



## **Long-term Frequent Med Admin Utilization: Population Profile**

CT BHPOC Presentation: October 14, 2015



- Overview
- Methodology
- Findings
- Summary

# Overview

- Growing out of a longstanding successful Home Health Provider Profile Program, this Population Profile deepened our understanding of members with long-term frequent medication administration.
- The intent of this Population Health Profile was to better understand the characteristics and utilization of this subgroup of members, and inform possible prescriber, provider, or member-level interventions to decrease inappropriate Home Health utilization or increase alternative services that might better fit member needs.

# Overview

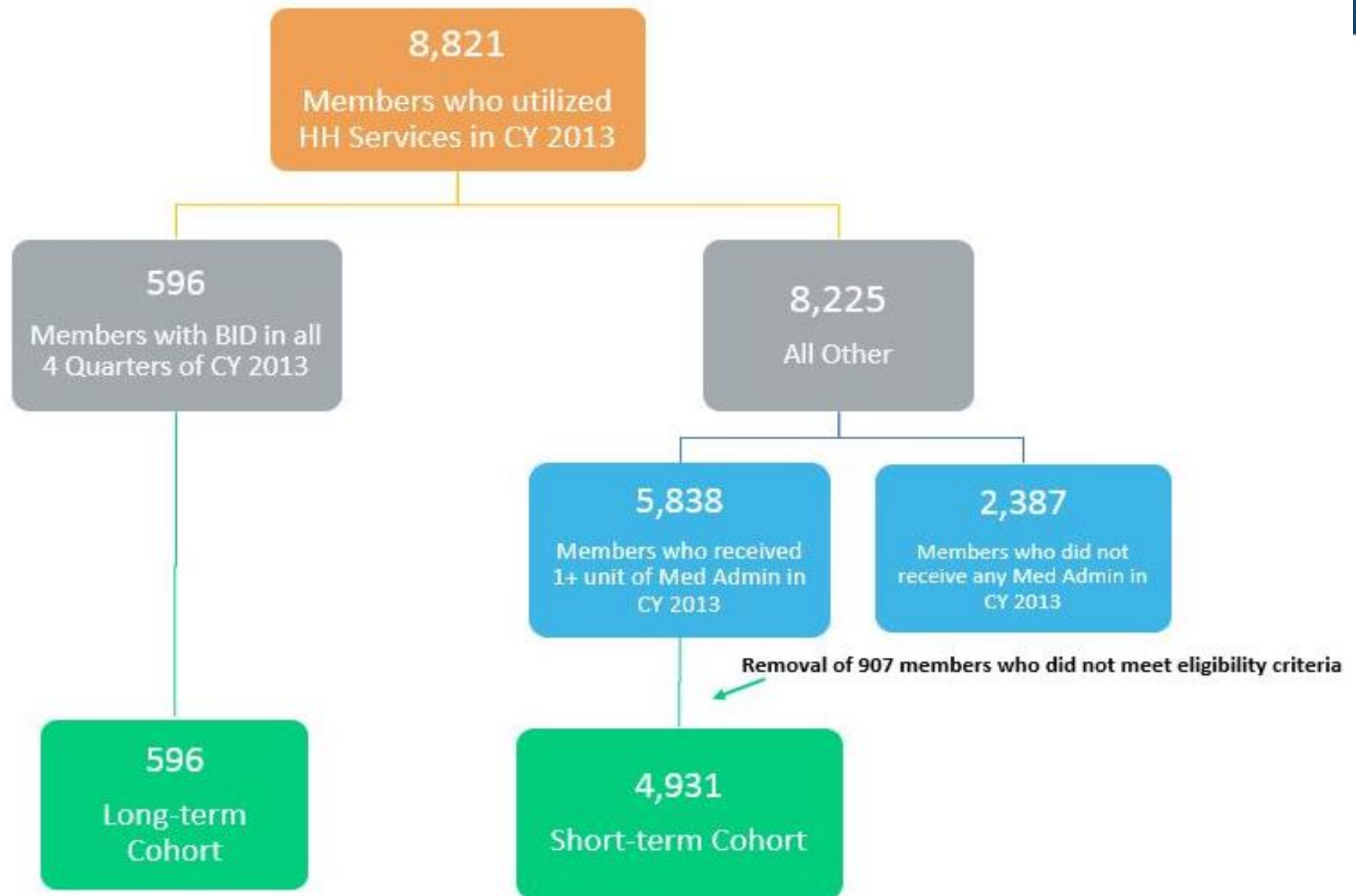
- Overall, there were many similarities between members that had Long-term and Short-term Home Health Med Admin utilization, including among demographics, diagnoses, and medication.
- The findings also highlight the need to consider support of recovery in any attempts to decrease utilization of Home Health Medication Administration and increase use of community-based alternatives.



# Med Admin Utilization Classification

Home Health Med Admin Utilization Classification Definitions	
BID	Includes all members who utilized 10 or more Med Admin services in a week for 10 or more weeks in the 13-week quarter (Twice Daily)
BTW	Includes all members who did not qualify for BID or QD and whose average units per week is greater than 7
QD	Includes all members who utilized between five and seven Med Admin services in a week, for 10 or more weeks in the 13-week quarter (Once Daily)
LOWER	Includes all members who did not qualify for BID or QD and whose average units per week is less than or equal to 7

# Methodology: Sample



**Long-term Cohort** = All members who received BID Med Admin services across all 4 quarters of CY 2013

**Short-term Cohort** = All members who received 1 or more units of Med Admin in all of CY 2013 and who also met eligibility criteria in all 4 quarters of CY 2013

**Eligibility Criteria** = Member could not have had greater than 21 days of ineligibility in any given quarter of CY 2013.

# Methodology: Sample

CY 2013 Home Health Med Admin Cohorts	
	# Members
Long-term Med Admin	596
Short-term Med Admin	4,931
Total Eligible Med Admin Population	5,527

# Sample Demographics: Age

## Home Health Med Admin: Age Summary Statistics CY 2013

<b>Age Summary Statistics</b>	<b>Short-term Cohort (N = 4931)</b>	<b>Long-term Cohort (N = 596)</b>
<b>Mean</b>	48.0	51.1
<b>Median</b>	49.0	52.0
<b>Range</b>	18 - 96	19 - 101
<b>Lower Quartile</b>	38.0	58.0
<b>Upper Quartile</b>	45.5	59.0



# Sample Demographics: Age

**Home Health Med Admin: Age Distribution  
CY 2013**

Age Categories	Short-term		Long-term	
	# Members	% of Cohort	# Members	% of Cohort
18-24	325	6.6%	12	2.0%
25-34	678	13.7%	51	8.6%
35-44	802	16.3%	86	14.4%
45-54	1,415	28.7%	197	33.1%
55-64	1,187	24.1%	187	31.4%
65+	524	10.6%	63	10.6%
<b>Total</b>	<b>4,931</b>	<b>100%</b>	<b>596</b>	<b>100%</b>

# Sample Demographics: Gender

## Home Health Med Admin: Gender CY 2013

Gender	Short-term		Long-term	
	# Members	% of Cohort	# Members	% of Cohort
Male	2,357	47.8%	329	55.2%
Female	2,574	52.2%	267	44.8%
Total	4,931	100%	596	100%

# Sample Demographics: Race/Ethnicity

## Home Health Med Admin: Race/Ethnicity CY 2013

Race/Ethnicity	Short-term		Long-term	
	# Members	% of Cohort	# Members	% of Cohort
Asian	44	0.9%	7	1.2%
African American	1,124	22.8%	149	25.0%
Caucasian	2,508	50.9%	311	52.2%
Hispanic	1,244	25.2%	128	21.5%
Other	11	0.2%	1	0.2%
<b>Total</b>	<b>4,931</b>	<b>100%</b>	<b>596</b>	<b>100%</b>

Please Note: Other includes Pacific Islander, Multi-Racial & Native American



# Home Health Utilization

## Home Health Med Admin: Med Admin Units Used Summary Statistics CY 2013

Med Admin Units Used Summary Statistics	Short-term Cohort (N = 4,931)	Long-term Cohort (N = 596)
Mean	213.7	678.2
Median	210.0	687.0

## Home Health Med Admin: Short-term BID Utilization CY 2013

Short-term Cohort	BID in 3 Quarters		BID in 2 Quarters		BID in 1 Quarter		BID in 0 Quarters	
4,931 Members	# Members	% of Cohort	# Members	% of Cohort	# Members	% of Cohort	# Members	% of Cohort
	209	4.2%	230	4.7%	317	6.4%	4,175	84.7%

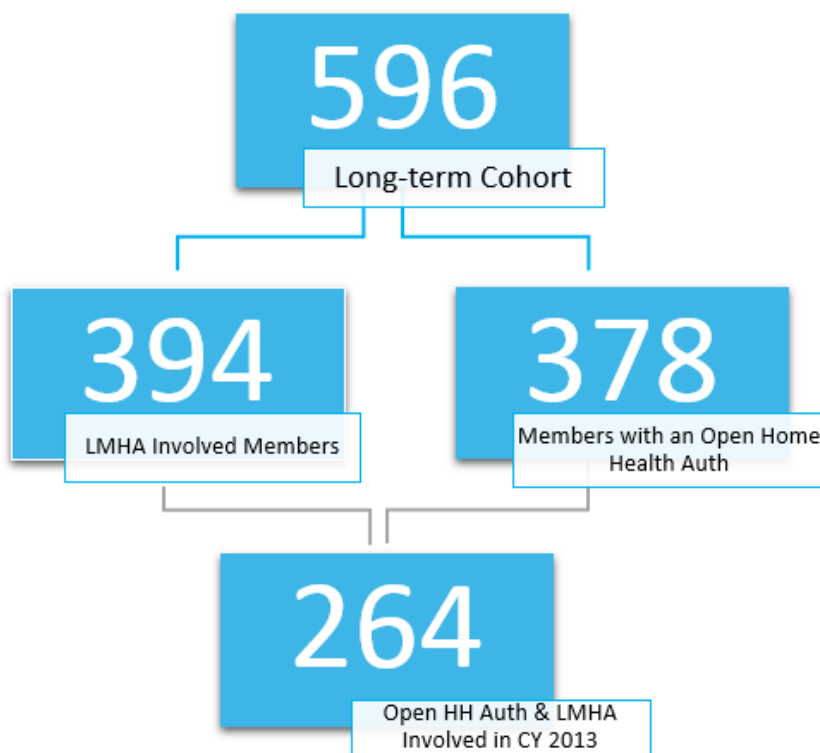
# Multiple Home Health Providers

## Home Health Med Admin: Use of Multiple Home Health Providers within a Year CY 2013

	Short-term		Long-term	
	# Members	% of Cohort	# Members	% of Cohort
<b>1 Provider</b>	4,544	92.2%	556	93.3%
<b>2 Providers</b>	364	7.4%	40	6.7%
<b>3 Providers</b>	22	0.4%	-	0.0%
<b>4 Providers</b>	1	0.0%	-	0.0%
<b>Total</b>	<b>4,931</b>	<b>100%</b>	<b>596</b>	<b>100%</b>

# Any LMHA in CY 2013 & Open HH Auth in 2015

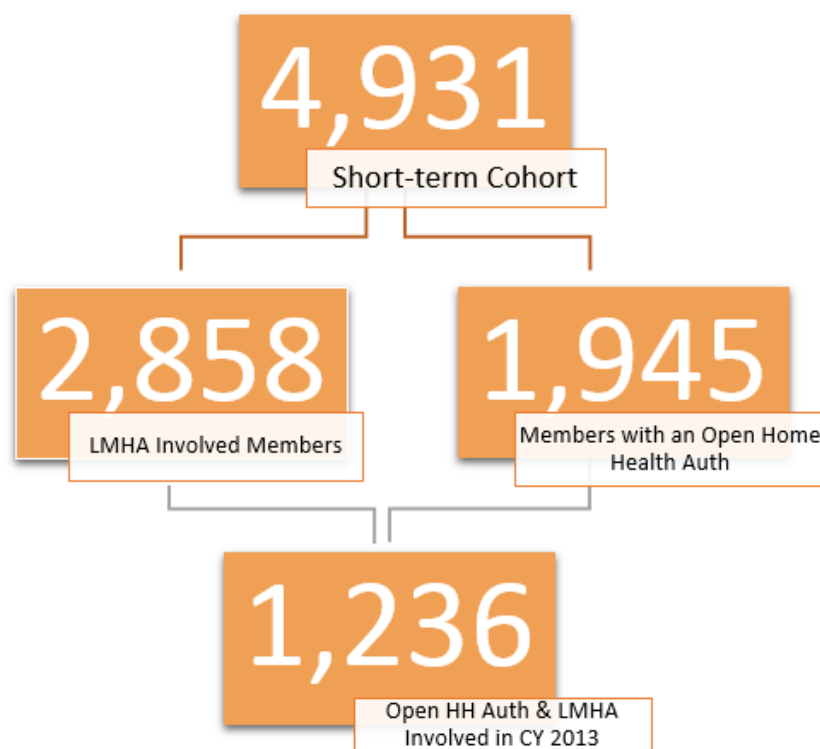
Home Health Med Admin Long-term CY 2013						
# Members in Long-term Cohort	Long-term with LMHA Involvement		Long-term with Open Home Health Auth as of 5-29-15		Long-term with LMHA Involvement and an Open Home Health	
596	# Members	% of Cohort	# Members	% of Cohort	# Members	% of Cohort
	394	66.1%	378	63.4%	264	44.3%





# Any LMHA in CY2013 & Open HH Auth in 2015

Home Health Med Admin Short-term CY 2013						
# Members in Short-term Cohort	Short-term with LMHA Involvement		Short-term with Open Home Health Auth as of 5-29-15		Short-term with LMHA Involvement and an Open Home Health	
4931	# Members	% of Cohort	# Members	% of Cohort	# Members	% of Cohort
	2,858	58.0%	1,945	39.4%	1,236	25.1%



# SMI

- Serious Mental Illness (SMI): The SMI Indicator was used to identify whether or not a member had a diagnoses that fell within the SMI range, at any point in the CY. SMI included Schizophrenia & Psychotic Disorders, Mood Disorders, Anxiety Disorders, Personality Disorders and PTSD.

Home Health Med Admin: Serious Mental Illness (SMI) Indicator CY 2013				
SMI Indicator	Short-term		Long-term	
	# Members	% of Cohort	# Members	% of Cohort
SMI Present	4,548	92.2%	571	95.8%
No SMI Present	383	7.8%	25	4.2%
Total	4,931	100%	596	100%

# Schizophrenia

## Home Health Med Admin: Psychotic Disorders CY 2013

	Short-term		Long-term	
	# Members	% of Cohort	# Members	% of Cohort
Schizophrenia & Schizoaffective Disorders	2,993	60.7%	478	80.2%



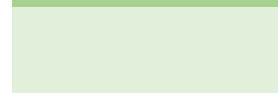
# Comorbidity

## Home Health Med Admin: Identification of Cormorbidity CY 2013

Comorbidity	Short-term		Long-term	
	# Members	% of Cohort	# Members	% of Cohort
Behavioral Health Diagnoses Only	966	19.6%	97	16.3%
Behavioral Health & Medical Diagnoses Present	3,965	80.4%	499	83.7%
Total	4,931	100%	596	100%



≥ 10 Percentage Points Lower than Short-term Cohort



≥ 5 Percentage Points Lower than Short-term Cohort



≥ 10 Percentage Points Higher than Short-term Cohort



≥ 5 Percentage Points Higher than Short-term Cohort

# Behavioral Health Diagnoses

Home Health Med Admin: Behavioral Health Diagnosis Categories CY 2013				
Behavioral Health Diagnosis Categories	Short-term		Long-term	
	# Members	% of Cohort	# Members	% of Cohort
Schizophrenias	2,114	42.9%	367	61.6%
Other Mental Disorders	2,656	53.9%	280	47.0%
Schizoaffective Disorders	1,883	38.2%	273	45.8%
Other Conditions That May be Focus of Clinical Attention	2,008	40.7%	196	32.9%
Bipolar Disorders	1,780	36.1%	157	26.3%
Mood Depressive Disorders NOS	2,056	41.7%	123	20.6%
Other Psychotic Disorders	1,451	29.4%	117	19.6%
Nicotine Related Disorders	1,240	25.1%	115	19.3%
Major Depressive Disorders	1,486	30.1%	108	18.1%
Other Substance Abuse Issues	1,014	20.6%	108	18.1%
Anxiety Disorders	1,561	31.7%	107	18.0%
Personality Disorders	885	17.9%	100	16.8%
Alcohol Related Disorders	1,093	22.2%	91	15.3%
Other Unspec Drug Disorders	871	17.7%	59	9.9%
Cocaine Related Disorders	613	12.4%	54	9.1%
Intellectual Disabilities	420	8.5%	52	8.7%
Stress Disorders	870	17.6%	41	6.9%
Cognitive Disorders	705	14.3%	41	6.9%
Cannabis Related Disorders	586	11.9%	41	6.9%
Combination Drug Related Disorders	405	8.2%	27	4.5%
Opioid Related Disorders	454	9.2%	26	4.4%
Sleep Disorders	323	6.6%	21	3.5%

# Medical Diagnoses

Home Health Med Admin: Medical Diagnosis Categories CY 2013				
Medical Diagnosis Categories	Short-term		Long-term	
	# Members	% of Cohort	# Members	% of Cohort
Hypertension	2,512	50.9%	347	58.2%
Diabetes	1,882	38.2%	288	48.3%
Hyperlipidemia	1,909	38.7%	247	41.4%
Asthma	1,215	24.6%	124	20.8%
COPD	913	18.5%	112	18.8%
Epilepsy	433	8.8%	45	7.6%
Liver Disease	461	9.3%	35	5.9%
CAD	430	8.7%	31	5.2%
Heart Failure	275	5.6%	24	4.0%
HIV	149	3.0%	20	3.4%
Muscular Dystrophy	118	2.4%	18	3.0%
Migraine	224	4.5%	10	1.7%
Breast Cancer	69	1.4%	9	1.5%
Skin Cancer	25	0.5%	3	0.5%
Lymphoma	11	0.2%	3	0.5%
Cerebral Palsy	17	0.3%	2	0.3%
Head & Neck Cancer	8	0.2%	1	0.2%
Lung Cancer	23	0.5%	1	0.2%
Leukemias	10	0.2%	1	0.2%
Sickle Cell	8	0.2%	-	0.0%



# Burden of Disease: Long-Term Frequent Utilization Cohort

Behavioral Health/Medical Diagnosis Category Count Crosstab Long-term Cohort										
# of Behavioral Health Diagnostic Categories	# of Medical Diagnostic Categories									
		0	1	2	3	4	5	6	7	8
	1	10	12	16	13	5	1	-	-	-
	2	24	21	25	18	12	4	2	-	-
	3	15	23	26	36	12	7	2	1	-
	4	19	25	27	19	12	3	1	1	-
	5	10	8	19	23	14	6	2	-	-
	6	5	6	13	10	5	2	1	-	1
	7	7	4	6	6	6	2	2	1	-
	8	5	5	4	4	-	2	-	-	-
	9	1	2	2	3	2	2	1	-	-
	10	1	1	-	1	1	-	-	-	-
	11	-	1	1	-	1	-	-	-	-
	12	-	-	2	-	1	-	-	-	-
	13	-	-	-	1	-	-	-	-	-
	14	-	-	-	-	-	1	-	-	-



# Burden of Disease: Short-Term Utilization Cohort

Behavioral Health/Medical Diagnostic Categories Crosstab Short-term Cohort											
		# of Medical Diagnostic Categories									
		0	1	2	3	4	5	6	7	8	9
# of Behavioral Health Diagnostic Categories	1	70	57	50	60	12	7	2	-	-	-
	2	170	129	131	100	59	25	3	2	-	-
	3	146	156	154	155	84	39	11	8	-	-
	4	141	177	162	161	88	37	19	10	6	-
	5	115	131	141	104	70	48	22	5	4	-
	6	95	100	93	84	54	26	21	4	1	1
	7	71	83	83	63	51	34	12	8	3	-
	8	49	52	61	45	42	19	11	3	1	-
	9	41	41	48	39	22	18	7	3	2	-
	10	27	25	32	32	18	11	4	7	-	-
	11	17	30	19	19	20	7	4	2	1	-
	12	10	13	14	15	4	6	2	1	2	-
	13	5	9	10	7	5	5	3	-	-	-
	14	4	7	8	8	5	3	2	-	2	-
	15	3	3	1	5	2	2	1	-	-	-
	16	-	1	3	2	-	2	5	-	-	-
	17	-	2	1	-	1	2	-	-	-	-
	18	2	-	-	1	-	1	1	-	-	-
	19	-	-	-	1	1	-	-	-	-	-
	20	-	-	-	1	-	-	-	-	-	-

# Behavioral Health Medications

Home Health Med Admin: Behavioral Health Medication Categories  
CY 2013

Behavioral Health Medication Categories	Short-term		Long-term	
	# Members	% of Cohort	# Members	% of Cohort
Antipsychotics	3,713	75.3%	469	78.7%
Mood Stabilizer	2,199	44.6%	291	48.8%
Antidepressants	2,795	56.7%	267	44.8%
Antianxiety	2,273	46.1%	239	40.1%
Sedative Hypnotics	772	15.7%	66	11.1%
Narcotics	891	18.1%	56	9.4%
Antimanic	387	7.8%	51	8.6%
Smoking Deterrents	492	10.0%	42	7.0%
Methadone	175	3.5%	14	2.3%
Alcohol Treatment Agents	49	1.0%	6	1.0%
ADHD	138	2.8%	5	0.8%



# ED Utilization

## Home Health Med Admin: Behavioral Health Emergency Department Frequency Distribution CY 2013

# of BH ED Episodes in CY 2013	Short-term		Long-term	
	# Members	% of Cohort	# Members	% of Cohort
0	2,886	58.5%	422	70.8%
1-3	1,595	32.3%	161	27.0%
4-7	313	6.3%	6	1.0%
8+	137	2.8%	7	1.2%
Total	4,931	100%	596	100%

# ED Utilization

## Home Health Med Admin: Medical Emergency Department Frequency Distribution CY 2013

# of Medical ED Episodes in CY 2013	Short-term		Long-term	
	# Members	% of Cohort	# Members	% of Cohort
0	2,361	47.9%	365	61.2%
1-3	1,862	37.8%	188	31.5%
4-7	457	9.3%	31	5.2%
8+	251	5.1%	12	2.0%
Total	4,931	100%	596	100%

# Acute Psychiatric Inpatient Utilization

## Home Health Med Admin: Acute Inpatient Psych Frequency Distribution CY 2013

# of IPF Episodes in CY 2013	Short-term		Long-term	
	# Members	% of Cohort	# Members	% of Cohort
0	3,802	77.1%	536	89.9%
1-2	951	19.3%	59	9.9%
3+	178	3.6%	1	0.2%
Total	4,931	100%	596	100%



# Medical Inpatient Utilization

## Home Health Med Admin: Medical Inpatient Frequency Distribution CY 2013

# of Medical IP Episodes in CY 2013	Short-term		Long-term	
	# Members	% of Cohort	# Members	% of Cohort
0	4,015	81.4%	534	89.6%
1-2	816	16.5%	59	9.9%
3+	100	2.0%	3	0.5%
Total	4,931	100%	596	100%

# Summary

- The relative similarity between the cohorts was somewhat counterintuitive, as greater severity was expected among members with long-term frequent Medication Administration utilization.
- All members that utilized any Med Admin differed from the general Adult Medicaid population on several indicators suggesting greater severity, most notably the rate of Schizophrenia diagnoses, and patterns of behavioral health diagnoses and comorbidity.

# Summary

- Members that utilized longstanding intensive levels of Med Admin had even higher rates of Schizophrenia diagnoses, but also had lower rates of both Behavioral Health and Medical ED and Inpatient Hospital utilization.
- It is possible that there may be a protective benefit related to long-term frequent Med Admin utilization, suggesting additional supports might be required if there were a reduction in Home Health services.



## Summary

- There may be opportunities to address the needs of members with longstanding intensive Med Admin through existing relationships and community-based care, working with Peer Specialists, Integrated Care Nurses, and prescribers.
- There might also be opportunities to enhance collaboration between Home Health Agencies and Local Mental Health Authorities (LMHA's) to further support independence skills-building and promote recovery.

- **Questions?**
- **Discussion**

**Bonni Hopkins, AVP Analytics & Innovation**  
**[bonni.hopkins@valueoptions.com](mailto:bonni.hopkins@valueoptions.com)**