

Persona Based Population Strategy:

*Incorporating Predictive Modeling
into Member Care*

Bob Gladden VP, Center for Analytics

Cathy Meade Director, HealthCare Analytics

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Who is CareSource?



Introduction to CareSource



CareSource provides a full spectrum of services for the administration of public-sector healthcare programs for over 1.3 million members

Medicaid Managed Care is our focus:

- ♥ CareSource Ohio Medicaid
 - ~ 1,170,000 members (CFC, ABD and Expansion)
- ♥ CareSource Ohio Just4Me (Exchange)
 - ~ 30,000 members
- ♥ CareSource Ohio SNP and HCBS Waiver Program
 - ~ 3,000 members
- ♥ CareSource Ohio MyCare (Federal Duals Demonstration Project)
 - ~ 25,000 members
- ♥ Humana – CareSource Kentucky (an alliance with Humana)
 - ~ 88,000 members (TANF, ABD and Expansion)

Introduction to CareSource *(continued)*



Non-Profit, mission driven organization that takes pride in our
“heartbeat:”

*“To make a lasting difference in our members’ lives by
improving their health and well-being.”*

Very low administrative expense...~ 6.5%

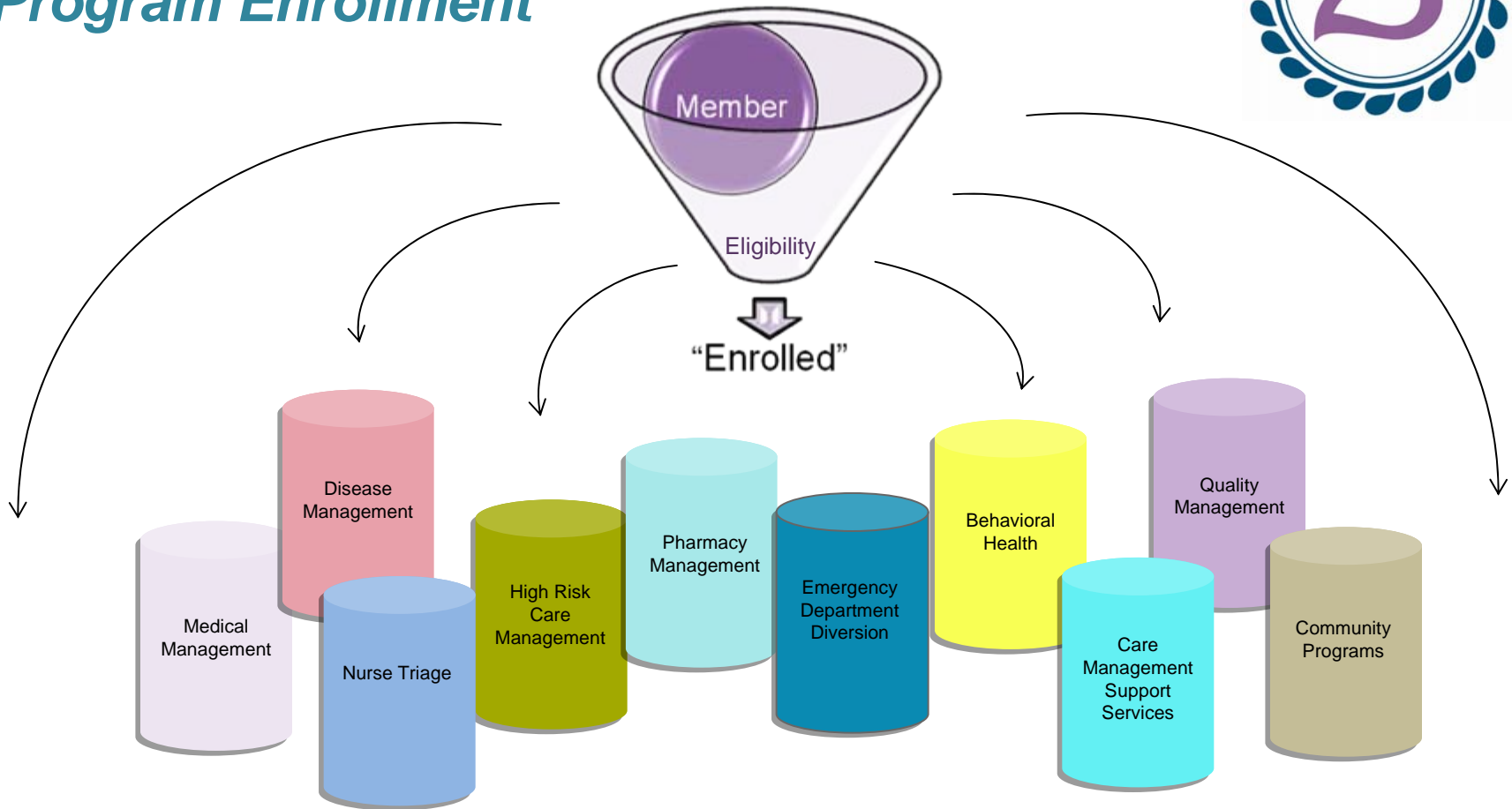
Dedicated Analytics Focus

- ♥ Team of ~ 25 members including:
 - ♥ Informatics
 - ♥ Predictive Analytics
 - ♥ Regulatory Analytics

*The Dilemma of Identifying
Members based on Disease
and/or High Cost*



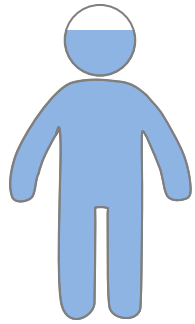
Old Approach Program Enrollment



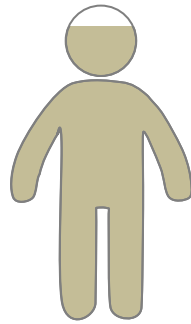
Lack of coordination between programs result in member fatigue and inefficiency

Diseases that Drive Expense

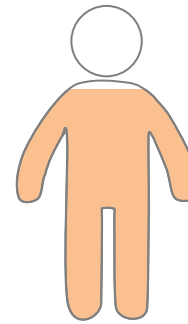
Which disease is the driver?



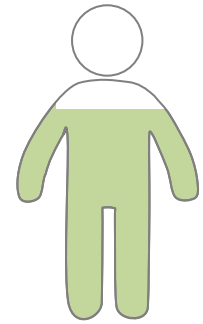
Diabetes 89%



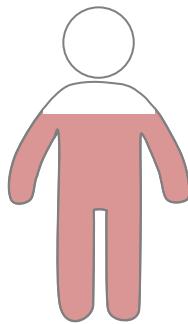
Hypertension 91%



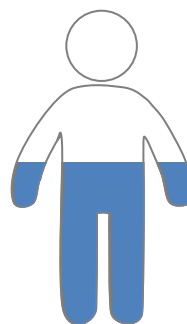
Depression 76%



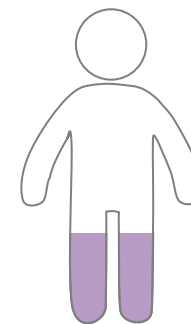
Low Back Pain 68%



Obesity 65%



Asthma 54%

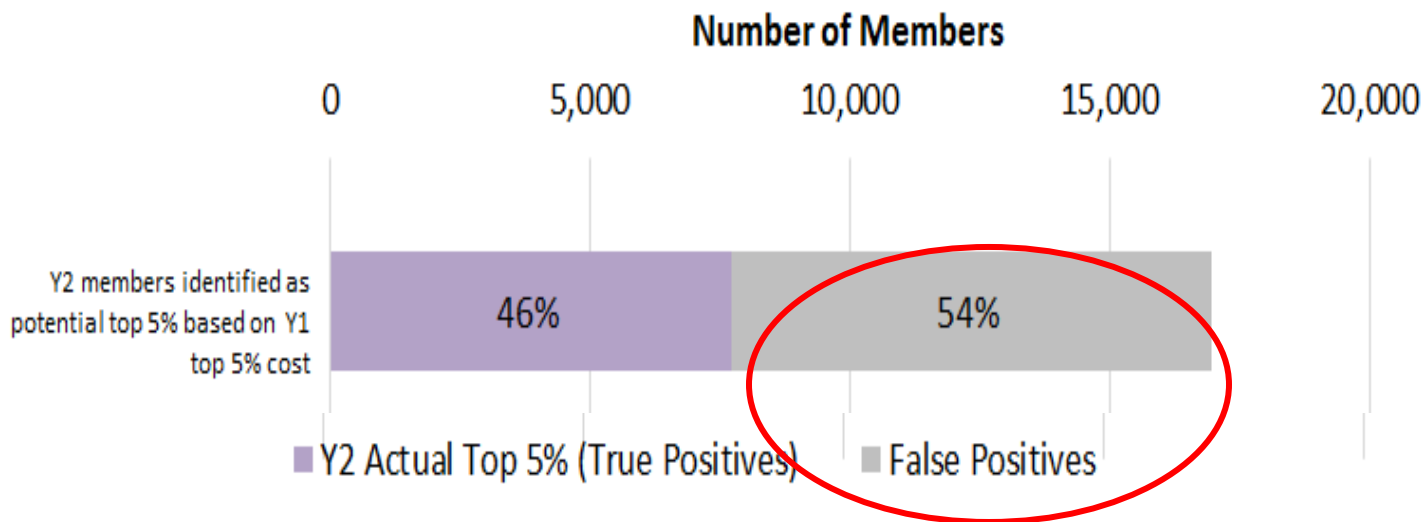


ADD 34%



High Cost Prediction

High cost year one \neq high cost year two

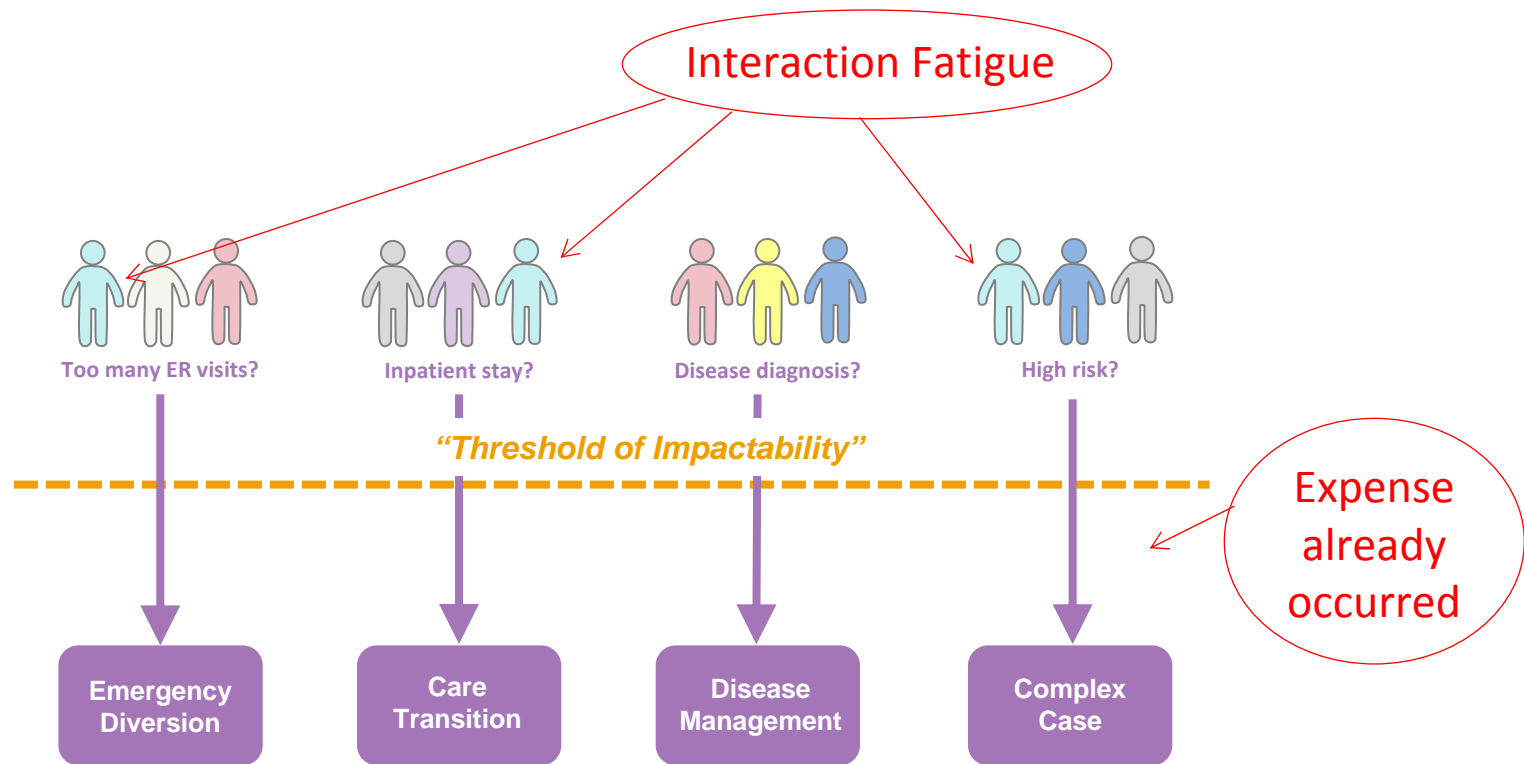




Care Management Transformation



Problems with Program Approach

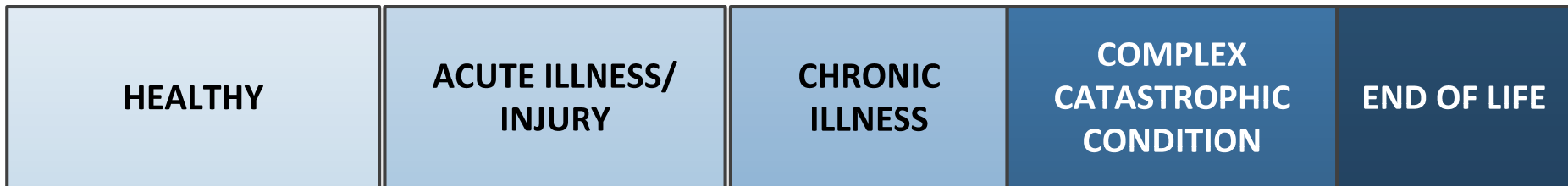


New Approach

Acuity Based Care Coordination



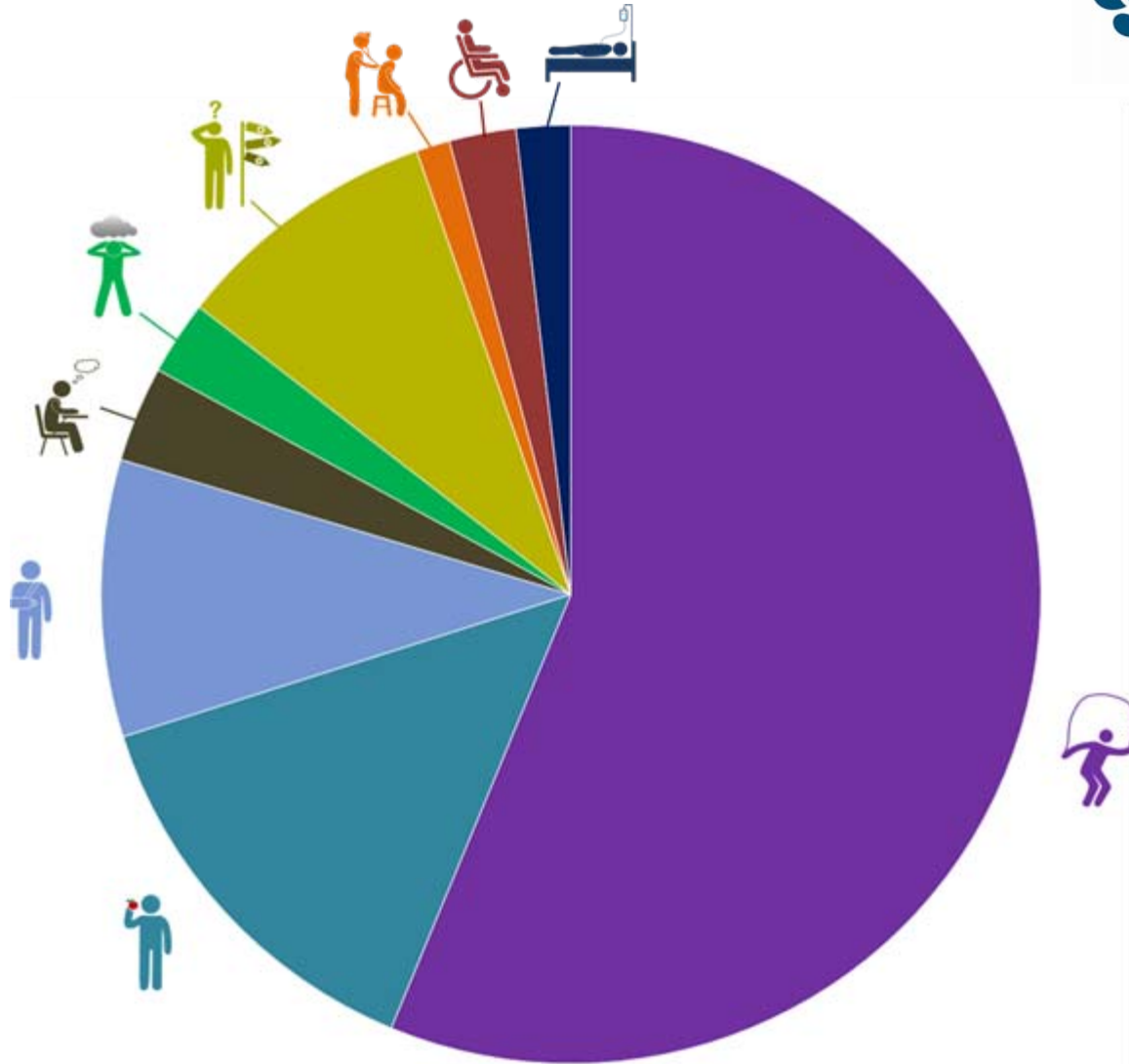
Acuity Based Care Coordination Services									
Acuity Level	1	1	1	2	2	2	3	3	3
Care Coordination Service	Welcome- Wellness Education- Health Needs Survey	Direct Engagement- Health Risk Appraisal- Nurse Advice- Wellness Coaching- Shared Decision Making	Outreach to confirm PCP Relationship- Personal Wellness Planning via Web or with PCP	Condition Focused Care Coordination- MTM- Healthy Maternity	Preadmission Care Coaching	Discharge Planning	Transition of Care	Recovery Focused Case Management	Complex-High Risk Case Management
Method of Delivery	Web Electronic Messages Mail	Telephone Electronic Messages Provider or Community Partner Office	Telephone Electronic Messages Provider or Community Partner Office	Telephone Electronic Messages Provider or Community Partner Office	Telephone Electronic Messages Provider or Community Partner Office	Telephonic- On site	Telephonic- On site	Telephonic- On site	Onsite- Home



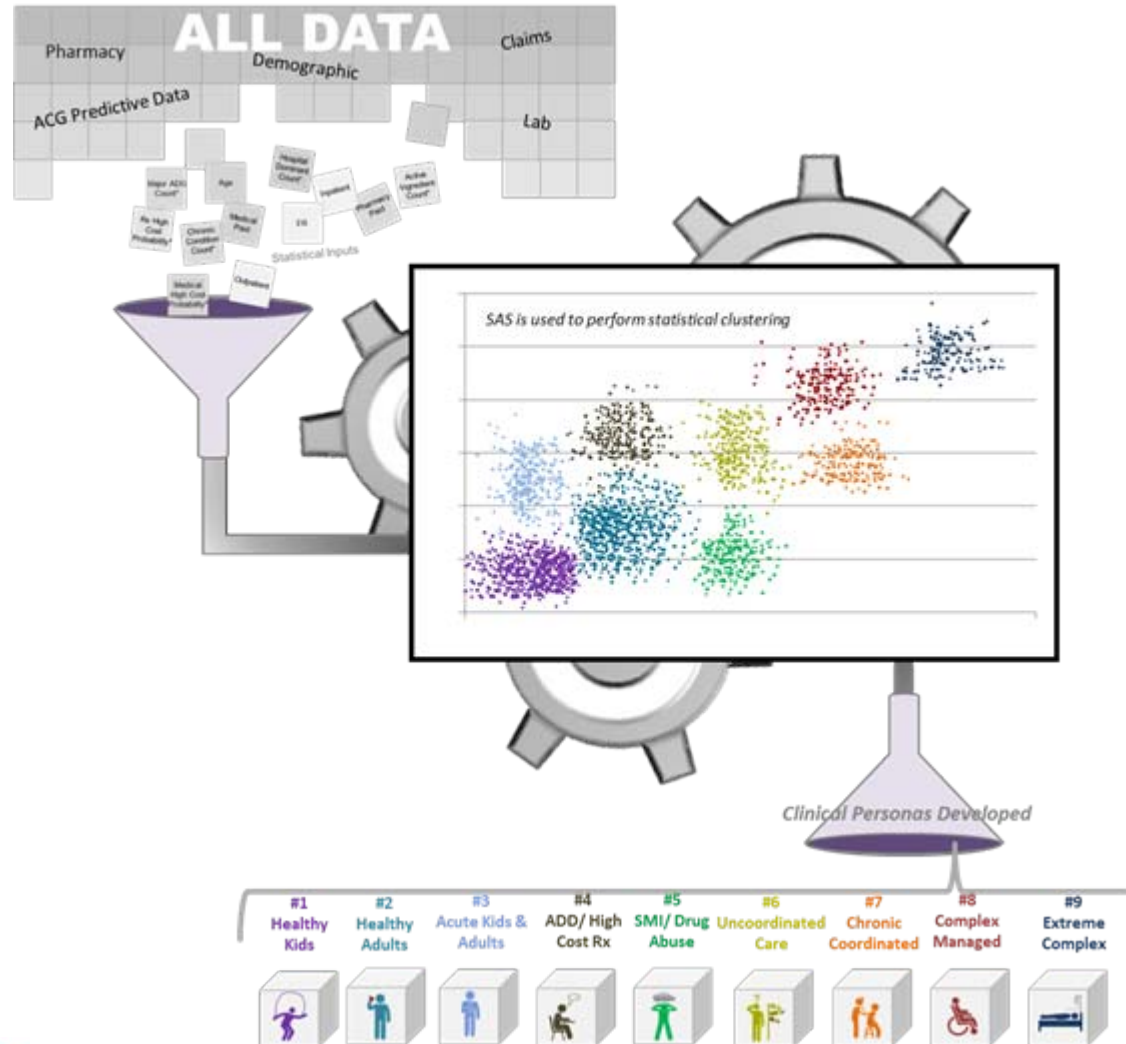
*A New Approach:
Cluster Analysis*



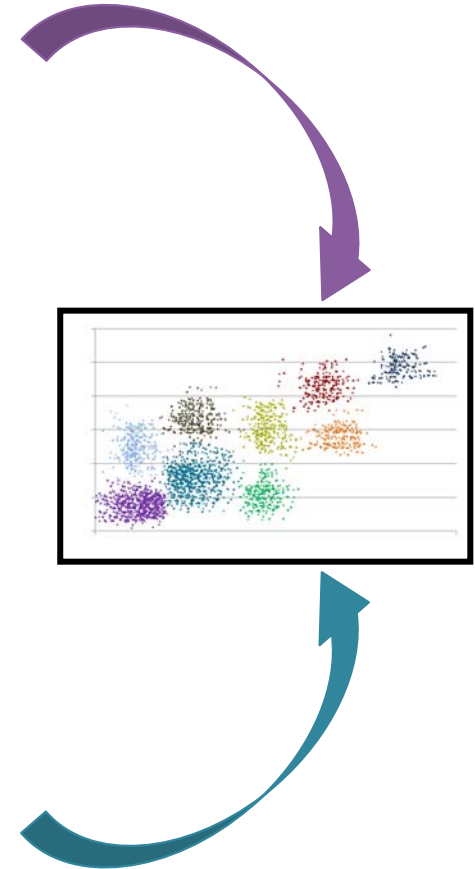
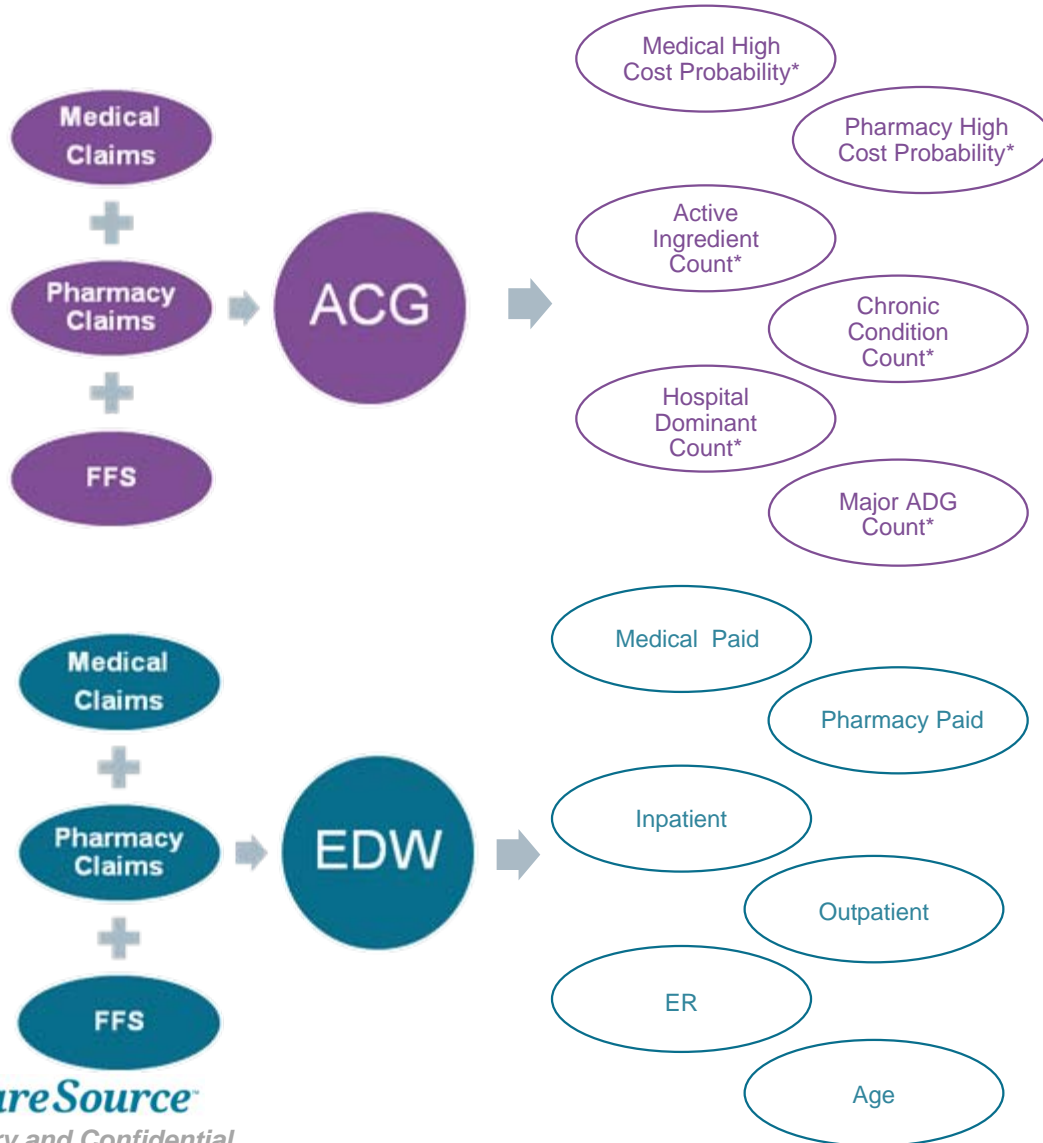
Clinical Personas



Cluster Analysis Process



Cluster Analysis Inputs



Cluster Analysis

Outputs

Clinical Personas

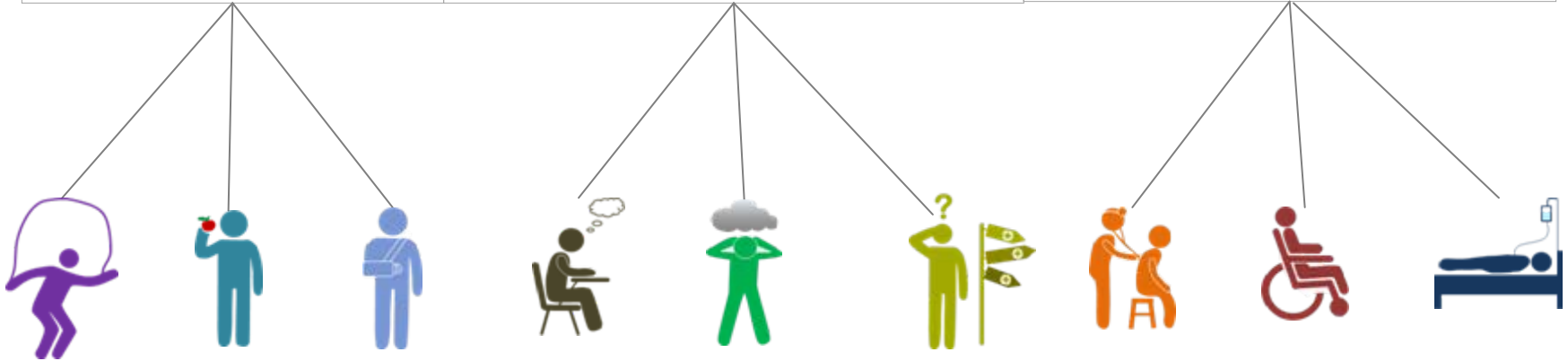


Three Marketing Personas

#1
Well / Acute

#2
"Acute" Episodic

#3
Chronic Complex



Nine Clinical Personas

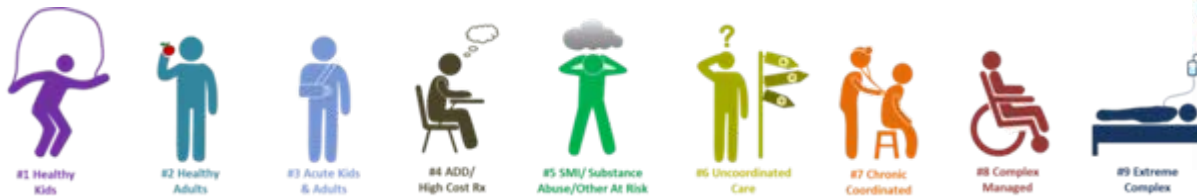
- #1 Healthy Kids
- #2 Healthy Adults
- #3 Acute Kids & Adults
- #4 ADD/ High Cost Rx
- #5 SMI/Substance Abuse/Other At Risk
- #6 Uncoordinated Care
- #7 Chronic Coordinated
- #8 Complex Managed
- #9 Extreme Complex

Cluster Drill-down

Clinical Persona Detail



• 80% are considered "healthy"

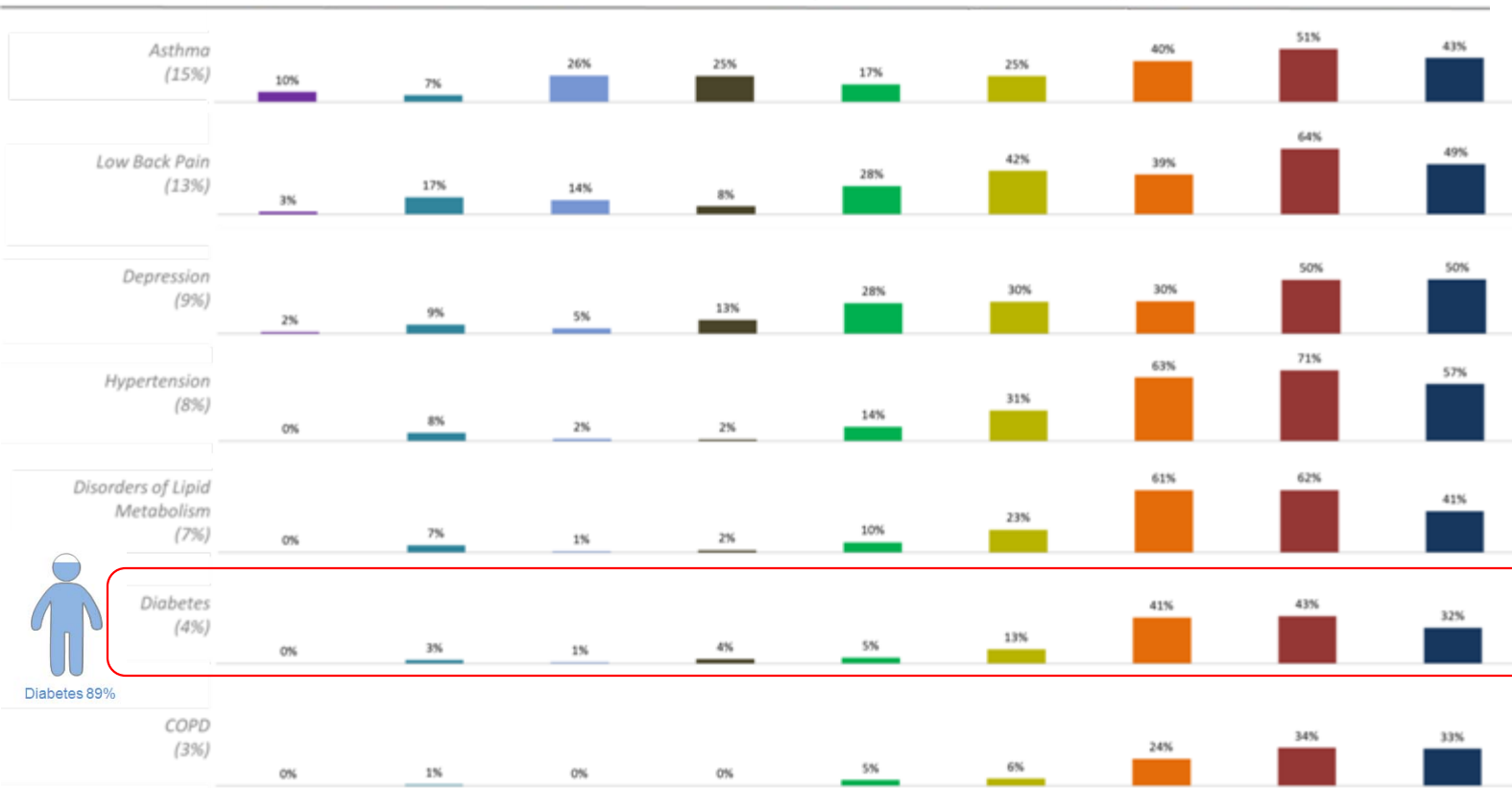


Few chronic conditions; but many disparate problems – represent top 5% of FUTURE costs

Highest IP Stays

Highest ER visits - 8x that of Persona #1 (Healthy Kids)

Disease Prevalence

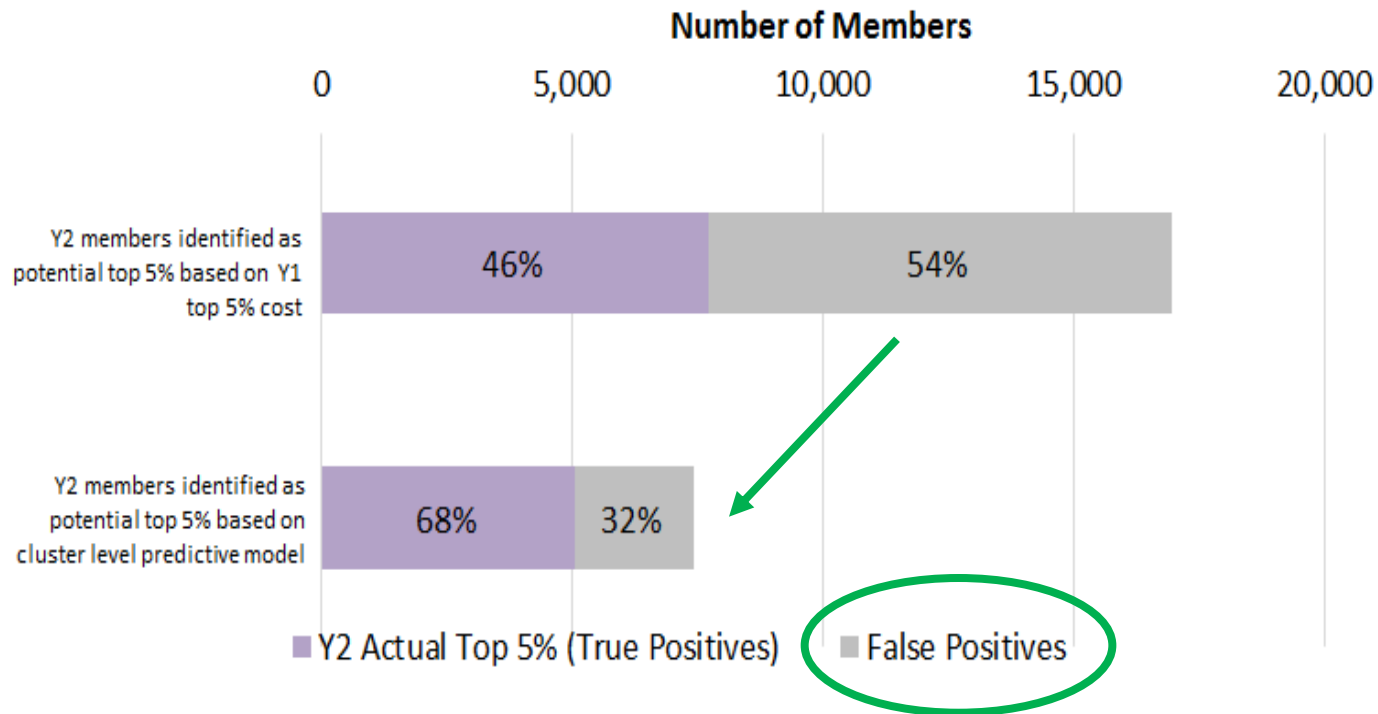


Diabetes 89%

Members with Diabetes and other comorbidities fall along the continuum

High Cost Prediction

Clustering model increases accuracy



Clinical Personas in Action



Pregnancy Journey

Persona 2 - Healthy Adult

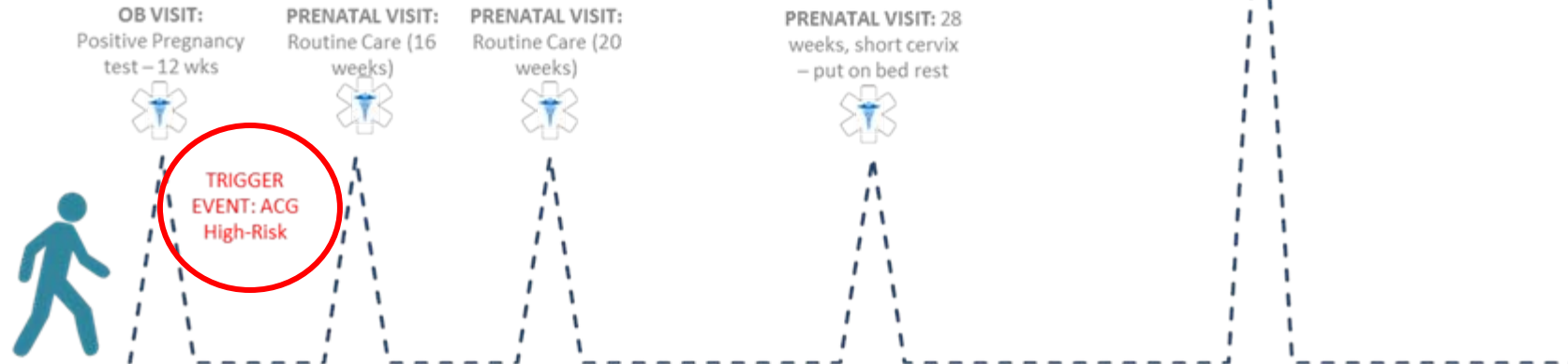


#2 Healthy Adults



IP STAY

Full-term delivery at 38 weeks



Pregnancy Journey

Persona 6 – Uncoordinated Care



#6 Uncoordinated Care

32-year old female with obesity, low back pain, tobacco use, and STD



OUTPATIENT VISIT
Low Back Pain,
receives opiates



URGENT CARE
Musculoskeletal Pain,
receives opiates



ER VISIT
For bleeding;
positive pregnancy
test, low back pain



PRENATAL VISIT
Routine Care (12
weeks)



TRIGGER EVENT: High-Risk pregnancy - potential opiate use during pregnancy

Severe Mental Illness Journey

Persona 5 – SMI/Substance Abuse/Other At-risk



#5 SMI/Substance Abuse/Other At-risk

44-year old male with history of bi-polar disorder



CMHC VISIT
Routine check for bi-polar disorder, med fills



Med fill for bi-polar

Med fill for bi-polar



TRIGGER EVENT:
Medication Gap

ER VISIT
Anxiety and bi-polar complications



CMHC VISIT
Follow-up for ER

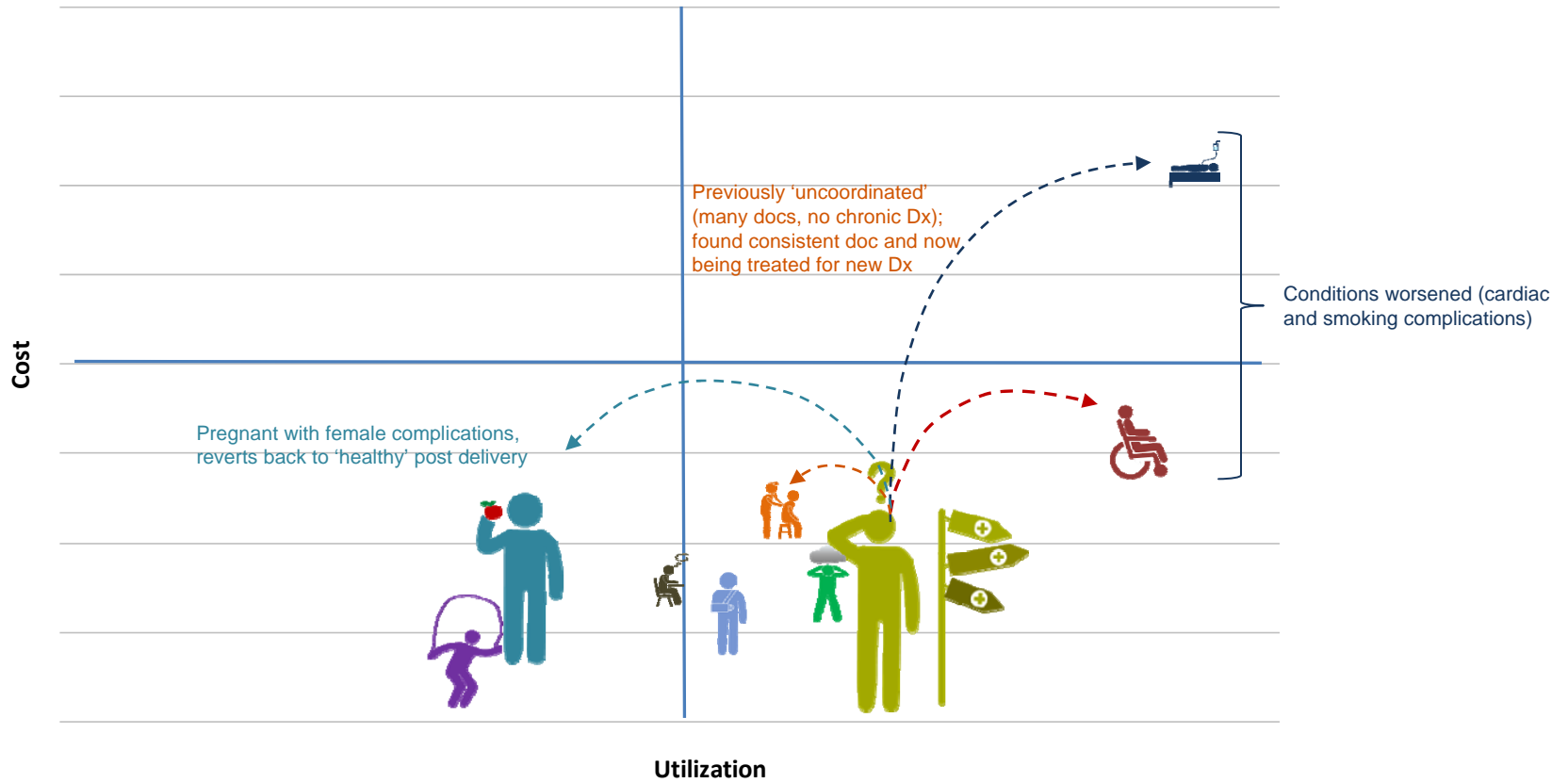


Next Steps



Clinical Persona Movement Over Time

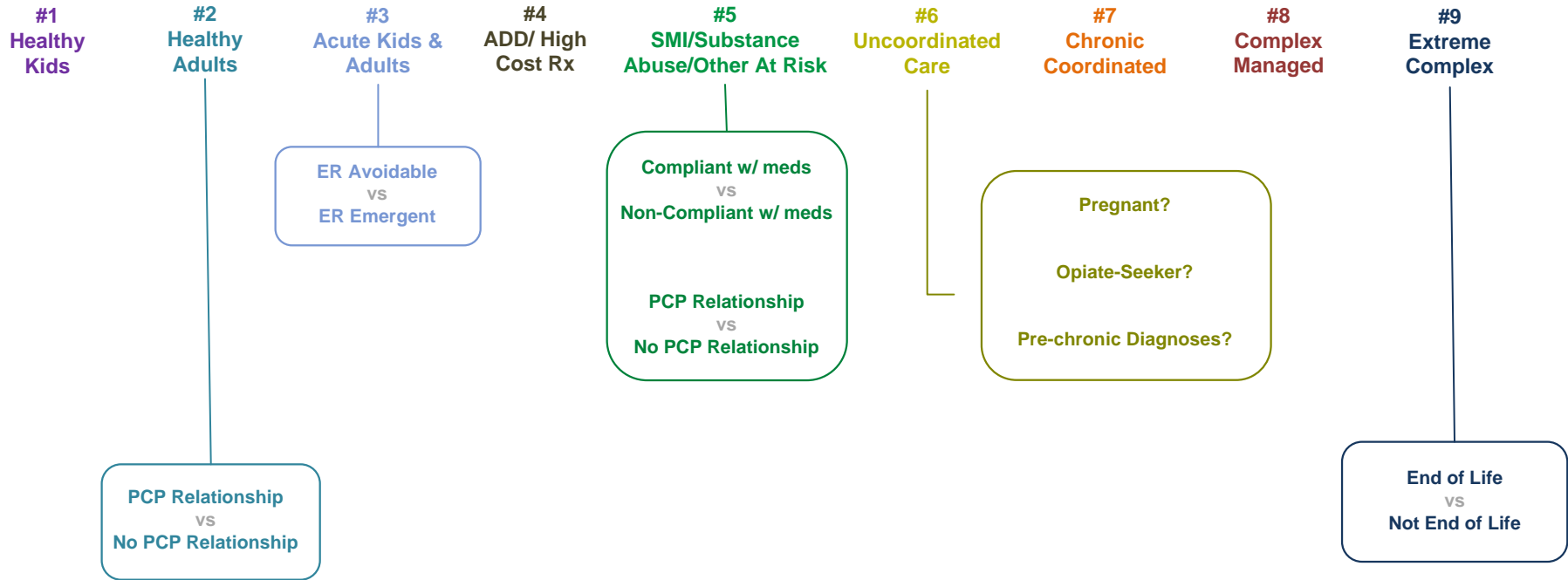
Persona 6 – Year over Year



Additional Opportunities



Nine Clinical Personas



Population subsets requiring unique member interaction

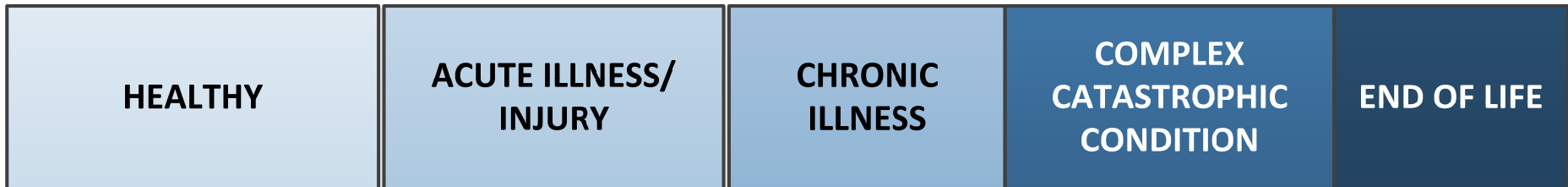
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Which wellness plan?

Which telephonic message?



Recap

Find People – Tailor Interventions



WHO? - Tightly segment populations - find areas of specific opportunity

WHAT? - Optimize type of intervention - most appropriate for segmented group

WHEN? - Predict the best time to intervene – get in front of the cost

HOW? - Tailor method of intervention – enhance consumer experience

Questions?



CareSource™

Bob Gladden

Vice President, Center for Analytics
bob.gladden@caresource.com

Cathy Meade

Director, Healthcare Analytics
cathy.meade@caresource.com