USING REAL-TIME AND POPULATION-BASED (CC360) DATA TO BUILD THE CARE BRIDGE

Michigan Medicine Complex Care Management Program
Washtenaw County Community Mental Health Department

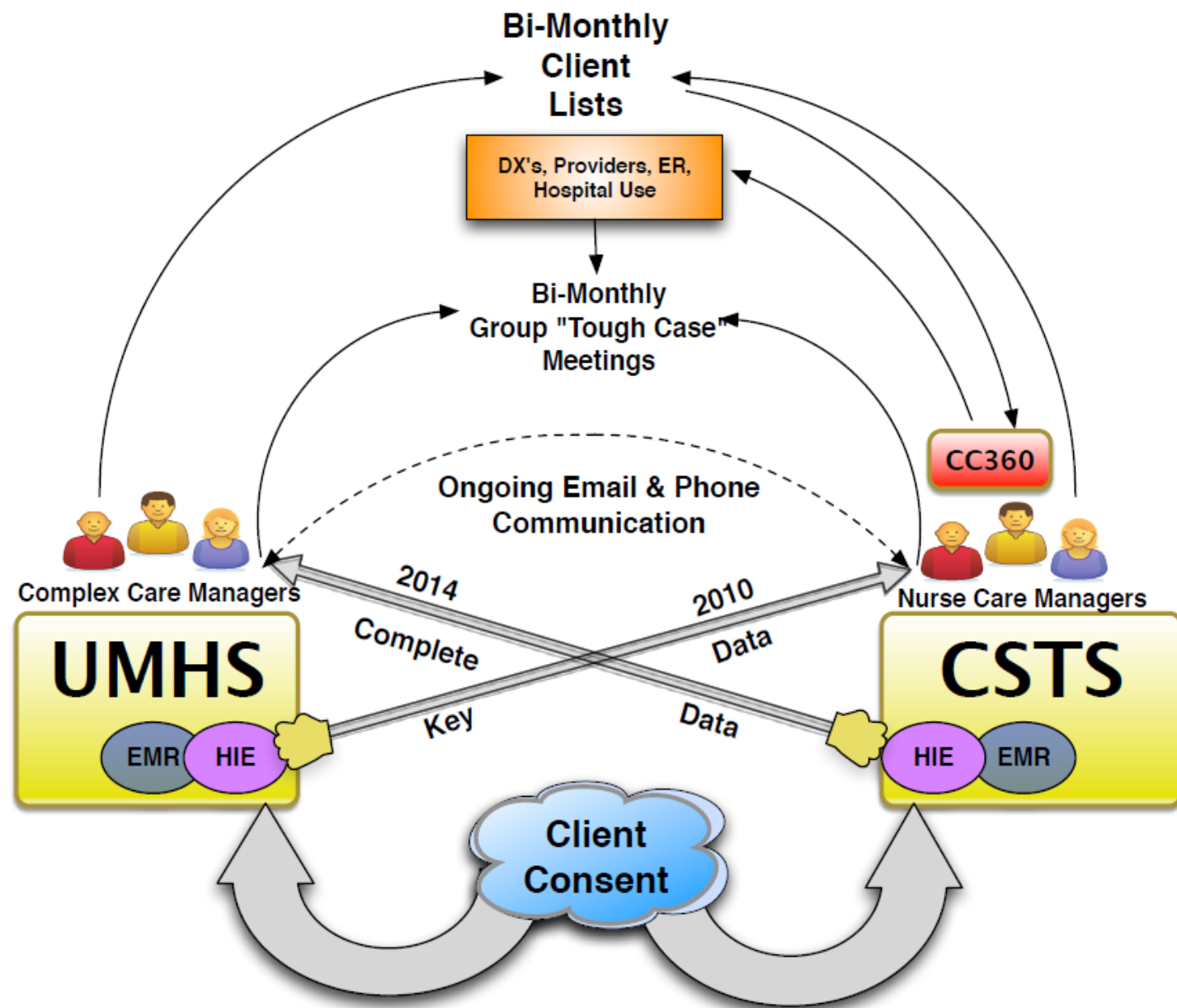MDHHS Practice Improvement Steering Committee (PISC)

June 7, 2018

GOALS

1. Describe UM-WCCMH use of CC360 in supporting our Care Bridge 2015-18. ("Washtenaw Project")

2. Brainstorm opportunities and challenges in generalizing our lessons to other counties in Michigan.

3. Decide next steps for:

   - Washtenaw County
   - State-wide

MM COMPLEX CARE MANAGEMENT PROGRAM WASHTENAW COUNTY COMMUNITY MENTAL HEALTH

- Worked closely for over a decade

- Leadership meetings twice monthly (data review, strategic planning)

- Co-management of high-need patients (largely telephonic)

WASHTENAW CARE BRIDGES WORK LINES

- Create <u>individual health care utilization and clinical profiles</u> for collaborative care planning.

- Make possible routine <u>access to behavioral health information</u> for CMH clients <u>across community health and social service agencies</u>.

- Create <u>population level reports</u> describing CMH clients' care at Michigan Medicine (ER, Inpatient, Ambulatory sites).

December 2015 Utilization		ER visits					Physical health IP visits						
Case_No	HH_Bucket	ERs_3mos_ending_12_31_2014	ERs_3mos_ending_03_31_2015	ERs_3mos_ending_06_30_2015	ERs_3mos_ending_09_30_2015	ERs_3mos_ending_12_31_2015	IPs_3mos_ending_12_31_2014	IPs_3mos_ending_03_31_2015	IPs_3mos_ending_06_30_2015	IPs_3mos_ending_09_30_2015	IPs_3mos_ending_12_31_2015	CC360_BEHHEALTH_IPvis_last180	Recent_ADTs_not_in_CC360
1143394	Narcotic RX	8	11	6	5	9	2	1	0	0	1	0	
260438	COPD	15	14	10	11	8	2	2	1	2	0	0	5
12601	Narcotic RX	3	12	5	6	7	2	3	1	1	0	0	1
209478	Narcotic RX	1	3	5	4	6	0	0	1	0	0	0	2
11613	Hospital IP/ED	11	10	13	5	6	0	0	1	0	0	1	4
94891	Narcotic RX	1	1	3	6	6	0	0	0	0	0	0	
49485	Narcotic RX	7	3	3	5	5	2	1	1	3	0	0	
12916	CHF	1	0	0	1	4	0	0	0	1	1	0	

COMMUNITY-WIDE ACCESS TO BEHAVIORAL HEALTH INFORMATION FOR CMH CLIENTS

- Avalon housing *
- The Corner Health Center
- Delonis Homeless Shelter *
- Home of New vision
- IHA
- Jewish Family Services of Washtenaw County
- Livingston County Catholic Charities
- Michigan Medicine Complex Care Management program *
- Packard Health *
- Saint Joseph Mercy Health System Complex Care Program
- Washtenaw Health plan
- Washtenaw County Sherriff's Office
- Washtenaw County Juvenile Detention Center

* Denotes Original Pilot

CC360 DATA DEVELOPMENT – POPULATION PROFILES

- State, WCCMH, and MM documentation used to normalize CC360 data. Complicated process.

- Data serves to:

  - Identifying high-risk groups seen in a single health care system from the entire CC360 database.

  - Determine patterns of use in ER, Inpt, Outpt / Medical-Behavioral Health

CC360 DATA DEVELOPMENT – POPULATION PROFILES - CHALLENGES

- Consent process

- Data use agreements

- Cleaning data (eliminating duplicate and Data anomalies)

- No identifier for specific outpatient clinics or providers at UM

- Clustering diagnoses

- Behavioral health diagnoses not uniformly recorded.

  - Data matched to CMH EHR.

- Substance use disorder information

Health service utilization for the 2,388 WCCMH clients seen
at UMHS in Calendar Year 2015

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	A	B	C	D	E	F	G	H	I
1	uofm	location_combined	cases	events	median_events	avg_events	min_events	max_events	pct_events
2	TRUE	Outpatient Hospital	1999	10034	3	5.0	1	53	48
3	FALSE	Ambulance - Land	827	2123	1	2.6	1	45	4
4	TRUE	Emergency Room - Hospital	858	2101	1	2.4	1	30	10
5	TRUE	Inpatient Hospital	324	2011	3	6.2	1	63	10
6	FALSE	Office	2340	12009	3	5.1	1	318	23
7	FALSE	Home	559	12431	7	22.2	1	376	24
8	TRUE	Home	393	2188	2	5.6	1	55	10
9	TRUE	Office	1211	4099	2	3.4	1	27	19
10	FALSE	Outpatient Hospital	1526	6789	2	4.4	1	66	13
11	FALSE	Emergency Room - Hospital	1006	3940	2	3.9	1	110	8
12	FALSE	Federally Qualified Health Center	127	277	2	2.2	1	11	1
13	FALSE	Inpatient Hospital	411	4102	4	10.0	1	159	8
14	FALSE	Group Home	22	662	5.5	30.1	1	243	1

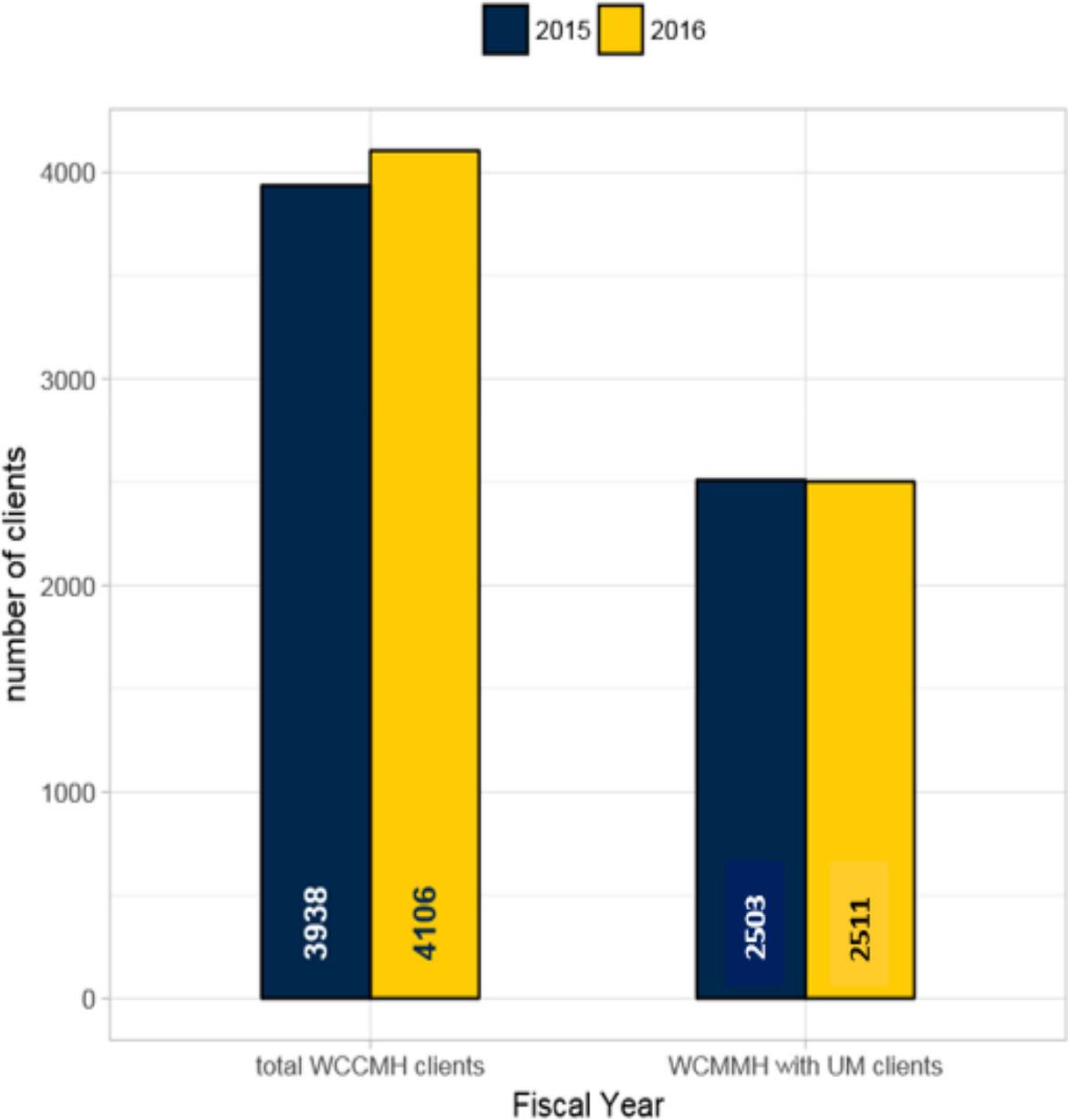**Figure 1. Utilization of UM health services by Washtenaw County Community Mental Health Clients**

Figure 2. Age distribution of WCCMH clients who utilized UM health services ("UM-CMH clients") by fiscal year
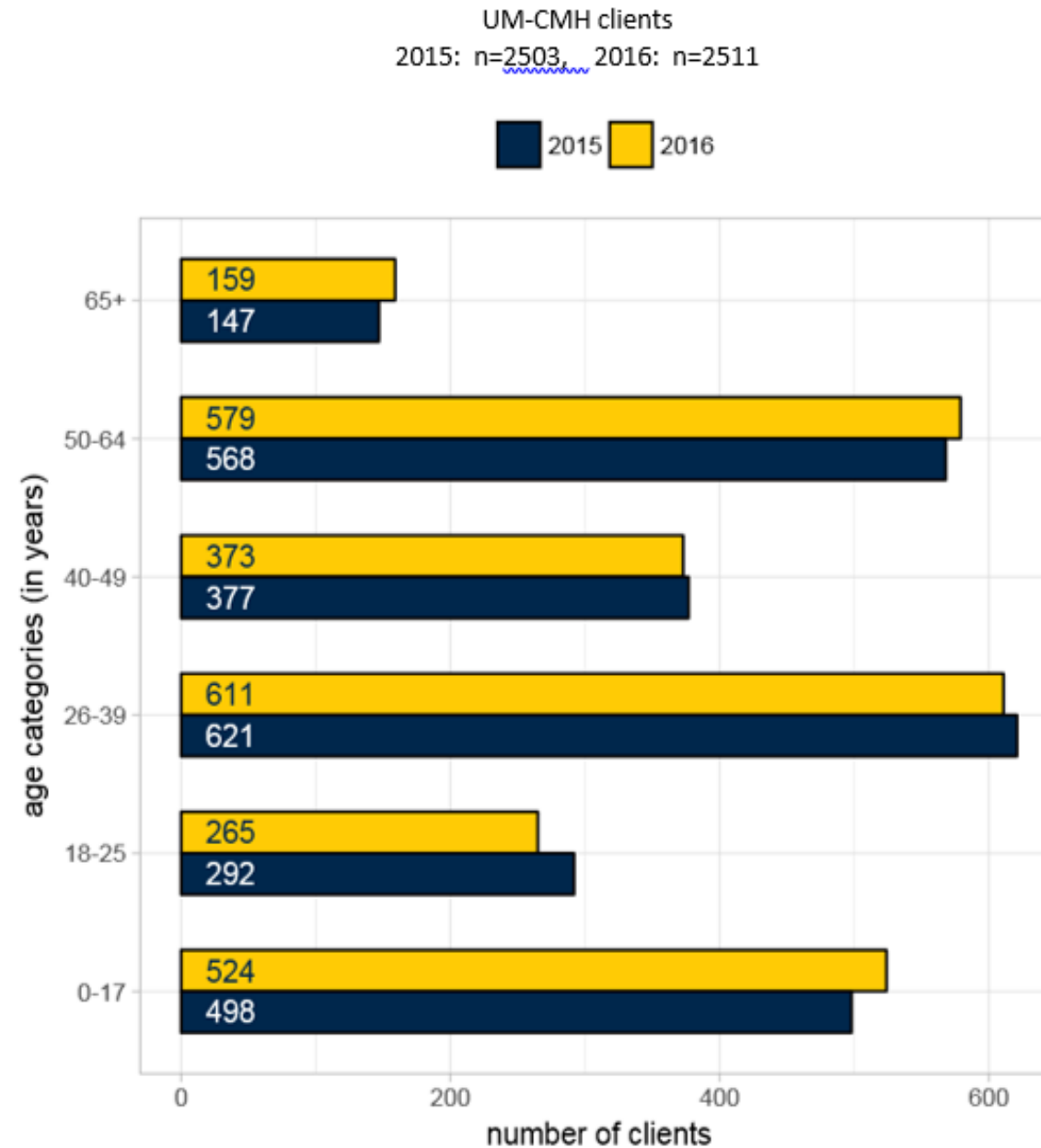

UM-CMH clients
2015: n=2503,   2016: n=2511

■ 2015   □ 2016

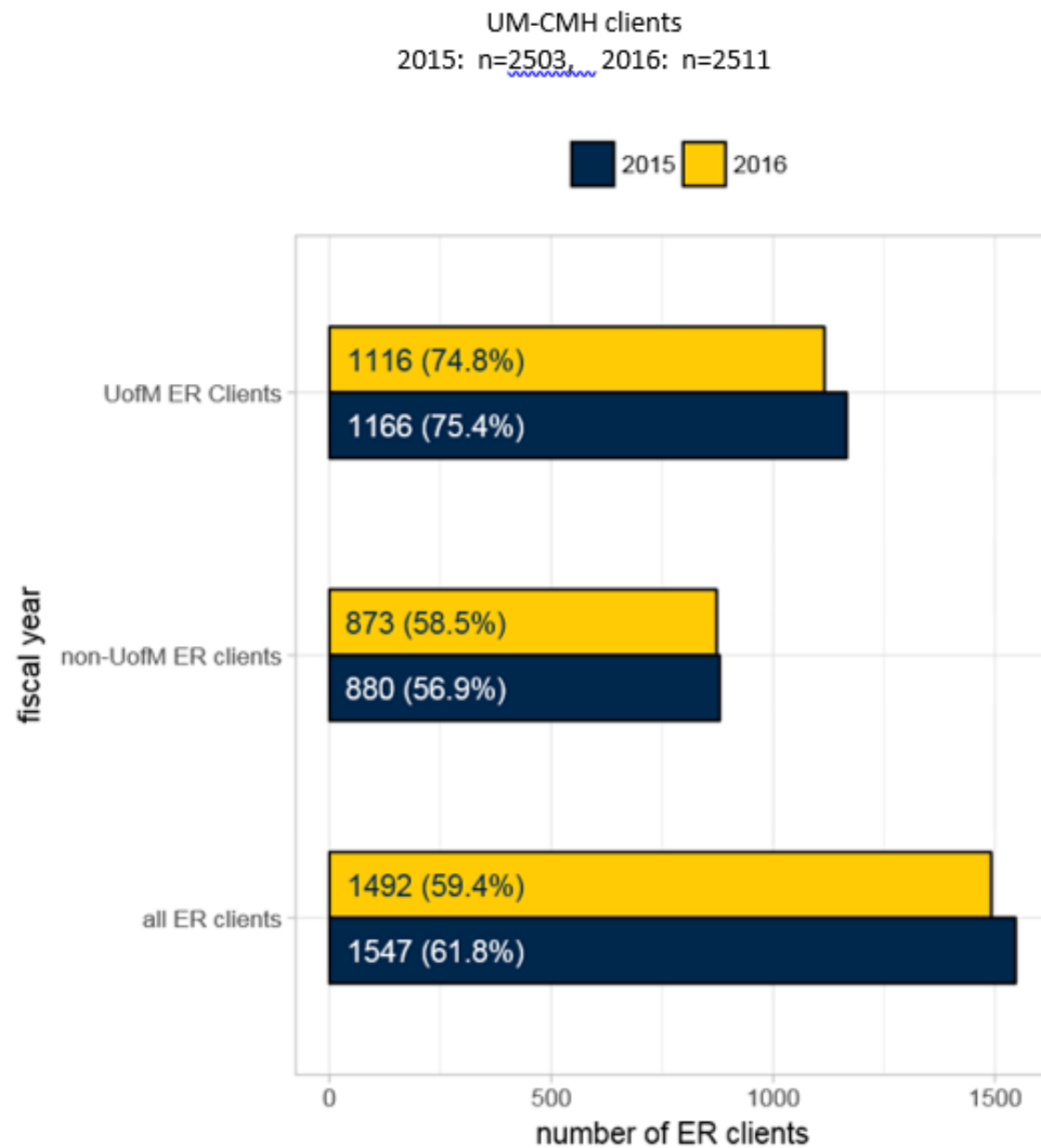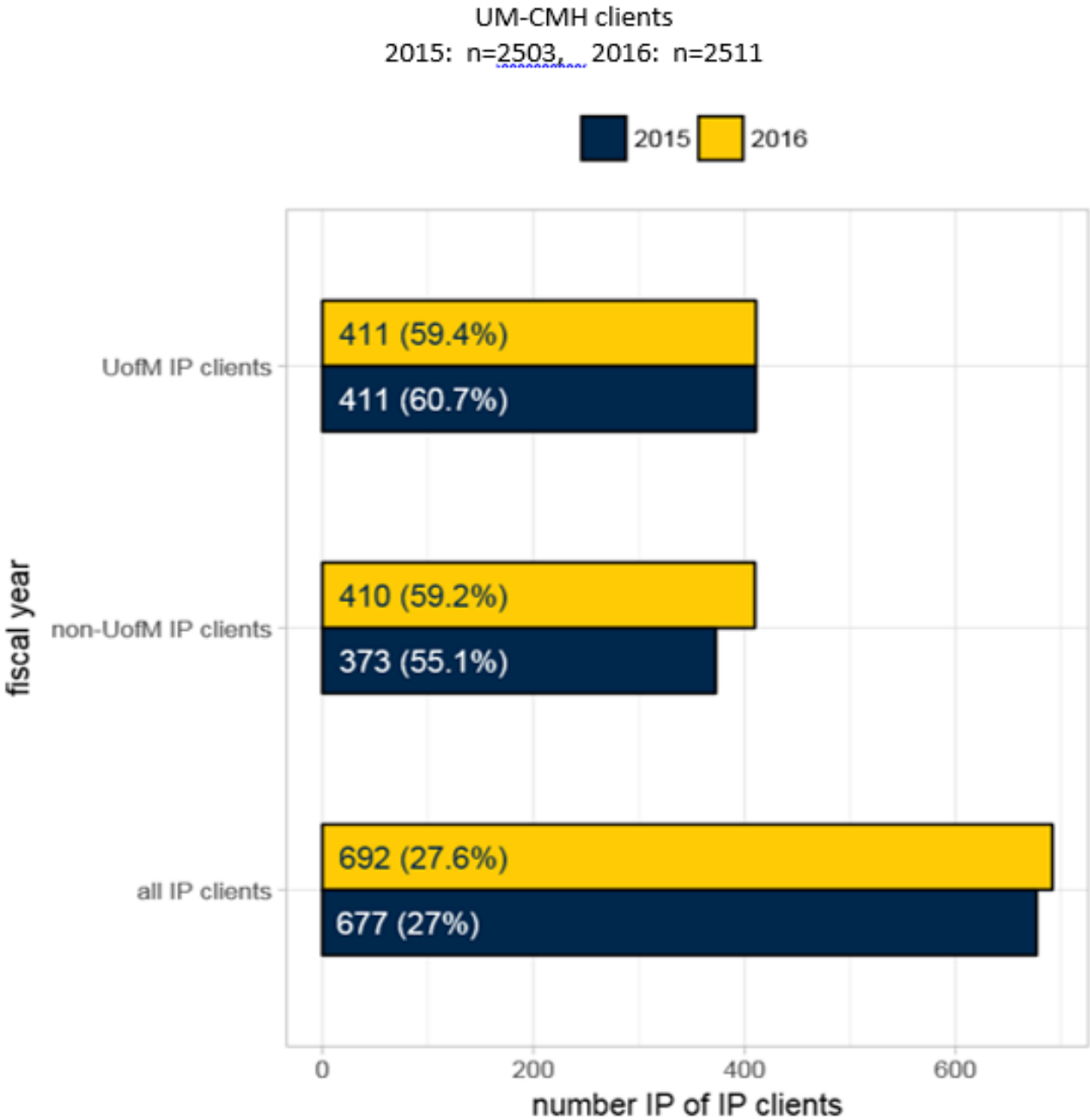**Figure 3. Emergency Room utilization among CMH clients with any UM utilization (UM-CMH clients) by fiscal year.**

UM-CMH clients
2015: n=2503, 2016: n=2511

Figure 4. Inpatient utilization among CMH clients with any UM utilization ("UM-CMH clients").

UM-CMH clients
2015: n=2503,   2016: n=2511

OTHER FINDINGS

- For CMH clients who receive care at UM, a large portion of their care in health systems is related to behavioral health conditions.

- Example: In 2016, the 2503 CMH clients seen at MM:
  - Experienced a total of 7,378 ER visits
    - 1 / 5 (1,527, 20.7%) were behavioral health ER visits
    - 4 / 5 (5,927, 80.3%)were physical health ER visits

  - Experienced a total of 1,603 hospital stays
    - 2 / 5 (611, 38.1%) were behavioral health stays
    - 3 / 5 (992, 61.9%) were physical health stays

CURRENT ACTIVITIES

- Provide utilization and clinical profiles of high-utilizing or medically complex CMH patients to complex care managers, who sort them by clinic.

- At clinic sites, engage complex care managers, CMH health professionals, and PCP nurse Care Navigators in face-to-face patient review for patients seen at that clinic.

- Facilitate increased use of MiCare Connect by clinic personnel.

POTENTIAL FUTURE DIRECTIONS

- Integrate and expand activities into community-wide care management through the State Innovation Model (SIM)

  - High cost data user profiles to identify high-need, high utilizing clients

  - Expanded Care Bridge to include diverse community care managers in multidisciplinary care of WCCMH clients

  - Develop and capitalize on additional program development and evaluation opportunities now available under SIM

FUTURE DIRECTIONS – STATE INNOVATION MODEL (SIM)

- SIM is: Community-wide care management with:

  - Identification of high needs clients

  - Single information system with access by multiple agencies to select patients, begin joint care, and document progress towards goals.

  - Coordination with PCP sites who are now screening for patients with needs related to social determinants of health

ACKNOWLEDGEMENTS

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