MME Demonstration Project – Risk Analysis Results

Complex Care Committee
April 24, 2015

HUSKY HEALTH
CONNECTICUT

Connecticut Department of Social Services
Making a Difference
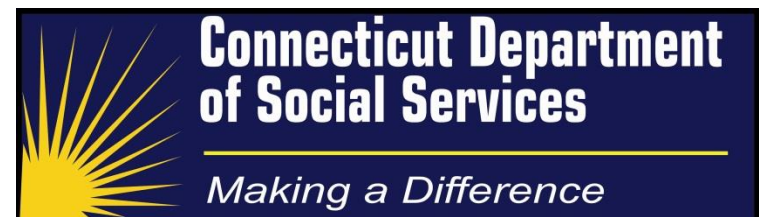
Analysis Overview

- Analysis was performed to identify and evaluate member risk for three MME populations:

  - Population 1: All members – includes all members with both Medicare and Medicaid enrollment in CY2013. Total # Members – 52,864.

  - Population 2: All members minus community well members – members with low or undetermined risk were removed. Total # Members – 49,640.

  - Population 3: All members minus community well members and SNF members - members with low or undetermined risk and SNF members were removed. Total # Members – 37,939.

Analysis Overview (Cont)

- Each analysis evaluates:
  - ☐ Population Age and Gender

  - ☐ Average Risk Scores

  - ☐ Resource Utilization Band (RUB) Distribution

  - ☐ Average Per Member Per Year (PMPY) costs

  - ☐ Top Medical Conditions

  - ☐ Primary Care Provider Attribution

Analysis Inclusion Criteria

- Medicare and Medicaid Medical claims for services incurred in CY2013

- Medicaid pharmacy data with fill dates in CY2013

- Medicare and Medicaid member eligibility in CY2013

Analysis Exclusion Criteria

- Members enrolled with an ACO - 841

- Members enrolled with Medicare Advantage – 9,661

- Members not found in CHNCT Medicaid data warehouse – 5,599

- Members with Medicare enrollment in CY2013 but no Medicaid enrollment in CY2013 – 5,860

- Part D pharmacy claims due to lack of financial information

- Final # members in dataset – 52,864

CareAnalyzer® Risk Methodology

- CareAnalyzer® uses the Johns Hopkins ACG® (Adjusted Clinical Group) System logic to identify member risk and severity by aggregating medical claims, and member and provider data.

- Current Relative Risk Score (RRS) is based on a member's diagnostic history, age, and gender during a one-year reporting period.

- RRS represents the cost expectation of an individual compared to the average population. For example, a relative risk score of 1.5 means the individual is expected to cost one and a half time more than the average population.

Resource Utilization Bands for Risk Categories

Based on their risk assignment, members are grouped into one of six Resource Utilization Bands (RUBs) of risk categories:

- 0 - No Diagnosis
- 1 - Healthy Users
- 2 - Low Risk
- 3 - Moderate or Emerging Risk
- 4 - High Risk
- 5 - Very High Risk

Results: Population 1 – All Members

Distribution by Age and Gender

Age	Female		Male		Total	
	#	%	#	%	#	%
Less Than 65	15,116	51.7%	14,103	48.3%	29,219	55.3%
65 and Older	15,532	65.7%	8,113	34.3%	23,645	44.7%
Total	**30,648**	**58.0%**	**22,216**	**42.0%**	**52,864**	**100.0%**

Attribution by Age

Age	Attributed to a PCP		Unattributed		Total	
	#	%	#	%	#	%
Less than 65	18,417	63.0%	10,802	37.0%	29,219	55.3%
65 and Older	9,217	39.0%	14,428	61.0%	23,645	44.7%
Total	**27,634**	**52.3%**	**25,230**	**47.7%**	**52,864**	**100.0%**

Results: Population 1 – All Members

Resource Utilization Band Distribution

Program	Resource Utilization Band (RUB)												
	0 No or only invalid diagnoses		1 Healthy User		2 Low Risk		3 Moderate Risk		4 High Risk		5 Very High Risk		Total	
	# Members	%	# Members	%	# Members	%	# Members	%	# Members	%	# Members	%	# Members	%
HUSKY A	83	1.9%	94	2.2%	146	3.4%	1,417	32.9%	1,423	33.1%	1,142	26.5%	4,305	8.1%
HUSKY C	826	1.7%	1,075	2.2%	962	2.0%	13,144	27.4%	12,674	26.4%	19,329	40.3%	48,010	90.8%
HUSKY D	16	2.9%	12	2.2%	10	1.8%	170	31.0%	155	28.2%	186	33.9%	549	1.0%
Total	925	1.7%	1,181	2.2%	1,118	2.1%	14,731	27.9%	14,252	27.0%	20,657	39.1%	52,864	100.0%

Average Risk Score by RUB

Program	Resource Utilization Band (RUB)												
	0 No or only invalid diagnoses		1 Healthy User		2 Low Risk		3 Moderate Risk		4 High Risk		5 Very High Risk		Total	
	# Members	Avg Risk Score	# Members	Avg Risk Score	# Members	Avg Risk Score	# Members	Avg Risk Score	# Members	Avg Risk Score	# Members	Avg Risk Score	# Members	Avg Risk Score
HUSKY A	83	0.00	94	0.24	146	0.30	1,417	0.56	1,423	0.85	1,142	1.44	4,305	0.86
HUSKY C	826	0.00	1,075	0.24	962	0.31	13,144	0.56	12,674	0.90	19,329	1.51	48,010	1.01
HUSKY D	16	0.00	12	0.22	10	0.28	170	0.57	155	0.89	186	1.51	549	0.95
Total	925	0.00	1,181	0.24	1,118	0.30	14,731	0.56	14,252	0.89	20,657	1.51	52,864	1.00

Per Member Per Year (PMPY) Cost by RUB

Program	Resource Utilization Band (RUB)												
	0 No or only invalid diagnoses		1 Healthy User		2 Low Risk		3 Moderate Risk		4 High Risk		5 Very High Risk		Total	
	# Members	Avg Cost PMPY	# Members	Avg Cost PMPY	# Members	Avg Cost PMPY	# Members	Avg Cost PMPY	# Members	Avg Cost PMPY	# Members	Avg Cost PMPY	# Members	Avg Cost PMPY
HUSKY A	83	$0	94	$1,949	146	$2,135	1,417	$5,101	1,423	$12,621	1,142	$33,549	4,305	$14,866
HUSKY C	826	$0	1,075	$13,315	962	$17,734	13,144	$31,627	12,674	$49,801	19,329	$80,047	48,010	$54,686
HUSKY D	16	$0	12	$473	10	$1,329	170	$9,771	155	$15,334	186	$41,853	549	$21,569
Total	925	$0	1,181	$12,280	1,118	$15,550	14,731	$28,823	14,252	$45,714	20,657	$77,133	52,864	$51,099

Results: Population 2 - All Members Minus Community Well

Distribution by Age and Gender

Age	Female		Male		Total	
	#	%	#	%	#	%
Less Than 65	14,330	52.9%	12,768	47.1%	27,098	54.6%
65 and Older	14,954	66.3%	7,588	33.7%	22,542	45.4%
Total	**29,284**	**59.0%**	**20,356**	**41.0%**	**49,640**	**100.0%**

Attribution by Age

Age	Attributed to a PCP		Unattributed		Total	
	#	%	#	%	#	%
Less than 65	17,729	65.4%	9,369	34.6%	27,098	54.6%
65 and Older	8,976	39.8%	13,566	60.2%	22,542	45.4%
Total	**26,705**	**53.80%**	**22,935**	**46.20%**	**49,640**	**100.0%**

Results: Population 2 - All Members Minus Community Well

Resource Utilization Band Distribution

| Program | Resource Utilization Band (RUB) | | | | | | | |
| | 3 Moderate Risk | | 4 High Risk | | 5 Very High Risk | | Total | |
	# Members	%	# Members	%	# Members	%	# Members	%
HUSKY A	1,417	35.6%	1,423	35.7%	1,142	28.7%	3,982	8.0%
HUSKY C	13,144	29.1%	12,674	28.1%	19,329	42.8%	45,147	90.9%
HUSKY D	170	33.3%	155	30.3%	186	36.4%	511	1.0%
Total	**14,731**	**29.7%**	**14,252**	**28.7%**	**20,657**	**41.6%**	**49,640**	**100.0%**

Average Risk Score by RUB

| Program | Resource Utilization Band (RUB) | | | | | | | |
| | 3 Moderate Risk | | 4 High Risk | | 5 Very High Risk | | Total | |
	# Members	Avg Risk Score	# Members	Avg Risk Score	# Members	Avg Risk Score	# Members	Avg Risk Score
HUSKY A	1,417	0.53	1,423	0.81	1,142	1.37	3,982	0.87
HUSKY C	13,144	0.54	12,674	0.86	19,329	1.44	45,147	1.01
HUSKY D	170	0.54	155	0.84	186	1.44	511	0.96
Total	**14,731**	**0.54**	**14,252**	**0.85**	**20,657**	**1.43**	**49,640**	**1.00**

Per Member Per Year (PMPY) Cost by RUB

| Program | Resource Utilization Band (RUB) | | | | | | | |
| | 3 Moderate Risk | | 4 High Risk | | 5 Very High Risk | | Total | |
	# Members	Avg Cost PMPY	# Members	Avg Cost PMPY	# Members	Avg Cost PMPY	# Members	Avg Cost PMPY
HUSKY A	1,417	$5,101	1,423	$12,621	1,142	$33,549	3,982	$15,947
HUSKY C	13,144	$31,627	12,674	$49,801	19,329	$80,047	45,147	$57,459
HUSKY D	170	$9,771	155	$15,334	186	$41,853	511	$23,136
Total	**14,731**	**$28,823**	**14,252**	**$45,714**	**20,657**	**$77,133**	**49,640**	**$53,776**

SNF Members

Distribution by Age and Gender

Age	Female #	Female %	Male #	Male %	Total #	Total %
Less Than 65	907	44.1%	1,149	55.9%	2,056	17.6%
65 and Older	6,587	68.3%	3,058	31.7%	9,645	82.4%
Total	**7,494**	**64.0%**	**4,207**	**36.0%**	**11,701**	**100.0%**

Attribution by Age

Age	Attributed to a PCP #	Attributed to a PCP %	Unattributed #	Unattributed %	Total #	Total %
Less than 65	628	30.5%	1,428	69.5%	2,056	17.6%
65 and Older	849	8.8%	8,796	91.2%	9,645	82.4%
Total	**1,477**	**12.6%**	**10,224**	**87.4%**	**11,701**	**100.0%**

Resource Utilization Band Distribution

Resource Utilization Band (RUB)						
3 Moderate Risk		4 High Risk		5 Very High Risk		Total
# Members	%	# Members	%	# Members	%	# Members
988	8.4%	2,481	21.2%	8,232	70.4%	11,701

Average Risk Score by RUB

Resource Utilization Band (RUB)							
3 Moderate Risk		4 High Risk		5 Very High Risk		Total	
# Members	Avg Risk Score	# Members	Avg Risk Score	# Members	Avg Risk Score	# Members	Avg Risk Score
988	0.54	2,481	0.87	8,232	1.48	11,701	1.27

Per Member Per Year (PMPY) Cost by RUB

Resource Utilization Band (RUB)							
3 Moderate Risk		4 High Risk		5 Very High		Total	
# Members	Avg Cost PMPY	# Members	Avg Cost PMPY	# Members	Avg Cost PMPY	# Members	Avg Cost PMPY
988	$121,795	2,481	$108,496	8,232	$112,980	11,701	$112,773

Results: Population 3 - All Members Minus Community Well and SNF

Distribution by Age and Gender

Age	Female #	Female %	Male #	Male %	Total #	Total %
Less Than 65	13,423	53.6%	11,619	46.4%	25,042	66.0%
65 and Older	8,367	64.9%	4,530	35.1%	12,897	34.0%
Total	**21,790**	**57.4%**	**16,149**	**42.6%**	**37,939**	**100.0%**

Attribution by Age

Age	Attributed to a PCP #	Attributed to a PCP %	Unattributed #	Unattributed %	Total #	Total %
Less than 65	17,101	68.3%	7,941	31.7%	25,042	66.0%
65 and Older	8,127	63.0%	4,770	37.0%	12,897	34.0%
Total	**25,228**	**66.5%**	**12,711**	**33.5%**	**37,939**	**100.0%**

Results: Population - 3 All Members Minus Community Well and SNF

Resource Utilization Band Distribution

| Program | Resource Utilization Band (RUB) | | | | | | | |
| | 3 Moderate Risk | | 4 High Risk | | 5 Very High Risk | | Total | |
	# Members	%	# Members	%	# Members	%	# Members	%
HUSKY A	1,417	35.6%	1,423	35.7%	1,142	28.7%	3,982	10.5%
HUSKY C	12,156	36.3%	10,193	30.5%	11,097	33.2%	33,446	88.2%
HUSKY D	170	33.3%	155	30.3%	186	36.4%	511	1.3%
Total	**13,743**	**36.2%**	**11,771**	**31.0%**	**12,425**	**32.7%**	**37,939**	**100.0%**

Average Risk Score by RUB

| Program | Resource Utilization Band (RUB) | | | | | | | |
| | 3 Moderate Risk | | 4 High Risk | | 5 Very High Risk | | Total | |
	# Members	Avg Risk Score	# Members	Avg Risk Score	# Members	Avg Risk Score	# Members	Avg Risk Score
HUSKY A	1,417	0.63	1,423	0.91	1,142	1.47	3,982	0.97
HUSKY C	12,156	0.62	10,193	0.91	11,097	1.50	33,446	1.00
HUSKY D	170	0.62	155	0.89	186	1.54	511	1.04
Total	**13,743**	**0.62**	**11,771**	**0.91**	**12,425**	**1.50**	**37,939**	**1.00**

Per Member Per Year (PMPY) Cost by RUB

| Program | Resource Utilization Band (RUB) | | | | | | | |
| | 3 Moderate Risk | | 4 High Risk | | 5 Very High Risk | | Total | |
	# Members	Avg Cost PMPY	# Members	Avg Cost PMPY	# Members	Avg Cost PMPY	# Members	Avg Cost PMPY
HUSKY A	1,417	$5,101	1,423	$12,621	1,142	$33,549	3,982	$15,947
HUSKY C	12,156	$24,298	10,193	$35,514	11,097	$55,617	33,446	$38,107
HUSKY D	170	$9,771	155	$15,334	186	$41,853	511	$23,136
Total	**13,743**	**$22,139**	**11,771**	**$32,481**	**12,425**	**$53,382**	**37,939**	**$35,580**

Results: Top 15 Medical Conditions

Population 1

Description	# of Members	% of Members
Hypertension	30,443	57.6%
Musculoskeletal signs and symptoms	23,748	44.9%
Disorders of lipid metabolism	22,832	43.2%
Depression	17,547	33.2%
Anxiety, neuroses	16,105	30.5%
Diabetes	15,880	30.0%
Gastroesophageal reflux	13,273	25.1%
Low back pain	12,957	24.5%
Musculoskeletal disorders, other	12,592	23.8%
Respiratory signs and symptoms	11,888	22.5%
Refractive errors	11,330	21.4%
Dementia and delirium	11,323	21.4%
Iron deficiency, other deficiency anemias	11,181	21.2%
Cardiovascular signs and symptoms	10,341	19.6%
Degenerative joint disease	10,340	19.6%

Population 2

Description	# of Members	% of Members
Hypertension	30,233	60.9%
Musculoskeletal signs and symptoms	23,605	47.6%
Disorders of lipid metabolism	22,681	45.7%
Depression	17,478	35.2%
Anxiety, neuroses	16,033	32.3%
Diabetes	15,759	31.7%
Gastroesophageal reflux	13,241	26.7%
Low back pain	12,904	26.0%
Musculoskeletal disorders, other	12,571	25.3%
Respiratory signs and symptoms	11,872	23.9%
Dementia and delirium	11,322	22.8%
Refractive errors	11,184	22.5%
Iron deficiency, other deficiency anemias	11,168	22.5%
Cardiovascular signs and symptoms	10,328	20.8%
Degenerative joint disease	10,315	20.8%

Population 3

Description	# of Members	% of Members
Hypertension	21,429	56.5%
Disorders of lipid metabolism	17,678	46.6%
Musculoskeletal signs and symptoms	17,297	45.6%
Depression	11,627	30.6%
Diabetes	11,603	30.6%
Anxiety, neuroses	11,411	30.1%
Low back pain	11,048	29.1%
Refractive errors	10,405	27.4%
Gastroesophageal reflux	9,531	25.1%
Respiratory signs and symptoms	8,465	22.3%
Abdominal pain	7,627	20.1%
Cardiovascular signs and symptoms	7,540	19.9%
Musculoskeletal disorders, other	7,417	19.5%
Chest pain	6,958	18.3%
Cataract, aphakia	6,747	17.8%

Population 1: All members
Population 2: All members minus community well
Population 3: All members minus community well and SNF

Questions/Comments