



1301 Fifth Avenue, Suite 3800  
 Seattle, Washington 98101-2605  
 Telephone: (206) 504-5548  
 Fax: (206) 682-1295  
 Email: justin.birrell@milliman.com

April 24, 2012

Ms. Patricia Bazin  
 Health Care Services Branch Administrator  
 Department of Human Services, Med-QUEST Division  
 601 Kamokila Blvd., Ste. 518  
 Kapolei, HI 96707-2021

Re: CCS Behavioral Health Data Book and CY 2013 Rates

Dear Patti:

Per your request, we have produced a data book for behavioral health services included in the Community Care Services Program (CCS) contract. In addition, we have computed calendar year 2013 rates for this program. A table is shown below including rates for different tax scenarios for potential bidders.

	Calendar Year 2013 CCO Per Member Monthly Capitation Rates			
	Base Rate	Premium Tax	General Excise Tax Rate (2)	
		Rate (1)	Oahu	Other Islands
Males and Females < 40	\$1,056.21	\$1,103.26	\$1,105.98	\$1,149.23
Males and Females 40+	\$845.96	\$883.64	\$885.82	\$881.21

- (1) Premium Tax load is 4.265% . Rates are rounded to two decimal places.
- (2) General Excise Tax load is 4.5% for Oahu and 4% for all other islands.

*This letter and attachments are intended for the use of the State of Hawaii Department of Human Services (DHS) for use with the Community Care Services Program (CCS) managed care program. It is our understanding that the information contained in this report may be utilized in a public document. To the extent that the information contained in this report is provided to third parties, the document should be distributed in its entirety. Any user of the data must possess a certain level of expertise in actuarial science and health care modeling so as not to misinterpret the data presented.*

*Milliman makes no representations or warranties regarding the contents of this report to third parties. Similarly, third parties are instructed that they are to place no reliance upon this report prepared for DHS by Milliman that would result in the creation of any duty or liability under any theory of law by Milliman or its employees to third parties. Other parties receiving this report must rely upon their own experts in drawing conclusions about the DHS capitation rates, assumptions and trends. It is the responsibility of each BHO to determine the adequacy of the rates for their risk, management, and contractual obligations.*

## Rate Development

We have developed rates for a Behavioral Health Organization (BHO) to case manage, authorize, and facilitate the delivery of behavioral health services to Medicaid eligible adults who have serious mental illness (SMI) or serious and persistent mental illness (SPMI) who are in the QUEST Expanded Access (QExA) health plans.

We have developed rates based on CCS claims data from calendar year 2008 data for members to be included in this program. Claims are not necessarily from specific members currently in the program, but rather the subset of CCS members from that period who have now been allocated to the QExA program rather than QUEST members who used to be served by the CCS program.

We have chosen to use the calendar year 2008 data as a base year for two reasons. First, the state has serious concerns with the quality of current data available for these members and second, pharmacy services were subsequently removed from the contract and are now included again. Therefore we chose a data period where we had both pharmacy as well as other behavioral health services.

Membership was determined on a monthly basis as those who had CCS claims and were Medicaid eligible in that month with a rate code that would subsequently be transitioned into the QExA program. An April 2012 snapshot of membership is as follows:

<u>Population</u>	<u>Members</u>
Less than 40	195
40 and over	619

Completion factors were not applied because claims data included 12 months of claims run-out and proved to be complete.

We have assumed that rebates have not been removed from pharmacy costs and that in the future the state will collect rebates directly. Therefore we have not made a rebate adjustment.

Although we have not applied any management discount factors to the base year data, we have reviewed the annual trend rates used in the development of managed care rates for the Medicaid managed care programs by service line. These were the basis for applied trends shown below.

<u>Annual Trend Rates</u>		
<u>Service Type</u>	<u>Utilization</u>	<u>Cost</u>
Inpatient Hospital	1.000	1.020
Outpatient Hospital	1.020	1.015
Professional	1.020	1.010
Pharmacy	1.025	1.030

Because of the unusually long trend period (5 years) from the base data year of 2008 to the contract period of 2013, the DHS has implemented a risk corridor to protect both themselves and the BHO.

We have assumed a case management and administration component of \$382.50 PMPM. This is based on the amount currently paid to the CCS organization for this purpose.

After a review of the claim data by island and age/gender bands, we found that the only credible cost differences for this population was for members under 40 years old and those 40 years old and older.

The cost models provided are intended to provide as much detail as possible for a BHO to review the historical costs of this program. We have therefore provided HCPCS level detail for most of the professional costs and pharmacy models by drug class split by single-source brand, multi-source brand and generic.

The attached data book includes the following exhibits:

<u>Exhibit</u>	<u>Description</u>
1a	CCS Cost Model - Males and Females < 40
1b	Pharmacy Detail - Males and Females < 40
2a	CCS Cost Model - Males and Females 40+
2b	Pharmacy Detail - Males and Females 40+

### **Additional Notes**

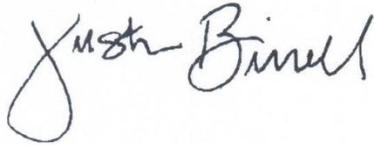
This analysis has relied extensively on data provided by the state. While we have performed numerous checks of reasonableness and have made adjustments where necessary, we have not performed an independent audit of the data. Errors in data reporting may flow through the analysis, and as such would impact the results.

The above analysis is based on Milliman's experience in working with the projections of health care claim costs for the Medicaid population. Actual experience will vary from our estimated rates for many reasons, including trends in health status, changes in provider contracting, and other non-random and random factors. It is important that actual experience be monitored and that adjustments are made, as appropriate.

Patii Bazin  
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Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. I am a member of the American Academy of Actuaries, and I meet the qualification standards for performing the analyses in this report.

Sincerely,

A handwritten signature in black ink that reads "Justin C. Birrell". The signature is written in a cursive style with a large, stylized initial "J".

Justin C. Birrell, FSA, MAAA  
Consulting Actuary

**Exhibit 1a**  
**Hawaii Medicaid CCS Behavioral Health Cost Model Summary**  
**Data Incurred 1/2008 - 12/2008, Paid Thru 12/2009**  
**Rates Effective Calendar Year 2013**  
**All Islands**  
**Males and Females < 40**

Cost Model Line	Benefit	Total Admits	Total Days/Services	Total Paid	Annual Admits Per 1,000	Average Length of Stay	Annual Utilization Per 1,000	Average Cost Service	Member Months	Paid PMPM
									2,937	
	CCS Claims Data									
	Case Management / Administration Capitation		2,937	\$1,123,313			12,000.0	\$382.50		\$382.50
I99	Inpatient Hospital Total	10	128	\$81,142	40.9	12.79	523.0	\$699.90		\$30.51
O99	Outpatient Hospital Total		248	\$31,006			1,118.8	\$134.69		\$12.56
	Professional									
80101	Drug screen single		8	\$43			36.1	\$5.70		\$0.02
85025	Complete cbc w/auto diff wbc		51	\$548			230.1	\$11.29		\$0.22
90772	Ther/proph/diag inj, sc/im		156	\$1,986			703.8	\$13.38		\$0.78
90801	Psy dx interview		108	\$11,677			487.2	\$113.64		\$4.61
90804	Psytx office 20-30 min		95	\$4,562			428.6	\$50.47		\$1.80
90805	Psytx off 20-30 min w/e&m		189	\$10,086			852.7	\$56.08		\$3.99
90806	Psytx off 45-50 min		660	\$46,794			2,977.5	\$74.52		\$18.49
90807	Psytx off 45-50 min w/e&m		214	\$17,075			965.4	\$83.86		\$6.75
90808	Psytx office 75-80 min		69	\$7,776			311.3	\$118.44		\$3.07
90809	Psytx off 75-80 w/e&m		10	\$1,165			45.1	\$122.45		\$0.46
90817	Psytx hosp 20-30 min w/e&m		43	\$2,409			194.0	\$58.89		\$0.95
90819	Psytx hosp 45-50 min w/e&m		90	\$7,308			406.0	\$85.34		\$2.89
90847	Family psytx w/patient		40	\$3,260			180.5	\$85.66		\$1.29
90853	Group psychotherapy		27	\$564			121.8	\$21.97		\$0.22
90862	Medication management		874	\$34,202			3,943.0	\$41.13		\$13.51
90870	Electroconvulsive therapy		-	\$0			-	\$0.00		\$0.00
99283	Emergency dept visit		14	\$442			63.2	\$33.22		\$0.17
99284	Emergency dept visit		14	\$985			63.2	\$73.92		\$0.39
99285	Emergency dept visit		22	\$2,592			99.3	\$123.80		\$1.02
A0180	Noner transport lodgng recip		72	\$1,104			324.8	\$16.12		\$0.44
A0427	ALS1-emergency		1	\$300			4.5	\$315.30		\$0.12
A0428	BLS		-	\$0			-	\$0.00		\$0.00
A0429	BLS-emergency		12	\$3,145			54.1	\$275.48		\$1.24
H0004	Alcohol and/or drug services		-	\$0			-	\$0.00		\$0.00
H0007	Alcohol and/or drug services		426	\$1,654			1,921.9	\$4.08		\$0.65
H0020	Alcohol and/or drug services		-	\$0			-	\$0.00		\$0.00
H0036	Comm psy face-face per 15min		10,941	\$23,415			49,359.4	\$2.25		\$9.25
Z9002	Alcohol and/or drug services		53	\$1,437			239.1	\$28.50		\$0.57
Z9004	Comm psy face-face per 15min		71	\$42,376			320.3	\$627.28		\$16.74
Z9008	Psytx off 75-80 w/e&m		17	\$4,695			76.7	\$290.27		\$1.86
All Other	All Other HCPCS		161	\$1,683			726.3	\$10.98		\$0.66
	Professional Total		14,438	\$233,284			65,135.8	\$16.98		\$92.18
Rx	Prescription Drug Total		4,852	\$1,205,661			22,431.2	\$288.07		\$538.47
	Total Medical		19,666	\$1,551,093			89,208.8	\$90.62		\$673.71
	CCS Total Capitation (Including Case Management and Admin)			\$2,674,406						\$1,056.21

Exhibit 1b  
Hawaii Medicaid QUEST Behavioral Health Pharmacy Summary by Drug Class  
Data Incurred 1/2008 - 12/2008, Paid Thru 12/2009  
Rates Effective Calendar Year 2013  
All Islands  
Males and Females < 40

Member Months 2,937

Drug Class	Total Scripts	Total Paid	Annual Utilization Per 1,000	Average Cost Service	Paid PMPM	Total Generic Scripts	Total Generic Paid	Annual Utilization Per 1,000	Average Cost Service	Generic Paid PMPM
Dibenzapines / Quinolone Derivatives / Benzisoxazoles	2,180	\$940,196	10,078.3	\$499.97	\$419.91	408	\$76,450	1,886.2	\$217.22	\$34.14
Antipsychotics - Misc.	205	\$74,675	947.7	\$422.29	\$33.35	-	\$0	-	\$0.00	\$0.00
Anticonvulsants - Misc.	260	\$48,553	1,202.0	\$216.49	\$21.68	93	\$12,888	429.9	\$160.66	\$5.76
Selective Serotonin Reuptake Inhibitors (SSRIs)	428	\$35,928	1,978.7	\$97.31	\$16.05	279	\$20,492	1,289.8	\$85.15	\$9.15
Valproic Acid	292	\$38,973	1,349.9	\$154.73	\$17.41	19	\$2,503	87.8	\$152.73	\$1.12
Serotonin-Norepinephrine Reuptake Inhibitors (SNRIs)	135	\$24,141	624.1	\$207.30	\$10.78	-	\$0	-	\$0.00	\$0.00
Antidepressants - Misc.	96	\$11,158	443.8	\$134.74	\$4.98	77	\$8,461	356.0	\$127.38	\$3.78
Anticonvulsants - Benzodiazepines	208	\$3,727	961.6	\$20.77	\$1.66	208	\$3,727	961.6	\$20.77	\$1.66
Benzodiazepines	205	\$3,942	947.7	\$22.29	\$1.76	205	\$3,942	947.7	\$22.29	\$1.76
Opioid Antagonists	8	\$832	37.0	\$120.51	\$0.37	8	\$832	37.0	\$120.51	\$0.37
Attention-Deficit/Hyperactivity Disorder (ADHD) Agents	37	\$6,262	171.1	\$196.19	\$2.80	-	\$0	-	\$0.00	\$0.00
Butyrophenones	121	\$5,252	559.4	\$50.32	\$2.35	120	\$5,101	554.8	\$49.28	\$2.28
Modified Cyclics	77	\$764	356.0	\$11.50	\$0.34	77	\$764	356.0	\$11.50	\$0.34
Alpha-2 Receptor Antagonists (Tetracyclics)	48	\$2,438	221.9	\$58.89	\$1.09	48	\$2,438	221.9	\$58.89	\$1.09
Amphetamines	14	\$937	64.7	\$77.61	\$0.42	13	\$655	60.1	\$58.44	\$0.29
Monoamine Oxidase Inhibitors (MAOIs)	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Antianxiety Agents - Misc.	15	\$755	69.3	\$58.37	\$0.34	15	\$755	69.3	\$58.37	\$0.34
Antiparkinson Anticholinergics	297	\$1,968	1,373.1	\$7.68	\$0.88	297	\$1,968	1,373.1	\$7.68	\$0.88
Antimanic Agents	41	\$631	189.5	\$17.83	\$0.28	39	\$596	180.3	\$17.70	\$0.27
Combination Psychotherapeutics	7	\$1,994	32.4	\$330.18	\$0.89	-	\$0	-	\$0.00	\$0.00
Phenothiazines	5	\$144	23.1	\$33.41	\$0.06	5	\$144	23.1	\$33.41	\$0.06
Stimulants - Misc.	4	\$412	18.5	\$119.39	\$0.18	-	\$0	-	\$0.00	\$0.00
Antihistamines - Phenothiazines	12	\$211	55.5	\$20.39	\$0.09	12	\$211	55.5	\$20.39	\$0.09
Opioid Agonists - Non-Patch	5	\$167	23.1	\$38.71	\$0.07	4	\$52	18.5	\$15.08	\$0.02
Antihistamines - Ethanolamines	33	\$197	152.6	\$6.91	\$0.09	33	\$197	152.6	\$6.91	\$0.09
Tricyclic Agents	15	\$100	69.3	\$7.76	\$0.04	15	\$100	69.3	\$7.76	\$0.04
Agents for Chemical Dependency	2	\$267	9.2	\$154.82	\$0.12	-	\$0	-	\$0.00	\$0.00
Smoking Deterrents	2	\$270	9.2	\$156.51	\$0.12	2	\$270	9.2	\$156.51	\$0.12
Beta Blockers Non-Selective	49	\$286	226.5	\$6.76	\$0.13	49	\$286	226.5	\$6.76	\$0.13
Antiadrenergic Antihypertensives	44	\$331	203.4	\$8.72	\$0.15	44	\$331	203.4	\$8.72	\$0.15
5-HT3 Receptor Antagonists	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Non-Barbiturate Hypnotics	1	\$6	4.6	\$7.34	\$0.00	1	\$6	4.6	\$7.34	\$0.00
Insulin	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Azithromycin	1	\$24	4.6	\$27.59	\$0.01	1	\$24	4.6	\$27.59	\$0.01
Beta Agonists	1	\$13	4.6	\$15.42	\$0.01	1	\$13	4.6	\$15.42	\$0.01
Fluoroquinolones	2	\$28	9.2	\$16.20	\$0.01	2	\$28	9.2	\$16.20	\$0.01
Thioxanthenes	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Penicillin Combinations	1	\$45	4.6	\$52.54	\$0.02	1	\$45	4.6	\$52.54	\$0.02
Antiparkinson Dopaminergics	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Antihypertensive Combinations	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Imidazole-Related Antifungals	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Nonsteroidal Anti-inflammatory Agents (NSAIDs)	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Antihistamines - Non-Sedating	1	\$35	4.6	\$40.66	\$0.02	1	\$35	4.6	\$40.66	\$0.02
Parenteral Therapy Supplies	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Otic Steroids	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Hydantoins	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Thyroid Hormones	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Central Muscle Relaxants	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Laxative Combinations	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Natural Penicillins	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Aminopenicillins	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Iron	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Stimulant Laxatives	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
<b>Total</b>	<b>4,852</b>	<b>\$1,205,661</b>	<b>22,431.2</b>	<b>\$288.07</b>	<b>\$538.47</b>	<b>2,077</b>	<b>\$143,314</b>	<b>9,602.1</b>	<b>\$79.99</b>	<b>\$64.01</b>

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Exhibit 1b  
Hawaii Medicaid QUEST Behavioral Health Pharmacy Summary by Drug Class  
Data Incurred 1/2008 - 12/2008, Paid Thru 12/2009  
Rates Effective Calendar Year 2013  
All Islands  
Males and Females < 40

Member Months 2,937

Drug Class	Total	Total	Annual	Average	Multi-Source	Total	Total	Annual	Average	Single-Source
	Multi-Source Brand Scripts	Multi-Source Brand Paid	Utilization Per 1,000	Cost Service	Brand Paid PMPM	Single-Source Brand Scripts	Single-Source Brand Paid	Utilization Per 1,000	Cost Service	Brand Paid PMPM
Dibenzapines / Quinolinone Derivatives / Benzisoxazoles	950	\$399,748	4,391.9	\$487.81	\$178.53	822	\$463,998	3,800.2	\$654.38	\$207.23
Antipsychotics - Misc.	-	\$0	-	\$0.00	\$0.00	205	\$74,675	947.7	\$422.29	\$33.35
Anticonvulsants - Misc.	165	\$35,529	762.8	\$249.62	\$15.87	2	\$136	9.2	\$79.07	\$0.06
Selective Serotonin Reuptake Inhibitors (SSRIs)	149	\$15,436	688.8	\$120.10	\$6.89	-	\$0	-	\$0.00	\$0.00
Valproic Acid	273	\$36,469	1,262.1	\$154.86	\$16.29	-	\$0	-	\$0.00	\$0.00
Serotonin-Norepinephrine Reuptake Inhibitors (SNRIs)	96	\$18,565	443.8	\$224.19	\$8.29	39	\$5,575	180.3	\$165.73	\$2.49
Antidepressants - Misc.	19	\$2,698	87.8	\$164.59	\$1.20	-	\$0	-	\$0.00	\$0.00
Anticonvulsants - Benzodiazepines	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Benzodiazepines	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Opioid Antagonists	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Attention-Deficit/Hyperactivity Disorder (ADHD) Agents	-	\$0	-	\$0.00	\$0.00	37	\$6,262	171.1	\$196.19	\$2.80
Butyrophenones	1	\$151	4.6	\$175.21	\$0.07	-	\$0	-	\$0.00	\$0.00
Modified Cyclics	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Alpha-2 Receptor Antagonists (Tetracyclics)	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Amphetamines	-	\$0	-	\$0.00	\$0.00	1	\$282	4.6	\$326.71	\$0.13
Monoamine Oxidase Inhibitors (MAOIs)	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Antianxiety Agents - Misc.	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Antiparkinson Anticholinergics	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Antimanic Agents	2	\$35	9.2	\$20.35	\$0.02	-	\$0	-	\$0.00	\$0.00
Combination Psychotherapeutics	-	\$0	-	\$0.00	\$0.00	7	\$1,994	32.4	\$330.18	\$0.89
Phenothiazines	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Stimulants - Misc.	-	\$0	-	\$0.00	\$0.00	4	\$412	18.5	\$119.39	\$0.18
Antihistamines - Phenothiazines	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Opioid Agonists - Non-Patch	1	\$115	4.6	\$133.21	\$0.05	-	\$0	-	\$0.00	\$0.00
Antihistamines - Ethanolamines	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Tricyclic Agents	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Agents for Chemical Dependency	-	\$0	-	\$0.00	\$0.00	2	\$267	9.2	\$154.82	\$0.12
Smoking Deterrents	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Beta Blockers Non-Selective	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Antiadrenergic Antihypertensives	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
5-HT3 Receptor Antagonists	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Non-Barbiturate Hypnotics	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Insulin	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Azithromycin	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Beta Agonists	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Fluoroquinolones	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Thioxanthenes	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Penicillin Combinations	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Antiparkinson Dopaminergics	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Antihypertensive Combinations	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Imidazole-Related Antifungals	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Nonsteroidal Anti-inflammatory Agents (NSAIDs)	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Antihistamines - Non-Sedating	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Parenteral Therapy Supplies	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Otic Steroids	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Hydantoins	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Thyroid Hormones	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Central Muscle Relaxants	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Laxative Combinations	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Natural Penicillins	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Aminopenicillins	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Iron	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Stimulant Laxatives	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
<b>Total</b>	<b>1,656</b>	<b>\$508,746</b>	<b>7,655.8</b>	<b>\$356.15</b>	<b>\$227.22</b>	<b>1,119</b>	<b>\$553,601</b>	<b>5,173.2</b>	<b>\$573.53</b>	<b>\$247.25</b>

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Exhibit 2a  
Hawaii Medicaid CCS Behavioral Health Cost Model Summary  
Data Incurred 1/2008 - 12/2008, Paid Thru 12/2009  
Rates Effective Calendar Year 2013  
All Islands  
Males and Females 40+

Cost Model Line	Benefit	Total Admits	Total Days/Services	Total Paid	Annual Admits Per 1,000	Average Length of Stay	Annual Utilization Per 1,000	Average Cost Service	Member Months	Paid PMPM
									6,883	
	CCS Claims Data									
	Case Management / Administration Capitation		6,883	\$2,632,867			12,000.0	\$382.50		\$382.50
I99	Inpatient Hospital Total	11	38	\$30,746	19.2	3.45	66.2	\$893.33		\$4.93
O99	Outpatient Hospital Total		820	\$82,152			1,578.3	\$107.93		\$14.20
	Professional									
80101	Drug screen single		140	\$1,010			269.5	\$7.58		\$0.17
85025	Complete cbc w/auto diff wbc		68	\$730			130.9	\$11.29		\$0.12
90772	Ther/proph/diag inj, sc/im		159	\$2,041			306.0	\$13.49		\$0.34
90801	Psy dx interview		211	\$22,726			406.1	\$113.20		\$3.83
90804	Psytx office 20-30 min		217	\$10,544			417.7	\$51.07		\$1.78
90805	Psytx off 20-30 min w/e&m		319	\$16,731			614.0	\$55.12		\$2.82
90806	Psytx off 45-50 min		1,541	\$110,016			2,966.1	\$75.03		\$18.55
90807	Psytx off 45-50 min w/e&m		361	\$27,826			694.9	\$81.01		\$4.69
90808	Psytx office 75-80 min		24	\$2,714			46.2	\$118.84		\$0.46
90809	Psytx off 75-80 w/e&m		76	\$8,954			146.3	\$123.83		\$1.51
90817	Psytx hosp 20-30 min w/e&m		37	\$2,127			71.2	\$60.42		\$0.36
90819	Psytx hosp 45-50 min w/e&m		83	\$6,847			159.8	\$86.70		\$1.15
90847	Family psytx w/patient		26	\$2,090			50.0	\$84.50		\$0.35
90853	Group psychotherapy		160	\$3,766			308.0	\$24.74		\$0.63
90862	Medication management		1,238	\$48,213			2,382.9	\$40.93		\$8.13
90870	Electroconvulsive therapy		14	\$994			26.9	\$74.61		\$0.17
99283	Emergency dept visit		12	\$491			23.1	\$43.04		\$0.08
99284	Emergency dept visit		29	\$2,190			55.8	\$79.37		\$0.37
99285	Emergency dept visit		25	\$2,980			48.1	\$125.28		\$0.50
A0180	Noner transport lodgng recip		428	\$5,570			823.8	\$13.68		\$0.94
A0427	ALS1-emergency		1	\$300			1.9	\$315.30		\$0.05
A0428	BLS		-	\$0			-	\$0.00		\$0.00
A0429	BLS-emergency		15	\$3,904			28.9	\$273.53		\$0.66
H0004	Alcohol and/or drug services		229	\$928			440.8	\$4.26		\$0.16
H0007	Alcohol and/or drug services		769	\$2,999			1,480.2	\$4.10		\$0.51
H0020	Alcohol and/or drug services		1,850	\$4,436			3,560.9	\$2.52		\$0.75
H0036	Comm psy face-face per 15min		24,208	\$49,472			46,595.5	\$2.15		\$8.34
Z9002	Alcohol and/or drug services		56	\$3,356			107.8	\$62.99		\$0.57
Z9004	Comm psy face-face per 15min		71	\$36,144			136.7	\$535.03		\$6.09
Z9008	Psytx off 75-80 w/e&m		15	\$5,788			28.9	\$405.58		\$0.98
All Other	All Other HCPCS		316	\$1,874			608.2	\$6.23		\$0.32
	Professional Total		32,698	\$387,763			62,937.0	\$12.46		\$65.37
Rx	Prescription Drug Total		10,033	\$1,988,775			19,789.5	\$229.80		\$378.96
	Total Medical		43,589	\$2,489,437			84,371.0	\$65.92		\$463.46
	CCS Total Capitation (Including Case Management and Admin)			\$5,122,303						\$845.96

**Exhibit 2b**  
**Hawaii Medicaid QUEST Behavioral Health Pharmacy Summary by Drug Class**  
**Data Incurred 1/2008 - 12/2008, Paid Thru 12/2009**  
**Rates Effective Calendar Year 2013**  
**All Islands**  
**Males and Females 40+**

Member Months 6,883

Drug Class	Total Scripts	Total Paid	Annual Utilization Per 1,000	Average Cost Service	Paid PMPM	Total Generic Scripts	Total Generic Paid	Annual Utilization Per 1,000	Average Cost Service	Generic Paid PMPM
Dibenzapines / Quinolone Derivatives / Benzisoxazoles	3,483	\$1,398,097	6,870.0	\$465.34	\$266.41	350	\$97,161	690.4	\$321.82	\$18.51
Antipsychotics - Misc.	467	\$150,766	921.1	\$374.26	\$28.73	-	\$0	-	\$0.00	\$0.00
Anticonvulsants - Misc.	663	\$111,182	1,307.7	\$194.41	\$21.19	355	\$45,913	700.2	\$149.93	\$8.75
Selective Serotonin Reuptake Inhibitors (SSRIs)	1,125	\$80,982	2,219.0	\$83.45	\$15.43	786	\$44,466	1,550.3	\$65.58	\$8.47
Valproic Acid	396	\$63,572	781.1	\$186.10	\$12.11	49	\$7,298	96.6	\$172.66	\$1.39
Serotonin-Norepinephrine Reuptake Inhibitors (SNRIs)	337	\$49,912	664.7	\$171.70	\$9.51	2	\$117	3.9	\$67.68	\$0.02
Antidepressants - Misc.	317	\$44,164	625.3	\$161.51	\$8.42	246	\$30,481	485.2	\$143.64	\$5.81
Anticonvulsants - Benzodiazepines	522	\$11,124	1,029.6	\$24.71	\$2.12	521	\$11,116	1,027.6	\$24.73	\$2.12
Benzodiazepines	789	\$9,736	1,556.3	\$14.31	\$1.86	789	\$9,736	1,556.3	\$14.31	\$1.86
Opioid Antagonists	46	\$8,961	90.7	\$225.83	\$1.71	42	\$5,832	82.8	\$160.98	\$1.11
Attention-Deficit/Hyperactivity Disorder (ADHD) Agents	32	\$4,316	63.1	\$156.34	\$0.82	-	\$0	-	\$0.00	\$0.00
Butyrophenones	168	\$5,982	331.4	\$41.28	\$1.14	165	\$5,824	325.5	\$40.92	\$1.11
Modified Cyclics	419	\$8,965	826.5	\$24.80	\$1.71	419	\$8,965	826.5	\$24.80	\$1.71
Alpha-2 Receptor Antagonists (Tetracyclics)	84	\$6,601	165.7	\$91.10	\$1.26	84	\$6,601	165.7	\$91.10	\$1.26
Amphetamines	40	\$4,929	78.9	\$142.84	\$0.94	36	\$4,328	71.0	\$139.37	\$0.82
Monoamine Oxidase Inhibitors (MAOIs)	13	\$6,581	25.6	\$586.89	\$1.25	-	\$0	-	\$0.00	\$0.00
Antianxiety Agents - Misc.	131	\$3,832	258.4	\$33.91	\$0.73	131	\$3,832	258.4	\$33.91	\$0.73
Antiparkinson Anticholinergics	320	\$2,182	631.2	\$7.90	\$0.42	320	\$2,182	631.2	\$7.90	\$0.42
Antimanic Agents	97	\$2,300	191.3	\$27.49	\$0.44	97	\$2,300	191.3	\$27.49	\$0.44
Combination Psychotherapeutics	4	\$1,665	7.9	\$482.59	\$0.32	-	\$0	-	\$0.00	\$0.00
Phenothiazines	72	\$3,273	142.0	\$52.70	\$0.62	72	\$3,273	142.0	\$52.70	\$0.62
Stimulants - Misc.	56	\$2,754	110.5	\$57.01	\$0.52	56	\$2,754	110.5	\$57.01	\$0.52
Antihistamines - Phenothiazines	28	\$1,151	55.2	\$47.65	\$0.22	28	\$1,151	55.2	\$47.65	\$0.22
Opioid Agonists - Non-Patch	55	\$1,257	108.5	\$26.50	\$0.24	55	\$1,257	108.5	\$26.50	\$0.24
Antihistamines - Ethanolamines	149	\$1,037	293.9	\$8.07	\$0.20	149	\$1,037	293.9	\$8.07	\$0.20
Tricyclic Agents	48	\$863	94.7	\$20.83	\$0.16	48	\$863	94.7	\$20.83	\$0.16
Agents for Chemical Dependency	8	\$489	15.8	\$70.91	\$0.09	7	\$345	13.8	\$57.21	\$0.07
Smoking Deterrents	1	\$182	2.0	\$211.45	\$0.03	1	\$182	2.0	\$211.45	\$0.03
Beta Blockers Non-Selective	25	\$401	49.3	\$18.59	\$0.08	25	\$401	49.3	\$18.59	\$0.08
Antiadrenergic Antihypertensives	43	\$305	84.8	\$8.24	\$0.06	43	\$305	84.8	\$8.24	\$0.06
5-HT3 Receptor Antagonists	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Non-Barbiturate Hypnotics	66	\$425	130.2	\$7.46	\$0.08	66	\$425	130.2	\$7.46	\$0.08
Insulin	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Azithromycin	3	\$117	5.9	\$45.09	\$0.02	3	\$117	5.9	\$45.09	\$0.02
Beta Agonists	8	\$106	15.8	\$15.42	\$0.02	8	\$106	15.8	\$15.42	\$0.02
Fluoroquinolones	1	\$88	2.0	\$102.55	\$0.02	-	\$0	-	\$0.00	\$0.00
Thioxanthenes	2	\$116	3.9	\$67.24	\$0.02	2	\$116	3.9	\$67.24	\$0.02
Penicillin Combinations	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Antiparkinson Dopaminergics	1	\$81	2.0	\$94.04	\$0.02	-	\$0	-	\$0.00	\$0.00
Antihypertensive Combinations	1	\$66	2.0	\$76.11	\$0.01	-	\$0	-	\$0.00	\$0.00
Imidazole-Related Antifungals	1	\$17	2.0	\$19.87	\$0.00	1	\$17	2.0	\$19.87	\$0.00
Nonsteroidal Anti-inflammatory Agents (NSAIDs)	4	\$58	7.9	\$16.71	\$0.01	4	\$58	7.9	\$16.71	\$0.01
Antihistamines - Non-Sedating	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Parenteral Therapy Supplies	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Otic Steroids	1	\$29	2.0	\$33.20	\$0.01	1	\$29	2.0	\$33.20	\$0.01
Hydantoins	1	\$28	2.0	\$32.01	\$0.01	1	\$28	2.0	\$32.01	\$0.01
Thyroid Hormones	2	\$27	3.9	\$15.84	\$0.01	-	\$0	-	\$0.00	\$0.00
Central Muscle Relaxants	1	\$20	2.0	\$23.13	\$0.00	1	\$20	2.0	\$23.13	\$0.00
Laxative Combinations	1	\$19	2.0	\$22.43	\$0.00	1	\$19	2.0	\$22.43	\$0.00
Natural Penicillins	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Aminopenicillins	1	\$10	2.0	\$11.72	\$0.00	1	\$10	2.0	\$11.72	\$0.00
Iron	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Stimulant Laxatives	1	\$5	2.0	\$5.53	\$0.00	1	\$5	2.0	\$5.53	\$0.00
<b>Total</b>	<b>10,033</b>	<b>\$1,988,775</b>	<b>19,789.5</b>	<b>\$229.80</b>	<b>\$378.96</b>	<b>4,966</b>	<b>\$298,670</b>	<b>9,795.1</b>	<b>\$69.72</b>	<b>\$56.91</b>

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Exhibit 2b  
Hawaii Medicaid QUEST Behavioral Health Pharmacy Summary by Drug Class  
Data Incurred 1/2008 - 12/2008, Paid Thru 12/2009  
Rates Effective Calendar Year 2013  
All Islands  
Males and Females 40+

Member Months 6,883

Drug Class	Total	Total	Annual	Average	Multi-Source	Total	Total	Annual	Average	Single-Source
	Multi-Source Brand Scripts	Multi-Source Brand Paid	Utilization Per 1,000	Cost Service	Brand Paid PMPM	Single-Source Brand Scripts	Single-Source Brand Paid	Utilization Per 1,000	Cost Service	Brand Paid PMPM
Dibenzapines / Quinolinone Derivatives / Benzisoxazoles	1,712	\$670,870	3,376.8	\$454.28	\$127.83	1,421	\$630,065	2,802.8	\$514.02	\$120.06
Antipsychotics - Misc.	-	\$0	-	\$0.00	\$0.00	467	\$150,766	921.1	\$374.26	\$28.73
Anticonvulsants - Misc.	306	\$64,996	603.6	\$246.24	\$12.38	2	\$273	3.9	\$158.32	\$0.05
Selective Serotonin Reuptake Inhibitors (SSRIs)	339	\$36,516	668.7	\$124.87	\$6.96	-	\$0	-	\$0.00	\$0.00
Valproic Acid	347	\$56,274	684.4	\$188.00	\$10.72	-	\$0	-	\$0.00	\$0.00
Serotonin-Norepinephrine Reuptake Inhibitors (SNRIs)	172	\$27,597	339.3	\$186.00	\$5.26	163	\$22,198	321.5	\$157.87	\$4.23
Antidepressants - Misc.	71	\$13,683	140.0	\$223.42	\$2.61	-	\$0	-	\$0.00	\$0.00
Anticonvulsants - Benzodiazepines	1	\$8	2.0	\$9.68	\$0.00	-	\$0	-	\$0.00	\$0.00
Benzodiazepines	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Opioid Antagonists	-	\$0	-	\$0.00	\$0.00	4	\$3,129	7.9	\$906.78	\$0.60
Attention-Deficit/Hyperactivity Disorder (ADHD) Agents	-	\$0	-	\$0.00	\$0.00	32	\$4,316	63.1	\$156.34	\$0.82
Butyrophenones	3	\$159	5.9	\$61.30	\$0.03	-	\$0	-	\$0.00	\$0.00
Modified Cyclics	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Alpha-2 Receptor Antagonists (Tetracyclics)	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Amphetamines	-	\$0	-	\$0.00	\$0.00	4	\$601	7.9	\$174.10	\$0.11
Monoamine Oxidase Inhibitors (MAOIs)	-	\$0	-	\$0.00	\$0.00	13	\$6,581	25.6	\$586.89	\$1.25
Antianxiety Agents - Misc.	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Antiparkinson Anticholinergics	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Antimanic Agents	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Combination Psychotherapeutics	-	\$0	-	\$0.00	\$0.00	4	\$1,665	7.9	\$482.59	\$0.32
Phenothiazines	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Stimulants - Misc.	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Antihistamines - Phenothiazines	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Opioid Agonists - Non-Patch	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Antihistamines - Ethanolamines	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Tricyclic Agents	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Agents for Chemical Dependency	-	\$0	-	\$0.00	\$0.00	1	\$144	2.0	\$166.80	\$0.03
Smoking Deterrents	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Beta Blockers Non-Selective	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Antiadrenergic Antihypertensives	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
5-HT3 Receptor Antagonists	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Non-Barbiturate Hypnotics	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Insulin	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Azithromycin	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Beta Agonists	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Fluoroquinolones	-	\$0	-	\$0.00	\$0.00	1	\$88	2.0	\$102.55	\$0.02
Thioxanthenes	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Penicillin Combinations	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Antiparkinson Dopaminergics	1	\$81	2.0	\$94.04	\$0.02	-	\$0	-	\$0.00	\$0.00
Antihypertensive Combinations	1	\$66	2.0	\$76.11	\$0.01	-	\$0	-	\$0.00	\$0.00
Imidazole-Related Antifungals	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Nonsteroidal Anti-inflammatory Agents (NSAIDs)	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Antihistamines - Non-Sedating	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Parenteral Therapy Supplies	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Otic Steroids	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Hydantoins	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Thyroid Hormones	2	\$27	3.9	\$15.84	\$0.01	-	\$0	-	\$0.00	\$0.00
Central Muscle Relaxants	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Laxative Combinations	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Natural Penicillins	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Aminopenicillins	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Iron	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
Stimulant Laxatives	-	\$0	-	\$0.00	\$0.00	-	\$0	-	\$0.00	\$0.00
<b>Total</b>	<b>2,955</b>	<b>\$870,278</b>	<b>5,828.6</b>	<b>\$341.42</b>	<b>\$165.83</b>	<b>2,112</b>	<b>\$819,826</b>	<b>4,165.8</b>	<b>\$450.00</b>	<b>\$156.22</b>

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