

**10th Annual Conference on the Science of Dissemination
and Implementation in Health
Arlington, VA at the Crystal Gateway Marriott
December 5th, 2017**

Community Participatory Research to Enhance Multisector Collaboration, Accelerate Alignment, and Reduce Policy Cycle Time to Advance the Culture of Health Using Data Visualization

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Stove-piping of Health & Social Services

Improve Health

Maintain Public Safety

Improve Healthcare

Cost Containment

Ensure Justice

Maximize Independence

Reduce Incarceration

Make Affordable
Housing Available

= Goal Mis-Alignment

OUR GOAL

DEMONSTRATE THAT MULTISECTOR **INTER-OPERABILITY** CAN BE ACHIEVED BETWEEN SILOED INFORMATION SYSTEMS.

ASSESS THE IMPACT OF THESE INTEGRATED INFORMATION SYSTEMS USING DATA VISUALIZATION TO INFORM **POLICY MAKERS** TO ACCELERATE ALIGNMENT, ENHANCE COLLABORATION, AND REDUCE POLICY CYCLE TIME .

**MEDICAID
CLAIMS**

**Linking Data
Across Systems
to Create Data-
Informed
Approaches to
Create Goal
Alignment
Between Health
& Social Service
Systems**

**JAIL BOOKING
ROSTER**

**ADUL PROBATION
ENTERPRISE
TRACKING SYSTEM**

**HOMELESS
MANAGEMENT
INFORMATION
SYSTEM**

Multi-Systems Involvement

All Medicaid Claimants in Maricopa County
SFY 2015, n = 326,678

	Non-SMI claimants	SMI claimants
	%	%
Emergency Department	67.51%	49.23%
Inpatient	46.03%	26.85%
Jail Bookings	n/a	8.51%
Probation	.88%	8.47%
HMIS	n/a	n/a

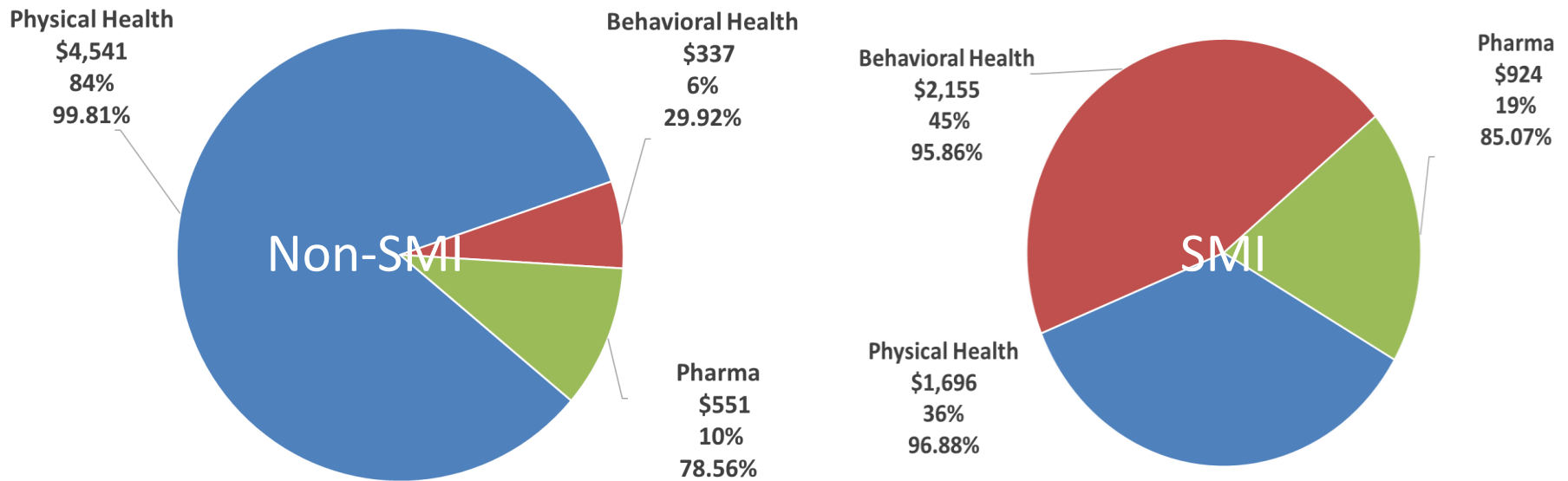
FOUR AIMS

AIM 1: To create an *INTEGRATION QUOTIENT* for every individual enrolled in the RBHA network as SMI, GMHSA, or children.

The *INTEGRATION QUOTIENT* will express the total Medicaid claims on an individual, the relative proportion of those claims on behavioral health versus physical health services, and the composition of service procedures.

Integration Quotient =

$$\sum \text{BH Claims} / (\text{BH claims} + \text{PH claims})$$



median value per claim
% of total claims
% of sample w/ ≥ 1 claim

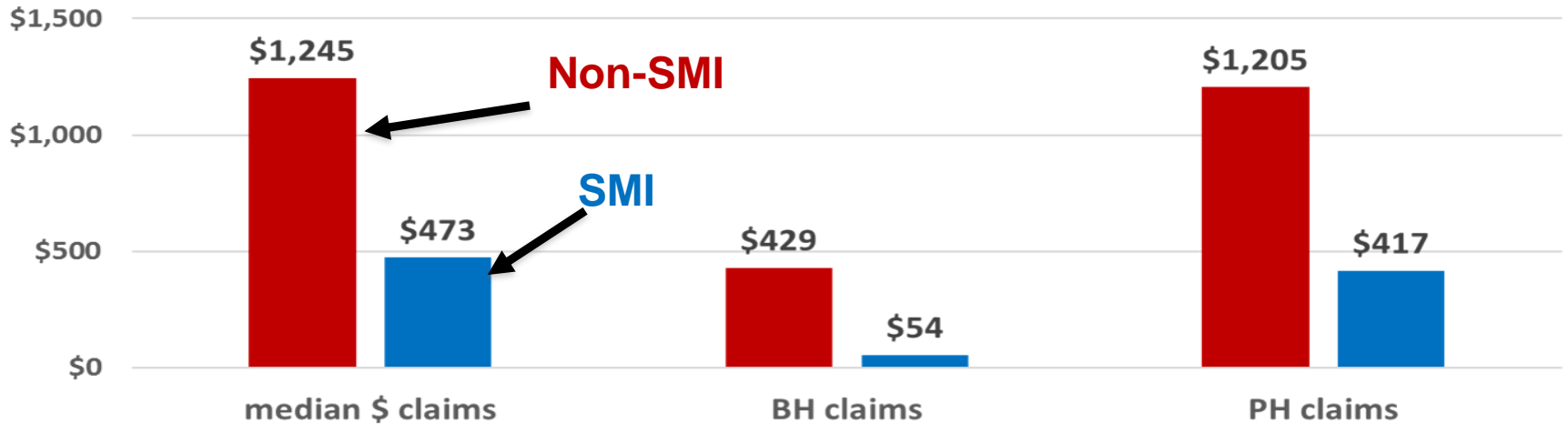
FOUR AIMS

AIM 2: To develop predictive models of psychiatric and general hospitalization based upon behavioral health and med/surg service utilization patterns observed prior to and following periods of hospitalization.

- ✓ Focused analysis on high cost/high utilizers
- ✓ Analysis of pre- and post-hospitalization service patterns

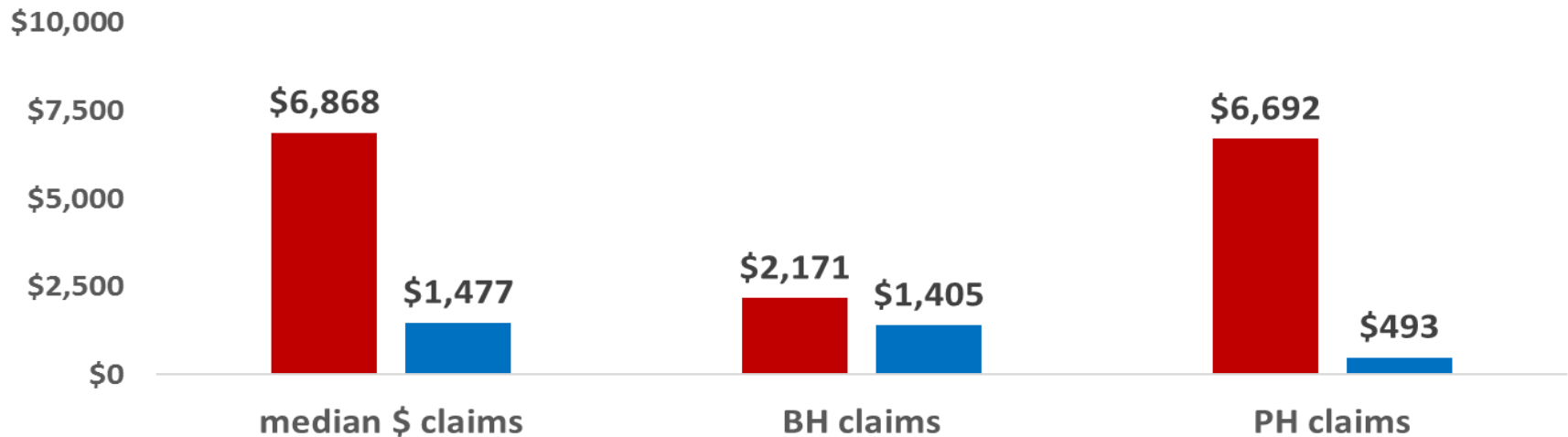
Emergency Department

Median Claims Value Per Patient



Inpatient Hospitalization

Median Claims Value Per Patient



FOUR AIMS

AIM 3: To develop predictive models of criminal justice systems involvement based upon behavioral health and med/surg service utilization patterns observed prior to, during, and following periods of CJ system involvement.

- ✓ Focused analysis on high utilizers
- ✓ Analysis of pre- and post-booking service patterns
- ✓ Analysis of concurrent service patterns (probation & behavioral health services)

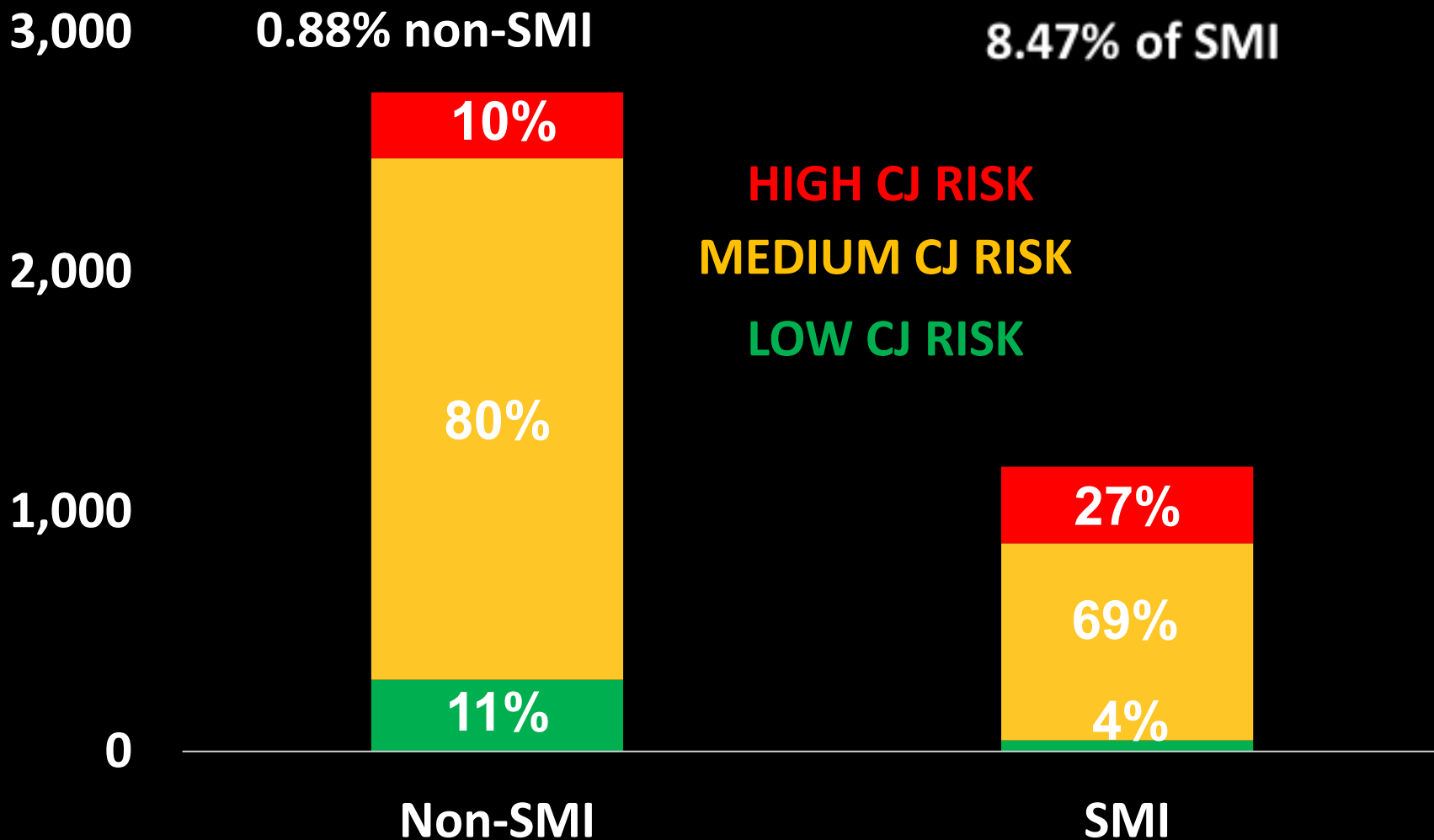
Criminal Justice Systems Involvement – Jail Bookings

Arrests/Booking (*smi only*)

	mean	median	max	rates per 1,000	%
pre-study period	1.6	1	11	103	10.28%
study period	1.48	1	10	86	8.51%
post study period	2.07	1	16	149	14.89%

Criminal Justice Systems

Involvement – Probation Risk Assessments



FOUR AIMS

AIM 4: To transform our proof of concept analyses **into visualizations** that facilitate **evidence-informed and actionable dialogue and decision-making between multi-sector policy-makers** that can lead to a culture of health for Medicaid enrolled individuals experiencing behavioral health issues.

ASU Decision Theater

