

Medicaid Innovation Accelerator Program

Beneficiaries with Complex Care Needs and High Costs (BCN)

Identification and Stratification of Medicaid Beneficiaries with Complex Needs and High Costs

IAP BCN National Dissemination Webinar

October 31, 2016

2:00 PM – 3:30 PM ET



Logistics for the Webinar

- All participant lines will be muted automatically during today's webinar.
- Use the chat box on your screen to ask a question or leave comment
 - Note: chat box will not be seen if you are in “full screen” mode
 - Please exit out of “full screen” mode to participate in polling questions
- Moderated Q&A will be held during the webinar:
 - To verbally ask a question, dial *1. You will be connected to the webinar operator, who will connect your line so that you can ask your question.
- Please complete the evaluation in the pop-up box after the webinar to help us continue to improve your experience.

Poll #1

- Please select the type of organization you are representing.
 - State Medicaid Agency
 - State Agency other than Medicaid Agency
 - Managed Care Organization
 - Healthcare Provider
 - Consultant
 - Other

Agenda and Background

Karen LLanos

Agenda

- Background
 - Karen Llanos, Director, Medicaid IAP Centers for Medicare & Medicaid Services
- Key Learnings about BCN Identification & Stratification
 - Juan Montanez, Principal, Health Management Associates
- Perspectives from the Field
 - Tracy Johnson, Director, Health Care Reform Initiatives, Denver Health
 - Ruben Amarasingham, President and CEO, Parkland Center for Clinical Innovation, Pieces Technologies, Inc.
- Reflections from BCN Initiative States
- Topic Wrap Up and Closing Remarks

Background

- BCN track of IAP has worked with five states over ten months on issues such as:
 - Identifying and stratifying BCN target populations
 - Incorporating social determinants of health into targeting and program design activities
 - Designing effective care management strategies
 - Designing Alternative Payment Methodologies
- This is the first of a series of four national dissemination webinars for the IAP Beneficiaries with Complex Care Needs & High Costs program area
- Today's focus-- Identifying and stratifying BCN target populations

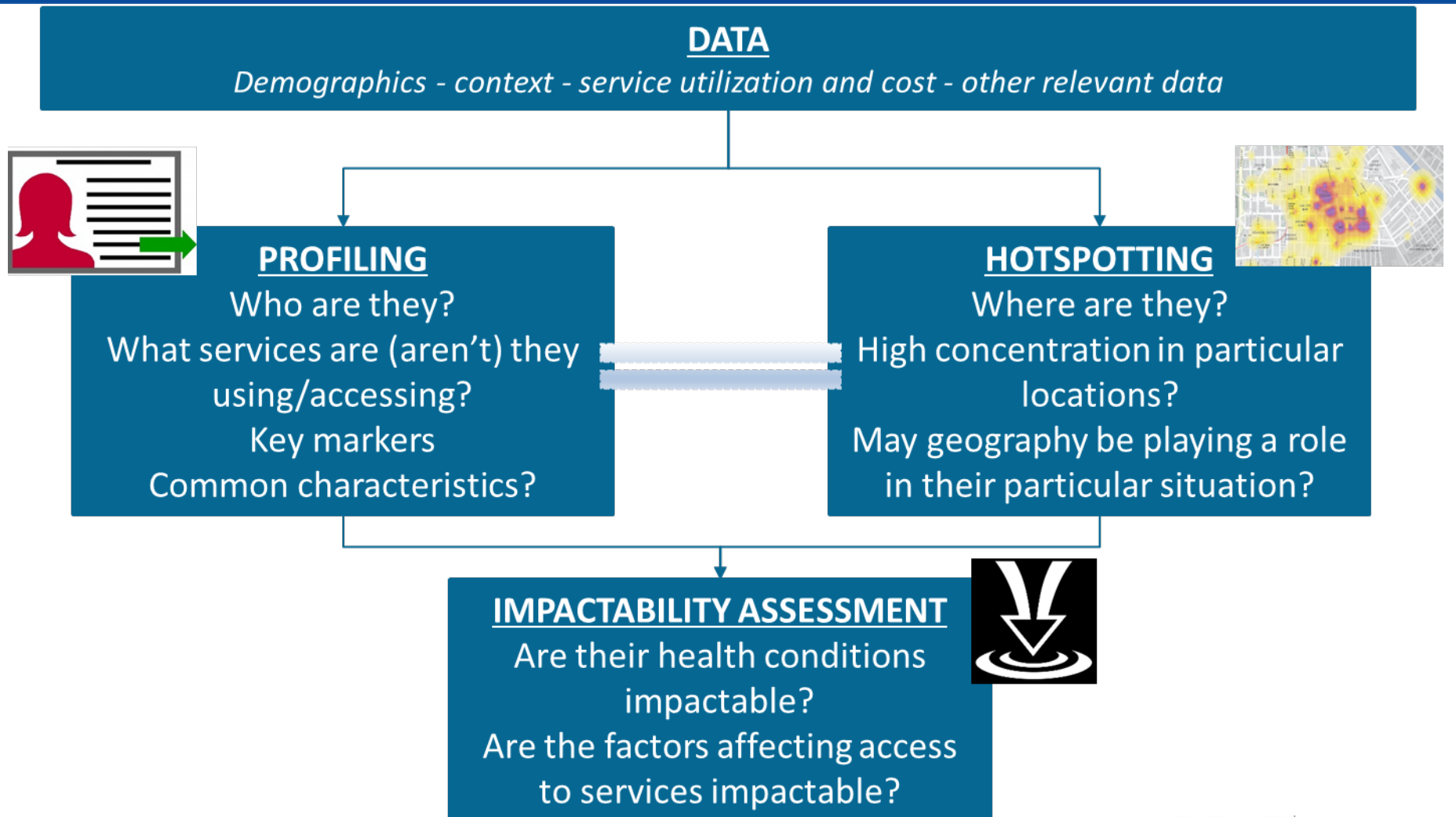
Learnings about BCN Identification and Stratification

Juan Montanez

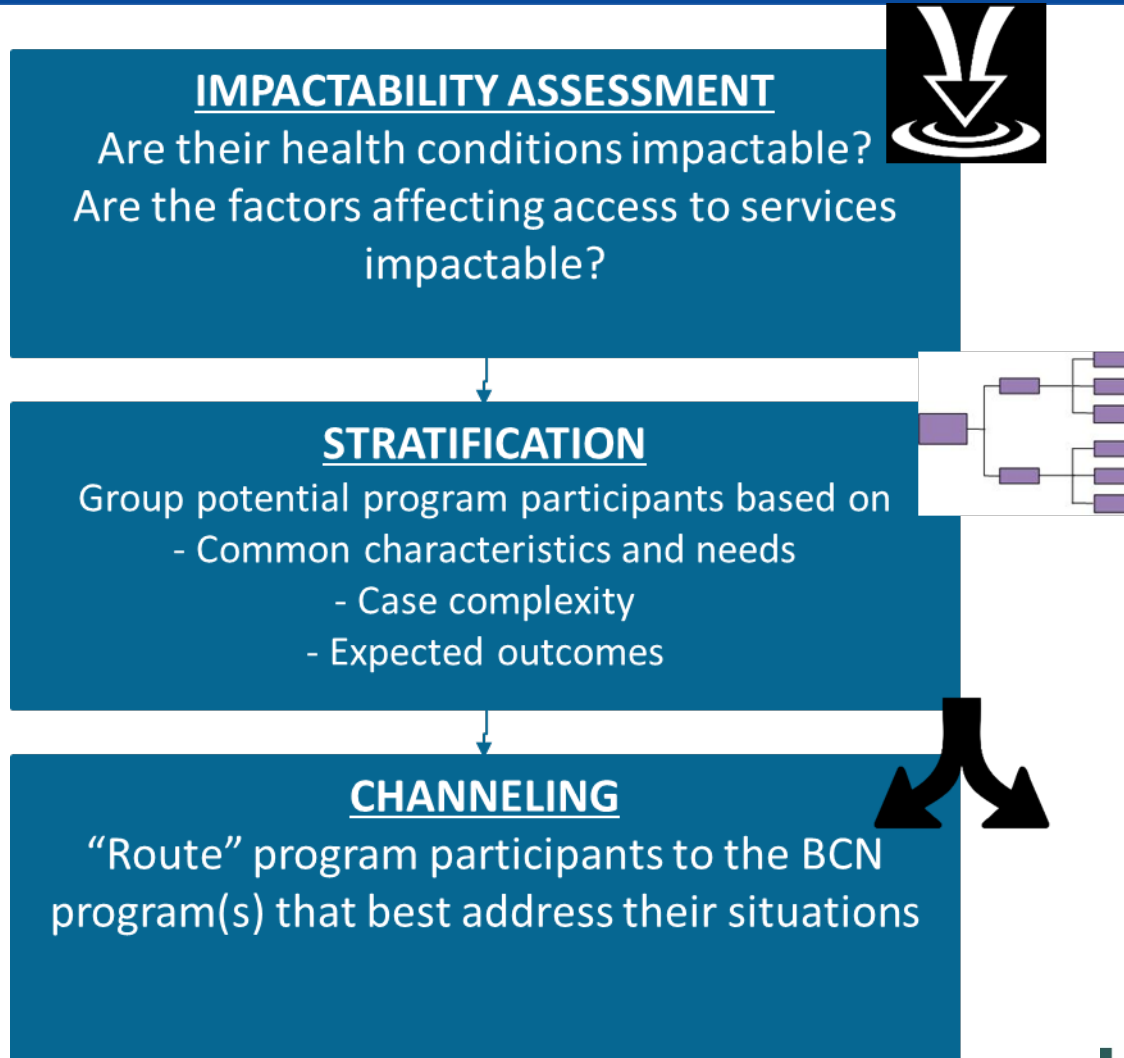
Premise

- Innovative models and systems of care (ACOs, health homes, etc.) are being implemented across the country with the goals of improving the health and containing the health care costs of Medicaid beneficiaries with complex needs (BCNs).
- BCNs manifest **poorly managed yet impactable health conditions** that result in high utilization and costs.
- Addressing these conditions calls for coordinated physical health, behavioral health and social services that attend to health risks, gaps in care and barriers to accessing needed health care services.

What is Targeting?



What is Targeting? (cont'd)



The Universe of BCN program participants: *Results from Systematic Activities*

- After Completing...

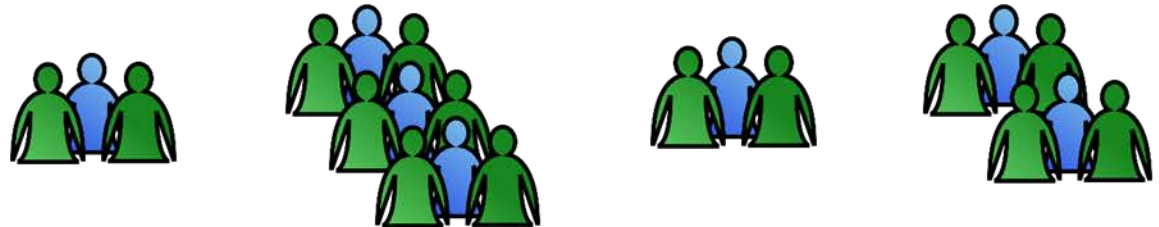
PROFILING/
HOTSPOTTING



IMPACTABILITY
ASSESSMENT



STRATIFICATION
AND
CHANNELING



NO BCN PROGRAM
WARRANTED

BCN PROGRAM A
TIER 1

BCN PROGRAM A
TIER 2

BCN PROGRAM B

Macro vs. Micro Targeting

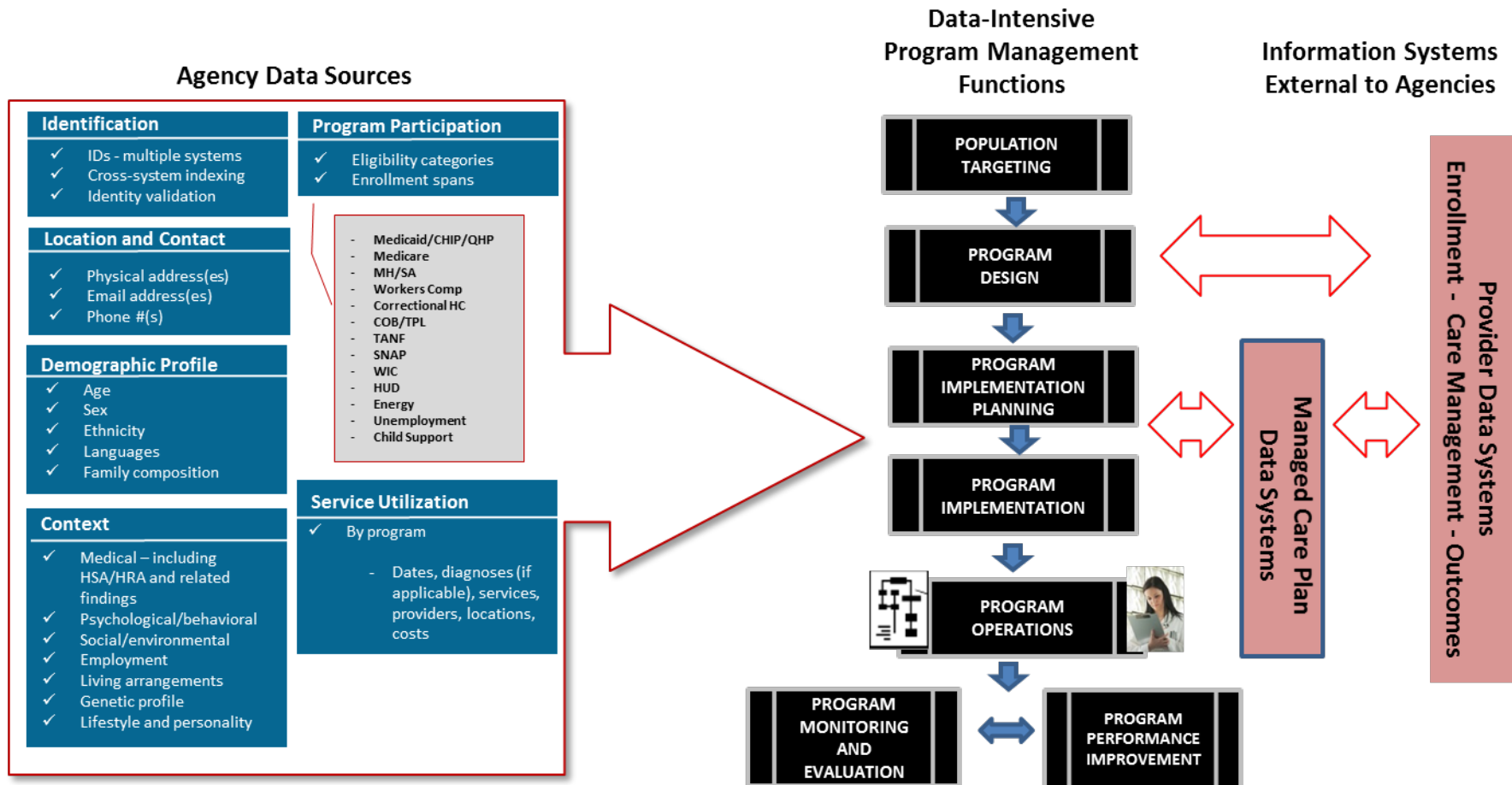
- **Macro**
 - Occurs at the state/region/local level
 - More reliant on higher-order, more aggregated, historical data
 - More reliant on encounter/claims and program participation data
 - Ultimately leads to channeling individuals to specific BCN programs but not to the development of case/care/service plans
 - Occurs prior to “enrollment” in a BCN program

Macro vs. Micro Targeting (cont'd)

- **Micro**

- Occurs at the program/service provider level
- Pulls more “real-time” information, such as facts garnered from observations/assessments, into evaluation and decision making
- Leads to development of individualized case/care/service plan and assignment to a specific care manager and care team

What Data Do States and BCN Providers Need for these Activities?



Key Learnings from Engagement with IAP BCN State Participants

| Area | Examples | Observations |
|---|--|---|
| Use of algorithms for BCN targeting and risk stratification/scoring | <ul style="list-style-type: none"> - CDPS - PRISM (WA State) - Elixhauser comorbidity index | <ul style="list-style-type: none"> - Important to incorporate social determinants to the degree that is feasible - Means to an end... |
| Use of academic institutions and Medicaid EQRO in support of analytics activities | <ul style="list-style-type: none"> - Oregon (OSHU) - Texas (ICHP – U. of Florida) | <ul style="list-style-type: none"> - Many capable institutions - Important that this is not treated mainly as academic or research exercise |
| Overcoming the challenge of data aggregation and harmonization | <ul style="list-style-type: none"> - Data warehouses/marts - Decision support systems | <ul style="list-style-type: none"> - Leverage data “standards” (HIPAA, NIEM, HL7, QRDA, etc.) - Ability to “drill down” and “roll up” is critical |

Key Learnings from Engagement with IAP BCN State Participants

| Area | Examples | Observations |
|--|--|---|
| <p>Overcoming challenges of sharing/exchanging data</p> <ul style="list-style-type: none"> - Across agencies - With and among MCOs | <ul style="list-style-type: none"> - Data sharing/ exchange use cases - Data use agreements (DUAs) | <ul style="list-style-type: none"> - Must understand real constraints to, and enablers of, data sharing/exchange - Ability to regulate access based on laws/regs, consents, user roles - Importance of well structured DUAs - Importance of data governance |
| <p>Linking measurement strategies to targeted populations</p> | <ul style="list-style-type: none"> - Leveraging claims data (VT) - Going beyond claims data to harness data from risk assessments (WA) | <ul style="list-style-type: none"> - Strategies depend on available data and analytics resources - Important to leverage current quality/performance initiatives but not overburden data collection/reporting capacities - Importance of alignment across state, other payers and providers - Challenges to harness social determinant data |

Perspectives from the Field

Tracy Johnson, PhD, MA

Director

Health Care Reform Initiatives Denver Health

Ruben Amarasingham, MD, MBA President and CEO

Parkland Center for Clinical Innovation. Pieces Technologies, Inc.

Macro and Micro Targeting for Population Health Management

Tracy Johnson, PhD, MA

Director, Health Care Reform Initiatives

Denver Health

Australian-American Health Policy Research Fellow (2016-17)



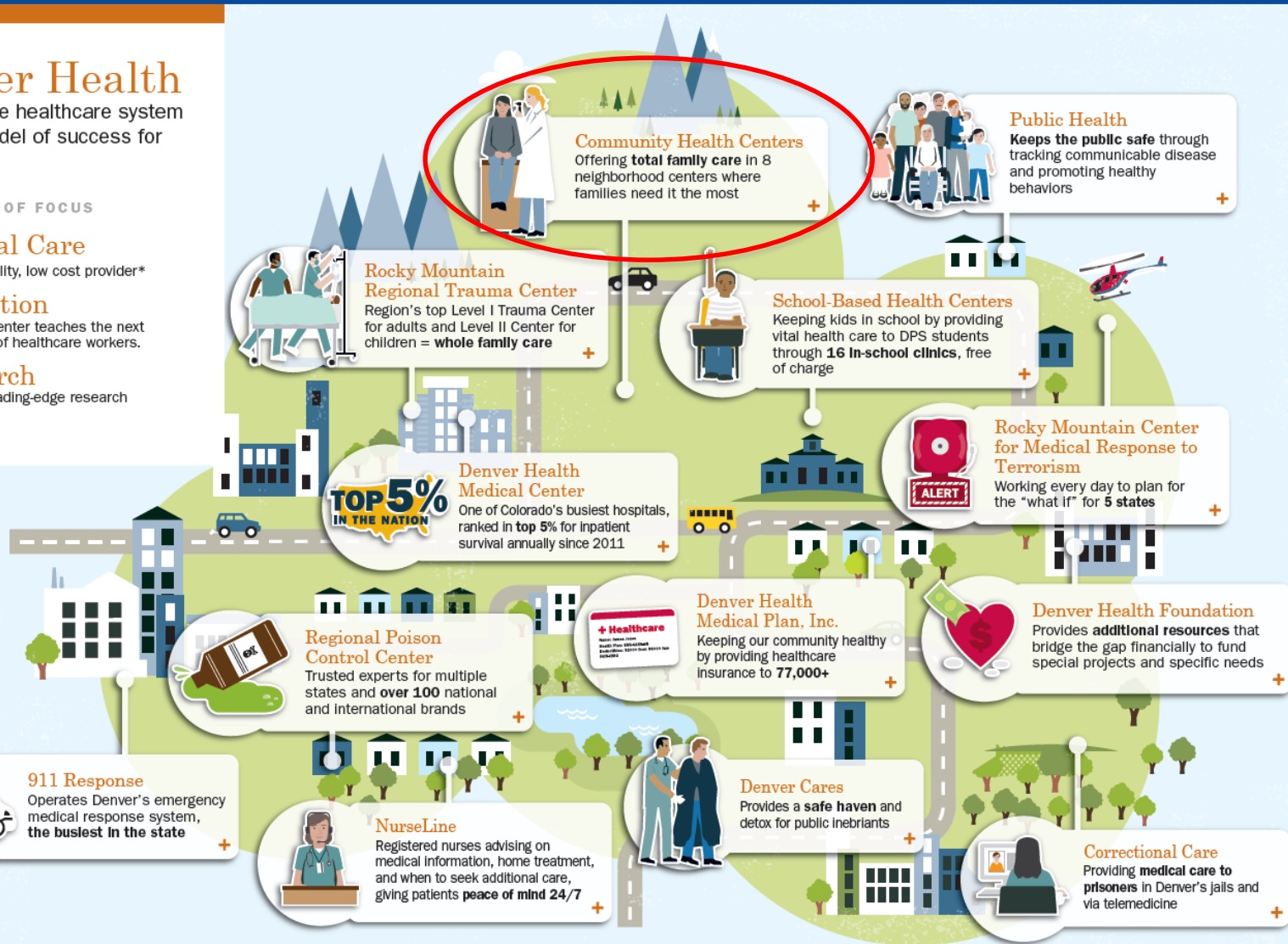
Denver Health and Hospital Authority

Denver Health

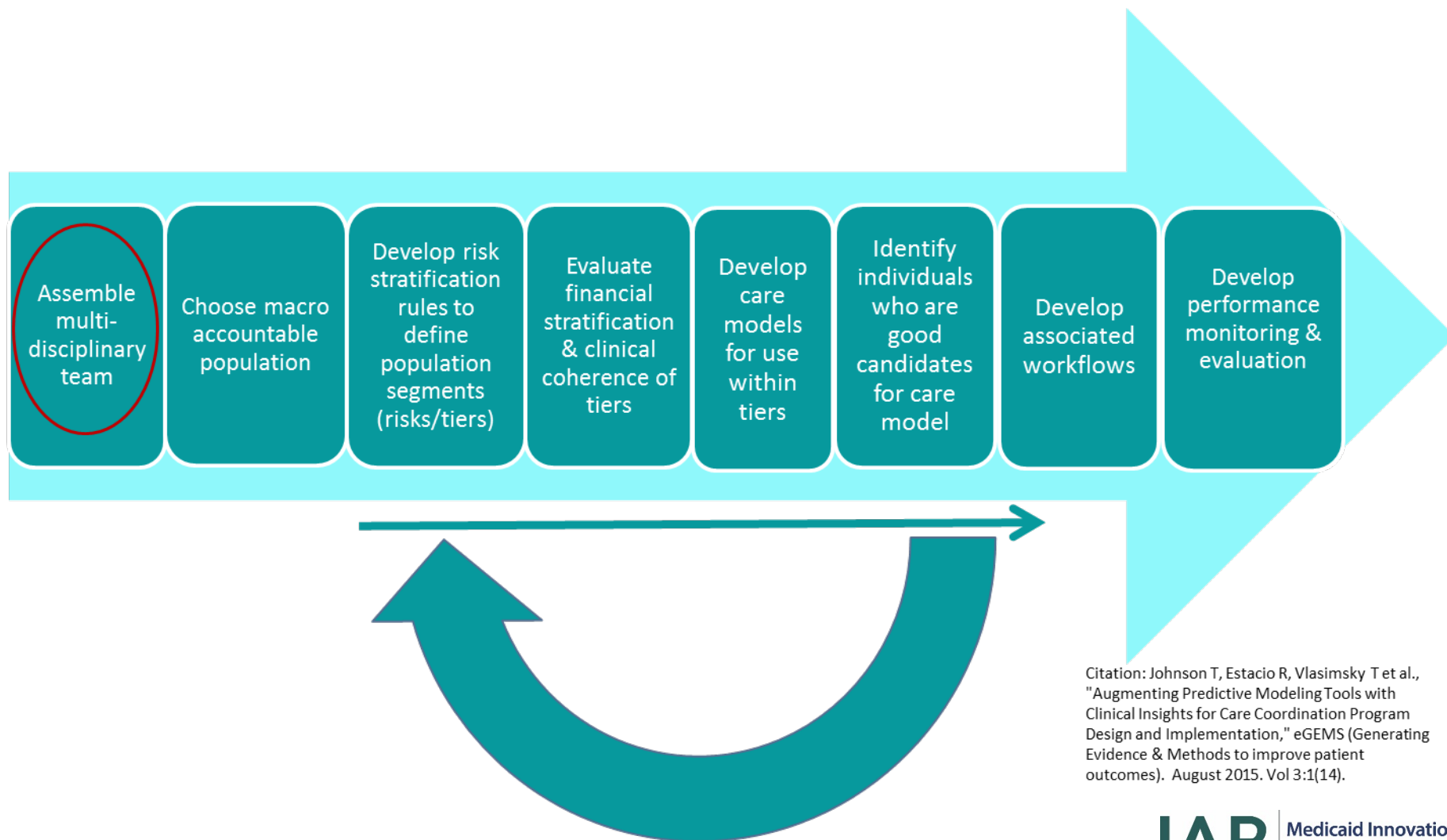
An innovative healthcare system that is a model of success for the nation.

OUR AREAS OF FOCUS

-  **Clinical Care**
Highest quality, low cost provider*
-  **Education**
Academic center teaches the next generation of healthcare workers.
-  **Research**
Ongoing, leading-edge research

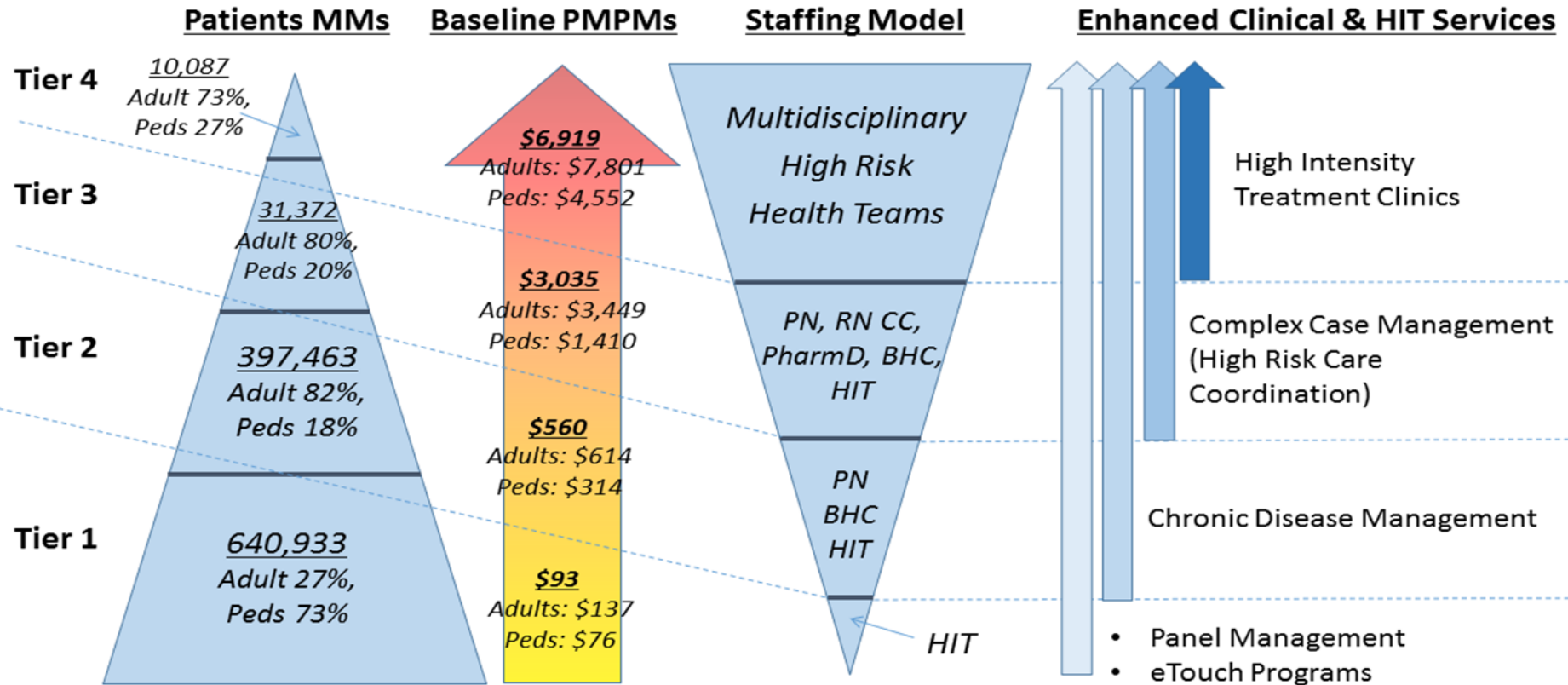


Iterate to optimize population segmentation & patient identification



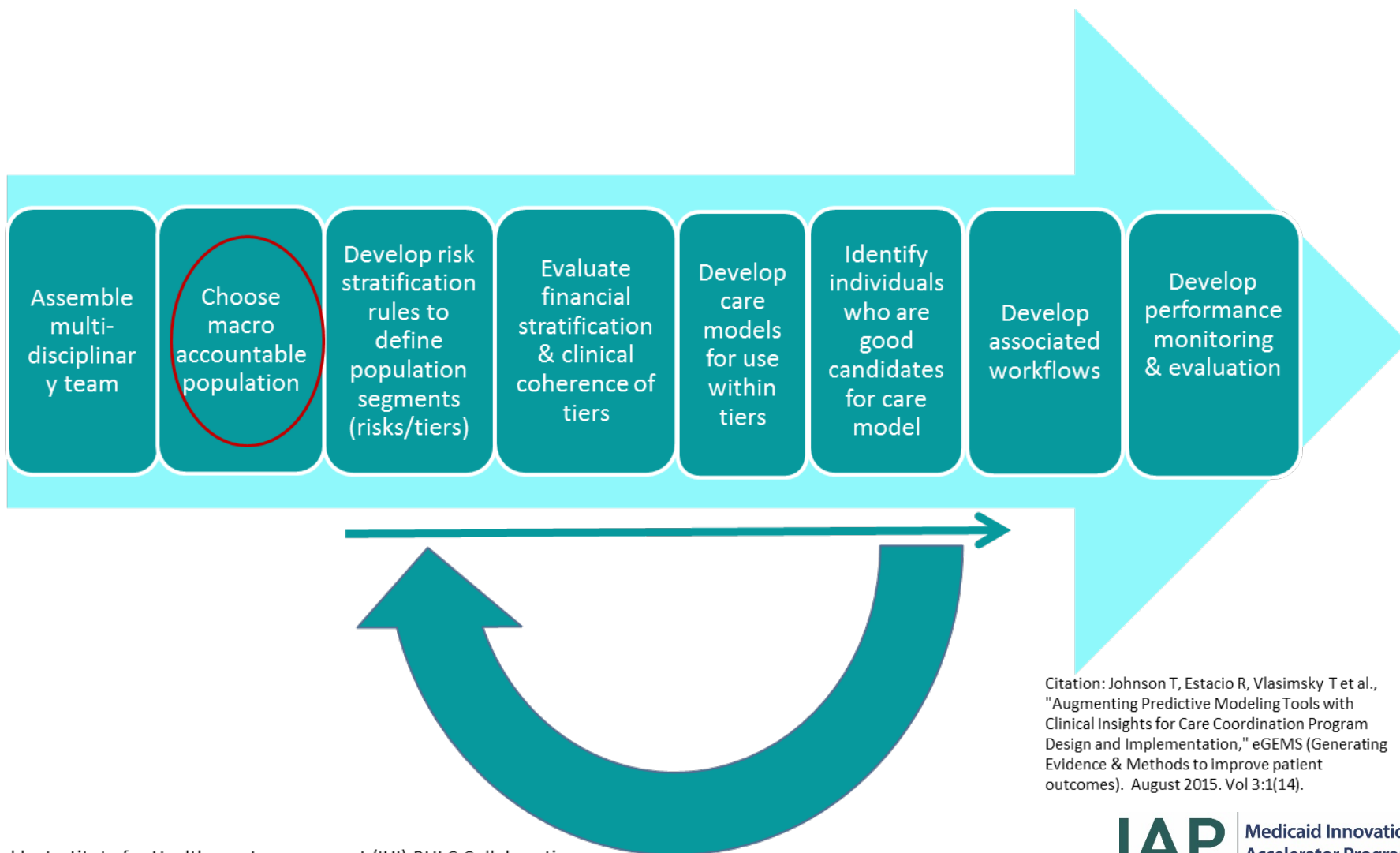
Citation: Johnson T, Estacio R, Vlasimsky T et al., "Augmenting Predictive Modeling Tools with Clinical Insights for Care Coordination Program Design and Implementation," eGEMS (Generating Evidence & Methods to improve patient outcomes). August 2015. Vol 3:1(14).

21st Century Care: Population Health “Tiered” Delivery of Enhanced Care Management Services



Notes: Baseline period is July 2010 through June 2011. This initial "proof of concept" tiering algorithm was implemented by Milliman using CDPS predictive modeling tool thresholds to define tiers. Tier sizes were pre-determined according to estimated resource capacity. The attributed managed care population was identified through membership files, whereas the fee-for-service population was selected at a single point in time at the beginning of the time period and fixed for the duration. All attributed individuals were tiered. MM: Member months, PMPMs: Per member per month, PN: Patient Navigator, RN CC: Nurse Care Coordinators, PharmD: Clinical Pharmacist, eTouch: Health Text Messages Programs. Grant tiers (Beta version).

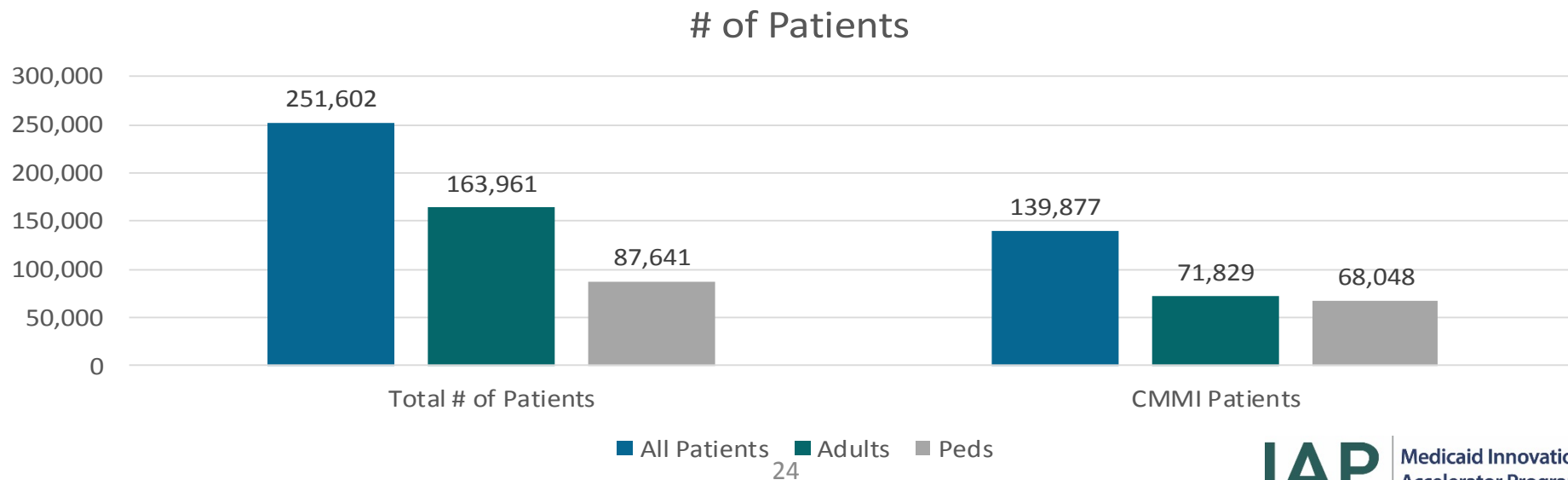
Iterate to optimize population segmentation & patient identification



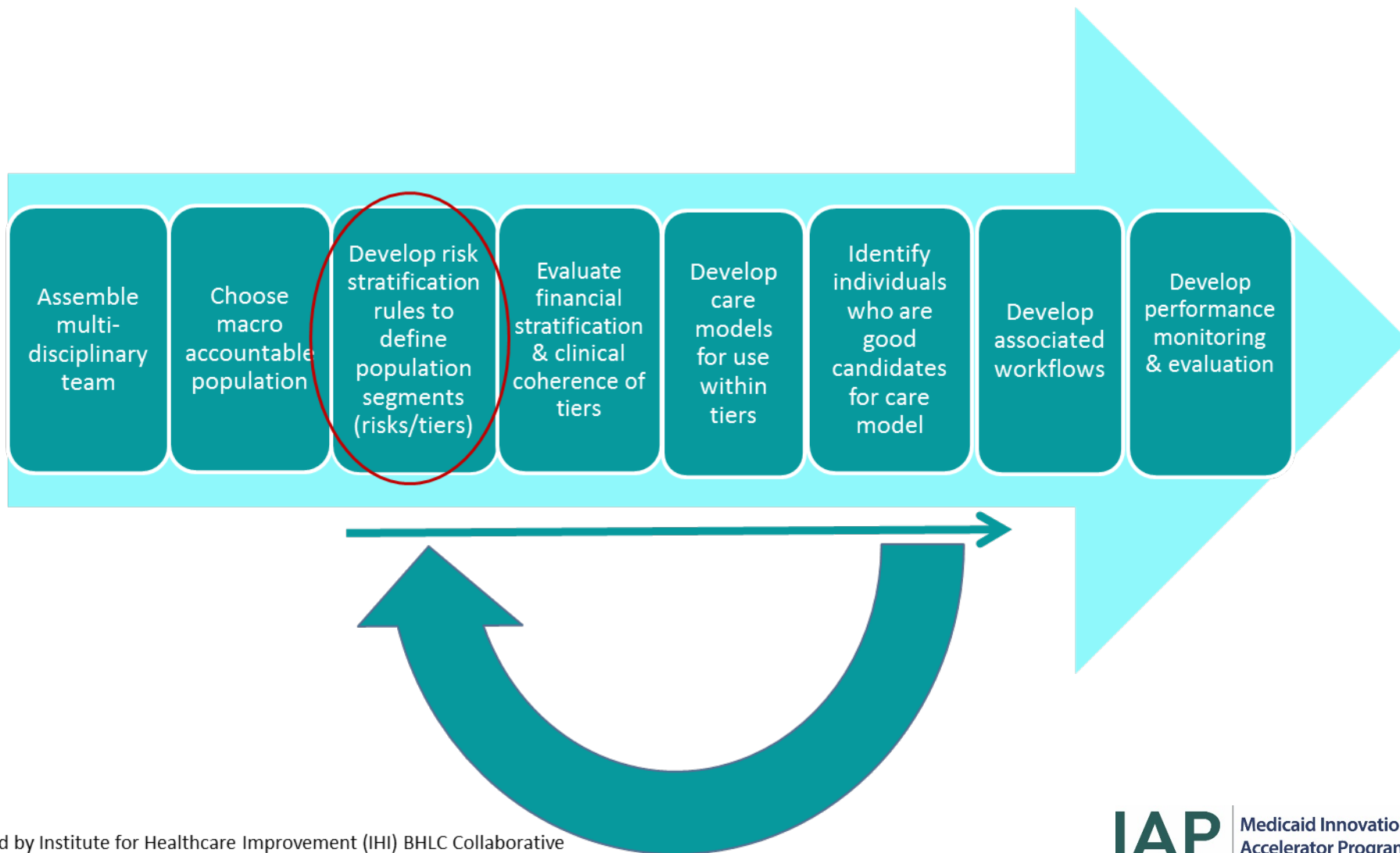
Citation: Johnson T, Estacio R, Vlasimsky T et al., "Augmenting Predictive Modeling Tools with Clinical Insights for Care Coordination Program Design and Implementation," eGEMS (Generating Evidence & Methods to improve patient outcomes). August 2015. Vol 3:1(14).

Who Do We Tier?

- All patients who have had a visit to a Denver Health facility in the previous 18 months (includes clinic visits, hospital, ED, urgent care, public health visits, etc.)
- Medicaid, Medicare, CHP Managed Care patients, regardless of whether they have been to DH or not
- Run daily, with full population refreshes monthly



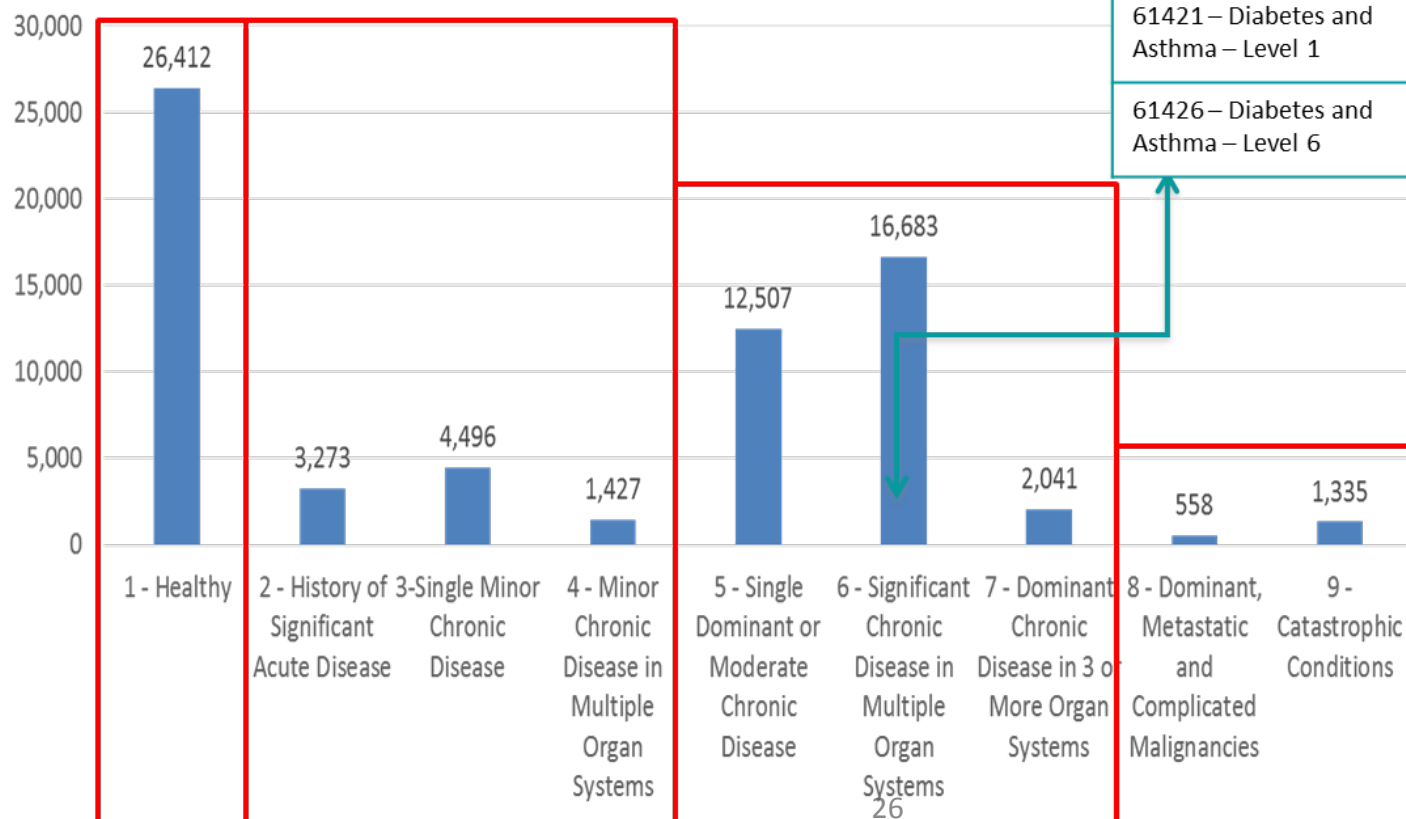
Iterate to optimize population segmentation & patient identification



CRG Status

CRG Status is a primary building block for constructing DH's tiered population

CMMI Adults by CRG Status

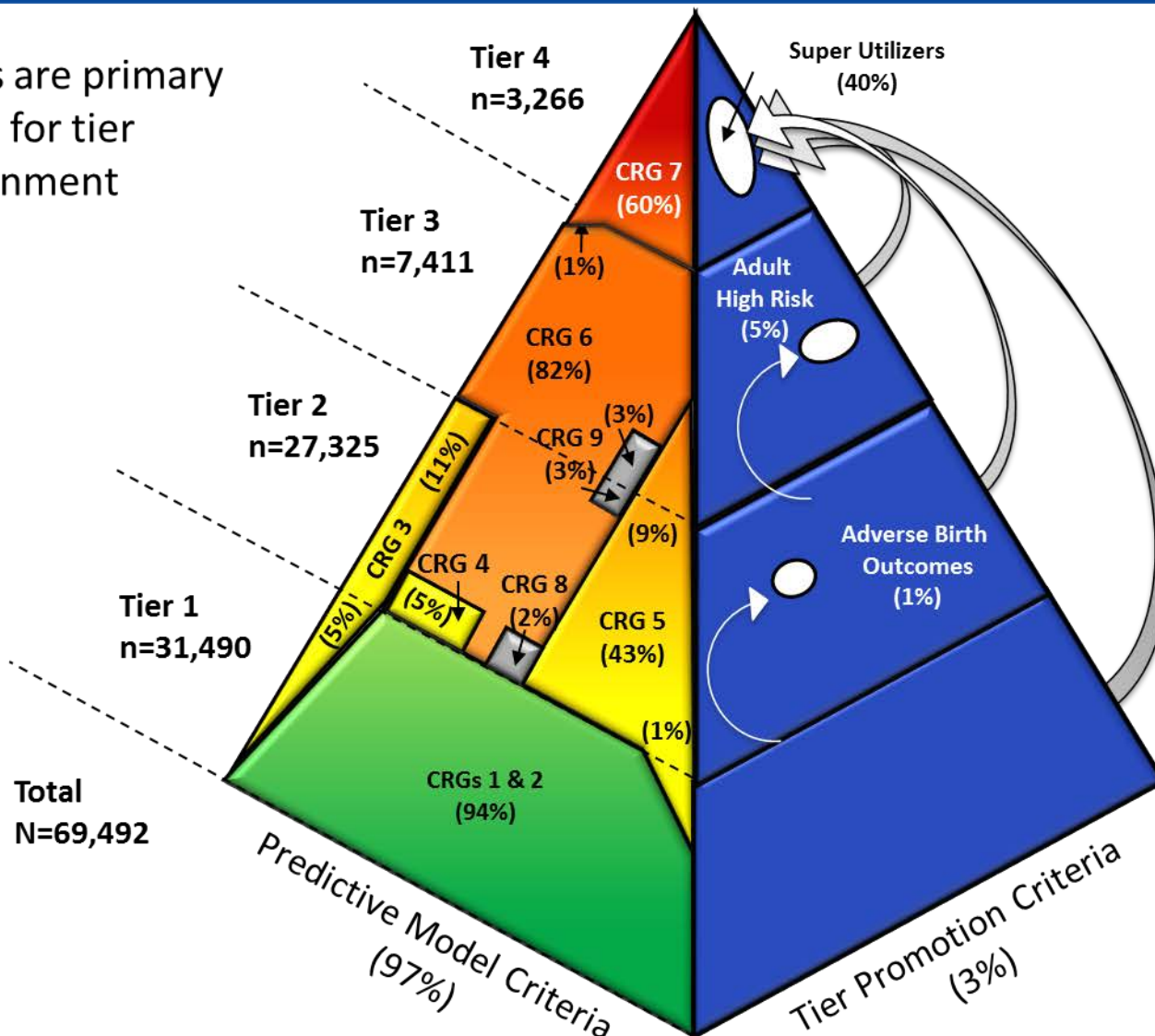


| Full CRG Description | Avg. Charges |
|---------------------------------------|--------------|
| 61421 - Diabetes and Asthma - Level 1 | \$5,815 |
| 61426 - Diabetes and Asthma - Level 6 | \$41,346 |

Adult Risk Stratification Using Predictive Risk Model and Recent Use

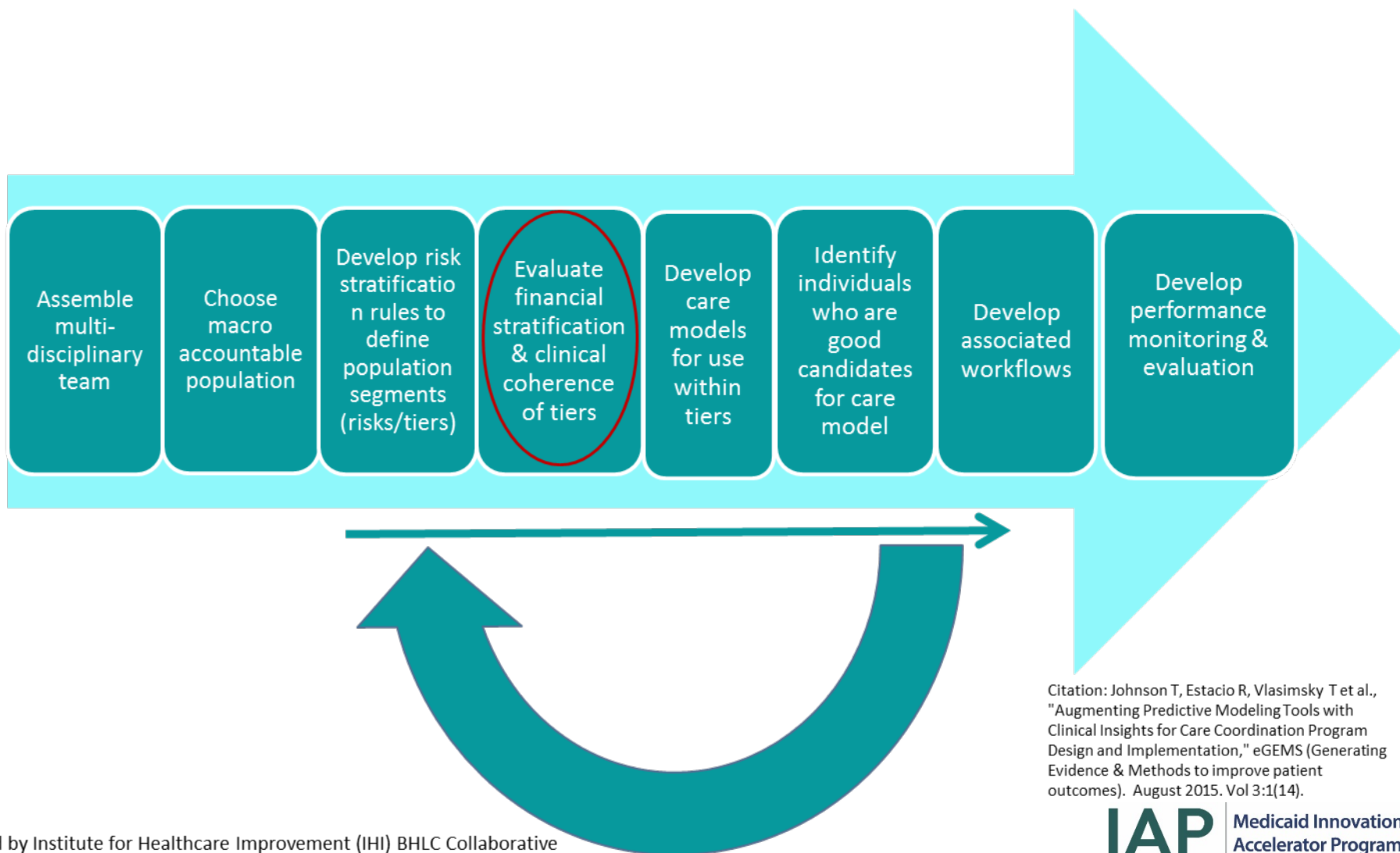
CRGs are primary basis for tier assignment

Utilization may override CRG-assigned Tier



Citation: Johnson T, Estacio R, Vlasimsky T et al., "Augmenting Predictive Modeling Tools with Clinical Insights for Care Coordination Program Design and Implementation," eGEMS (Generating Evidence & Methods to improve patient outcomes). August 2015. Vol 3:1(14).

Iterate to optimize population segmentation & patient identification



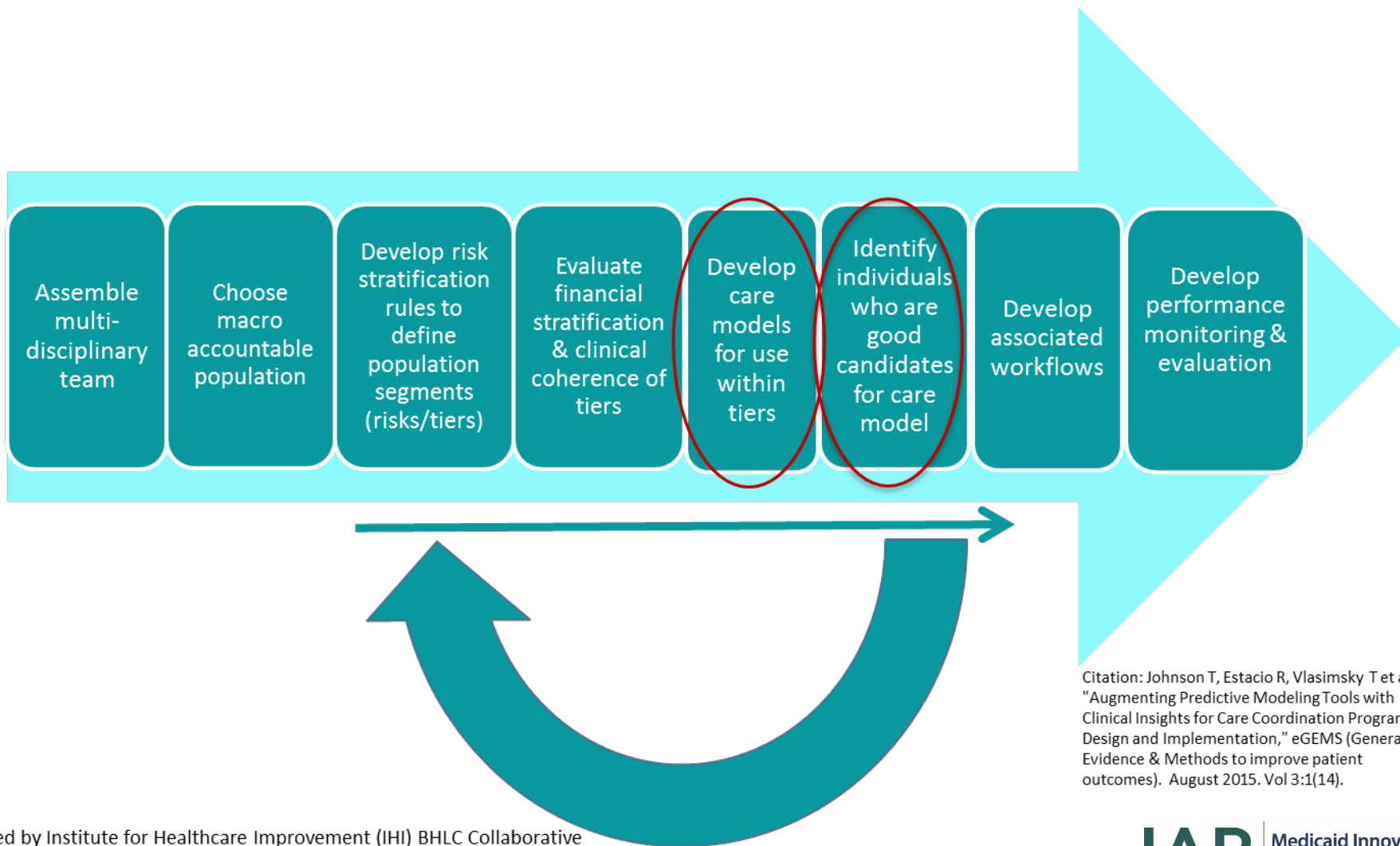
Citation: Johnson T, Estacio R, Vlasimsky T et al., "Augmenting Predictive Modeling Tools with Clinical Insights for Care Coordination Program Design and Implementation," eGEMS (Generating Evidence & Methods to improve patient outcomes). August 2015. Vol 3:1(14).

CRGs Provide Financial Stratification with Clinical Meaning

| CRG* Status | 2012 Cohort average charges | 2013 Cohort average charges | 2014 Cohort average charges |
|------------------------------------|-----------------------------|-----------------------------|-----------------------------|
| 1 - Healthy | \$2859 | \$3,058 | \$1,940 |
| 2 - Acute Only | \$5686 | \$5,820 | \$3,450 |
| 3 - Single Minor Chronic | \$5243 | \$5,843 | \$3,213 |
| 4 - Multiple Minor Chronic Disease | \$6572 | \$7,055 | \$4,346 |
| 5 - Moderate Chronic Disease | \$7474 | \$7,571 | \$4,084 |
| 6 - Significant Multiple Chronic | \$17,413 | \$18,437 | \$9,909 |
| 7 - Dominant Multiple Chronic | \$45,277 | \$42,380 | \$29,353 |
| 8 - Cancer | \$39,243 | \$48,771 | \$34,689 |
| 9 - Catastrophic | \$81,538 | \$87,993 | \$48,372 |

Citation: Johnson T, Estacio R, Vlasimsky T et al., "Augmenting Predictive Modeling Tools with Clinical Insights for Care Coordination Program Design and Implementation," eGEMS (Generating Evidence & Methods to improve patient outcomes). August 2015. Vol 3:1(14)

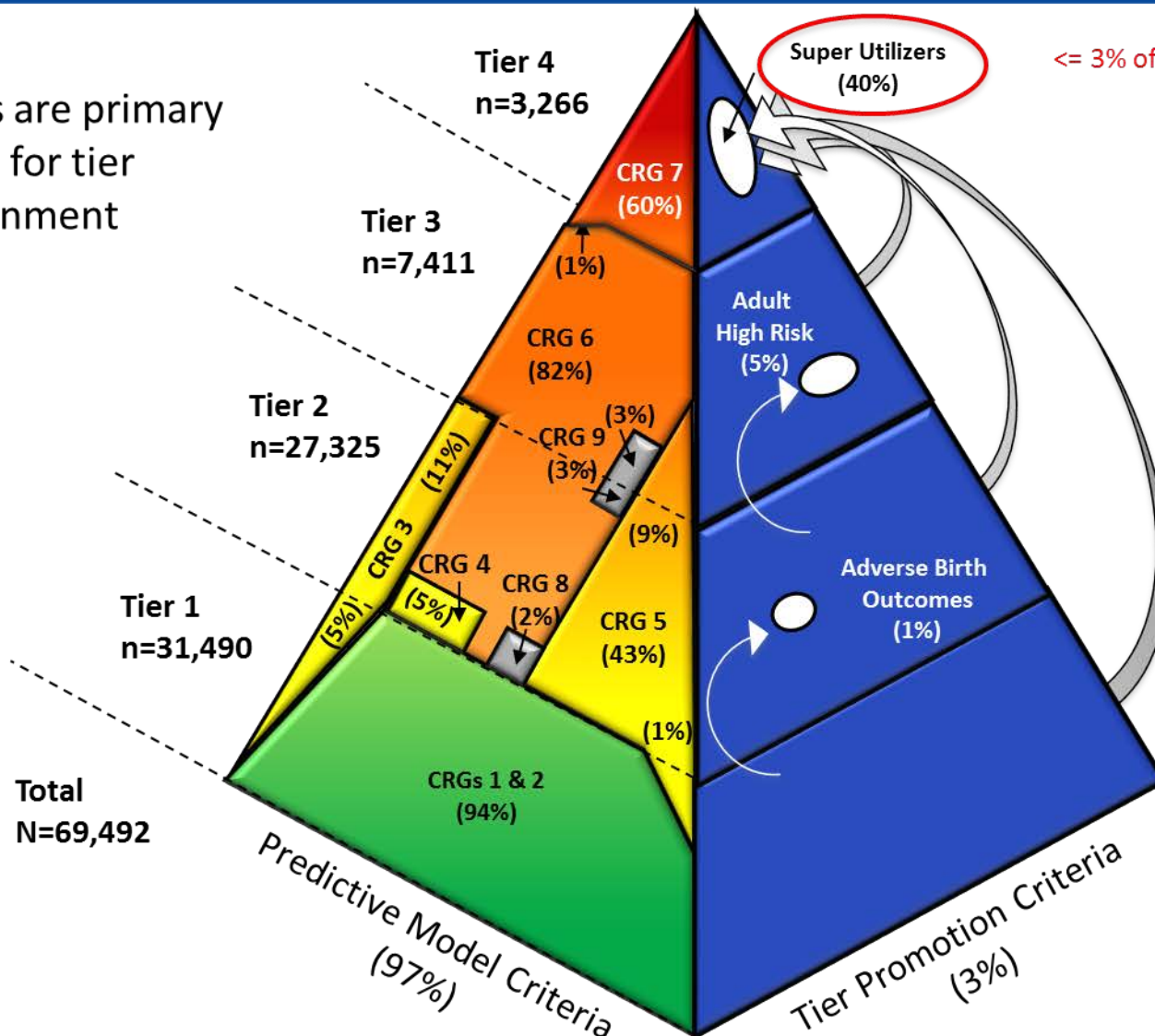
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Adult Risk Stratification Using Predictive Modeling and Clinical

CRGs are primary basis for tier assignment

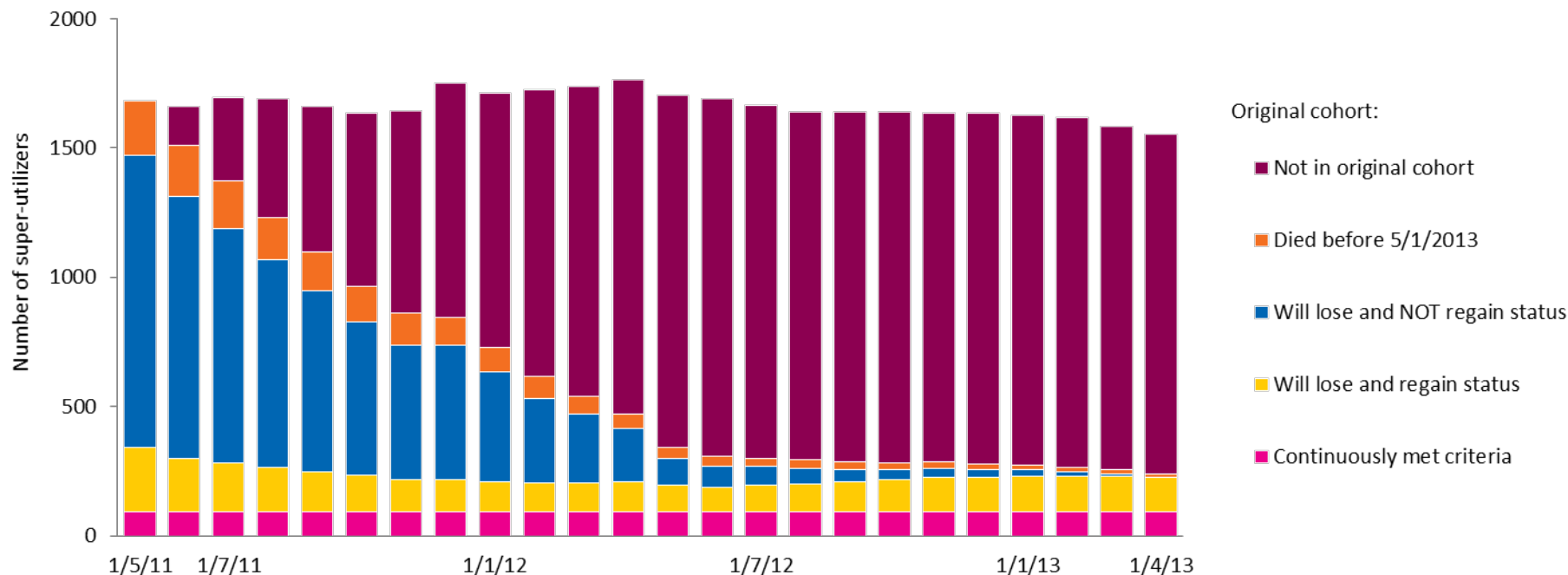


Utilization overrides CRG-assigned tier

Citation: Johnson T, Estacio R, Vlasimsky T et al., "Augmenting Predictive Modeling Tools with Clinical Insights for Care Coordination Program Design and Implementation," eGEMS (Generating Evidence & Methods to improve patient outcomes). August 2015. Vol 3:1(14).

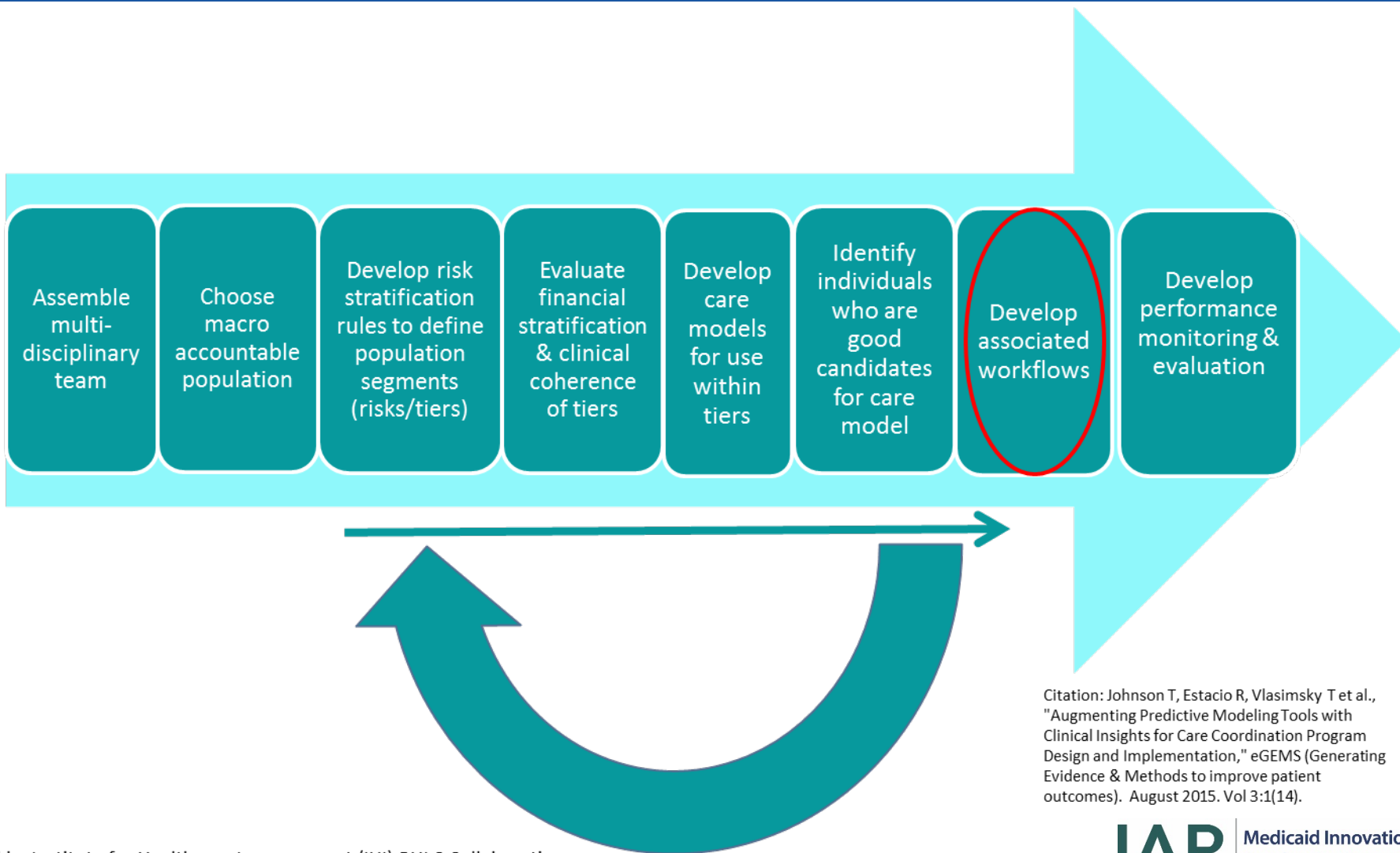
“Super-Utilizers” are Stable in Number, BUT Individual Turn-Over is High

Population And Individual-Level Analyses of Adult Super-Utilizers in Denver County, Colorado, May 1, 2011–April 30, 2013



DATA NOTES: Authors’ analysis of data from the data warehouse of Denver Health. NOTES “Not in original cohort” is people who became super-utilizers after the study period began (members of all other categories were in the original cohort). “Will die” is people from the original cohort who died during the study period; some people who died also permanently or temporarily lost super-utilizer status. “Will lose and not regain status” is people from the original cohort who stopped being super-utilizers and did not regain that status during the study period. “Will lose and regain status” is people from the original cohort who stopped being super-utilizers and did regain that status during the study period. “Continuously met criteria” is people who met the criteria for super-utilizers throughout the study period. Some people classified as “not in original cohort” also died, permanently or temporarily lost super-utilizer status, or both during the study period. However, these super-utilizer status changes were not tracked. Only status changes affecting the original cohort are shown in the exhibit.

Iterate to optimize population segmentation & patient identification



Develop Work Flows: Daily Intensive Outpatient Clinic List

Microsoft Dynamics CRM

Peter B DenverH

File Intervention Screenings View Charts Add

Records Collaborate Process Data

Workplace

My Work

- Dashboards
- Activities
- Calendar
- Imports
- Duplicate Detection
- Queues
- Articles
- Reports
- Announcements
- Screenings
- Enrollments

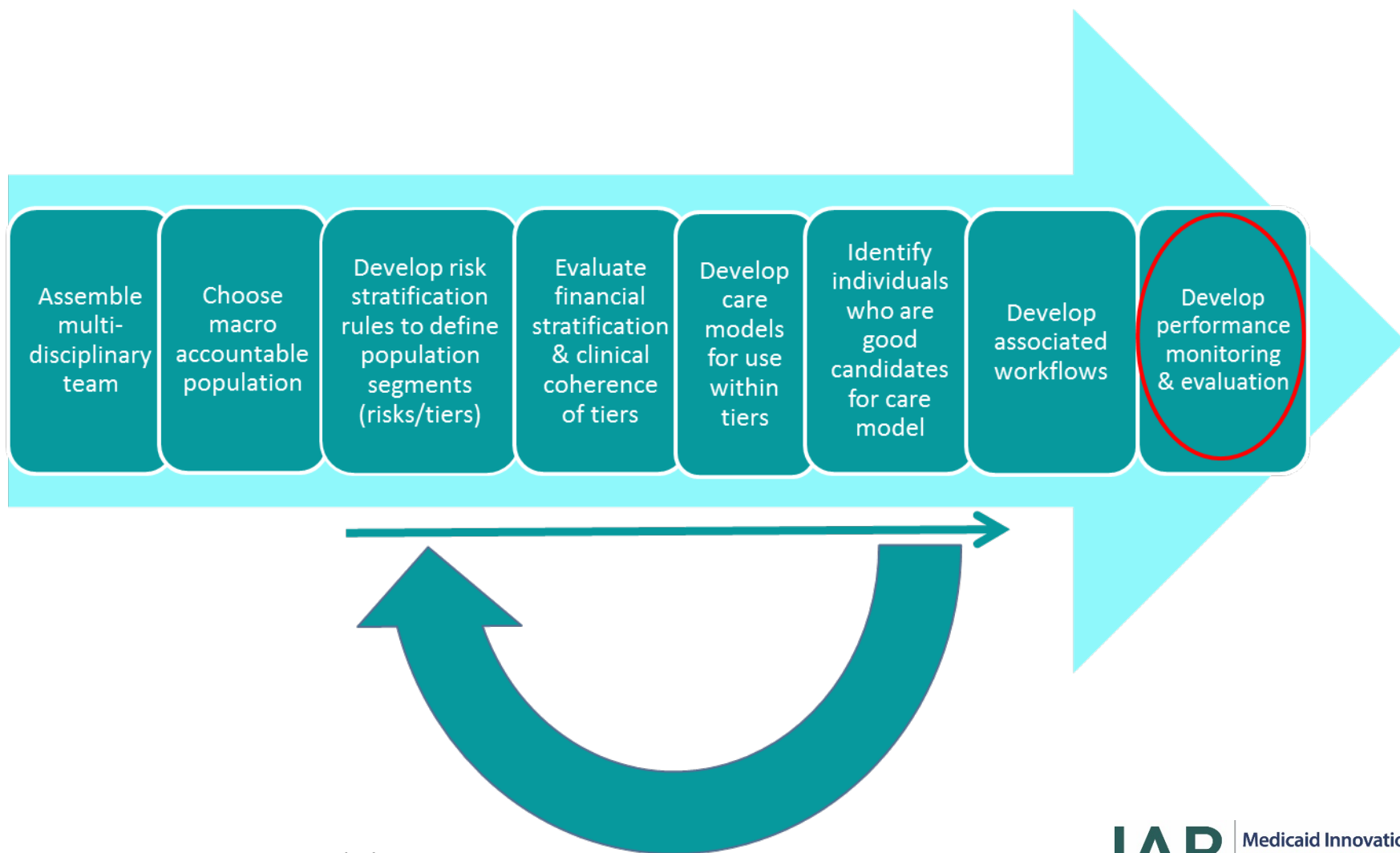
Extensions

- Events
- High Risk Screenings

Intervention Screenings Screenings Pending Enrollment

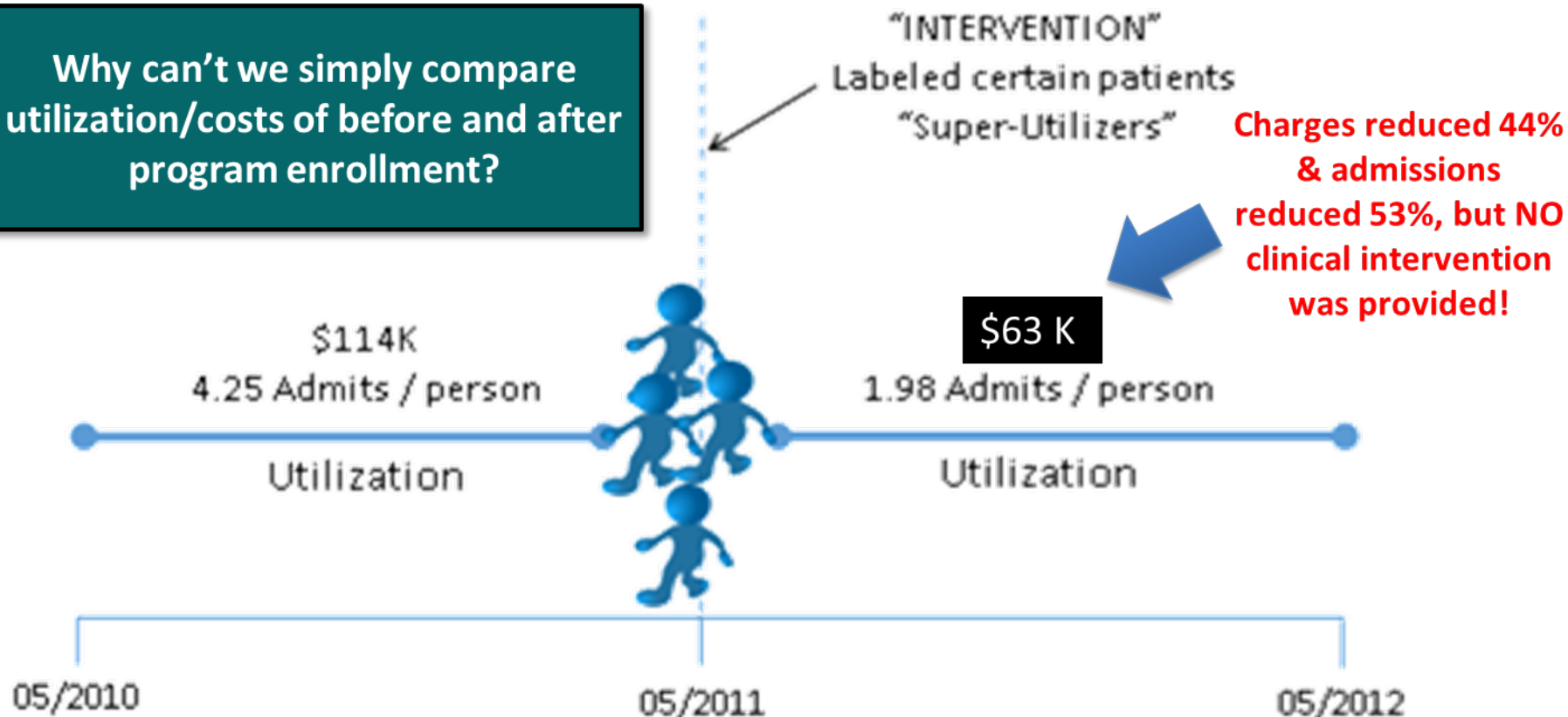
| Name | Contact | Created On | Date Screened | Enrollment Meth... | Ready for Enroll... | Screening |
|---------------------------------|---------|------------|---------------|--------------------|---------------------|-----------|
| Intervention Screening: Tier 4 | | | | | | IOC |
| Intervention Screening: Tier 4 | | | | | | IOC |
| Intervention Screening: Tier 4 | | | | | | IOC |
| Intervention Screening: Tier 4 | | | | | | IOC |
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Iterate to optimize population segmentation & patient identification



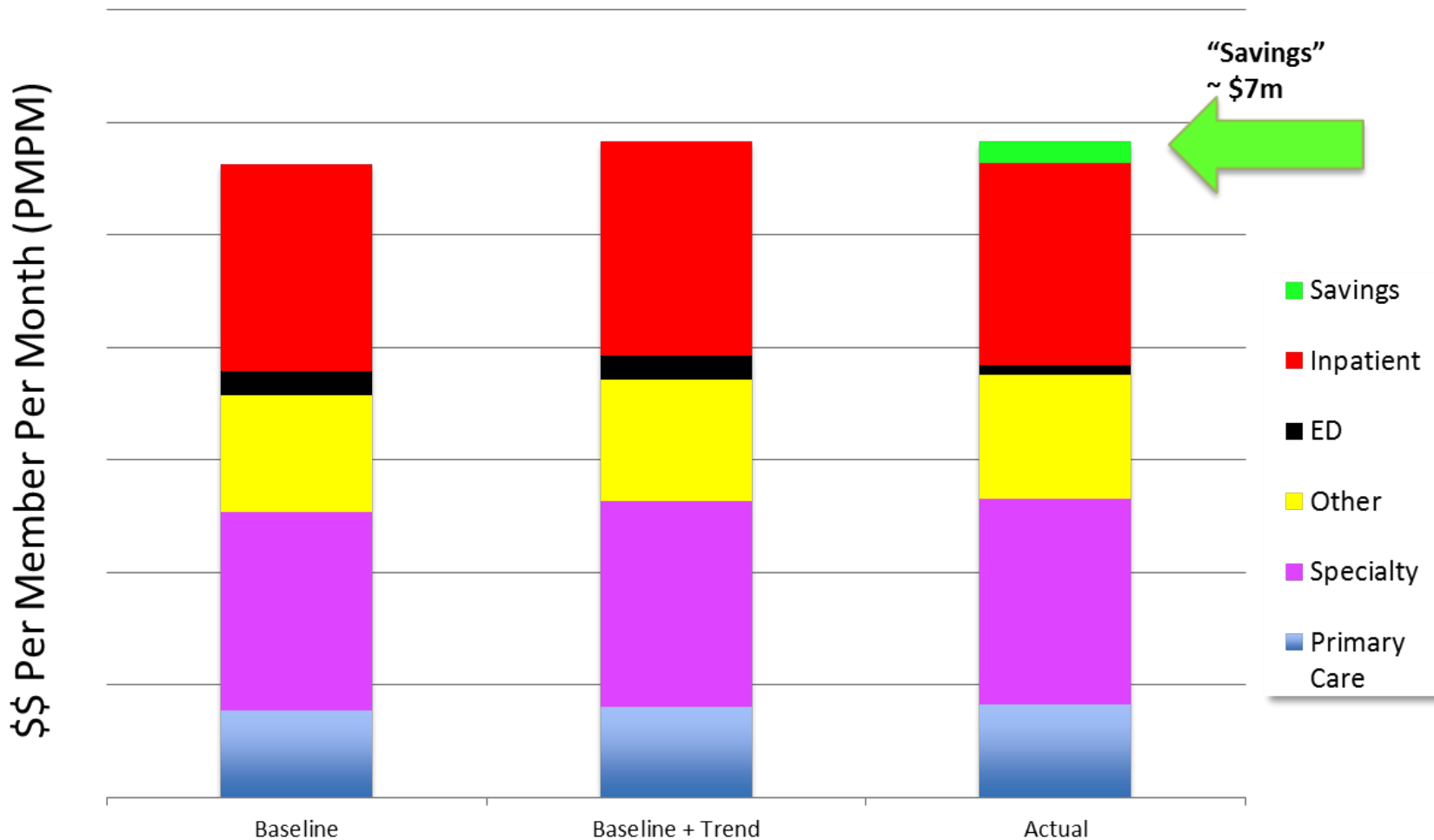
Cost Savings Analysis

Why can't we simply compare utilization/costs of before and after program enrollment?



This natural tendency for high-utilizing patients to become less high-utilizing over time is known as "regression to the mean".

Evaluation: Total Cost of Care Analysis Sample (“Mocked-Up”) Data



Macro-Targeting Lessons Learned

- Gaining clinician buy-in
 - Transparency
 - Focus on avoidable hospitalizations
 - Clinical design control
- Identifying target population
 - Claims data useful for population analysis
 - Provide real-time (not claims) data for clinical action
 - Balance predictive analytics & clinical insight
 - Balance short-term & long-term goals
- Payment model/perverse incentives
 - Modified productivity standards

Micro-Targeting Lessons Learned

Super-Utilizer Program Implications

- Real-time identification is critical
 - Billing data is helpful for descriptive analysis but “too old” for program identification
 - Window of opportunity may be short
- Where, when, how to intervene must be matched to the target population
 - Subpopulations differ by primary care use, reasons for utilization, and cost trajectory
 - Non-target populations are likely to be identified
 - Many super-utilizers are not currently engaged in primary care

Tracy L. Johnson, Deborah J. Rinehart, Josh Durfee, Daniel Brewer, Holly Batal, Joshua Blum, Carlos I. Oronce, Paul Melinkovich, and Patricia Gabow. For Many Patients Who Use Large Amounts Of Health Care Services, The Need Is Intense Yet Temporary. Health Affairs. August 2015; 34(8):1312-1319; doi:10.1377/hlthaff.2014.1186

State Medicaid Opportunities

- Regulatory approach
 - Process vs. outcomes orientation
 - Flexibility vs. standardization
- Data analytics
 - Facilitate access to real-time data on high-risk patients
 - Obtain clinical input to define what is a “high risk” patient
 - Facilitate access to raw data (for further analysis at clinical sites)
- Payment model
 - Advanced systems will want capitation/global payment ASAP
 - Managed FFS (PMPM care coordination payments) should focus on outcomes (less on qualified providers, workflow)

Acknowledgements and Disclaimers

- Core Team, Clinical Teams, IT Team, Evaluation Team, ACS and Executive Leadership (past and present)
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- The contents of this publication are solely the responsibility of the authors and do not necessarily represent the official views of the U.S. Department of Health and Human Services or any of its agencies.
- The analysis presented was conducted by the awardee. Findings may or may not be consistent with or confirmed by the findings of the independent evaluation contractor.
- The Colorado Multiple Institutional Review Board determined this project to be Quality Assurance, Not Human Subject Research.

Contact Information

- Thank you!
- Contact information
 - Holly Batal, MD, MBA
 - Holly.Batal@dhha.org
 - Co-PI, Clinical Lead
 - Tracy Johnson, PhD, MA
 - Tracy.Johnson@dhha.org
 - Co-PI, Evaluation Lead

Mobilizing Social Determinants Data to Target BCN Interventions and Improve Health Outcomes

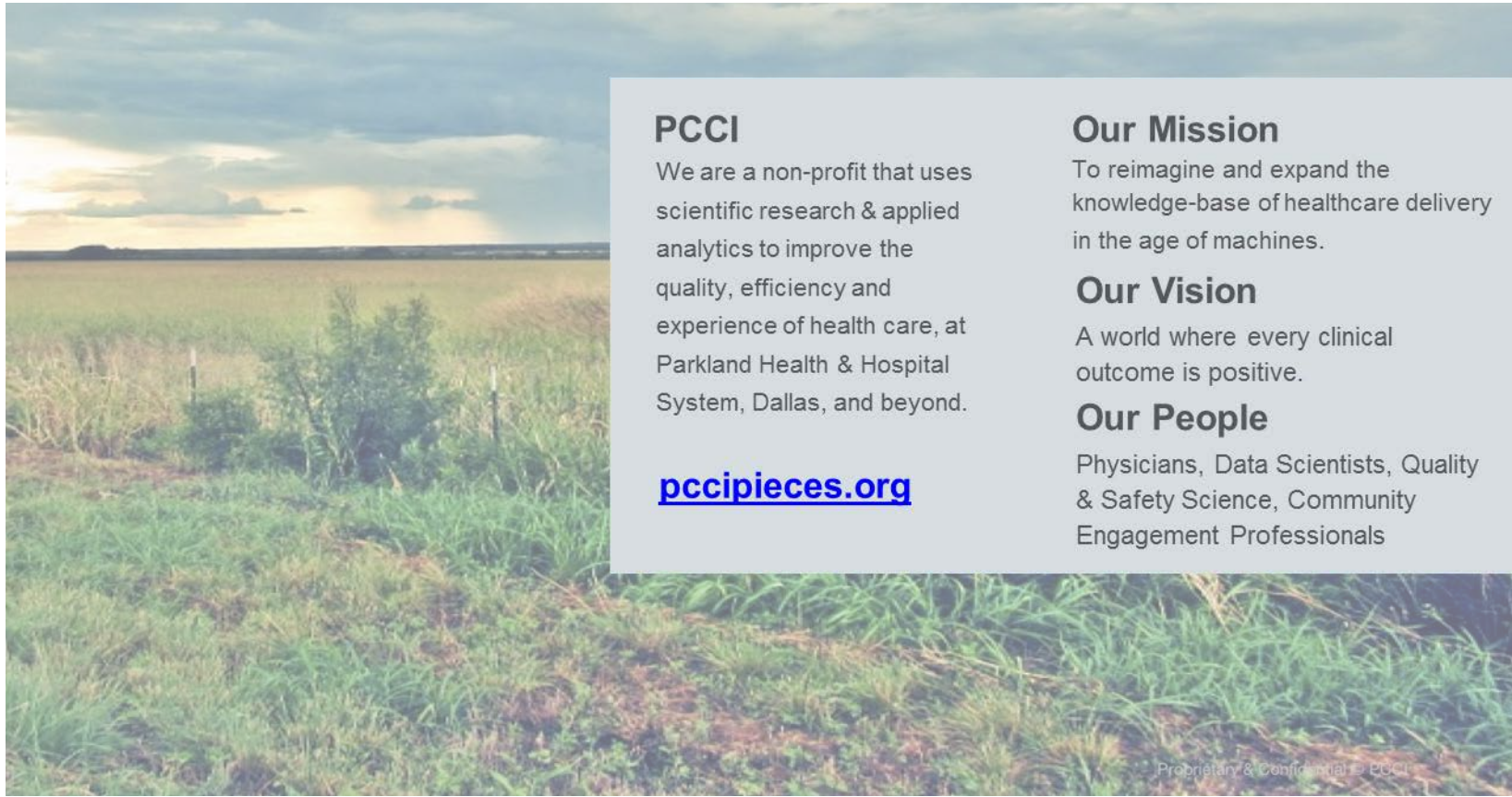
Ruben Amarasingham, MD, MBA

President and CEO

PCCI & Pieces Technologies, Inc.

Dallas, Texas

Who We Are



PCCI

We are a non-profit that uses scientific research & applied analytics to improve the quality, efficiency and experience of health care, at Parkland Health & Hospital System, Dallas, and beyond.

pccipieces.org

Our Mission

To reimagine and expand the knowledge-base of healthcare delivery in the age of machines.

Our Vision

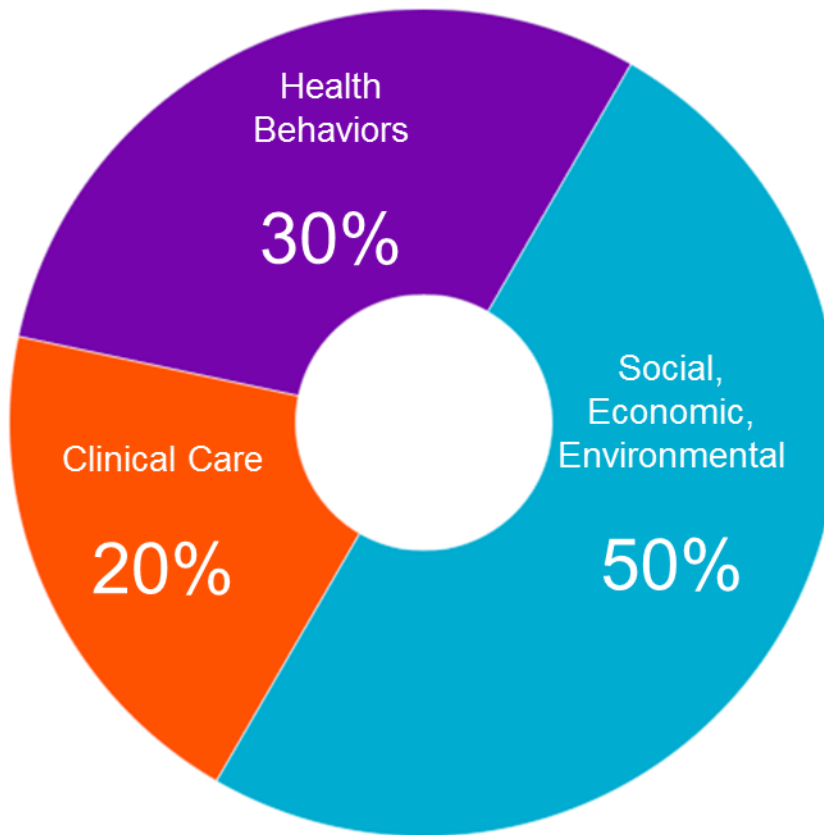
A world where every clinical outcome is positive.

Our People

Physicians, Data Scientists, Quality & Safety Science, Community Engagement Professionals

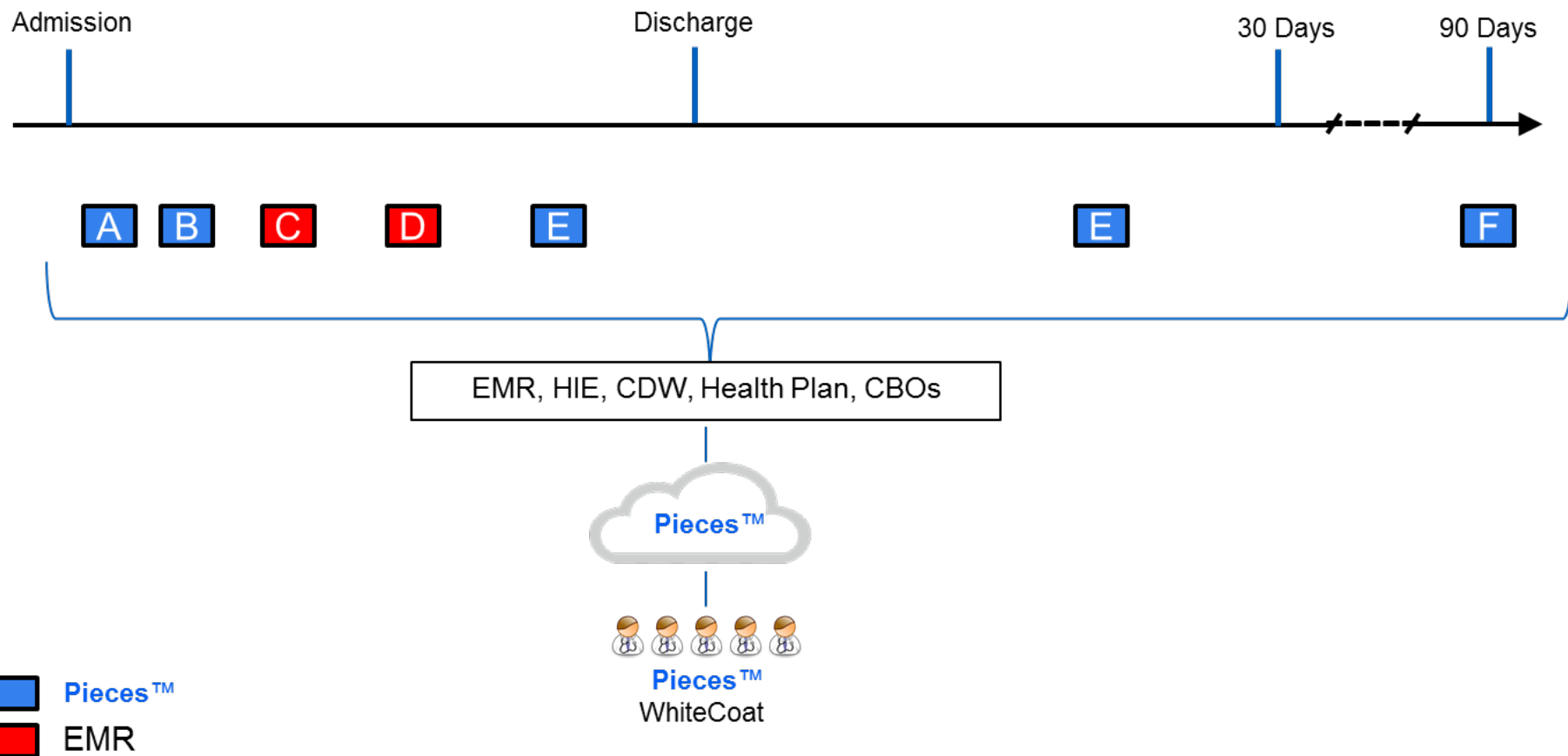
Proprietary & Confidential - PCCI

The Role of Social Determinants in Health

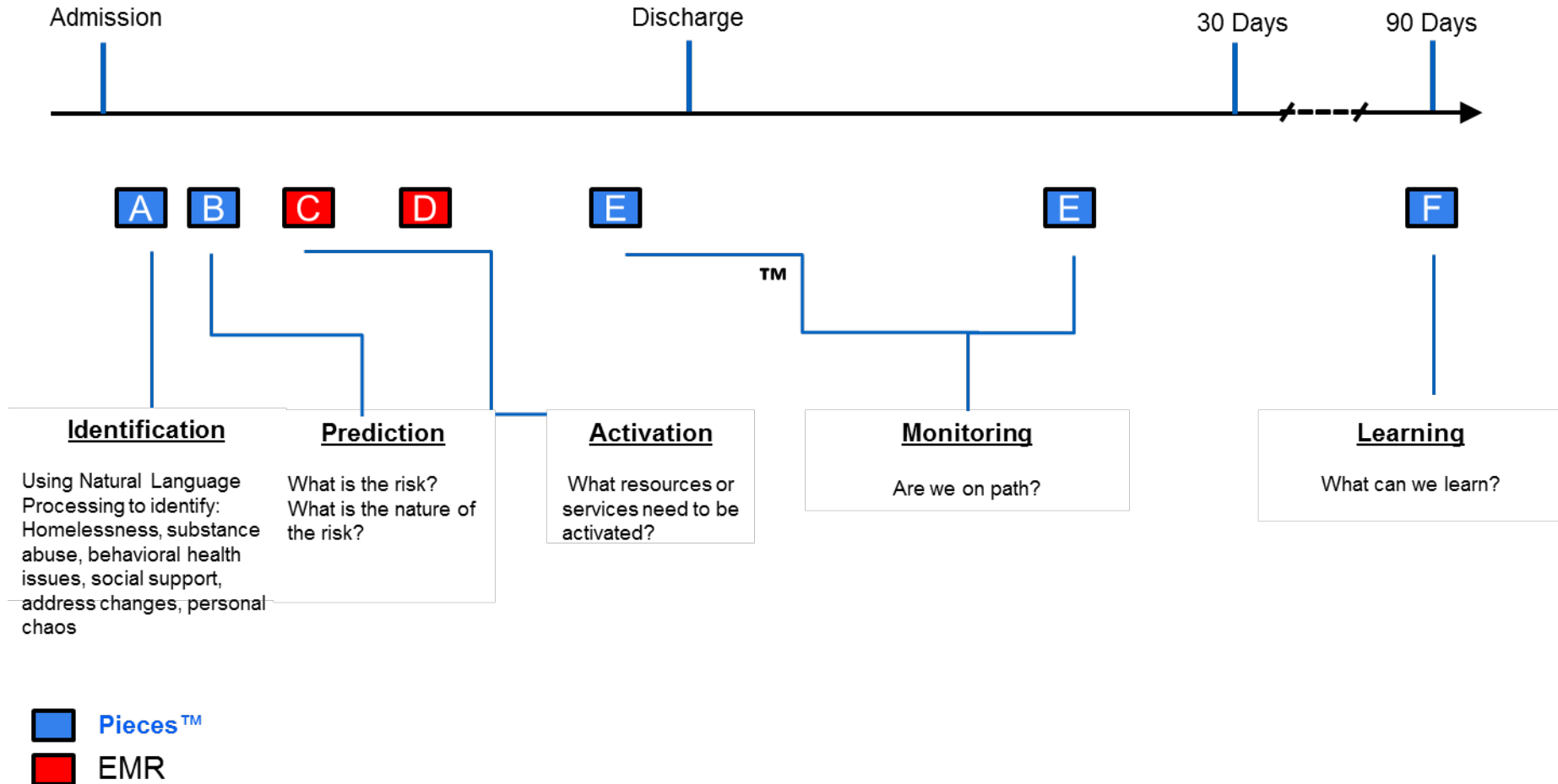


Adapted From: Booske, B.C., Athens, J.K., Kindig, D.A., Park, H., & Remington, P.L. (2010). County Health Rankings [www.countyhealthrankings.org]

Our Approach: Modeling Adverse Events Across a Time Scale



Our Approach: Modeling Adverse Events Across the Time Scale



Modeling Use Cases

| Emergency | Hospital Operations | Population Health | Medical / Surgical | Oncology | Medication Administration | Infectious Disease | Perinatal | Social Factors |
|--|---|--|--|---|--|---|--|--|
| <ul style="list-style-type: none"> ED complex case management Preventable ED utilization High utilizer identification | <ul style="list-style-type: none"> Real-time discharge modeling (Fall 2016) High bed capacity days (Summer 2016) Patient flow (Fall 2016) ICU modeling (Fall 2014) OR modeling Chart reviews for QI and Federal reporting | <ul style="list-style-type: none"> Readmissions suite v 2.0 with context Avoidable Hospitalization CKD progression Diabetes Management HTN Management | <ul style="list-style-type: none"> Inpatient Deterioration (Fall 2014) Burn Sepsis Slow-healing wounds Complications from Procedures Surgical Failure to Rescue SSI Blood incompatibility Manifestations of poor glycemic control DVT and PE VAP Rapid Mortality Analysis | <ul style="list-style-type: none"> Avoidable hospital Advanced Care Planning Appropriate diagnostic and procedure utilization E.g: <ul style="list-style-type: none"> Imaging Chemo duration Chemo selection Radiation | <ul style="list-style-type: none"> Medication non-compliance Complex medications or medication list Abx Stewardship through ID of false allergies Opioid Abuse | <ul style="list-style-type: none"> Appropriate treatment based on condition Treatment adherence Self administered outpatient antibiotics Sepsis POA Sepsis non-POA | <ul style="list-style-type: none"> Neonatal blood stream infection Newborn care-associated infection Late sepsis Meningitis C-section SSI Pre-term Delivery Prediction | <ul style="list-style-type: none"> Access to care barriers Homelessness Substance abuse Environmental stressors Community Based Referral prediction |

Complexities of Predictive Modeling in Healthcare

PREDICTIVE ANALYTICS

By Ruben Amarasingham, Rachel E. Patzer, Marco Huesch, Nam Q. Nguyen, and Bin Xie

DOI: 10.1377/htlhwf.2014.0152
HEALTH AFFAIRS 33,
NO. 7 (2014): 1149-1154
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The People-to-People Health
Foundation, Inc.

Implementing Electronic Health Care Predictive Analytics: Considerations And Challenges

Ruben Amarasingham (ruben.amarasingham@ohhc.org) is president and CEO of PCCI, a nonprofit research and development corporation and an associate professor in the Departments of Internal Medicine and Health Services at the University of Washington. He is also a senior advisor to the state of Washington's Department of Health. He has published numerous articles and books on health care reform and patient safety.

ABSTRACT The use of predictive modeling for real-time clinical decision making is increasingly recognized as a way to achieve the Triple Aim of improving outcomes, enhancing patients' experiences, and reducing health care costs. The development and validation of predictive models

present unique challenges. The development and validation of predictive models requires a multidisciplinary approach involving clinicians, data scientists, and health care administrators. This article discusses the challenges of implementing predictive analytics in health care and provides recommendations for success.

PREDICTIVE ANALYTICS

By L Glenn Cohen, Ruben Amarasingham, Anand Shah, Bin Xie, and Bernard Lo

DOI: 10.1377/htlhwf.2014.0048
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NO. 7 (2014): 1139-1147
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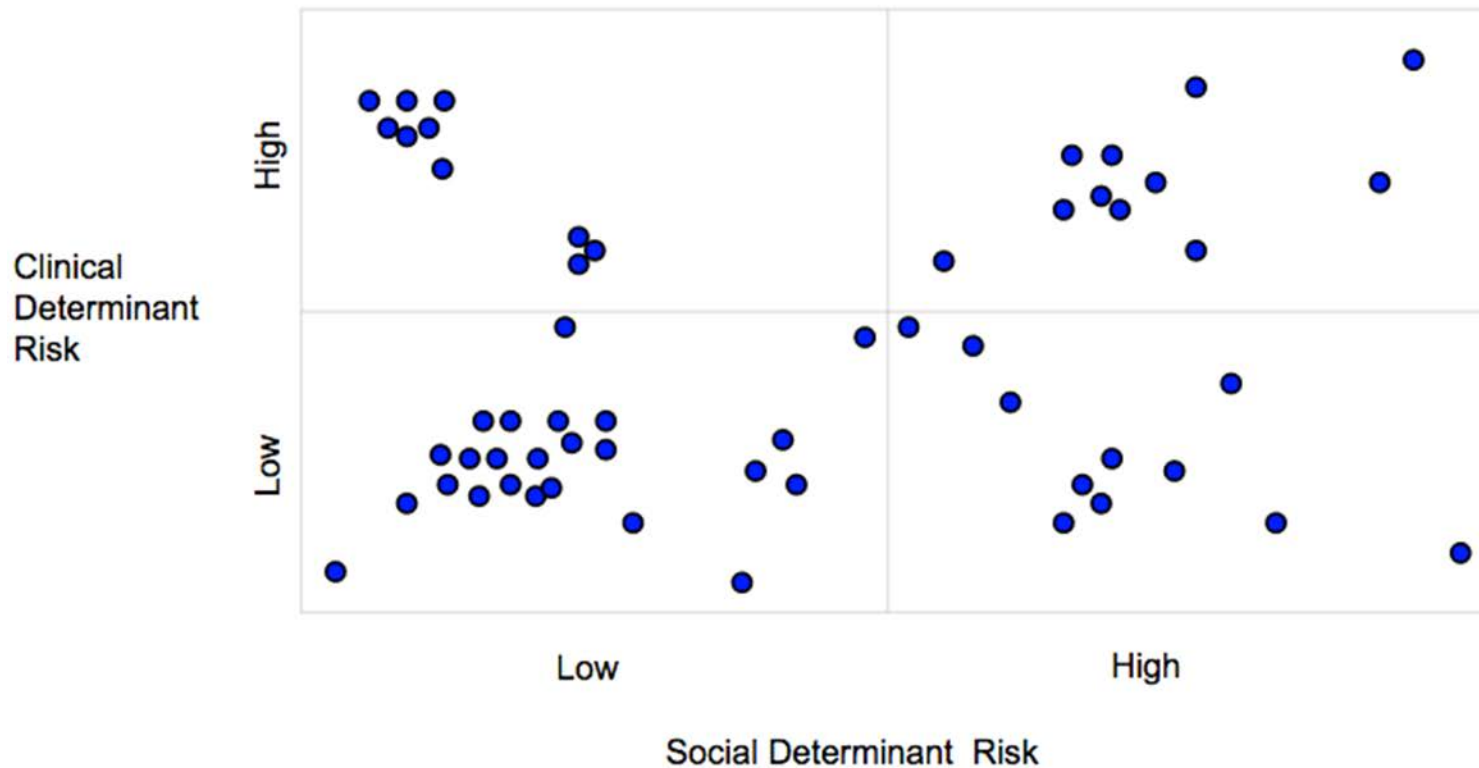
The Legal And Ethical Concerns That Arise From Using Complex Predictive Analytics In Health Care

ABSTRACT Predictive analytics, or the use of electronic algorithms to forecast future events in real time, makes it possible to harness the power of big data to improve the health of patients and lower the cost of health care. However, the use of predictive analytics also raises legal and ethical concerns. This article discusses the legal and ethical concerns that arise from using complex predictive analytics in health care and provides recommendations for success.

L Glenn Cohen (lgcohen@law.harvard.edu) is a professor of law and director of the Petrie-Flom Center for Health Law, Policy and Ethics at Harvard University. He has published numerous articles and books on health law and ethics.



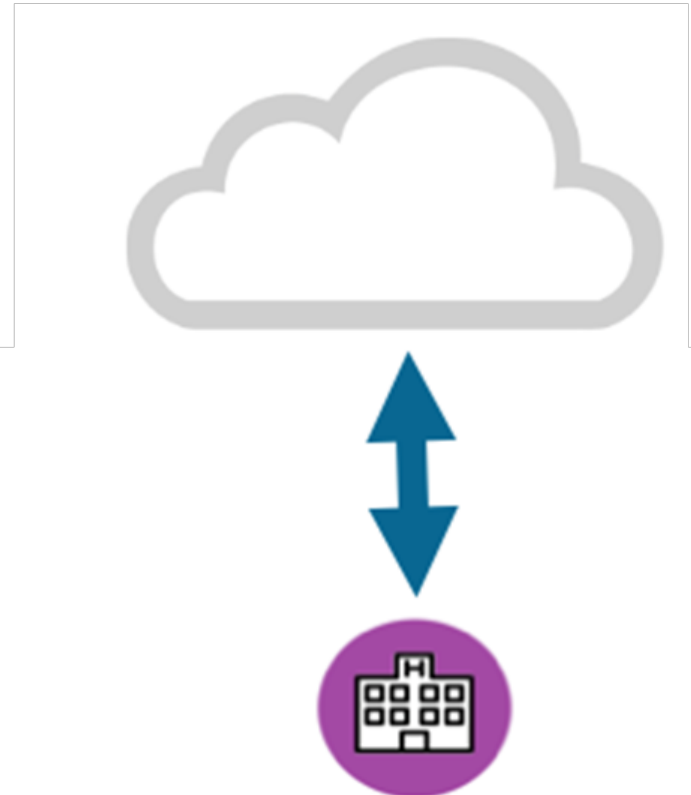
It's not enough to quantify risk: the intervention must match the need



Impacting Clinical Decision Making and Utilization

However..

Population health is often impacted by social determinants outside of a health system's walls.



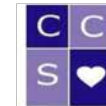
Community Based Organizations (CBO)

Address These Social Determinants of Health



CBOs

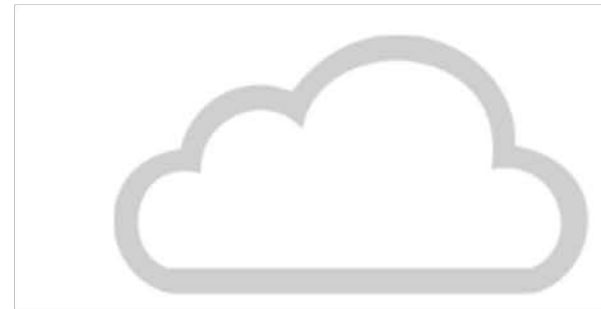
- Crisis and Emergency
- Food
- Transportation
- Housing and Utilities
- Health and Hospice
- Human Trafficking
- Jobs and Support
- Legal
- Special Needs
- Youth Counseling
- Seniors



..But CBOs are Fragmented, Technology Scarce, and Disconnected from Health Systems

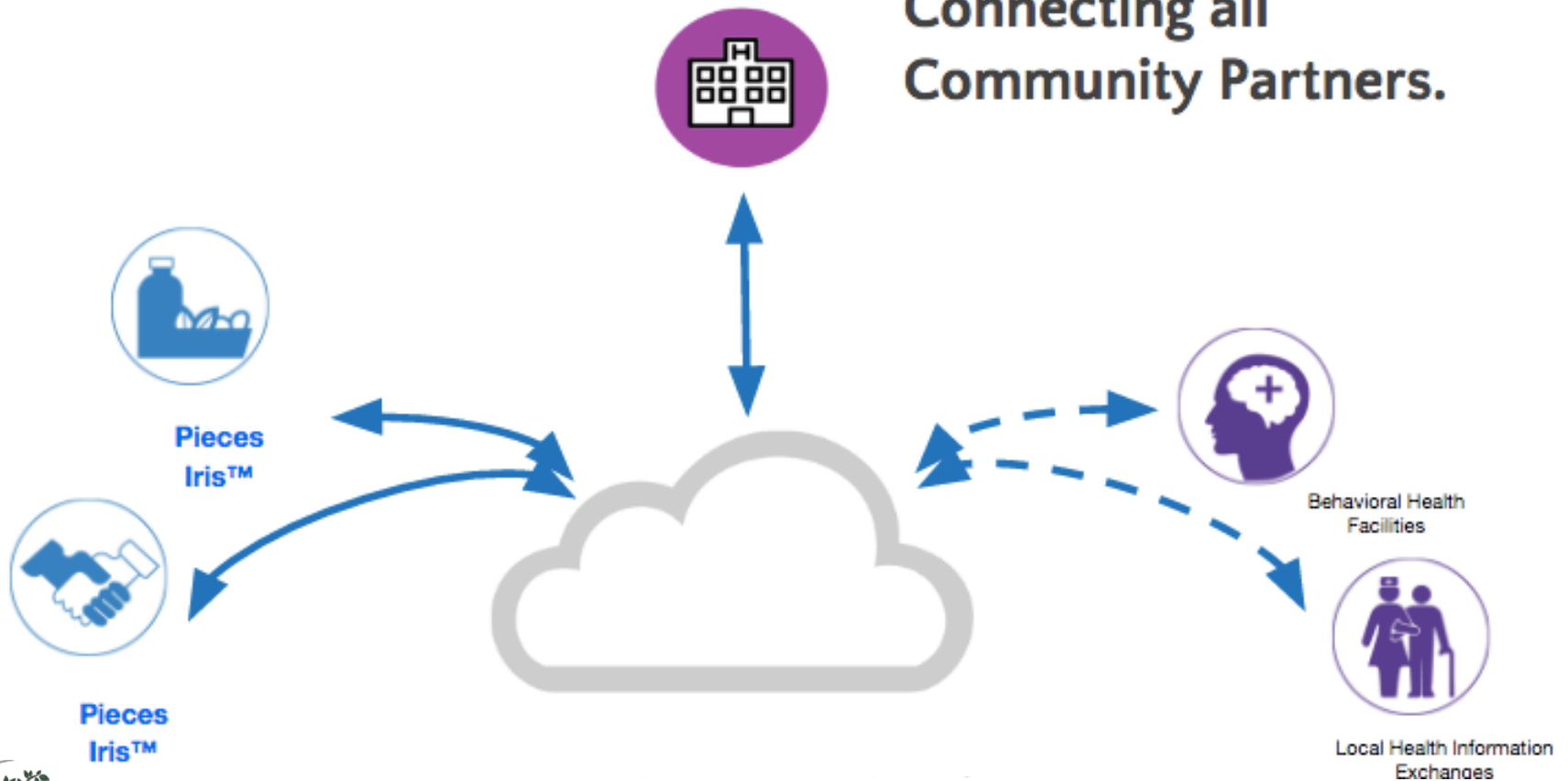


CBOs



Critical Technology Needs to Connect the Care Continuum

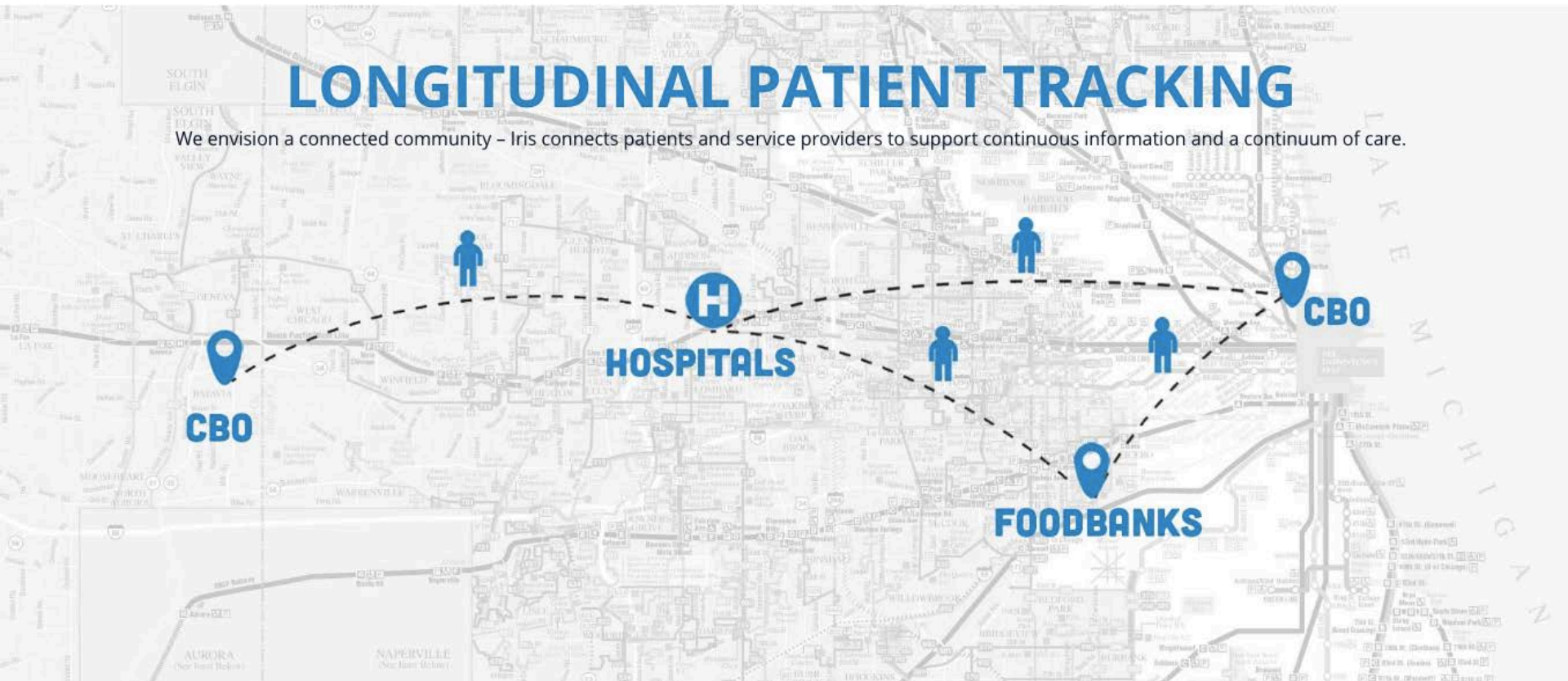
Connecting all
Community Partners.



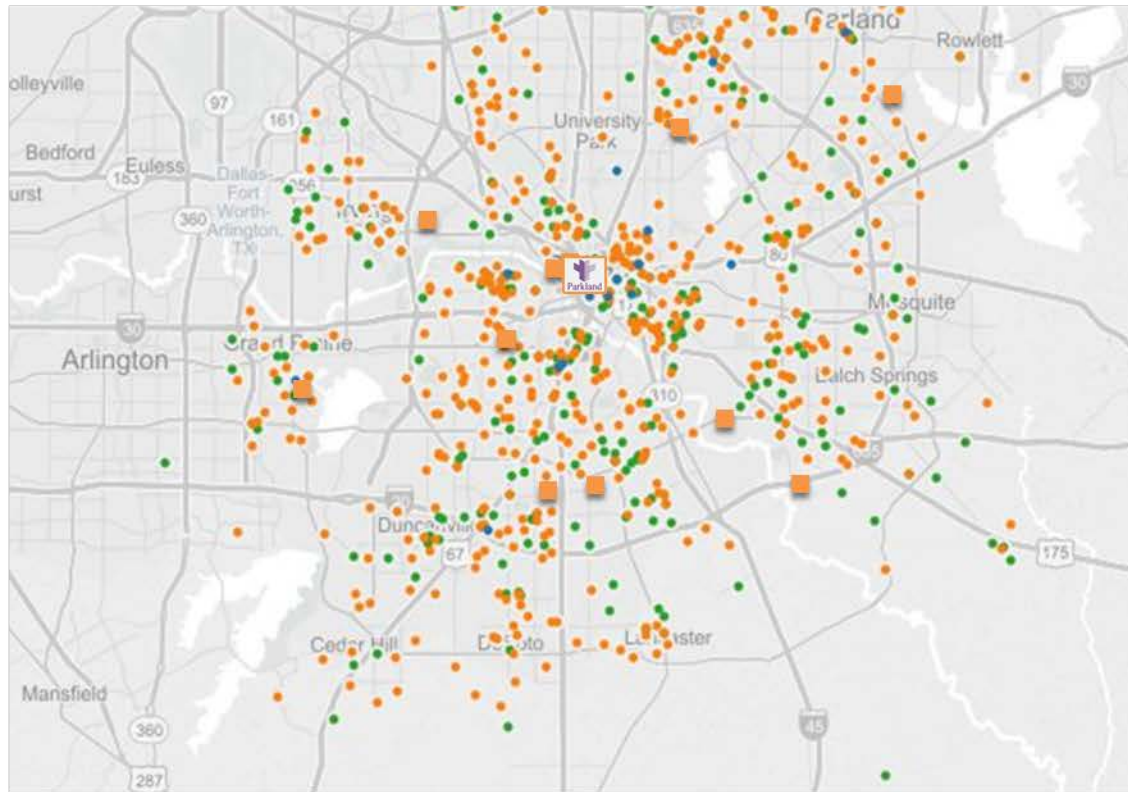
Tracking & Coordinating Across the Continuum of Care





LONGITUDINAL PATIENT TRACKING

We envision a connected community – Iris connects patients and service providers to support continuous information and a continuum of care.



PCCI Related Work: The Dallas Information Exchange Portal



-  North Texas Food Bank programs (654 Impacted Programs)
-  NTFB Partner Agencies (316 Piece Iris™ Implementations)
-  MDHA Projects (28-47 Pieces Iris™ Implementations)
-  Parkland Community Oriented Primary Care Clinics



Some of our current and future partners



PCCI's work in this area is available for Download

Environment
Report

of Health to Support Integrated Health
for Patients

PCCI's playbook & environmental scan report and the playbook are available for download at:

Playbook

of Health to Support Integrated Health
for Patients

PCCI¹

<http://www.pccipieces.org/environmental-scan/>

PCCI is party to an exclusive license agreement with Pieces Technologies, Inc.

Dr. Ruben Amarasingham is President and CEO at both PCCI and Pieces Technologies Inc.

Dr. Ruben Amarasingham²



@RAmarasingham

Contact PCCI:



@PCCIPIECES



/company/pcci



lindsey.duda@phhs.org

District of Columbia

Joe Weissfeld, MPP

Department of Health Care Finance

Government of the District of Columbia



Proposed My Health GPS Overview

- **Target population:** ~25,000 beneficiaries (primarily fee-for-service)
- **Eligibility:** 3 or more chronic conditions
- **Enrollment:** Patients will be assigned to a My Health GPS provider through an opt-out, with utilization trigger process. Patient attribution to My Health GPS provider will be based on a prior provider/patient relationship (up to a 2 year look-back), geography, provider capacity
- **Target Start Date:** April '17

Identification of My Health GPS Target Population

- **Population Profiling and Analytics**
 - Necessary Data
 - Claims data
 - To target populations/conditions
 - To determine eligibility
 - To tier by acuity
 - To identify potential providers
 - To provide “mock attributions”
 - To attribute to providers
 - Medicare data for dual eligibles
 - Historical, national Medicaid data for a risk assessment tool
- **Incentive Payment Structure**
 - Care Plan Incentive and P4P

Top 5 Data and Data Analytics Challenges

1. Lack of cohesive data compatibility and data sharing across District agencies as well as across District service providers
2. Lack of access to timely, high-quality historical claims data for our beneficiaries and/or a business analytics or risk assessment tool (however, we are in the process of launching a Data Warehouse)
3. Lack of internal data analytics capacity and expertise
4. Difficulty operationalizing a sensitive, responsive tool that is will be utilized by end-users
5. Difficulty balancing the powerful opportunity with CMS-Implementation Advanced Planning Document funds and the unpredictable nature of receiving approvals

Oregon

Jennifer Valentine, MSPH
Dual Eligibles/Medicare Medicaid
Health Services Division
Oregon Health Authority



Oregon Project Overview

- Initial focus on dual eligible beneficiaries as population with high prevalence of complex chronic and behavioral health conditions compared to the overall Medicaid population
- Expanded focus to complete a deeper dive on Oregon's Medicaid super utilizer population
- Brought diverse data sets together:
 - Medicare data from Oregon's All-Payer All-Claim Database (APAC) including Medicare Advantage
 - Oregon's Medicaid data
 - Medicare FFS data files from RESDAC
- Two-Phased Approach
 - Phase 1: Population Profile
 - Phase 2: Regression Analysis



<https://www.oregon.gov/oha/analytics/Pages/All-Payer-All-Claims.aspx>

Methodology

- After numerous conversations, we decided to take a two-phased approach to defining Oregon's super-utilizer population
- Because no standard definition of super-utilization currently exists, we drew on a review of published literature, conversations with other BCN IAP teams, and discussions with the Oregon Health Authority's Office of Health Analytics team to define super-utilizers.
- Since our project started as a look at Oregon Dual Eligibles, we decided to incorporate dual eligibles into our superutilizer analysis.

Phase I - Definitions

- **Several themes emerged from background work**
 1. ***High users that can be targeted for intervention.*** Large numbers of visits for any reason put strain on the healthcare system, but high numbers of preventable ED visits are a clear target for interventions.
 2. ***Repeated vs. time-limited high use.*** Interventions for patients with repeated high utilization can differ from those for patients with time-limited high utilization.
 3. ***Role of mental health.*** Discussion with Oregon Health Authority staff suggested that this may be an important factor related to high utilization in Oregon.
 4. ***Medicaid expansion.*** Discussion with Oregon Health Authority staff revealed that the Medicaid expansion population was a topic of interest.

Accomplishments: Phase 1

- Themes from background work:
 - Focus on high users that can be targeted for intervention. Repeated vs. time-limited high use.
 - Role of mental health.
 - Medicaid expansion.
- We stratified 9 groups of high ED Users

| ED VISIT PATTERN | Traditional Medicaid Population | | Medicaid Expansion Population (2014 only) |
|--|---------------------------------|--------------------------|---|
| | Temporary (2013 only) | Persistent (2013 & 2014) | |
| 4+ ED visits of any kind per year | Group 1 | Group 4 | Group 7 |
| 4+ avoidable ED visits per year | Group 2 | Group 5 | Group 8 |
| 4+ ED visits for mental health conditions per year | Group 3 | Group 6 | Group 9 |

Question and Answer

Juan Montanez, Facilitator

To Ask a Question or Make a Comment

- Use the chat box on your screen to ask a question or leave comment
 - Note: chat box will not be seen if you are in “full screen” mode
 - Please exit out of “full screen” mode to participate in polling questions
- Ask a question verbally by dialing *1. You will be connected to the webinar operator, who will connect your line so that you can ask your question.

Topic Wrap Up

Juan Montanez

Key Takeaways

1. Incorporating medical health, behavioral health and social/human needs data in the methodology/algorithm for targeting and stratification is ideal, and becoming more doable as information systems become more interoperable and data exchange standards become more prevalent.
2. Building a *continuum* of BCN data that supports targeting, stratification, care plan development and measurement is ideal, and also becoming more doable as advancements in information technology and exchange take hold and greater collaboration across data stewards occurs.
3. States should dedicate efforts to develop a feasible strategy for obtaining and using data from an expanded set of sources including non-clinical sources.
4. A better understanding of the federal and state laws and regulations that govern information access, use and exchange is critical to the success of any BCN initiative.

Closing Remarks

Karen LLanos

Closing Remarks

- National Dissemination Series continues:
 - December 12, 2016: Factoring Social Determinants into Strategies for BCNs
 - January 9, 2017: Effective Care Management Strategies for BCNs
 - February 27, 2017: Employing Alternate Payment Strategies for BCNs
 - All sessions are scheduled for 2:00 p.m.-3:30 p.m. ET
- Resources
 - Data Privacy, Data Use and Data Use Agreements Resource Paper will be posted soon to the updated IAP BCN webpage at:
<http://www.medicaid.gov/state-resource-center/innovation-accelerator-program/beneficiaries-with-complex-needs/beneficiaries-with-complex-needs.html>
 - Upcoming T-MSIS based tools for states from IAP Data Analytics
 - CMS's State Data Resource Center for Medicaid agencies interested in Medicare data access
- Please complete the post webinar evaluation