



**MARYLAND**  
**Health Care**  
**Commission**

***A Learning  
Network  
Event***

# Using Data To Manage Patient Populations



**MARCH 21, 2024**

# CME and Disclosures



- ▶ This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of MedChi, The Maryland State Medical Society (MedChi) and the Maryland Health Care Commission (MHCC). MedChi is accredited by the ACCME to provide continuing medical education for physicians
- ▶ MedChi designates this virtual online educational activity for a maximum of *1 AMA PRA Category 1 Credits™*
- ▶ Physicians should claim only the credit commensurate with the extent of their participation in the activity
- ▶ The planners and reviewers for this activity have reported no relevant financial relationships to disclose
- ▶ The presenters have reported no relevant relationships to disclose

# Learning Objectives



- ▶ Identify data available in CRISP reports that can be used to manage patient populations
- ▶ Understand how ambulatory practices use the data to enhance care delivery
- ▶ Recognize actual practice level improved patient outcomes from using data to manage patient populations



# AGENDA

- I. **Gene Ransom**, *MedChi*, Opening Remarks
- II. **Melanie Cavaliere**, *MHCC*, Overview of Maryland Landscape and MHCC Practice Transformation Activities
- III. **Audrey Speter**, *hMetrix*, Subject Matter Expert
- IV. **Mara Holton, MD**, *AA Urology*, Practice Perspective
- V. **George Bone, MD**, *IC Care*, Practice Perspective
- VI. Q&A





**Gene Ransom**

*CEO*

MedChi, The Maryland  
State Medical Society  
(MedChi)



# Snapshot of Maryland



- ▶ 6.18 million people (Source: [United States Census Bureau](#))
- ▶ 16.9% of population is age 65 and over (Source: [United States Census Bureau](#))





# Advancing Practice Transformation





# Background

- ▶ Advancing practice transformation has been an MHCC strategic priority for more than a decade
- ▶ Maryland law tasked MHCC with implementation and management of the Maryland Multi-Payor PCMH Program from 2011 through 2016
- ▶ The MHCC, MedChi, and the University of Maryland School of Medicine Department of Family and Community Medicine partnered with the New Jersey Innovation Institute to complete practice transformation activities in Maryland as part of federal initiative, the Transforming Clinical Practice Initiative, from 2015 to 2019
- ▶ The MHCC contributes to planning and policy development for the Maryland Primary Care Program since its inception in 2017



# Health Equity Practice Roundtable



- ▶ The MHCC convened a Health Equity Practice Roundtable (Roundtable) in March 2022 with representatives from advanced care delivery practices to identify challenges and opportunities for practices seeking to address key health equity concerns in their communities
- ▶ The goal of the Roundtable was to advance health equity in ambulatory practices in Maryland through the development of practice resources informed by HE Roundtable feedback
- ▶ Feedback from the Roundtable informed a Health Equity Symposium in March 2023 focused on strategies for identifying patterns of need in the community, building referral networks for services related to social needs, and connecting patients to resources
- ▶ More information about the Roundtable is available at:  
[mhcc.maryland.gov/mhcc/pages/apc/apc\\_icd/apc\\_icd\\_learning\\_networks.aspx](https://mhcc.maryland.gov/mhcc/pages/apc/apc_icd/apc_icd_learning_networks.aspx)

# Advancing Practice Transformation in Ambulatory Practices



- ▶ The MHCC released an Announcement for Grant Applications in May 2021 to identify a Care Transformation Organization (CTO) to engage eligible primary care and specialty practices (practices) in a practice transformation program (program)
- ▶ Grant objectives include:
  - Preparing practices to deliver efficient, high-quality care while improving health outcomes
  - Laying the foundation for practices to provide team-based, patient-centered care, and efficient use of health information technology
  - Supporting Total Cost of Care model goals by readying practices to participate in value-based care (VBC) models

# Advancing Practice Transformation

## Program Overview



- ▶ In June 2021, MedChi CTO was competitively selected to complete transformation activities
- ▶ A crucial role of MedChi CTO is providing practice coaching on specific transformation topics and approaches, such as quality improvement and tools to help sequence and manage change essential to succeed in a VBC model
- ▶ Program milestones:
  - Milestone 1 – Readiness Assessment
  - Milestone 2 – Workflow Redesign
  - Milestone 3 – Training
- ▶ Approximately 45 practices completed the program in June 2023
- ▶ An additional 27 practices are projected to complete Round 2 by June 2024

# Learning Network Events



- ▶ The MHCC convenes peer learning network events in collaboration with local and national health care leaders on topics such as health equity, advanced care delivery, and practice transformation
- ▶ More information on learning network events is available at:  
[mhcc.maryland.gov/mhcc/Pages/apc/apc\\_icd/apc\\_icd\\_learning\\_networks.aspx](https://mhcc.maryland.gov/mhcc/Pages/apc/apc_icd/apc_icd_learning_networks.aspx)



# Advanced Care Delivery Events



- ▶ Prior events available on the [Learning Network](#) include:



### Health Equity Symposium

March 2023

Challenges around addressing health equity issues are discussed during this symposium, which was convened in collaboration with the Health Services Cost Review Commission and MedChi, The Maryland State Medical Society. Discussions focus on strategies for identifying patterns of need in the community, building referral networks for services related to social needs, and connecting patients to resources.

[Watch Now](#) [Download Slides](#)



### THE EVOLVING ROLE OF SOCIAL WORKERS IN TEAM-BASED ADVANCED CARE DELIVERY

November 2023

A social worker and medical director share how the role of social workers in team-based models is evolving. The presentation includes information about why some advanced care delivery practices employ in-house social workers and demonstrate how advanced care delivery practices share social worker resources.

[Watch Now](#) [Download Slides](#)



**Audrey Speter**

*Director, Health Policy*

hMetric

hMetric



# Content

- ▶ Introduction to Population Health
- ▶ Phases of Population Health Initiatives
- ▶ Impact of Using Data for Population Health: Case Study of Health Quality Partners (HQP)
- ▶ Bringing Population Health Analytics to Maryland through CRISP Shared Services



# Introduction to Population Health

- ▶ Need for population health is growing
  - ↑ Prevalence of *chronic conditions*
  - ↑ Health care *costs*
  - ↓ *Health status*
- ▶ Promote value-based care instead of fee-for-service
- ▶ Breakdown care “silos” and manage across the spectrum
- ▶ Incorporate interdisciplinary care teams





# Role of Data

- ▶ Critical component of Population Health initiatives:
  - ▶ Targets populations in need of care
  - ▶ Improves focus for care management initiatives
  - ▶ Contains management system with data to ensure reliable delivery and tracking of the care model
  - ▶ Identifies SDOH
- ▶ Variety of data sources available:
  - ▶ Claims
  - ▶ EHR (clinical)
  - ▶ Medication
  - ▶ Labs
  - ▶ Socioeconomic
  - ▶ Patient-generated
- ▶ Right data for the right initiative



# Phases of Successful Population Health Initiatives

## Design

Design a system to identify and mitigate the target population's under-addressed risk factors

## Targeting

Develop data-driven approaches to accurately identify patients who could benefit from the program; effective reporting that facilitates outreach and coordination

## Engagement

Actively engage patients with the program

Access to data alone is not sufficient; it must be acted upon to be impactful

Effectively engaging patients is challenging but critical to success

## Implementation

Operationalize with high reliability to identify risks, modify behavior, and slow disease progression

hMetrix

# Impact of Using Data for Population Health



## **CASE STUDY OF HEALTH QUALITY PARTNERS (HQP)**

**h**Metrix



# Health Quality Partners (HQP)

- ▶ Non-profit, research-oriented organization that designs, tests, and disseminates scientifically-validated systems of preventive care, care coordination, and care management for clinically vulnerable populations
  - ▶ Integrated Advanced Preventive Care (iAPC) model seeks to mitigate the impacts of chronic conditions, while sustaining and enhancing the quality of life of those with complex comorbidities
- ▶ HQP and hMetrix developed SPERO® over a decade partnership
  - ▶ Supports the practical, operational tasks related to providing direct services to patients
  - ▶ Web-enabled platform provides an intuitive workflow to record data, while generating notifications that enable care management nurses to keep patient relationship-building manageable and on-track
  - ▶ Care managers easily access pre-designed reports
    - ▶ **Program-level** reports to show whether the program is improving care quality and health of the enrolled population
    - ▶ **Management-level** reports to assess reliability of program implementation and identify unwarranted process variation
    - ▶ **Patient-level** reports to track outcomes for an individual and link changes in intermediate outcomes with behavior/life changes

hMetrix

# HQP Integrated Advanced Preventive Care (iAPC) Model



## AVOIDABLE ADMISSIONS

By Randall S. Brown, Deborah Peikes, Greg Peterson, Jennifer Schore, and Carol M. Razafindrakoto

DOI: 10.1377/hlthaff.2012.0393  
HEALTH AFFAIRS 31,  
NO. 6 (2012): 1156-1166  
©2012 Project HOPE—  
The People-to-People Health  
Foundation, Inc.

## Six Features Of Medicare Coordinated Care Demonstration Programs That Cut Hospital Admissions Of High-Risk Patients

Finally, programs need to build on the lessons in this article and their own experiences to find ways to enhance their effectiveness. The demonstration program with the largest effects, at Health Quality Partners, was very data-driven, tracking care coordinators' performance and continually assessing the effectiveness of newly introduced intervention components and refinements to existing ones.

June 2012



Face-to-face care manager contact with patients



Face-to-face care manager contact with physicians



Evidence-based patient education



Management of care setting transitions



Facilitation of communications across providers



Medication management

hMetrix



# Outcomes

***“HQP uses a much more data-driven approach to manage patients and the program itself than [others].”***

- ▶ Results among high-risk beneficiaries:\*
  - ▶ 39% fewer annualized hospitalizations
  - ▶ 36% lower Part A and B expenditures (or reduction of \$511 per month)
  - ▶ \$397 lower Part A and B expenditures after including fees
  - ▶ 34% reduction in all-cause mortality over 5 years

\*All statistically significant; randomized controlled trial design.

Fourth & Fifth Reports to Congress on the Evaluation of the Medicare Coordinated Care Demonstration.  
[https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Reports/downloads/Schore\\_Fourth\\_Eval\\_MCCD\\_March\\_2011.pdf](https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Reports/downloads/Schore_Fourth_Eval_MCCD_March_2011.pdf)  
<https://www.cms.gov/priorities/innovation/files/reports/medicarecoordinatedcaredemortc.pdf>



hMetrix

# Bringing Population Health Analytics to Maryland through CRISP





# Analytics in Maryland with CRISP

- ▶ Maryland has several statewide programs aiming to reduce cost and improve outcomes
- ▶ As the HIE for Maryland, CRISP facilitates providers' success in their population health initiatives by providing data





# Voluntary Programs Adapted from National Initiatives

- ▶ Program evolution emphasizes value-based care while allowing participants to customize the program that is most suited to their initiatives

Maryland Voluntary Healthcare Programs	2017	2018	2019	2020	2021	2022	2023	2024	2025	...
CCIP (Chronic Care Improvement Program)	[Orange bar]									
HCIP (Hospital Care Improvement Program)	[Red bar]									
ECIP (Episode Care Improvement Program)			[Teal bar]				[Teal bar]			
CTI (Care Transformation Initiative)					[Blue bar]					
MDPCP (Maryland Primary Care Program)			[Purple bar]							
EQIP (Episode Quality Improvement Program)						[Light Green bar]				
AHEAD (Advancing All-Payer Health Equity Approaches and Development)									[Grey bar]	



# Mandatory Healthcare Programs

- ▶ Mandatory programs are focused more on financial impact to hospitals than facilitating care management
  - ▶ Statewide Integrated Health Improvement Strategy (SIHIS)
  - ▶ Maryland Hospital Acquired Conditions (MHAC)
  - ▶ Quality Based Reimbursement (QBR)
    - ▶ IP Mortality, Timely Follow-Up (TFU) & TFU Disparity, Total hip arthroplasty/total knee arthroplasty (THA/TKA), Hospital Consumer Assessment of Healthcare Providers and Systems (H-CAPHS), etc.
  - ▶ Readmission Reduction Incentive Program (RRIP)
  - ▶ Potentially Avoidable Utilization (PAU)
  - ▶ Patient Adversity Index (PAI)



# Using Data to Support Participants

- ▶ Clinicians/care managers need data to target beneficiaries for population health initiatives
- ▶ CRISP partners with hMetrix to provide data-driven tools
- ▶ Multi-Payer Reporting suite (MPR) represents the first report in CRISP Reporting Services (CRS) to include claims data for **both Medicare and Medicaid beneficiaries** in a single suite



hMetrix



# Population Navigator and Rosters

- ▶ Mechanism to explore populations by filtering or sorting by clinical and demographic characteristics
- ▶ Create rosters to isolate sub-populations; focus reporting to those populations

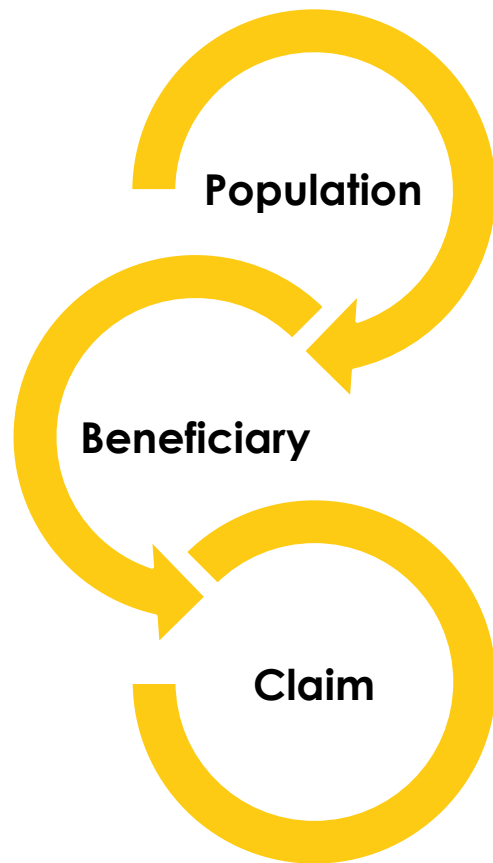
The screenshot shows a web application interface for population navigation. At the top, there are filters for 'Panel: Panel\_L3 - 3', 'Roster: -Default-', and 'Payer Type: Medicaid'. Below these is a table of beneficiary data with columns: Beneficiary Name, Medicare ID, Medicaid ID, MRN, Medicaid, Medicare, Gender, Medicaid Plan, Race, and DOB. A 'Measures' sidebar on the right lists various medical conditions with checkboxes and counts. 'Diabetes' is selected and highlighted in blue, showing a count of 149. Other conditions include Alzheimer's Disease (1), Anemia (34), Asthma (21), Atrial Fibrillation (5), Chronic Kidney Disease (33), Chronic Obstructive Pulmonar... (15), Colorectal Cancer (0), Depression (36), Endometrial Cancer (0), Female/Male Breast Cancer (0), Heart Failure (19), Hip/Pelvic Fracture (0), Hyperlipidemia (68), Hypertension (94), Ischemic Heart Disease (18), Lung Cancer (0), Osteoporosis (0), Parkinsons Disease (1), Pneumonia (10), Prostate Cancer (1), Stroke (3), and Urologic Cancer (0).

Demographic / Utilization Characteristics		Clinical Characteristics	
Beneficiary Name	DOB	Anemia	Heart Failure
Medicare ID	Age	Osteoporosis	Hip/Pelvic Fracture
Medicaid ID	Date of Death	Alzheimer's Disease	Hyperlipidemia
First Name	County name	Asthma	Hypertension
Middle Name	Claim Count	Atrial Fibrillation	Ischemic Heart Disease
Last Name	IP Claim Count	Chronic Kidney Disease	Lung Cancer
Medicaid	ER Claim Count	COPD and Bronchiectasis	Parkinsons Disease
Medicare	PQI-Like Event count	Colorectal Cancer	Pneumonia
Gender	Claim Payment Amount	Depression	Prostate Cancer
Race		Diabetes	Stroke
		Endometrial Cancer	Urologic Cancer
		Female/Male Breast Cancer	

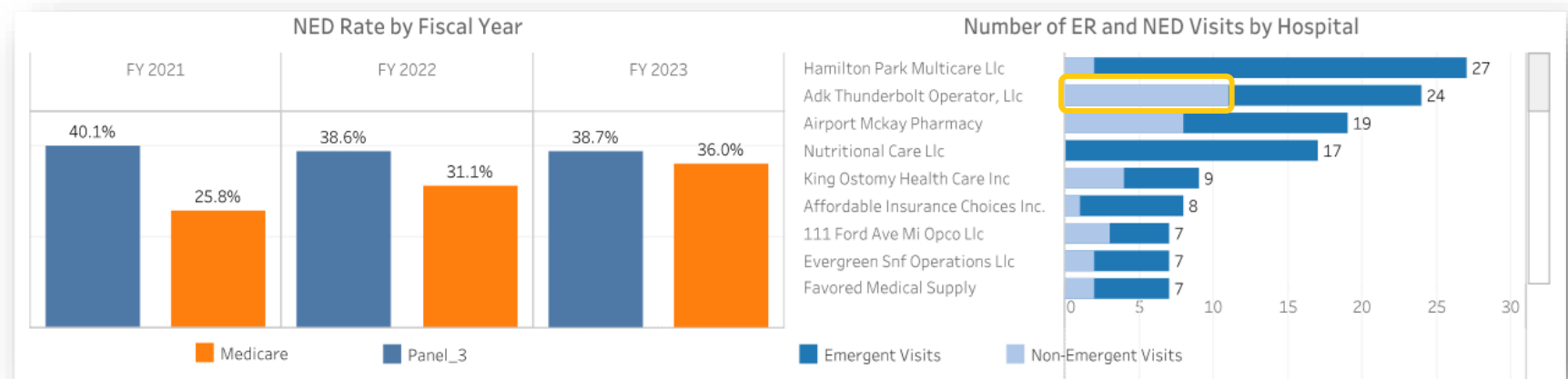
(Data are fictitious; does not contain PHI)



# Importance of Flexible Reporting

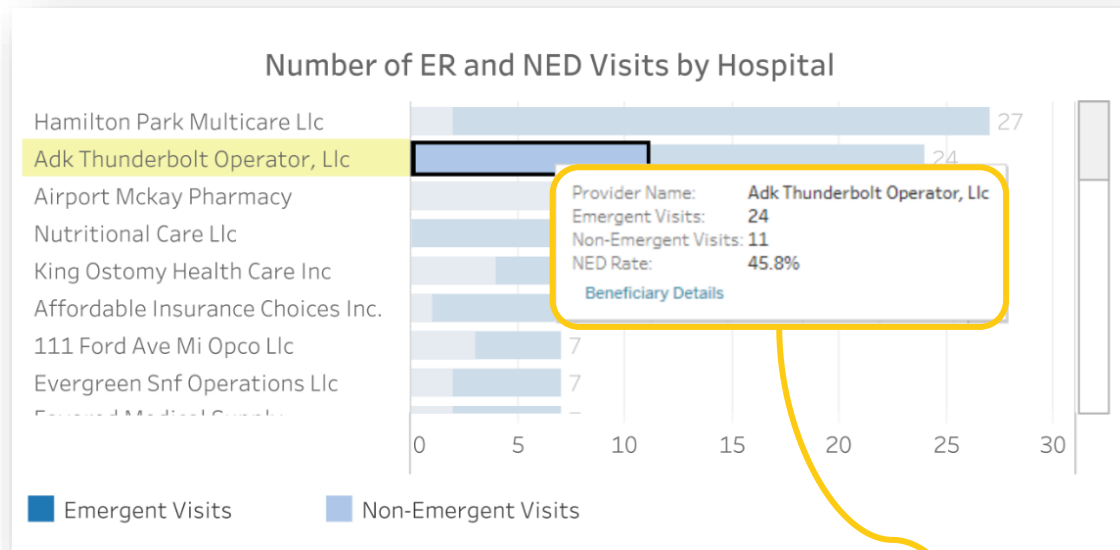


- ▶ CRISP reports contain flexible reporting to meet variety of use cases
- ▶ All reports start with population-level (aggregate) information
- ▶ Users can identify and select a data point of interest





# Aggregate Reporting → Patient Details



▶ Aggregate data leads to Beneficiary-level details identifying those patients with the utilization of interest

Beneficiary Name	Medicare ID	Medicaid ID	MRN	Medicaid	Medicare	Gender	Medicaid Plan	Race	DOB
[Redacted]	jnavbsci5zl	73qe1sqbrf8	lk0p446cnvqw7h42a...	Yes	Yes	Female	FFS	Black	[Redacted]
[Redacted]	og19spm7fk9	rzybd2zftv	o3m4pitwsmuntie53...	Yes	Yes	Female	FFS	Black	[Redacted]
[Redacted]	60j31ibsk3g	rg0039pvat8	j7qlemhk3ld6oi109h...	Yes	Yes	Male	FFS	Black	[Redacted]
[Redacted]	d5j4534iw5t	h5cggpepys4n	xew2zju9tbxjp11bnf...	Yes	Yes	Female	FFS	Black	[Redacted]

(Data are fictitious; does not contain PHI)



# Patient Details → Claim Details

- ▶ Having identified patients of interest, drill through further into their claim history
- ▶ Select claims by type and sort by any column in the table
- ▶ Export the data to for future reference and analytics outside the suite

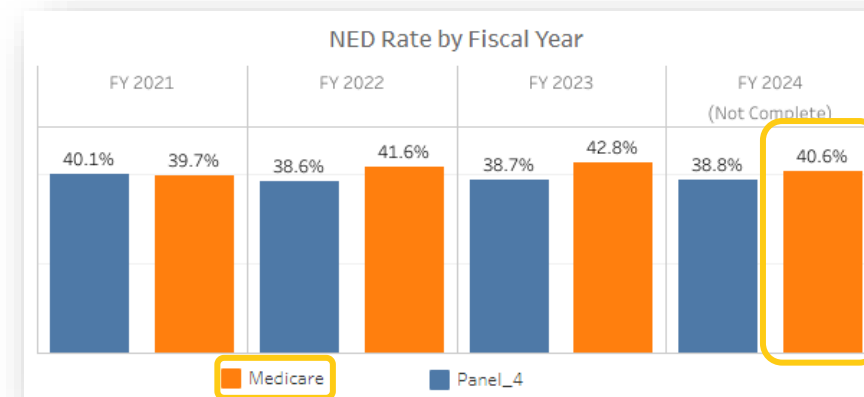
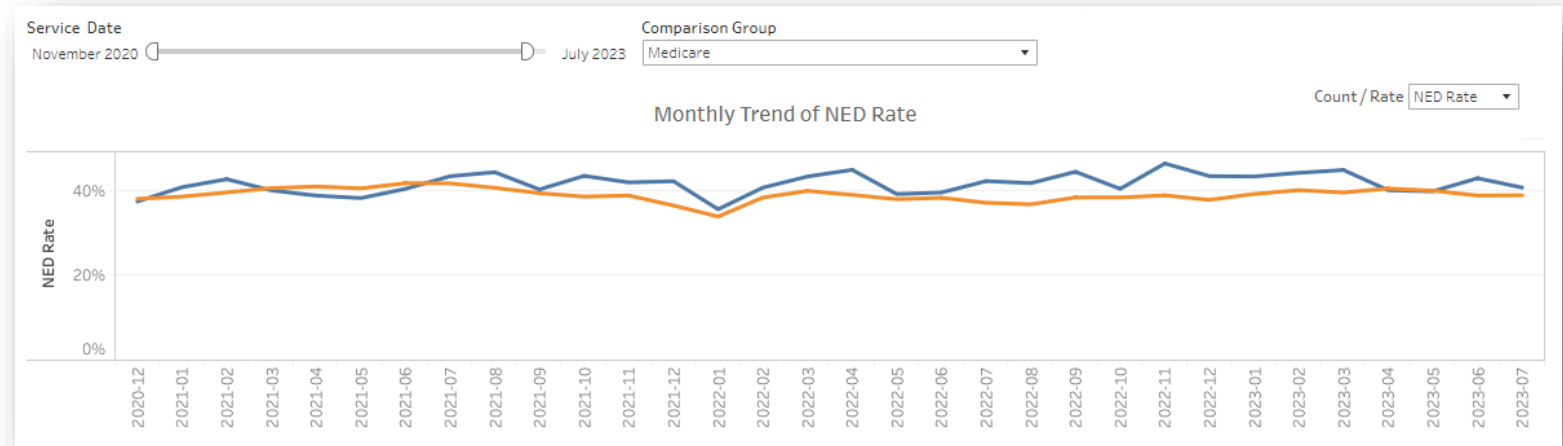
Beneficiary Name	Claim Number	Claim From Date	Claim Through Date	Primary Diagnosis	Provider Name	Claim Payment Amount
	8hjm818f6broe7e7k5	5/15/2023	5/17/2023	F259 : Schizoaffective disorder, ...	Lmg Team Service, Corp	\$0.00
	fswbn1depvp2bp3gch	7/1/2023	7/1/2023	F209 : Schizophrenia, unspecified	Lmg Team Service, Corp	\$0.00
	km4a2bfv36qrz5alg	4/25/2021	4/26/2021	R519 : Headache, unspecified	Slp Overton Lic	\$665.00
	ml2foylily1p5v1f69	11/9/2020	11/9/2020	J029 : Acute pharyngitis, unspec...	Match-e-be-nash-she-wish Band ..	\$344.00
	s1bg9cma0x41xv5oo	3/27/2023	3/27/2023	F259 : Schizoaffective disorder, ...	Lmg Team Service, Corp	\$0.00
	ttc6nvtneyb9og7yj	1/23/2022	1/23/2022	R5383 : Other fatigue	Adk Thunderbolt Operator, Lic	\$660.00
	ue28h5ihe6joptjz30	7/9/2023	7/9/2023	R0789 : Other chest pain	Lmg Team Service, Corp	\$0.00
	vc14bc3xb2k6idy43m	5/31/2023	5/31/2023	R10817 : Generalized abdominal ..	Lmg Team Service, Corp	\$0.00
	zkexfs8aa1gcxwfsxr	11/11/2022	11/12/2022	R109 : Unspecified abdominal p...	Lmg Team Service, Corp	\$0.00

(Data are fictitious; does not contain PHI)



# Use of Comparison Groups

- ▶ View population trends relative to comparison groups to establish context
- ▶ Often provided for the overall state, overall program, or by payer
- ▶ MDPCP reports have curated comparison groups to match the demographic characteristics of the attributed population







# Conclusions



# Conclusions

- ▶ Population Health initiatives around the country have informed best practices for program implementation
- ▶ Data is the cornerstone for success, but programs require **robust care model design** that incorporate systems thinking, active and strenuous **engagement of clinical teams and patients**, as well as **methodical implementation of program interventions**
- ▶ Data are not one-size fits all; pick the data source that is best for the initiative
- ▶ Flexible reporting with both aggregate and patient-level details enables a variety of users (administrators, care managers, physicians) to act on the reports and target their engagement
  - ▶ Comparison groups provide helpful context to evaluate performance

***Thank you!***

Contact: [audrey@hmetrix.com](mailto:audrey@hmetrix.com)

**hMetrix**



**Mara R. Holton, MD**  
*CEO, AAUrology*  
*Chair, LUGPA Health Policy*

CARE NAVIGATION



***Faulty  
Input***

***Garbage  
In***



***Faulty  
Output***

***Garbage  
Out***



**WHICH DATA POINTS?**

**WHERE TO COLLECT?**

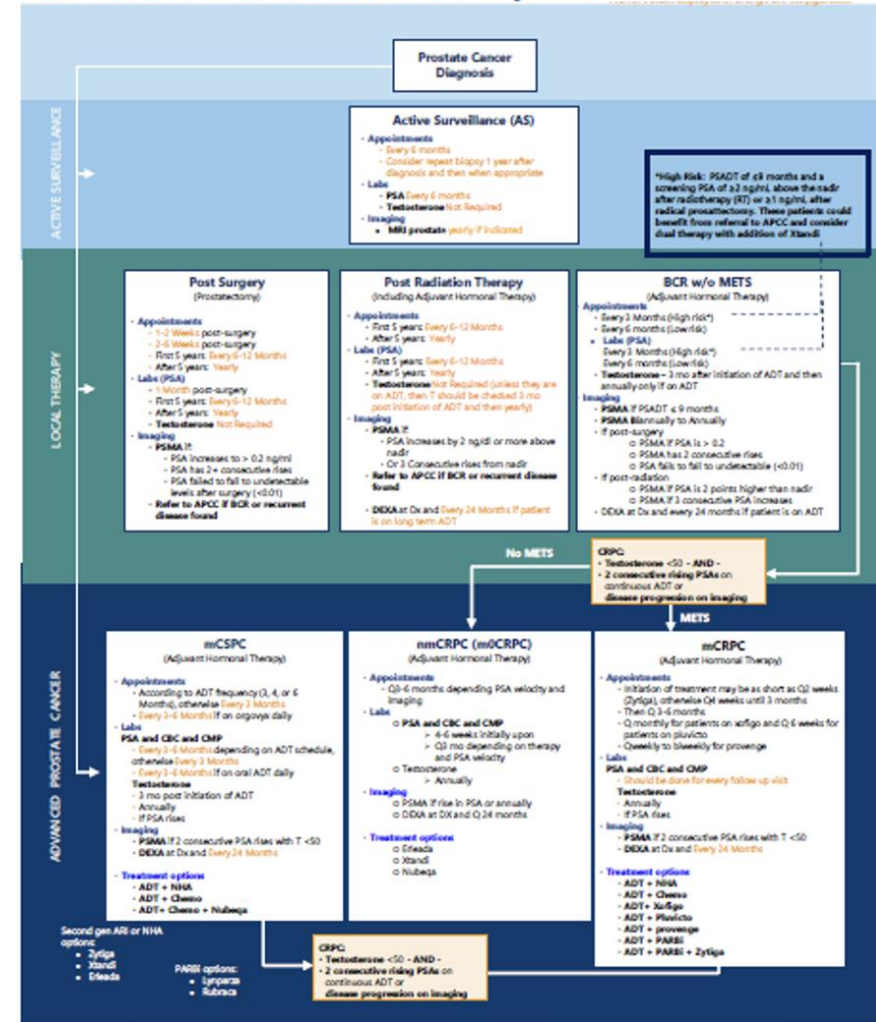
**WHO & HOW TO GET BEST INFO?**

**WHAT DOES IT MEAN?**



# Why APC?

- ▶ Clinically complex care algorithm
- ▶ Patient population at risk of 'falling through the cracks'
- ▶ Rapid evolution of novel therapies and treatment protocols
- ▶ Well established outcome metrics



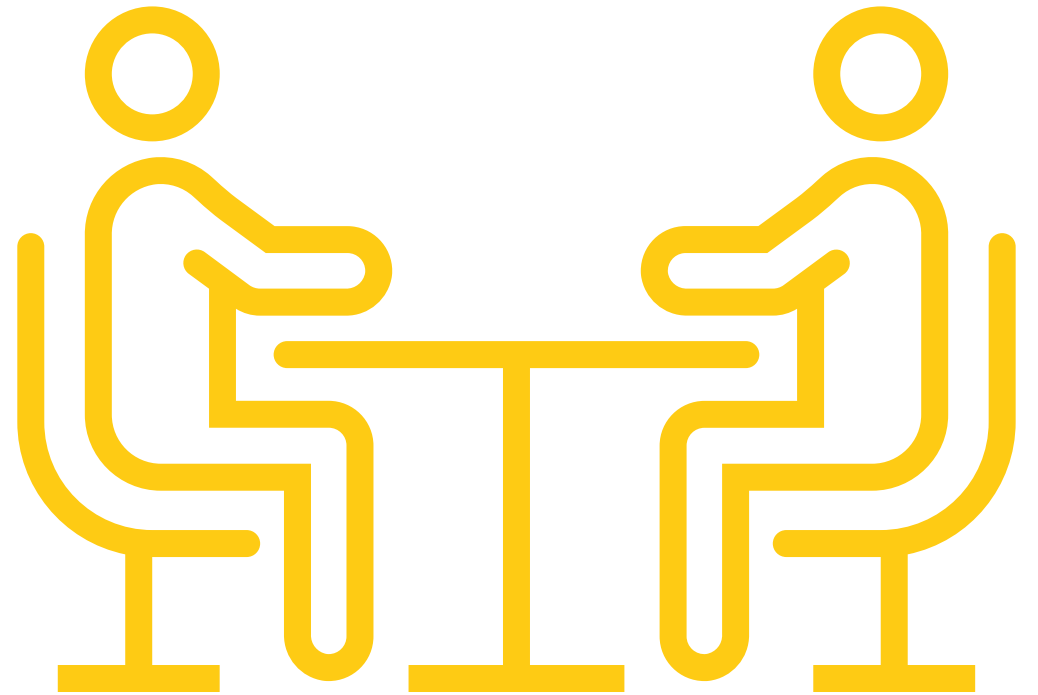


# DATA DRIVEN CARE EXAMPLE (APC)

- ▶ Pathway Driven Clinical Care Protocol
- ▶ Data Collection
  - ▶ EHR(s) lookback
  - ▶ Surveys
- ▶ Combination: Patient completed and Staff Facilitated
  - ▶ Outreach in person & via phone/text
- ▶ Measurable Outcomes

# VENDOR PARTNER

- ▶ Data is cumbersome
- ▶ EHRs are notoriously finicky & idiosyncratic
- ▶ Generally, private practices have limited specialized staff
  - ▶ IT
  - ▶ Data collection
  - ▶ Data analytics





# ORAL ONCOLYTIC SURVEY IMPACT SINCE 9/2023



**5 NEW PATIENTS STARTED AN  
ORAL ONCOLYTIC**



**97 SURVEYS  
COMPLETED**



**7 PATIENTS  
IDENTIFIED**

# SMS Text Feature



Active & Consented

Coordinator

Conditions

# of Coordinated Conditions

Task Callouts

Mins

Appointment

Tags

9  
Not Navigated

506  
Patients with  
Overdue Tasks

671  
Patients with  
Open Tasks

1  
Care Plan Ready  
to Generate

379  
No Next Appt

125  
Upcoming Appts

45  
Last Visit Over 6  
Months Ago

0  
Consent Not Yet  
Obtained

Send Text (25 patients)

Bulk Edit (25 patients)

Patient	Open Tasks	Coordinator	Provider	Conditions
[Redacted]		Ricketts, Melinda	Ransom, Lizbeth	Benign Prostatic Hyperplasia (BPH) N39.91 Urinary Retention (Unspecified) R33.91 Weak Urinary Stream R39.12 (+ 11 more)
[Redacted]	2023-10-24 see if interested in r/s	Mullins, Sabrina	Hyde, Brendan	Incontinence (Urge) N39.41 Prostate Cancer C61 - Local Therapy Benign Prostatic Hyperplasia (BPH) N39.91 (+ 36 more)
[Redacted]	2023-11-16 November PCM	Yarchin, Mitch	Kowalski, Renee	Prostate Cancer C61 - Local Therapy Benign Prostatic Hyperplasia (BPH) N39.91 Incontinence (Frequency) R35.0 (+ 5 more)
[Redacted]	2023-10-06 sxs check	Dolan, Louis	Hyde, Brendan	Benign Prostatic Hyperplasia (BPH) N39.91 Urinary Retention (Unspecified) R33.91 Post-Void Dribbling N39.43 (+ 11 more)
[Redacted]		Rider, Lucas	Cornwell, Britney	Bladder Cancer (Localized) C58.01 Benign Prostatic Hyperplasia (BPH) N39.91 Bladder Cancer (Localized) C58.01 (+ 5 more)
[Redacted]	2024-01-02 oaass	Mullins, Sabrina	Moore, Cody	Incontinence (Urgency) R39.15 Incontinence (Frequency) R35.0 Incontinence (Nocturia) R35.1 (+ 19 more)

⏪ ⏴ 1 2 3 ... 16 ⏵ ⏩

Send Messages

✕ Cancel

Send Text (All 379 patients)

Message Template

NNA Reminder

Reminder: You do not currently have an appointment scheduled with Demo Integrated. Please call (501) 219-8900 to schedule it. Reply STOP to unsubscribe.

Patients will be excluded if they received this same text message...

In the last week

321 of the 379 patients you selected will receive this SMS text message.

- 18 Have opted out of receiving text messages
- 40 Have not consented to receive text messages

Allows users to bulk-select patients & send text messages from any Dashboard:

- Reach out to patients with No Next Appointment
- Send reminders to patients with Overdue Labs
- Send Consent Requests for enrollment in CCM Program

# 2023 Improved Patient Outcomes



2,179

Net Patients Consented

1,317

Unique Patients Navigated



## Ensure all patients have a next appointment

- **64%** (842) all patients navigated have a next appointment  
*% of patients seen in 2023 that have a next appointment scheduled*



## Identify Cancer Progression

- **20%** (50) PCa patients navigated had cancer or cancer progression detected



## Treatment Identification

- **38%** (503) all patients navigated had new treatment identified



# Care Management

Month-in-Review  
July 2023



## Improved Patient Outcomes

- 15 Symptoms Improved
- 40 New Treatment Identified
- 2 Patient Satisfaction Score Increased
- 5 Cancer or Cancer Progression Detected
- 1 ER/Urgent care/Hospitalization Averted
- 1 Side Effect(s) Reduced/Removed
- 3 Missing Lab/Scan/Test Discovered & Resolved



BROADEN MEASURES



EXPAND  
ELIGIBLE/APPLICABLE  
CLINICAL DISEASE STATES



ONGOING REFINEMENT  
DATA COLLECTION  
PROCESS





THANK YOU.



contact: [mholton@aaurology.com](mailto:mholton@aaurology.com).



**George Bone, MD**  
*Medical Director*  
IC Care Inc.

# MHCC/MedChi Spring Forum

Using Data to Manage Patient Care Populations  
at IC Care Inc. & Prince Georges County



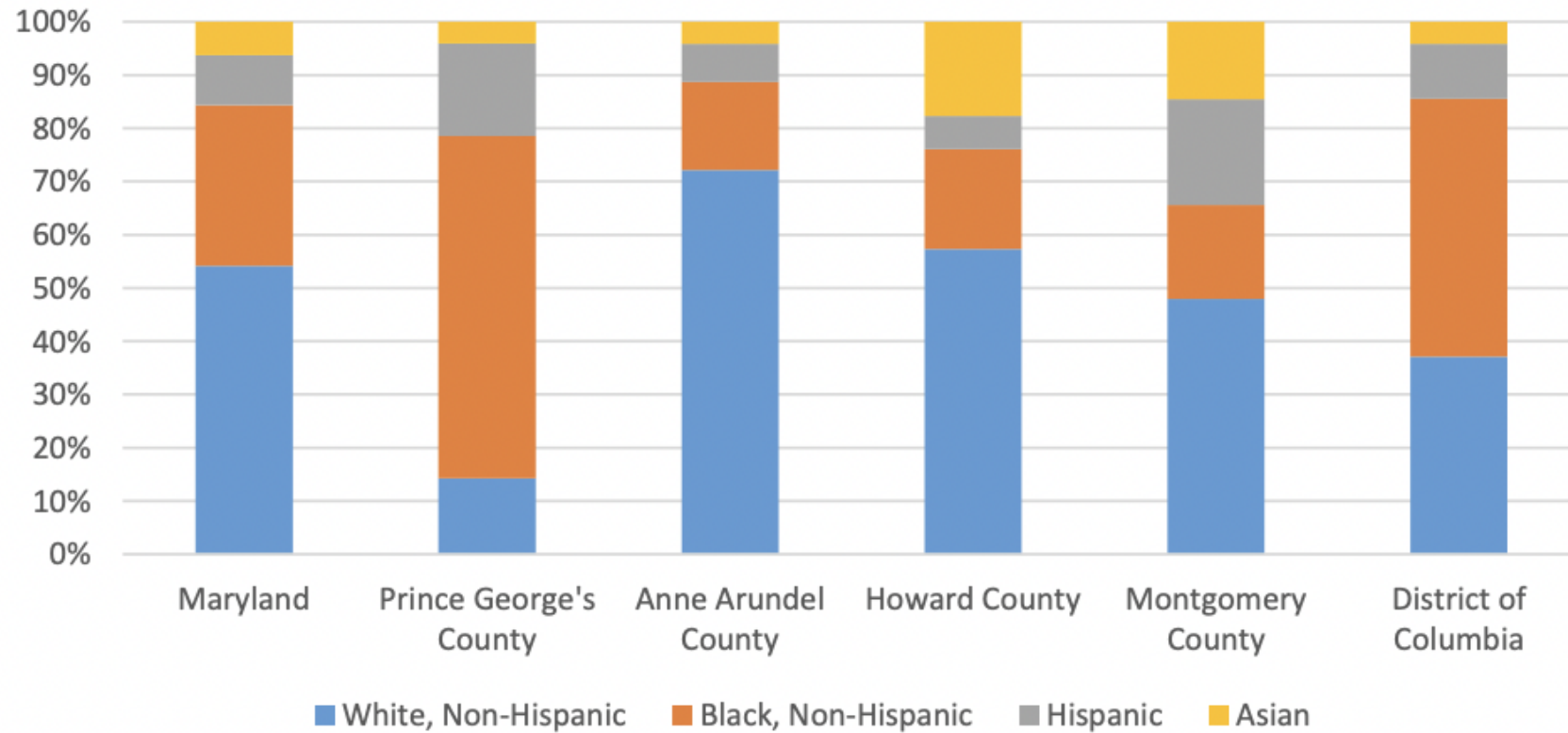


# Populations Under Care: Broad-strokes

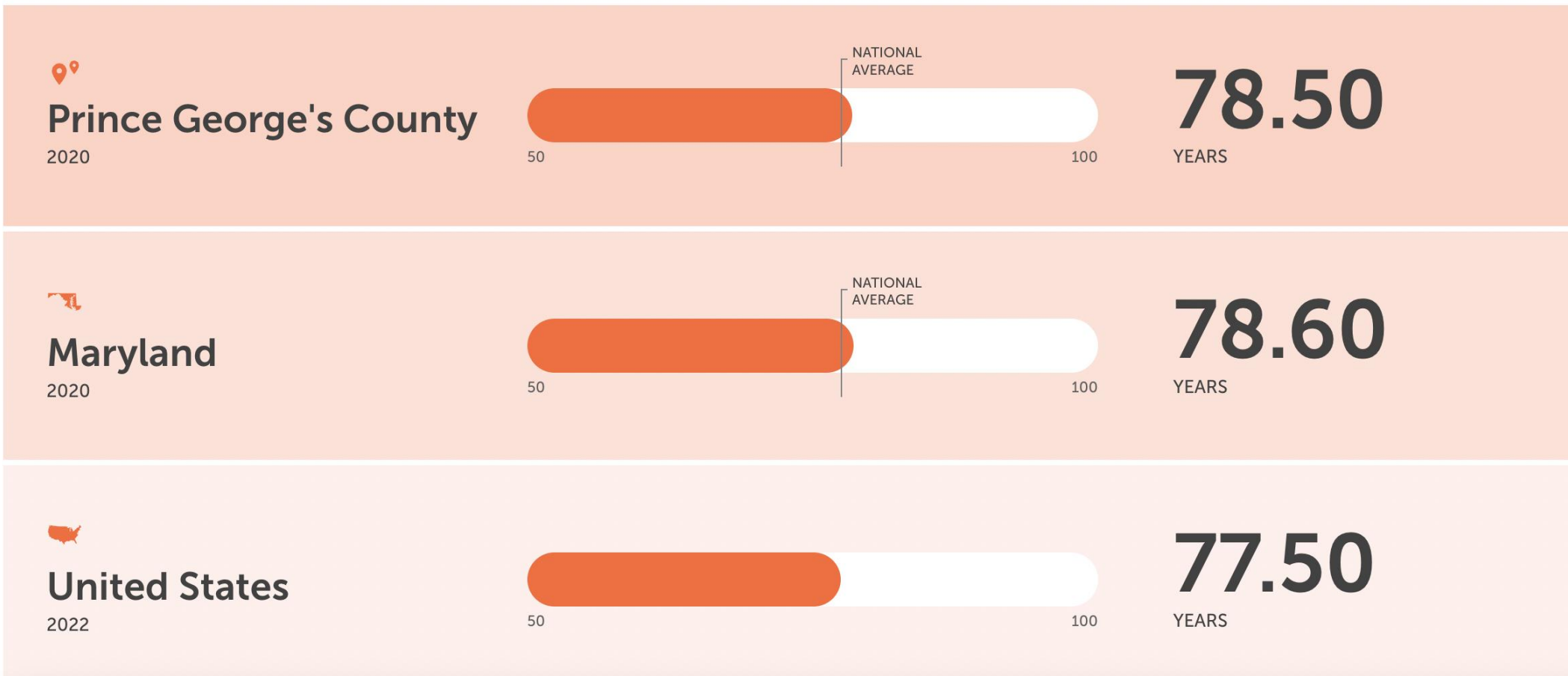
	Age	Ethnicity	Insurance
IC Care	<p>Range: 21 to 97 yo Average: 65.3 Median 66.5 Age &gt; 78yo = 19%</p>	<p>Black: 99 % White: &lt; 1 % Hispanic: &lt; 1% Asian: &lt; 1 %</p>	<p>Medicare: 70 % Commercial: 27 % Medicaid: 3% Cash/Un-insured: &lt; 1 %</p>
Prince Georges County	<p>Range: 0 to 102 yo Median 36.7 yo Age &gt; 78yo = 2.8 %</p>	<p>Black: 70 % White: 12 % Hispanic: 12 % Asian: 6 %</p>	<p>Medicare &amp; Medicaid: 29 % Commercial: 68.4 % Cash/Un-insured: 2.3 %</p>

# PG County Ethnic Make-up

Race and Ethnicity of Prince George's County Residents vs. Surrounding Areas



# Mortality in PG County



# Using Data to Manage Patient Care

## IC Care data sources

MIPS - Merit-Based Incentive Payment System

MDPCP - Maryland Primary Care Program

CRISP - Chesapeake Regional Information System for our Patients

Salesforce / ZH - Blue EHR

Maryland ImmuNet



# \$4.25 Trillion

Whoa! That's a big number, aren't you proud?



# Key drivers of U.S. health care spending



Administrative costs account for **8%** of total health care spending, compared with **1-3%** for other countries



Per capita spending for pharmaceuticals was **\$1,443** in the U.S. and **\$466-\$939** in other countries.



Average salary for a general practice doctor was **\$218,173** here and **\$86,607-\$154,126** in other countries.

Source: Harvard T.H. Chan School of Public Health, Harvard Global Health Institute, London School of Economics. Credit: Rebecca Coleman/Harvard Staff

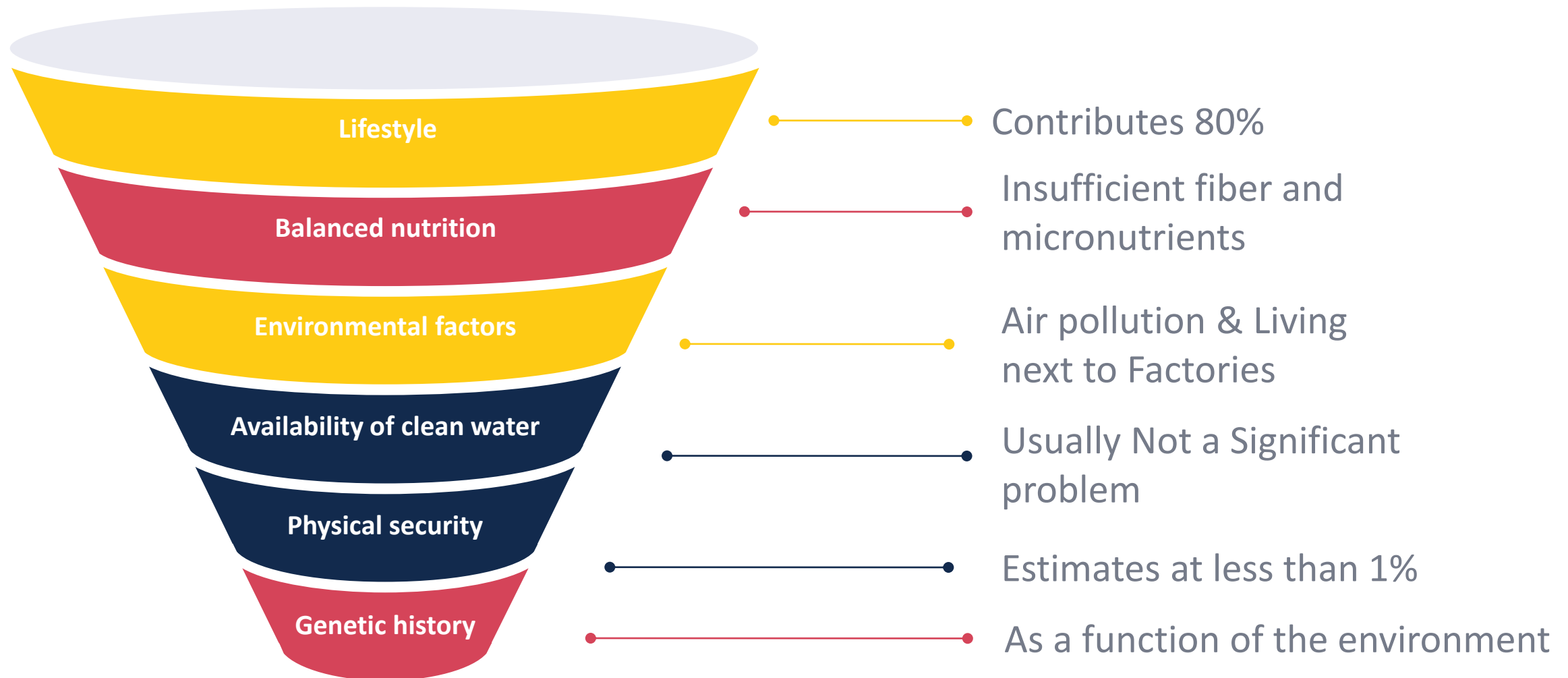


“ What’s a Doc to do”??





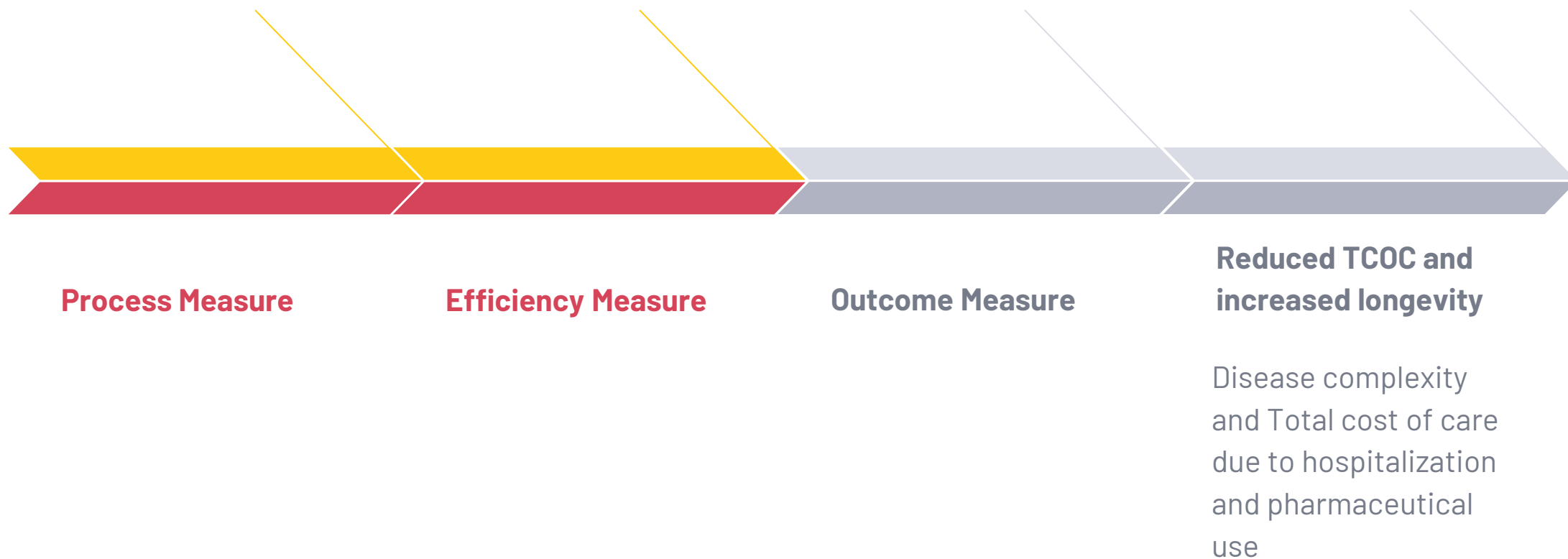
# Disease as Drivers in Health Care Costs: The China study







# Our process is easy : Keep them healthy & Reduce Total Cost of Care



# Data Groups



<b>Process measure: Screening</b>	<b>Efficiency measure: Disease Burden reduction</b>	<b>Treatment outcomes</b>	<b>Total cost of care and complexity</b>
<b>BMI</b>	<b>Medication adherence</b>	<b>BP control</b>	
<b>Bone density</b>	<b>Immunization</b>	<b>HbA1c reduction</b>	
<b>Colon cancer</b>	<b>Nutrition optimization</b>	<b>BMI reduction</b>	
<b>Breast cancer</b>			



# Using Data to Manage Patient Care

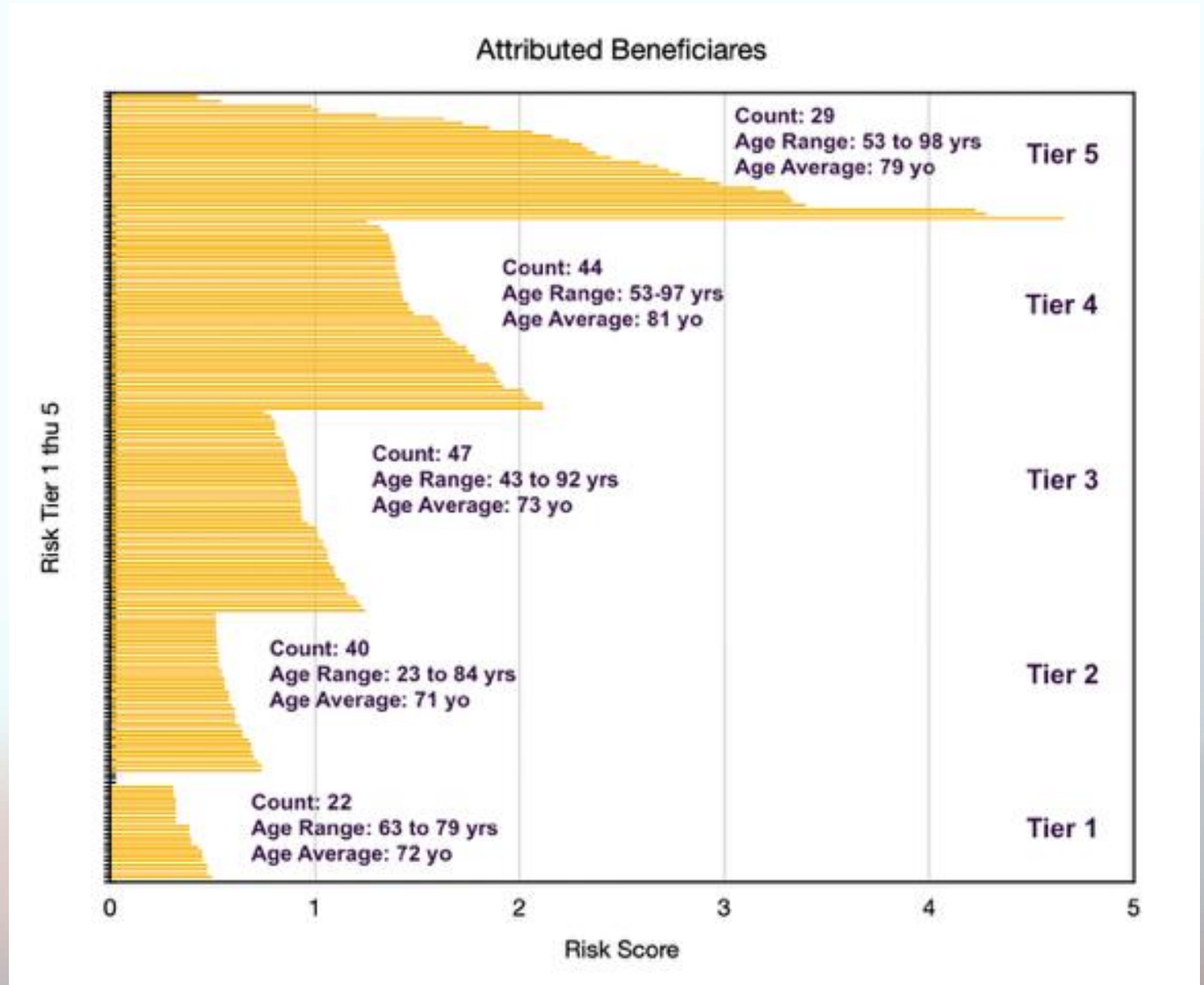
MDPCP

**Beneficiaries Attributed this Quarter: 182**

**Cumulative Beneficiaries Attributed in 2024: 182**

<b>Number of Beneficiaries by Risk Tier</b>		<b>Risk Score Range</b>
<b>Low Risk (\$9 PBPM)</b>	22	0 - 0.511
<b>Medium-Low Risk (\$11 PBPM)</b>	40	0.512 - 0.740
<b>Medium-High Risk (\$19 PBPM)</b>	47	0.741 - 1.251
<b>High Risk (\$33 PBPM)</b>	44	1.252 - 2.115
<b>Complex Risk (\$100 PBPM)</b>	29	0.428 - 4.657
		2.116 +

# MDPCP Data for IC Care



# Using Data to Manage Patient Care

Tools available: Primary care physicians have **6** tools to effect disease manifestation and total cost of care

1. Accurate Diagnosis
2. Immunization
3. Nutrition Optimization
4. Medication Compliance
5. Treatment Outcome Monitoring
6. Workflow Efficiency



# Efficiency

Key performance indicators - KPI  
Physician data input

# Standing orders

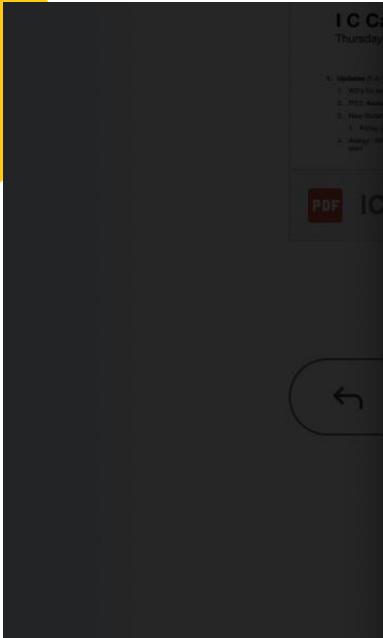
**Immunization:** Flu, Pneumococcal, Tetanus booster Shingles, and now RSV

**Disease screening :**

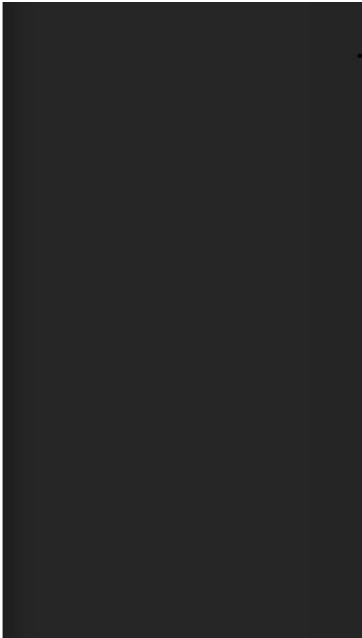
HbA1c frequency q90 day, Fructosamine every 30 days if HbA1c >9, Mammogram every 24 months, Eye exam, Bone density, Colon cancer screening.

# Using Data to Manage Patient Care

## KPI incorporating data collection



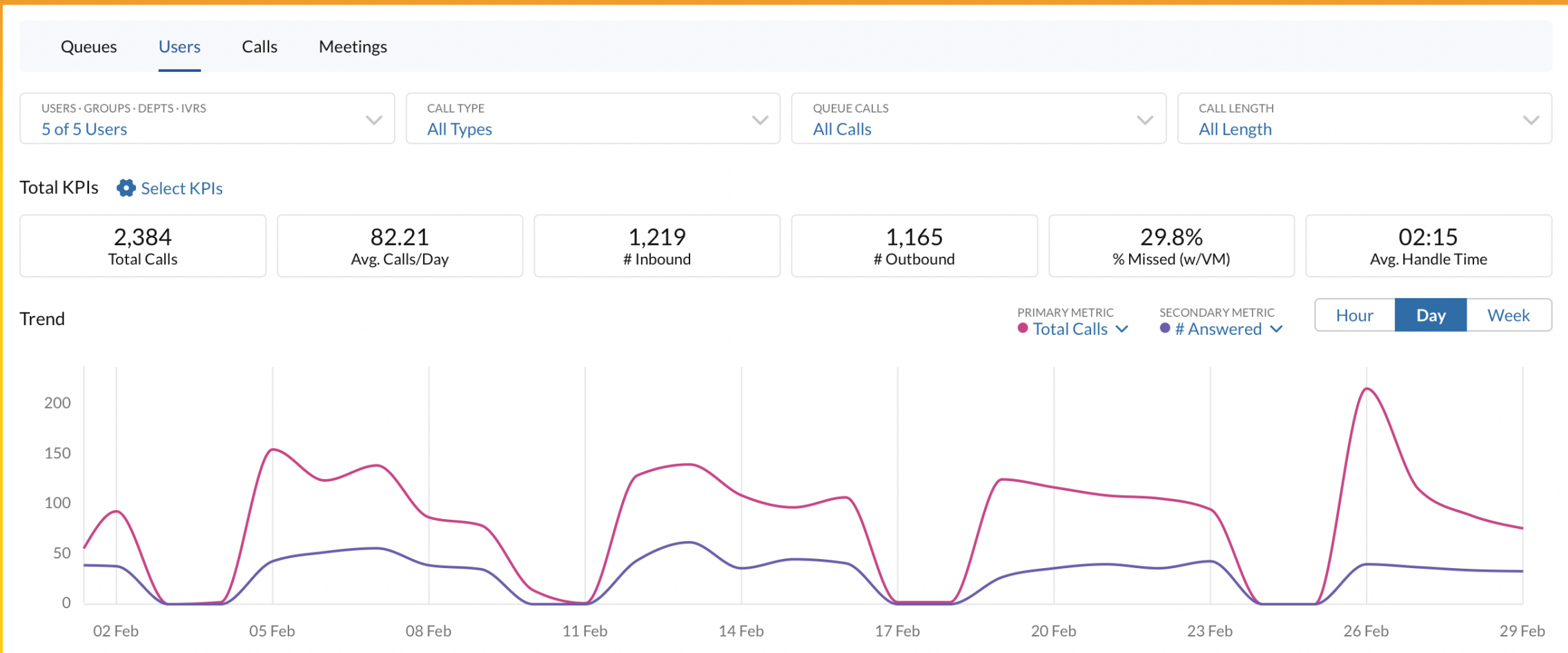
<p><b>patient loads</b> (GB 9-11, YC 13-15)</p> <p>4. <b>Bi-weekly ZH Clarifications vs Patient Encounters</b> (yes/90%) upload bi-weekly</p> <p>5. <b>Missed calls + Call Backs</b></p> <p>6. <b>Customer service</b> rating</p>	<p>3. <b>Hospital admit/releases &amp; Pre-op tracking</b> (~5 pre week)</p> <p>4. <b>A1C Wellness Improvement</b> (write monthly outreach, upload)</p> <p>5. <b>*Allergy - Patient Follow-up</b> (10-12 calls bi-weekly)</p> <p>6. <b>Customer service</b> rating</p>	<p><b>team huddle</b> agendas (upload)</p> <p>4. <b>Quarterly professional dev</b> course</p> <p>5. <b>Injections</b> for flu &amp; pneumonia (25 to 30 injections)</p> <p>6. <b>SMD patient liaison &amp; on-boarding</b></p> <p>7. <b>Customer service</b> rating</p>	<p>4. <b>*Allergy - Patient</b> identification by symptom for optimum care placement and tracking (2-0 green sheets missing)</p> <p>5. Monthly Exam Room <b>inventory</b></p> <p>6. <b>Injections</b> for flu &amp; pneumonia</p> <p>7. <b>Customer service</b> rating</p>
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# Using Data to Manage Patient Care

## Telephone Calls



# Using Data to Manage Patient Care

Immunization

ImmuNet

MIPS

# Immunization

#493 - Adult Immunization Status							
<i>Strata 1: Influenza Vaccine</i>	1,308	414	372	0	42	89.86%	
<i>Strata 2: Td or Tdap Vaccine</i>	1,308	414	7	0	407	1.69%	
<i>Strata 3: Zoster Vaccine</i>	1,284	390	0	0	390	0%	
<i>Strata 4: Pneumococcal Conjugate or Polysaccharide Vaccine</i>	1,161	267	42	0	225	15.73%	
<i>Strata 5: Overall</i>	1,308	414				9.19%	

\* For measures with no existing CMS benchmarks, the measure is assigned a score of 3 points for clinicians who are part of a small practice.

# Other process screening

#39 - Screening for Osteoporosis for Women Aged 65-85 Years of Age	342	342	106	0	236	30.99%	
#112 - Breast Cancer Screening	473	473	407	0	66	86.05%	
#113 - Colorectal Cancer Screening	1,039	1,039	867	0	172	83.45%	
#117 - Diabetes: Eye Exam	284	284	214	0	70	75.35%	
#128 - Body Mass Index (BMI) Screening and Follow-Up Plan	1,594	1,594	1,590	3	1	99.94%	
#130 - Documentation of Current Medications in the Medical Record	2,509	2,509	2,508	1	0	100%	



# Treatment Outcome Monitoring

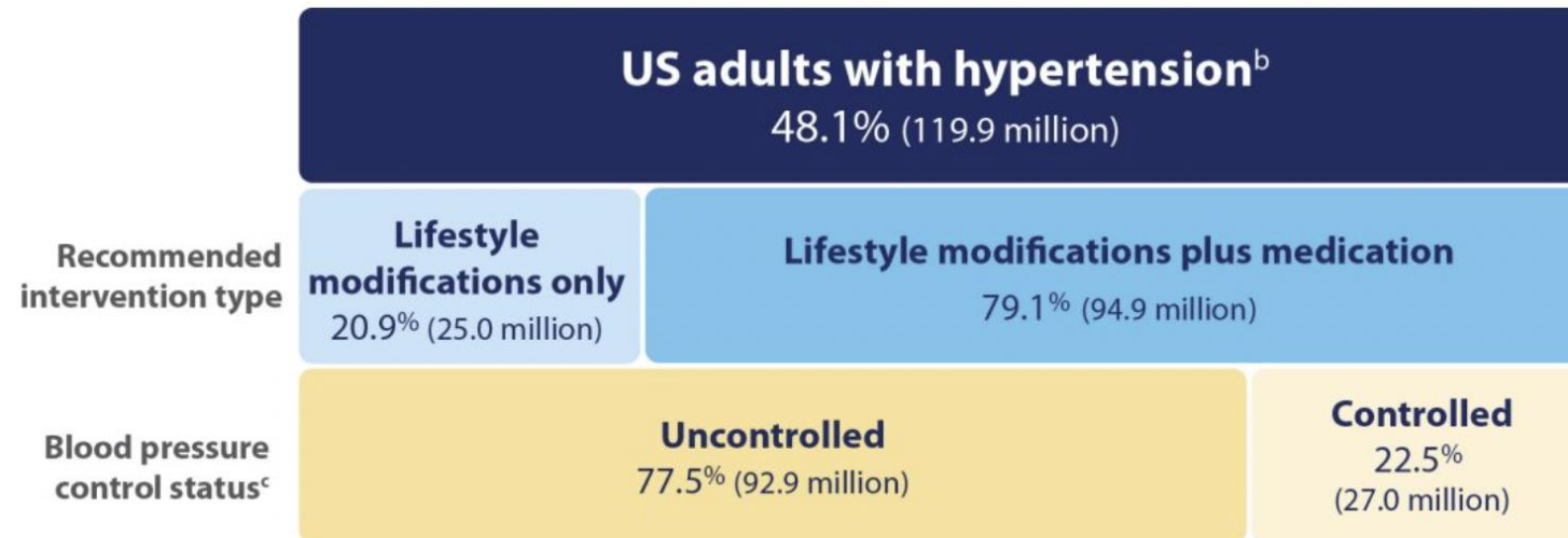
CRISP  
MDPCP

Hypertension  
Diabetes  
Complexity & Cost

# Using Data to Manage Patient Care

## Estimated Hypertension Prevalence, Treatment, and Control (Blood Pressure <130/80 mm Hg) Among US Adults<sup>a</sup>

Applying the criteria from the American College of Cardiology and American Heart Association's (ACC/AHA) 2017 Hypertension Clinical Practice Guideline - NHANES 2017- March 2020



Data source: National Center for Health Statistics, Centers for Disease Control and Prevention, National Health and Nutrition Examination Survey (NHANES) 2019-March 2020. Definitions: ACC/AHA criteria adapted from Ritchey MD, Gillespie C, Wozniak G, et al. Potential need for expanded pharmacologic treatment and lifestyle modification services under the 2017 ACC/AHA Hypertension Guideline. *J Clin Hypertens*. 2018; 1377-1391. <https://doi.org/10.1111/jch.13364>

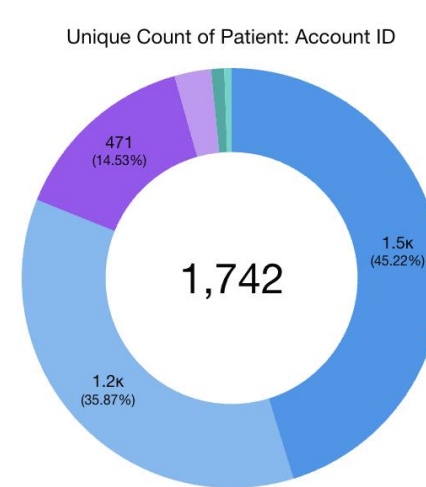
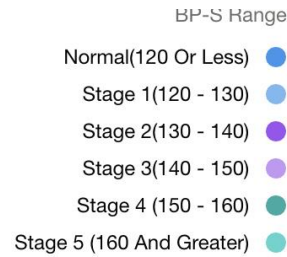
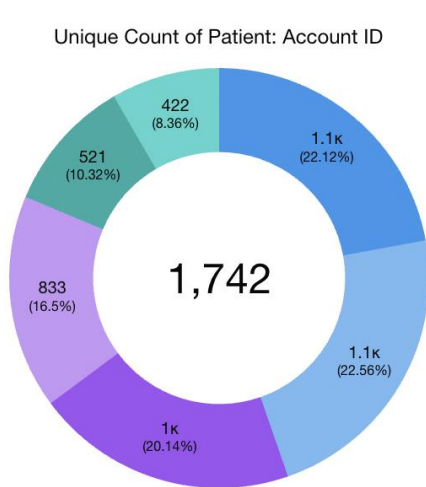
<sup>a</sup> Among adults aged 18 years and older; estimates may not equal 100% due to rounding.

<sup>b</sup> Blood pressure  $\geq$ 130/80 mm Hg or currently using prescription to lower blood pressure.

<sup>c</sup> Controlled is defined as having a blood pressure <130/80 mm Hg. All adults recommended lifestyle modifications only are considered uncontrolled as their blood pressure is above the threshold.



# Hypertension prevalence - IC Care

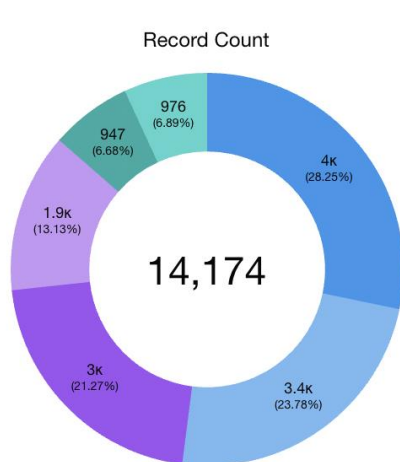


[View Report \(Total Patients W/ BP\)](#)

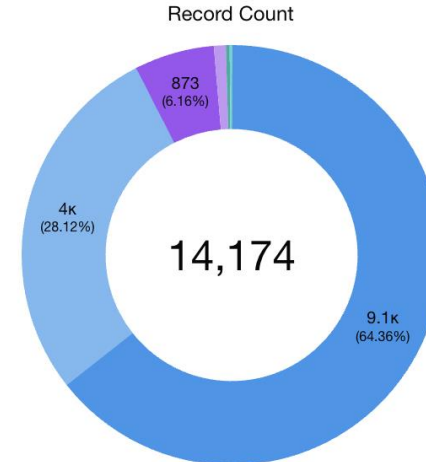
[View Report \(Total Patients W/ BP\)](#)

## Share of Patients by BP-S Range

Share of Patients by BP-S Range

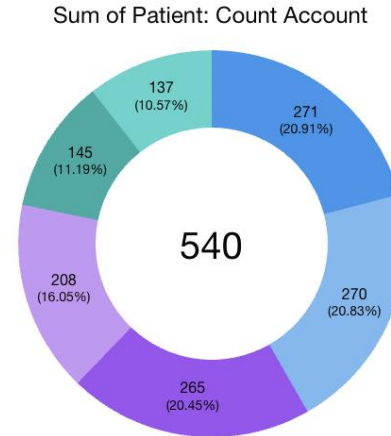


## Share of Patients by BP-D Range

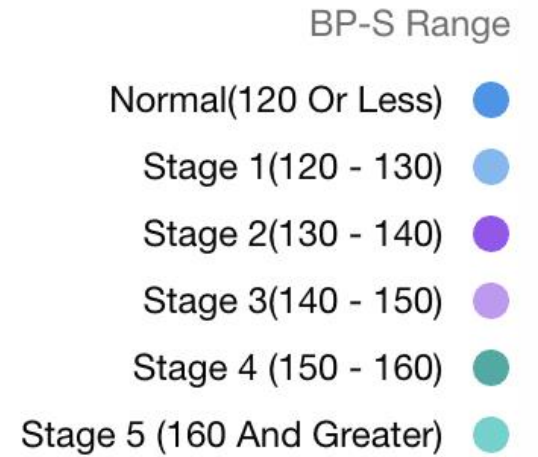


# Hypertension control - IC Care

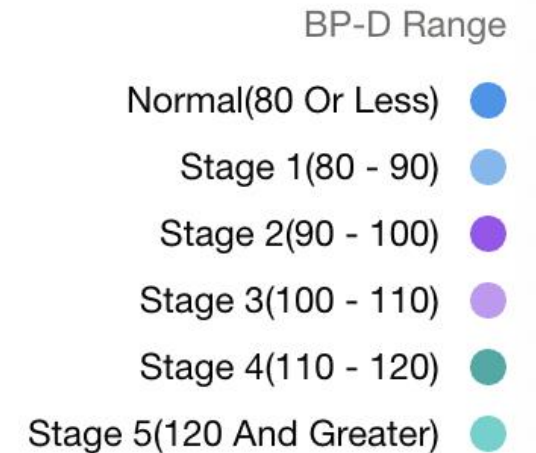
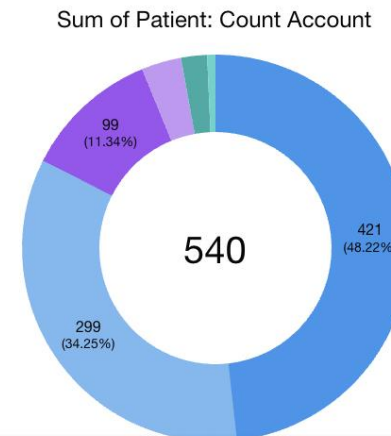
## Patients DX With Hypertension Systolic BP All Encounters



[View Report \(Patients diagnosed with hypertension\)](#)



## Patients DX With Hypertension Diastolic BP All Encounters





# Using Data to Manage Patient Care

**#236 - Controlling High Blood Pressure**

593

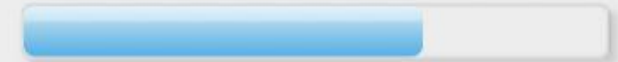
593

406

0

187

68.47%



MIPS BP report - IC Care

Total Patients  
( HbA1c of < or = 5.7)

77

[View Report \(Patient's HbA1c of <or= 5.7\)](#)

Total Patients  
( HbA1c of > 5.7 but < 6)

58

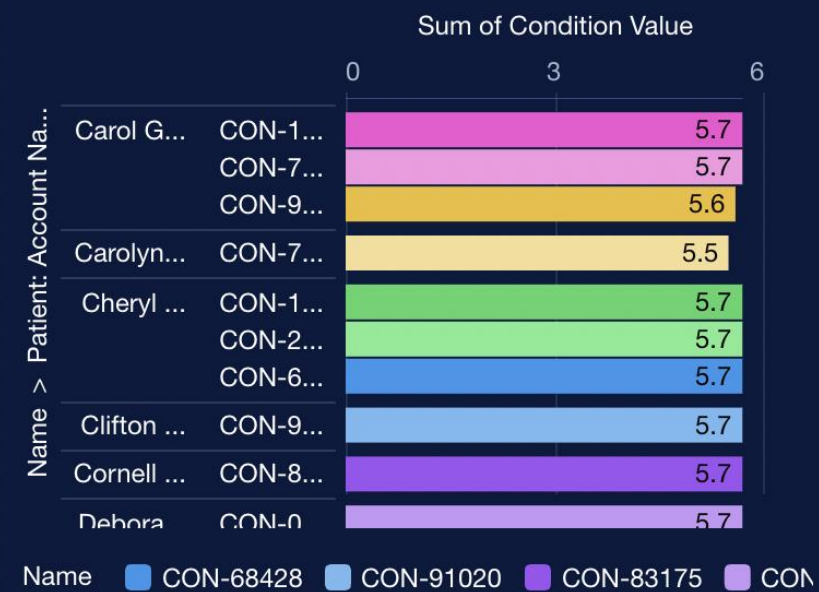
[View Report \(Patient's HbA1c of > 5.7 but < 6\)](#)

Total Number of Patients  
(Hba1c of > or = 6 but < 7)

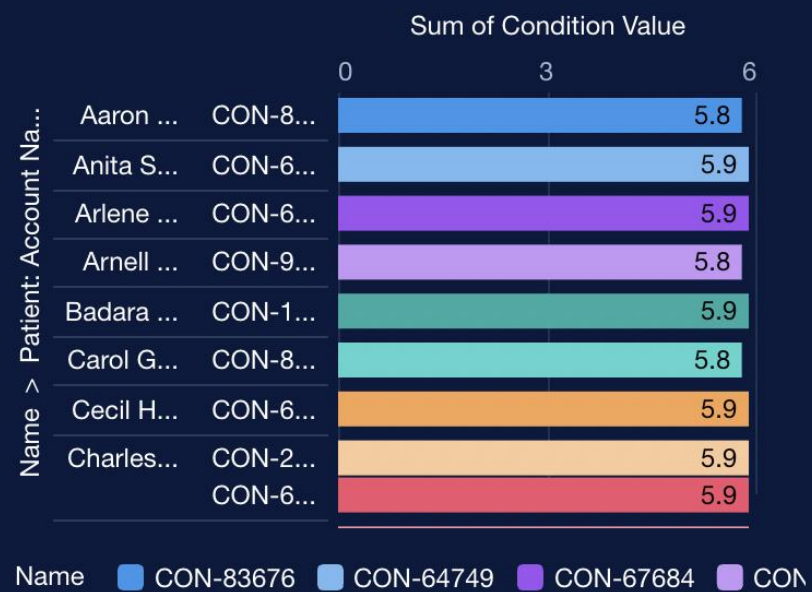
146

[View Report \(Patient's Hba1c of > or = 6 but < 7\)](#)

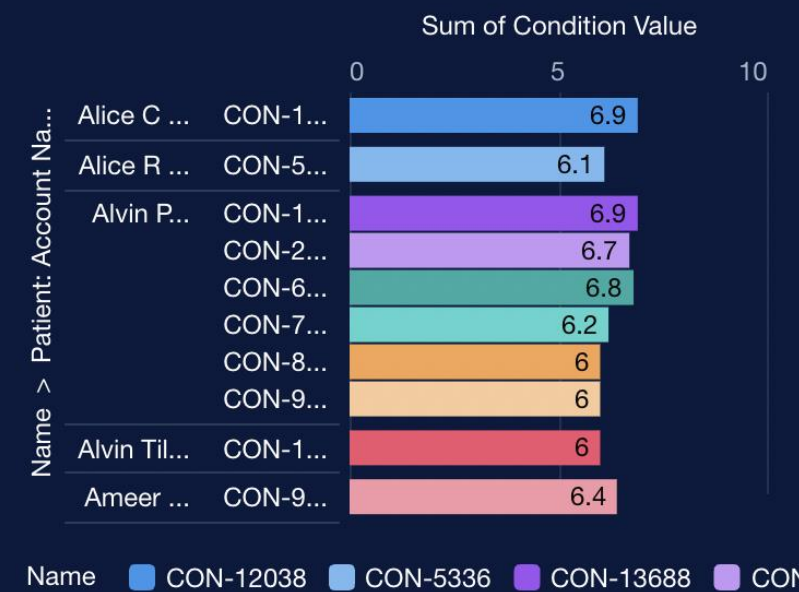
Patients by Conditions  
(HbA1c of < or = 5.7)



Patients by Conditions  
(HbA1c of > 5.7 but < 6)



Total Number of Patient  
(Hba1c of > or = 6 but < 7)



Total Number of Patients  
(HbA1c of > or = 7 but < 8)

70

View Report (Patient's HbA1c of > or = 7 but < 8)

Total Number of Patients  
(HbA1c of > or = 8 but < 9)

25

View Report (Patients HbA1c of > or = 8 but < 9)

Total Number of Patients  
(HbA1c of > or = 9)

38

View Report (Patient's HbA1c of > or = 9)

Total Number of Patients  
(HbA1c of > or = 7 but < 8)

Sum of Condition Value

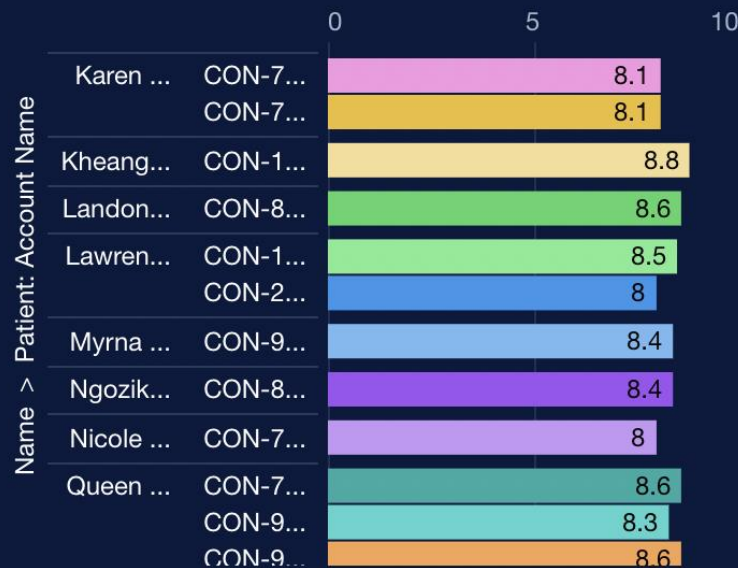


Name CON-76687 CON-99270 CON-103625 CO

View Report (Patient's HbA1c of > or = 7 but < 8)

Total Number of Patient  
(HbA1c of > or = 8 but < 9)

Sum of Condition Value

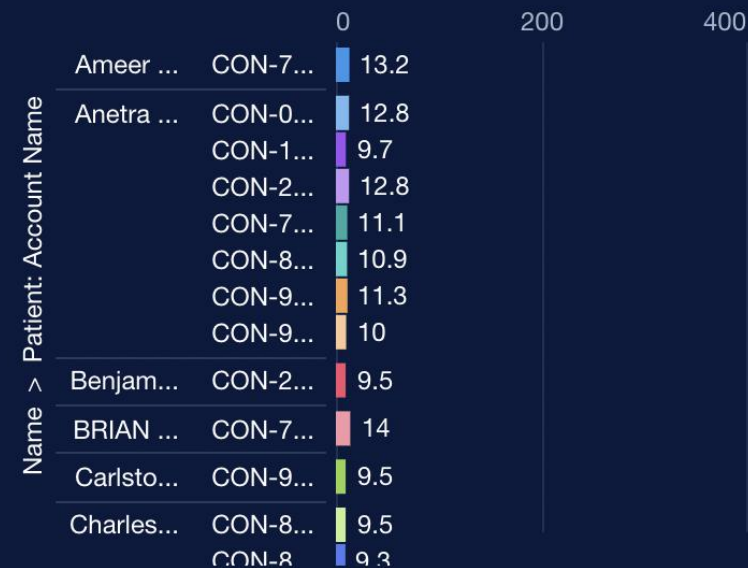


Name CON-83021 CON-86511 CON-5286 CON-

View Report (Patients HbA1c of > or = 8 but < 9)

Total Number of Patients  
(HbA1c of > or = 9)

Sum of Condition Value



Name CON-72347 CON-0746 CON-103757 CON

View Report (Patient's HbA1c of > or = 9)

# Using Data to Manage Patient Care

## Quality Performance Report

Quality Score: 30/30

George Bone

2023 (01/01 - 12/31)

Measure	Total Instances	Complete Instances	Met	Exclusions	Not Met	Performance Rate
<b>#1 - Diabetes: Hemoglobin A1c Poor Control (&gt;9%)</b> <i>An inverse measure</i>	284	260	17	0	243	6.54% 

MIPS Diabetes report - IC Care

# In Closing



## **Convergence of four major innovations:**

Precision genetic information

Advancements in deep learning

Cost reductions for collecting healthcare data

Understanding the socio demographic basis of disease

# Credits

Special thanks to all the people who help and who coordinate these awesome resources:

Data gathering by IC Care MA staff

Slide deck by Mastermind Graphics, MHCC and MedChi staff

Team management by Keiron Bone-Dormegnien

Population health data coordination by Rochelle McPhaul

Data from CRISP, MDPCP, MIPS, and the ZH-Blue EHR teams



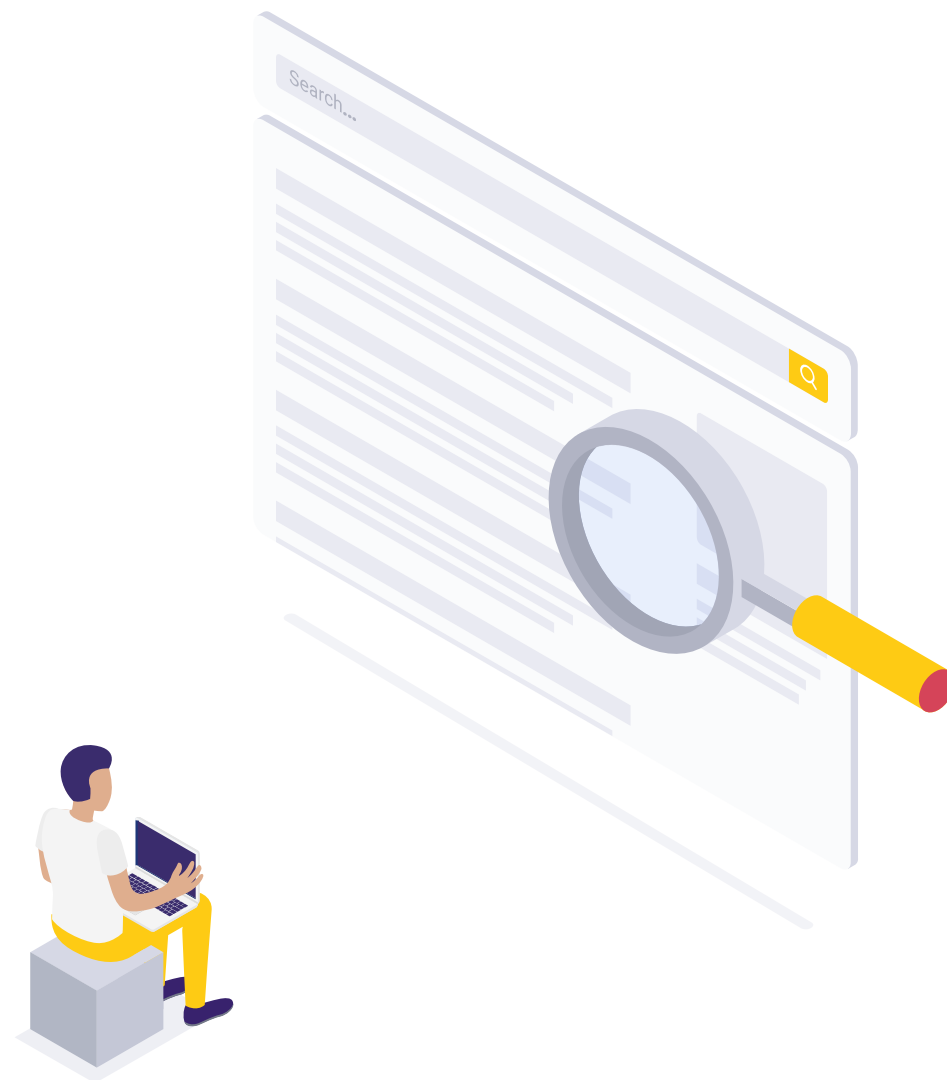


# THANKS!

## Any questions?

You can find me at:

- ▶ [ihc.bone@iccare.us](mailto:ihc.bone@iccare.us)
- ▶ 301-773-9700



# Q & A







# THANK YOU



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