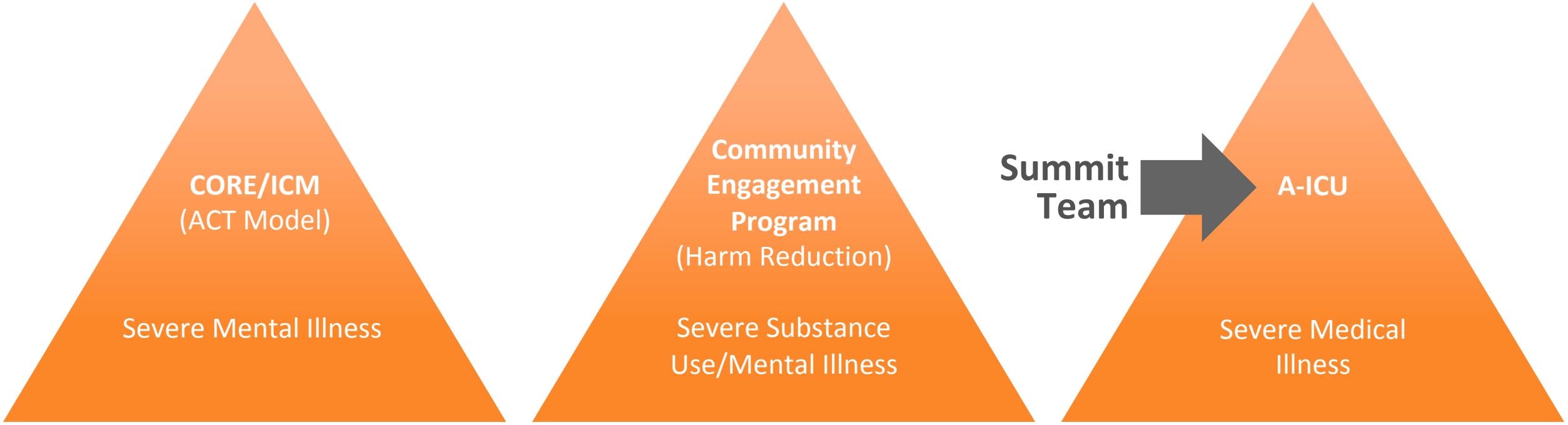
High Risk Teams Across Central City Concern



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Developing Old Town Clinic's Ambulatory ICU

- Payer interest in developing "value based" care models
  - Hybrid funding → monthly incentives, capitated per member per month, fee for service with "adjusted" productivity, academic funding for research
- Team Training at Stanford Coordinated Care
  - Refer to handout for details on AICU model
- No best practices for adapting to FQHC/HCH population
- Leadership engaged team members in design

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What does a Summit patient look like?

- Someone with advanced medical illness who has a hard time engaging in primary care
- Someone who may benefit from longer appointments, increased care coordination, and navigation
- Someone who may not go to the ED often, but when they do, they are usually admitted for a medical issues
- Someone who looks like “Rickie”

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HOMES HEALTH JOBS

Internal Referral for Summit Team

To refer a patient to the "Summit" high-risk medical team, please complete the form below.
If a referred patient does not meet standard enrollment criteria but would likely benefit from Summit, please provide a clear description of why the patient would be a good fit for Summit.

Patient name: _____ Date of birth: _____

Referring provider: _____ Team: _____

Standard Enrollment Criteria

Hospital utilization:

- ☐ ≥1 medical admission in prior six months

Medical conditions: (please check all that apply)

- ☐ Chronic kidney disease, stage III or higher
- ☐ Congestive heart failure
- ☐ COPD, group C or D
- ☐ Diabetes, uncontrolled (HbA1c>8)
- ☐ End-stage liver disease
- ☐ Osteomyelitis and/or chronic/severe soft tissue infections
- ☐ Other: _____

Optional: Engaged in specialty care?

- ☐ Nephrology
- ☐ Cardiology
- ☐ Pulmonology
- ☐ Endocrinology
- ☐ Hepatology
- ☐ ID specialist

Additional Information

Primary care utilization in prior year:

___ Number of completed appointments

___ Number of missed appointments

Behavioral health conditions:

- ☐ Mood disorder
- ☐ Psychotic disorder
- ☐ PTSD or other trauma-related disorder
- ☐ Substance use disorder
  Drug of choice: _____

Engaged in behavioral health care?

- ☐ Takes psychiatric meds as prescribed
- ☐ Specialty mental health services
  Program: _____
- ☐ Substance use disorder treatment
  Program: _____

Current housing status:

- ☐ Homeless
- ☐ Temporary or unstable housing
- ☐ Stable housing
- ☐ Other: _____

Summit Team Staffing: goal 200 (curr 110)

2 Addictions board certified physicians (1 FTE)
1 complex care RN
2 care coordinators (medical assistants)
2 social workers
1 clinical pharmacist
1 team manager

Data analyst
Research staff

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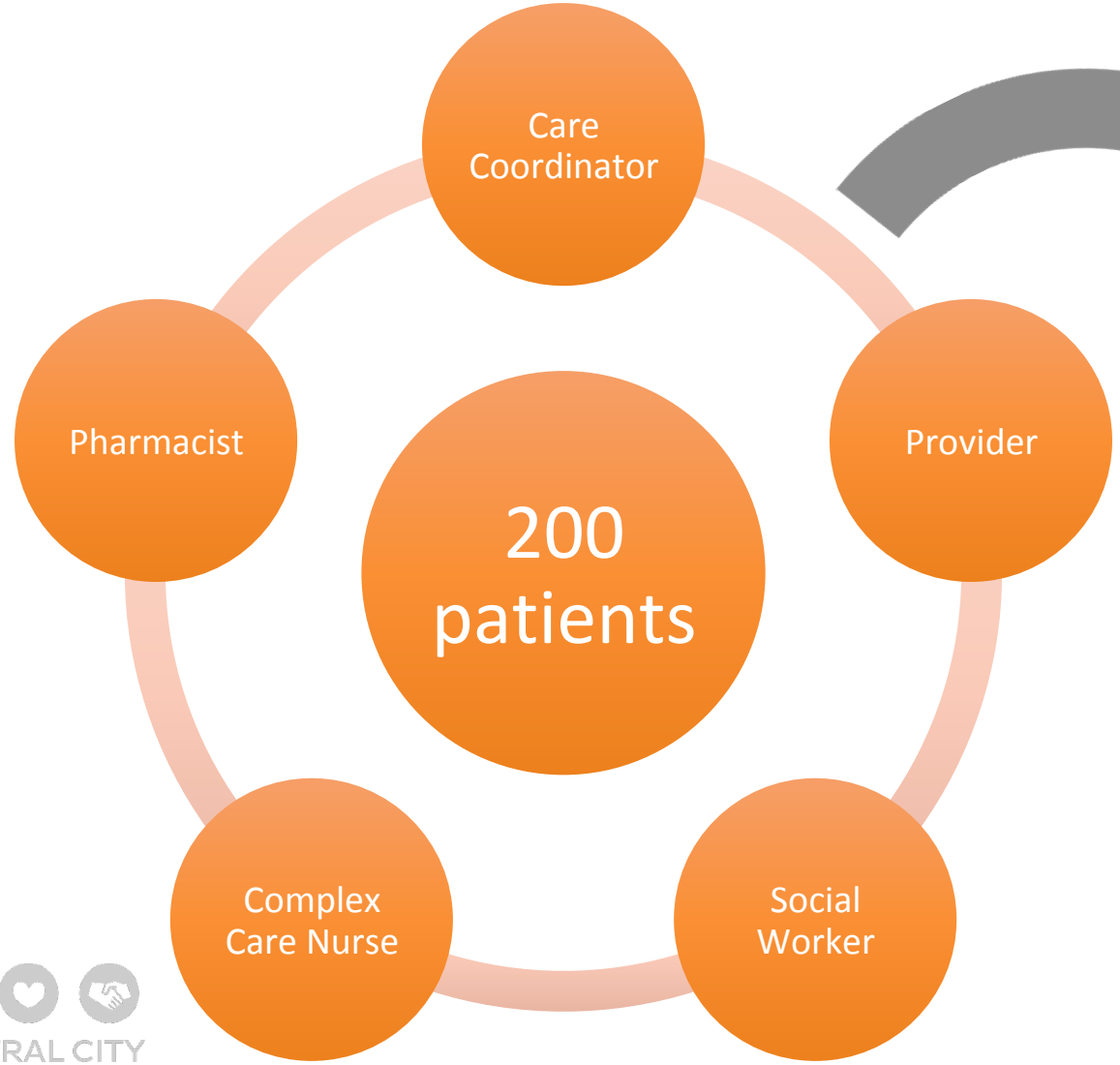
Summit Team Model



Allows more time to:

- **Build relationships**
- Outreach
- Provide timely support
- Increase access to team
- Smooth transitions of care

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SUMMIT Core Activities

- Comprehensive patient assessment w/ social work, physician, and care coordinator
  - 120 minute intake with social work, care coordinator, provider

- Increase self-efficacy via low patient-to-staff ratio
  - Flexible appointments, outreach visits
  - Trust/rapport building through high touches with team

- Focus on reducing treatment burden
  - Simplifying care based on patient goals

- Focus on social determinants of health
  - Social work involved in patients care from day one to identify unmet need
  - Linkages to housing, insurance, social services

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Core Activities (continued)

- Investment into the team
  - Training in palliative care, motivational interviewing, trauma-informed care
  - Use of data driven dashboards and QI methods for panel management

- Team wellness
  - Collaborative care where team members are encouraged to work to strengths
  - Co-location allows psychological safety
  - Team Reflection/ mindfulness

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Core Activities: Panel Management

Weekly “Speed Dating”

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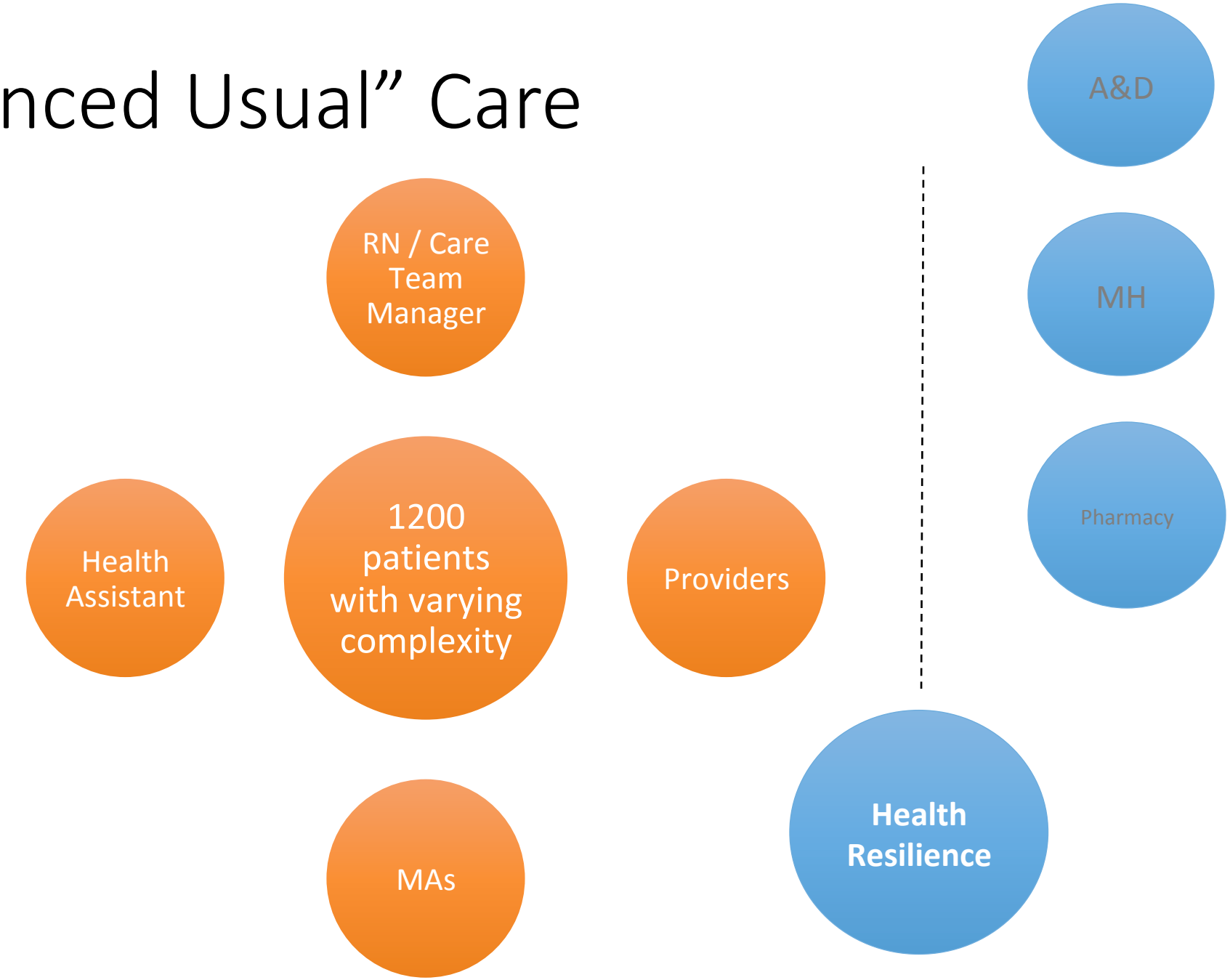
“Enhanced Usual” Care



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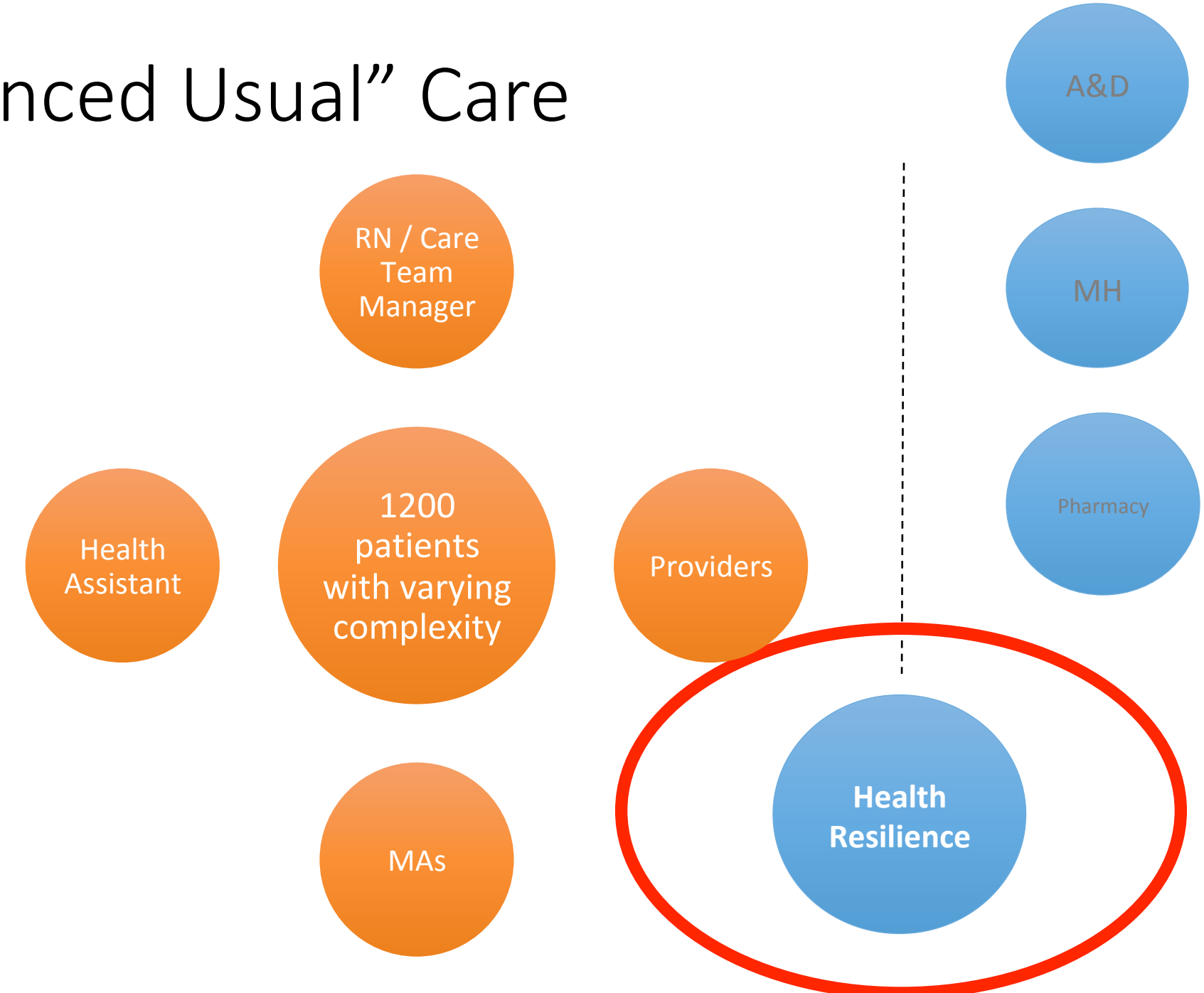
“Enhanced Usual” Care



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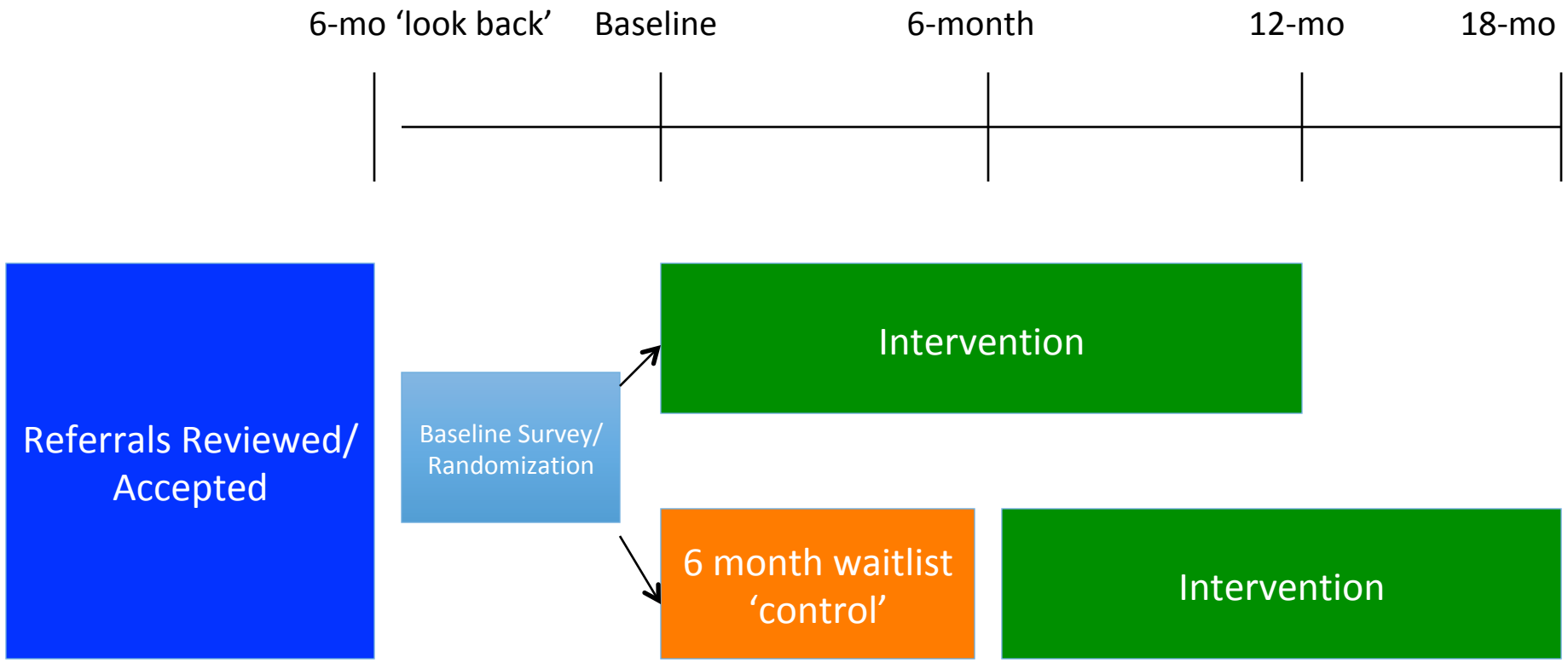
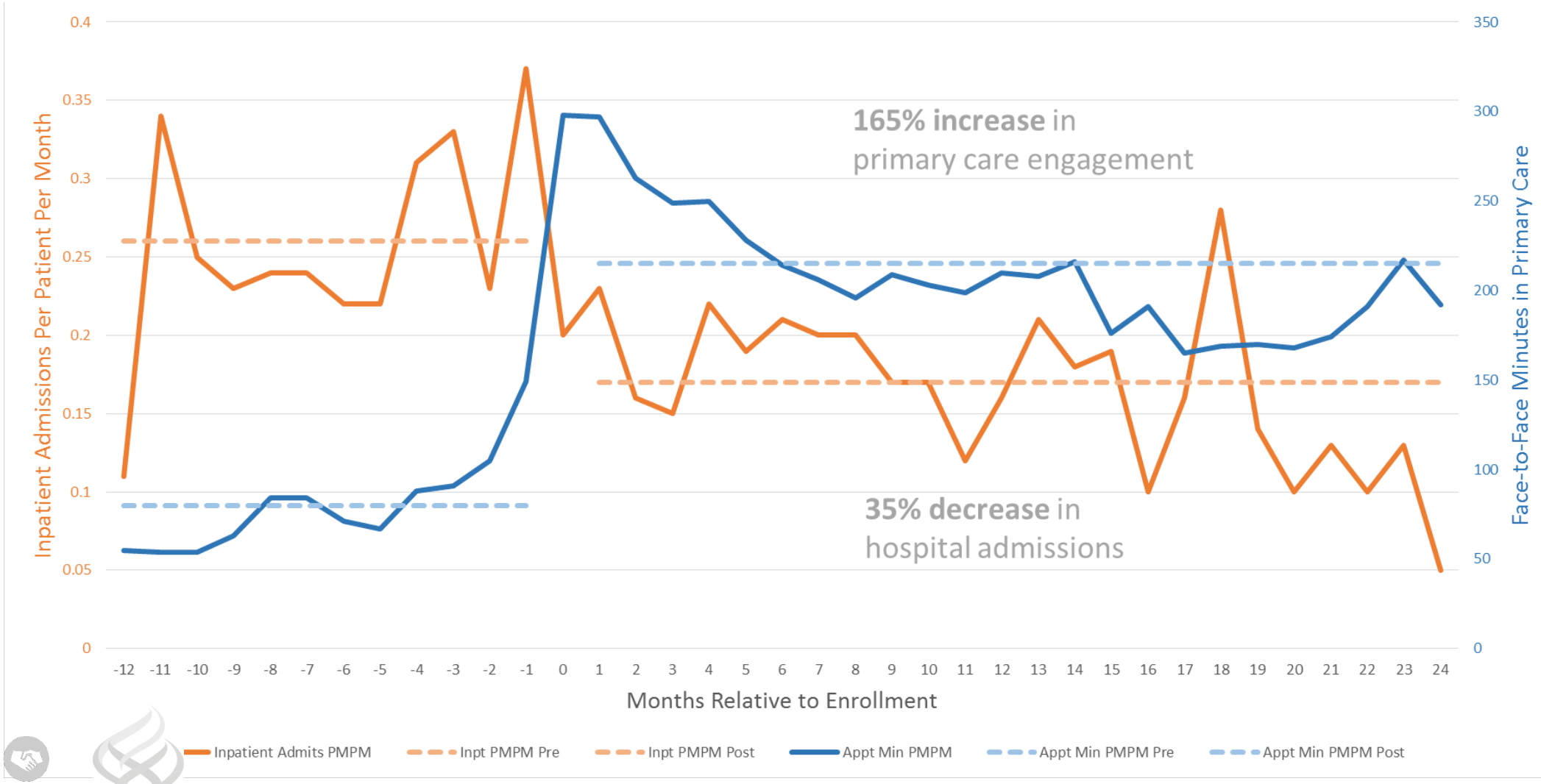
Study Design: Wait-list Control



Utilization Outcomes



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Qualitative Provider Results

- Domain #1. What is the problem that SUMMIT is addressing
- Domain #2. What are the most important ingredients staff provide
- Domain #3. How do staff define success

Theme 1: Patient-System Mismatch

"He was homeless when we made the referral … and we see that with a lot of our folks…the rest of the healthcare systems are designed for these neat packages of people that are housed, have family support, have access to other resources, are not actively using substances … our clients look a lot riskier on paper and we are really having to advocate...They still deserve end of life care, even if they're homeless….it's frustrating to have to explain to the outside world why our patients need access to these services…the services aren't really designed for complex folks…" *(Social Worker)*

Theme 2: Importance of Building Connection

"I spent an hour with a patient last week and we didn't talk about medical problems… It literally was a therapeutic session. I'm not a trained therapist, but I know through years of experience … That's what it was. We didn't talk about diabetes. We didn't talk about her foot ulcers. We didn't talk about any of that … Alot of times we end up doing the work of social workers, but when you do primary care, you have to do that. It's not 'oh hold on, that's personal. I'm not getting into that. I'm only here for the medical stuff.' It all wraps up into one." *(Physician)*

Theme 3: Being Present with the Patient

"Having more time, and then really having this sort of ability to ride through chaos with people where we are chasing people down and showing up at their apartment multiple times until we finally are able to catch them when they're home … Drawing people into the fold of care and riding out chaos with them." *(Social worker)*

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Theme 4: Flexibility in Care Delivery

"I'll have appointments with patients just with myself if patients need help with scheduling outside of the clinic and arranging transportation… I will make it a point for them to come in and we'll schedule together and try to give them a planner or write up all their appointments in a document for them to keep." *(Care Coordinator)*

Theme 5: Everyone Is in It Together

"I think we all have just built this together so, we inherently respect one another's clinical view of the situation … we all come at this from different backgrounds and feel like we get more out of our patient care experience if we hear what everyone else has to say … I think we have a very supportive and inclusive team environment" *(Physician)*

"They really listen and they really care and we all really feel it when someone does fail or fall or something bad happens" *(Nurse)*

Theme 6: Supporting Patient Self-Efficacy

"I think by us being able to adapt how we are giving him care, he's become engaged with the clinic in a different way that is better than it was before… [where] he wasn't getting his needs met. Now he comes in fairly frequently … and his life is much less chaotic." *(Physician)*

"…The patients that have been on Summit for a while who have a really solid relationship with us, that makes a huge difference. They are able to call. They are telling us what their needs are. They can make it to appointments" (*Physician)*

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- **Discuss challenges in adapting A-ICU model to FQHC/HCH setting**

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Challenges – Systems

- Gaps in care
  - TBI success?
  - “Winning” the firesources
  - Trauma informed settings for respite/long term care
  - Hospice for socially vulnerable patients
  - Substance use disorder treatment services for medically complex individuals
- Compassion fatigue → empathy failure across systems
- Maintaining patient trust across systems
- Retaining team flexibility to accommodate patient needs while growing
- How do you measure nancial case

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How Much Does SUMMIT cost?

- Funded by operations budget and a mix of per-member-per-month rate and direct service billing
  - Much of SUMMIT work is not billable! (phone notes/coordination/etc)
  - Current staffing ~ $700,000/ year
  - $3-4000/ member for 6 months
- Costs of hospitalization (3 days ~ $10-20,000)
  - 200 pts at 2 admissions/6 months ~
  - 10% reduction ~$4000 savings

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Challenges – Clinical

- Relationships are non-linear
- Relationships are intense and often we are sharing risk in a different way
- Controlling what you can control
- What comes with holding a high level of respect for autonomy and self determination?
  - Getting comfortable with allowing people to make “bad” decisions
  - Experiencing the risks and consequences associated with those decisions alongside people
- Flexibility vs Fidelity

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The Future…

- Better defining success through patient/provider experiences, outcomes, cost data
- Increased patient activation/self management
- Ongoing team role delineation
- Partnerships with hospitals/care homes
- Building expertise and sharing best practices
- Securing long term funding/payment reform?
- Qualitative and quantitative research findings

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Now it’s your turn…

Opportunities to share and learn together

Population Sorting Game

Identifying population segments requires:

- Quantitative analysis
- Clinical expertise

If you don’t have analytics/research staff with lots of free time, how can you use **clinical experts** to **conduct analysis**?

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Population Sorting Game

Rationale

- Statistical Significance ≠ Clinically Meaningful
  - Clustering algorithms always return results
  - Humans need to decide whether the results are meaningful

Goal

- Each card represents a *possible* subgroup
- Arrange cards to identify *meaningful* subgroups

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Population sorting game

Population Sorting Game

Game Play

- Setup: Place 6 cards face-up on the table
- Dealer: Deal cards to everyone at the table, one-by-one
- Players:
  - Moving clockwise, place one card face-up on the table
  - Arrange any cards as you see fit and talk aloud about your rationale
- Repeat until all cards are on arranged on the table

Ways to arrange: group, divide, discard, or create a continuum

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Population Sorting Game

Discussion

- What intersecting needs do you see?
- How else can you engage clinicians in a data-driven population segmentation process?

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Learn From the Experts (each other)

Table Discussion

- What subpopulations are you effectively targeting with interventions?
  - What outcomes are you trying to improve?
  - Why have you been successful?
  - What challenges have you faced?

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Learn From the Experts (each other)

Report Out

- What did *someone else* say that resonated with you?
- Is your clinic's experience similar to what you heard others talk about? Is it substantially different?

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