

IMPACT OF THE AFFORDABLE CARE ACT ON THE HAWAI'I MARKETPLACE

HAWAI'I DEPARTMENT OF COMMERCE & CONSUMER AFFAIRS, INSURANCE DIVISION







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Executive Summary

The Affordable Care Act (ACA) represents the most significant government expansion and regulatory overhaul of the US healthcare system since the passage of Medicare and Medicaid in 1965. This sweeping legislation is designed to reform the healthcare system and ensure access to affordable coverage, regardless of one's health status. It has the primary goals of reducing both the number of uninsured and the overall cost of healthcare, while improving outcomes and streamlining the delivery of healthcare.

The ACA provides funding assistance for the planning and establishment of the American Health Benefit Exchanges (the Exchanges). Under the ACA, each state may elect to set up an Exchange that will create a new marketplace for health insurance. The Exchanges will offer individuals and small employers a choice of health plan options, oversee the certification of health plans offering coverage within the Exchanges, calculate premium subsidies and provide information to assist consumers in their purchasing decisions. It is believed that the Exchanges will also promote competition among carriers.

The Hawai'i Department of Commerce & Consumer Affairs (DCCA) engaged Oliver Wyman Actuarial Consulting, Inc. (Oliver Wyman) to assist in assessing the impact of the ACA on the Hawai'i insurance marketplace. As part of our work, one of the first tasks was to conduct background research required to assess Hawai'i's current population and health insurance marketplace. The results of that research, which were presented in a report dated September 4, 2012¹, serve as the basis for many of the inputs into the actuarial modeling that is the focus of this report.

Key Provisions of the ACA Impacting the Hawai'i Market

With the passage of the ACA, there are many changes scheduled to occur within the insurance marketplace, including changes that will impact eligibility criteria, covered benefits, patient cost sharing, premium rates and more. At any point in time, there will be individuals moving in and out of the Exchanges, known in Hawai'i as the Hawai'i Health Connector (the Connector) and between various coverage statuses (e.g., between Medicaid and uninsured) for a variety of reasons. This movement will be driven not only by changes in individuals' characteristics (e.g., health status or employment status) and eligibility status for various types of coverage (e.g., Medicaid, Medicare), but also changes in employers' behavior regarding their decision to offer coverage to their employees, which may be mitigated by Hawai'i's Prepaid Health Care Act (PHCA) mandating employer sponsored health insurance be provided under certain conditions.

In addition to these traditional drivers of coverage, there are many new provisions in the ACA that will impact the demand for health insurance. These include the expansion of Medicaid eligibility, federal premium and cost sharing subsidies offered inside the Individual Exchange, individual

¹ Josh Sober, FSA, MAAA and Tammy Tomczyk, FSA, MAAA. "Current Status of Insurance Coverage in the State of Hawai'i." September 4, 2012.

penalties for not taking coverage, employer penalties for not offering coverage, and guarantee issue of coverage in the individual and small group markets, among other things.

The option for states to establish a Basic Health Program (BHP) for individuals with incomes between 138% and 200% FPL² also impacts the potential enrollment in the Individual Exchange within the Connector. If a BHP is established, individuals in this income range would not be eligible to enroll in the Individual Exchange and receive subsidized insurance coverage. These individuals would instead be eligible to enroll through the State-run BHP and be charged premiums no greater than those they would have otherwise been required to pay in the Individual Exchange. A discussion of the key provisions of the ACA that will impact benefits, premiums and enrollment can be found in Section 5 of this report.

Model Design, Methodology and Assumptions

Oliver Wyman's Healthcare Reform Micro-simulation Model (Oliver Wyman's HRM Model) was used to project potential premium levels and enrollment in various markets under various reform scenarios. The model is a tool for estimating potential behavioral and economic effects of public policies on decision-making units (individuals, households, and employers) as well as insurance carriers and the government. The model is scenario based and well suited to test the sensitivity of various assumptions to assist policymakers in making many key decisions, including but not limited to whether or not to merge the individual and small group markets, and whether or not to establish a BHP. A detailed description of the model is provided in Appendix A.

The Oliver Wyman HRM Model is comprised of three primary modules. The first module generates a synthetic population made up of individuals, families, employer groups and government programs. The second module uses the synthetic population to calibrate the model by solving for various model parameters, such that the model reproduces Hawai'i's current insurance marketplace. Using the simulated population, the solved-for model parameters and many other economic variables, the third module introduces the changes to the marketplace that will come about as a result of the ACA. Using these marketplace changes as assumptions, the model projects the migration of individuals among the various coverage statuses that will be available to them in the post-reform insurance marketplace.

The model evaluates all options available to the health insurance unit (HIU) for obtaining health insurance (i.e., they select among various insurance options with various premiums and out-of-pocket (OOP) cost sharing, public programs or choose to remain uninsured), and assumes the HIU elects the option with the highest economic utility. The utility function that we have chosen to use is similar to utility function that The RAND Corporation uses in its model,³ but we have calibrated it to reproduce Hawai'i's current insurance marketplace. In modeling HIU behavior, we chose a utility function over an elasticity function (which postulates that behavior can be modeled on changes to historical prices) because the choices consumers will face in the reformed market are, in many cases, significantly different from those they have faced in the past.

² Section 1331 of the ACA.

³ The utility function utilized by The RAND Corporation was previously justified by research performed by Goldman, Buchanan and Keeler (2000).

While the individual purchasing decision will change significantly with the introduction of the Connector, premium and cost-sharing subsidies, adjusted community rating and the individual mandate, the decision from the employer perspective will essentially remain the same. That is, the employer will be subject to the provisions of the PHCA and the attendant risk of not offering coverage. Based on information we received from the State, we have assumed that the PHCA will compel small groups (currently offering coverage) to remain in the market. Therefore, we have assumed that the employer participation rates in the employer-sponsored insurance (ESI) market will not change.

A key underlying assumption of the model is a steady State population. By this we mean that the underlying mix of the population does not change over the projection period with respect to most variables. Our modeling assumes that:

- The distribution of the population by income remains unchanged; however incomes themselves are modeled to increase each year based on salary inflation assumptions
- The population is projected to grow each year. However, significant migration of individuals of a specific age or gender into or out of Hawai'i is not assumed to occur
- The distribution of the overall population by health status, occupation, and family size are assumed to remain relatively constant through 2018, with the exception of the impact that aging of the population will have. The steady state assumption does not mean that the health status for specific individuals will not change over time, only that the overall distribution by specific subsets of the population (e.g., by FPL and age) does not change. Similarly, the family composition of a given household may change; however it is assumed that the overall distribution of the State's population by family composition does not change.
- The overall rate of employment over the period 2014 through 2018 is assumed to be consistent with current levels

Another set of key assumptions relates to carrier participation and product offerings in the individual and small group markets in Hawai'i. We made the following assumptions in this regard:

- All major carriers participating in the State's individual and small group markets during the base period continue to participate in 2014 and beyond
- Any new carriers that enter the market will offer products with benefits and premiums similar to products and premiums that will be offered in 2014 by carriers currently participating in the market
- Carriers will offer products at all metallic levels
- All carriers participate in markets both inside and outside the Connector
- Carriers charge the same premium rates inside and outside of the Connector, for the same products, as required by the ACA
- Products offered in the Individual and SHOP Exchanges are similar to products offered
 outside the Individual and SHOP Exchanges, and premium rates are the same inside and
 outside the Exchanges for the same benefit packages

 Carriers' products are priced based on the pooled experience of their entire individual block and their entire small group block, as required by the ACA. In the scenario where a merged market is modeled, the pooled individual and small group experience is used to develop rates

Based on discussions with DCCA, we have assumed that the PHCA will not be diminished by the ACA, and small employers offering coverage today will continue to do so in 2014. For a complete description of the underlying assumptions employed in the modeling, please see Appendix C.

Key Data Sources Relied Upon

A considerable amount of data from various sources was gathered and synthesized to populate the HRM Model, which was then calibrated to reproduce Hawai'i's 2010 population and insurance marketplace, prior to projecting estimated enrollment and premium from 2014 through 2018.

Our primary source for these data was the 2010 American Community Survey (ACS), the most recently available survey data at the time our analysis was performed. The ACS provided information on each respondent's age, gender, income, insurance coverage type, employment status, geographic place of work, geographic place of residence, industry and more.

This information was supplemented with additional information from the Current Population Survey (which provided morbidity by coverage status, FPL and other characteristics), the Medical Expenditure Panel Survey (employer offer rates, employee take-up rates and premium contribution rates by tier), carriers' 2011 statutory financial statements (premium, claims and membership by market), Dunn & Bradstreet (distributions of group size by major industry), a data call made to the primary carriers currently doing business in Hawai'i (membership, premium, claims, actuarial values, current rating and underwriting practices), and information from Hawai'i's Department of Human Services (DHS) (enrollment by aid category, claims). We also reviewed updated 2011 ACS information which became available as we were completing our analysis to ensure that it did not significantly impact the results of our modeling. In addition, several phone conversations were held with various key stakeholders who provided valuable information, guidance, and input into many of the key assumptions employed. These stakeholders included, but were not necessarily limited to, DCCA, DHS, the Department of Labor and Industrial Relations as well as representatives from the Connector and the Governor's office.

Modeling Results

To understand how certain design scenarios could impact enrollment and premiums in the Individual and SHOP Exchanges, we used the Oliver Wyman HRM Model to test potential results for four scenarios. The four scenarios are based on the ACA default small group definition of employers with up to 100 employees and vary based on whether the individual and small group markets are merged, and whether a BHP is established. The focus of the following model findings is on the sensitivity of results under these scenarios.

As previously described, the model is based upon the assumption that consumers will select the option that maximizes the utility for the HIU. Employers' decisions to offer or continue offering coverage is based on a demand elasticity curve. As previously noted, we engaged in several discussions with various key stakeholders and DCCA ultimately informed us that our modeling should assume that small employers not subject to the shared responsibility penalty under the ACA would continue to offer coverage due to the strength of the PHCA.

Significant rate shock for some individuals in Hawai'i will result in dropped coverage or movement among coverage levels in the new market, as younger and healthier consumers react to premium increases associated with the new rating rules. Other consumers who are currently not covered may be attracted to the marketplace as premiums become more affordable for them, or as financial penalties associated with the individual mandate reduces the utility associated with remaining uninsured. Finally, other consumers, many of whom will be newly eligible for Medicaid or newly aware of the program, will leave the insurance market to participate in that program.

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The State requested scenarios that test the impact of merging the small group and individual markets, as well as the impact of establishing a BHP. A merger of the small group and individual markets would require carriers both to blend the experience in the two markets for the purposes of premium development as well as to apply a consistent set of rating rules. Carriers doing business in one market would by default be required to participate in both. The first scenario presents the results in the case where separate pools are maintained for the individual and small group markets. and a BHP is not established. We refer to this as our Baseline Reform Scenario. We then present three alternate scenarios, one where the individual and small group markets are merged, one where a BHP is established, and one where both of these changes occur.

Baseline Reform Scenario

In the Baseline Reform Scenario the ACA definition of a small group will include groups with up to 100 employees starting in 2014. In addition, separate individual and small group markets are maintained, and a BHP is not established. The projected membership in various market segments of interest are shown in the table and corresponding figure below.

Table 1.1: Membership by Key Market Segment and Year

Market	2010	2012	2014	2015	2016	2017	2018
Individual - Subsidy Eligible	0	0	51,000	54,000	57,000	58,000	60,000
Individual - Non-Subsidy Eligible	44,000	46,000	48,000	53,000	56,000	57,000	60,000
Small Group⁴	151,000	148,000	207,000	210,000	212,000	213,000	215,000
Mid Group	63,000	63,000	0	0	0	0	0
Medicaid/CHIP (Excl. Duals)	193,000	220,000	250,000	253,000	254,000	251,000	250,000
BHP	0	0	0	0	0	0	0
Uninsured	104,000	99,000	46,000	39,000	35,000	36,000	34,000

⁴ Small group is defined as up to 50 employees in 2010 and up to 100 eligible employees in 2014 and later years.

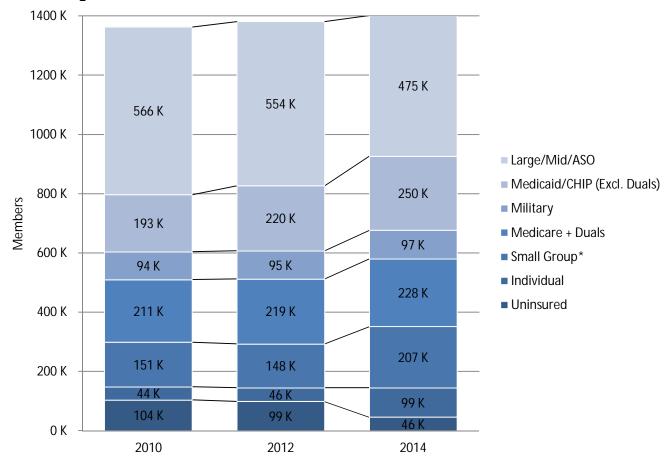


Figure 1.1: Pre- and Post-Reform Insurance Market Estimates in Hawai'i

*Small group is defined as up to 50 employees in 2010 and 2012 and up to 100 employees in 2014 and later years; Mid-Individual (51-100) is included in Large Individual in 2010 and in Small group in 2014 and later years.

The average morbidity in the individual market is projected to increase significantly (by 38%) and remain relatively unchanged in the small group market. Improved morbidity is projected in the uninsured population as those who are uninsured with the poorest health status move to the Connector, once the current barrier of medical underwriting is removed. In addition, the lowest income uninsured will benefit the most from premium subsidies, and are currently in poorer health than the uninsured with higher incomes, all else equal.

This change in morbidity, when combined with enhanced benefits, additional taxes fees, and an offset resulting from the Transitional Reinsurance Program results in an average increase in premiums in the individual market of 50% between 2010 and 2014. It is important to note that in addition to four years of trend, this increase in average premium also reflects changes in the average demographics of those enrolled, as well as a significant buy-down in the actuarial value of benefits. The various components of this change in premium can be seen below.

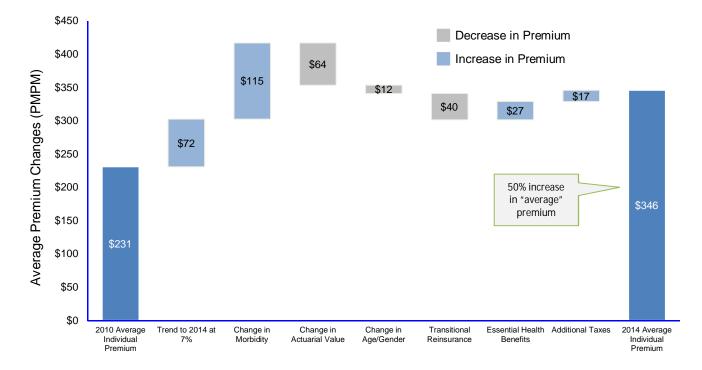


Figure 1.2 Key Drivers of Average Increase in Individual Market Premiums

Transitional reinsurance includes assessment and recoveries; additional taxes includes insurer, pharmaceutical and medical device taxes; addition of prescription drugs and maternity coverage to those currently not covering these services is included in the "change in actuarial value"

The following tables present the estimated average monthly cost a 40-year old non-smoker would have to pay for subsidized premium and cost sharing in the Connector, at various income levels, over the period 2014 through 2018. The premiums were calculated using the applicable percent of income as outlined in the ACA; cost sharing amounts are based on microsimulation modeling performed to estimate average claims costs for a 40-year old with average morbidity in the individual market with reduced cost sharing requirements for the applicable income level.

Table 1.2: Subsidized Premium and Cost Sharing in the Connector - 2014-2018

Income as a					
% of FPL	2014	2015	2016	2017	2018
100%	\$47	\$50	\$51	\$54	\$57
138%	\$75	\$78	\$81	\$84	\$87
144%	\$83	\$87	\$89	\$93	\$96
150%	\$121	\$126	\$130	\$136	\$143
175%	\$154	\$160	\$165	\$172	\$179
200%	\$194	\$201	\$207	\$215	\$222
250%	\$324	\$336	\$346	\$360	\$373
300%	\$428	\$443	\$456	\$473	\$489
400%	\$534	\$551	\$566	\$587	\$604

Table 1.3: Subsidized Premium and Cost Sharing as a % of Income - 2014-2018

Income as a % of FPL	2014	2015	2016	2017	2018
100%	4.2%	4.4%	4.4%	4.5%	4.7%
138%	4.9%	5.0%	5.0%	5.1%	5.2%
144%	5.2%	5.3%	5.3%	5.4%	5.5%
150%	7.2%	7.4%	7.5%	7.6%	7.9%
175%	7.9%	8.1%	8.1%	8.2%	8.5%
200%	8.7%	8.9%	8.9%	9.0%	9.2%
250%	11.7%	11.8%	11.9%	12.1%	12.3%
300%	12.8%	13.0%	13.1%	13.2%	13.5%
400%	12.0%	12.1%	12.2%	12.3%	12.5%

We note the ACA provides that premium and cost sharing subsidies for lawfully present immigrants with incomes below 100% FPL who are ineligible for Medicaid due to not meeting minimum residency requirements are calculated as if their income were 100% FPL. Therefore, they would have expected costs equal to those in the 100% FPL row in the tables above.

While our economic and actuarially based HRM model is well suited for projecting premiums, claims and coverage take-up, it is not designed to model decisions which are non-financial in nature. Given premiums for comparable coverage must be the same inside and outside of the Connector, the decision to take-up coverage through the Connector or obtain coverage in the outside market is not a financial one for those ineligible for subsidies. The following table presents long-term estimates under low take-up and high take-up scenarios. All subsidy eligible individuals are projected to take coverage through the Connector in both scenarios. In the low take-up scenario 25% of the non-subsidy eligible individuals and small groups are projected to enroll through the Connector; in the high take-up scenario 50% of the non-subsidy eligible individuals and small groups are projected to enroll through the Connector.

Table 1.4: Projected Enrollment in the Connector

Market	2014	2015	2016	2017	2018
		Low T	ake-up Sc	enario	
Individual - Subsidy Eligible	51,000	54,000	57,000	58,000	60,000
Individual - Non-Subsidy Eligible	12,000	13,250	14,000	14,250	15,000
Small Group	51,750	52,500	53,000	53,250	53,750
Total	114,750	119,750	124,000	125,500	128,750
		High T	ake-up Sc	enario	
Individual - Subsidy Eligible	51,000	54,000	57.000	58.000	60,000
			- ,	,	00,000
Individual - Non-Subsidy Eligible	24,000	26,500	28,000	28,500	30,000
Individual - Non-Subsidy Eligible Small Group	24,000 103,500	26,500 105,000	28,000 106,000		,

⁵ Sections 1401(c)(1)(B)(ii) and 1402(b)(2) of the ACA.

As a result of the increased take-up of coverage in the individual market and expanded Medicaid eligibility, the uninsured rate is projected to decline significantly. In 2014, the first year after major reforms take effect, just over 3% of the population is projected to remain uninsured. The modeling indicates that there is potential for additional improvement in the uninsured rate through 2016 after at which point it stabilizes. The primary driver of the additional improvement in the uninsured rate between 2014 and 2016 is the phasing in of the penalty under the individual mandate.

Table 1.5: Uninsured Rate

Year	Uninsured Rate
2010	7.8%
2014	3.2%
2015	2.7%
2016	2.4%
2017	2.4%
2018	2.3%

These projected uninsured rates are much lower than projections nationwide; however, this is because the current uninsured rate in Hawai'i is roughly half the current uninsured rate nationwide. Hawai'i's PHCA and the State's large military presence make Hawai'i unique from other states and contribute to this lower uninsured rate.

Alternate Reform Scenario 1

In this scenario it is assumed that the State decides to merge the individual and small group risk pools into one. Merging these markets would mean that the rates for individual and small group products would be based on the combined morbidity of both markets, which would have the effect of spreading risk across a wider pool of participants and potentially providing greater rate stability for all. Projected enrollment in the individual market is approximately 4% higher in the individual market if the individual and small group risk pools are merged, and enrollment in the small group market is relatively unchanged.

Table 1.6: Membership by Market Key Segment and Year

Market	2010	2014	2015	2016	2017	2018
Individual - Subsidy Eligible	0	50,000	53,000	55,000	57,000	59,000
Individual - Non-Subsidy Eligible	44,000	53,000	57,000	59,000	60,000	63,000
Small Group ⁶	151,000	207,000	209,000	211,000	212,000	214,000
Mid Group	63,000	0	0	0	0	0
Medicaid/CHIP (Excl. Duals)	193,000	250,000	253,000	254,000	251,000	250,000
BHP	0	0	0	0	0	0
Uninsured	104,000	43,000	38,000	33,000	34,000	33,000

Premium rates would be 7.1% lower in the individual market in this scenario. It is important to note that only those over 400% FPL would enjoy the savings of the lower premiums since premiums for

⁶ Small group is defined as up to 50 employees in 2010 and up to 100 eligible employees in 2014 and later years

subsidized individuals are tied to income and are independent of actual premium rates in the market. Supporting the lower premium rates in the individual market are higher premium rates in the small group market. Small group premiums are estimated to be 4.1% higher if the markets were merged.

The figure below shows the lower average morbidity of the merged market as compared to the average morbidity in the individual market in 2014 under the baseline scenario; the figure also shows an increase in the morbidity used to develop rates for the small group market. The average morbidity of the uninsured and Medicaid populations are relatively unchanged in this scenario as compared to the baseline scenario.

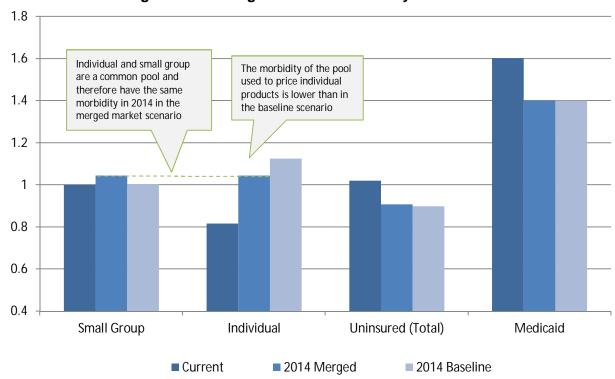


Figure 1.3: Change in Relative Morbidity of the Markets

The uninsured rate in the merged market scenario improves slightly over the separate markets modeled in the baseline scenario.

Table 1.7: Uninsured Rate

Year	Baseline	Merged Markets
2010	7.8%	7.8%
2014	3.2%	3.0%
2015	2.7%	2.6%
2016	2.4%	2.3%
2017	2.4%	2.3%
2018	2.3%	2.2%

There are several potential advantages and disadvantages of merging the risk pools. These include but are not limited to the following.

Potential Advantages of Merging the Risk Pools

- A larger pool is created over which a carrier's costs are spread, which could lead to greater stability of rates
- Rates in the individual market are anticipated to decrease 7.1% in a merged market (however it
 is important to note that only non-subsidy eligible individuals will realize savings from these
 reduced premiums)
- The same products are required to be sold to both individuals and small groups, which could reduce administrative expenses for carriers with one product portfolio
- Individuals leaving group coverage would able to maintain their coverage if the same products are offered in the individual market
- Consumer choice may be increased among carriers since carriers would be required to participate in both the individual and small group markets

Potential Disadvantages of Merging the Risk Pools

- Rates for small employers are anticipated to increase 4.1%, all else equal. This could lead to small employers with more favorable experience electing to self-insure which would put further upward pressure on fully insured rates
- Carriers specializing in only one market today (individual or small group) may decide not to participate if required to participate in both markets
- A merged market may make it more difficult to tailor products, customer service, and marketing to meet the respective needs of the respective markets
- Carriers would only be allowed to change rates in the small group market once per year
- The same products are required to be offered to both individuals and small groups, which could work to increase administrative difficulties for the Connector given the PHCA
- Carriers not currently in the Hawai'i market may view a merged market to be burdensome and as a result may elect not to enter the market
- Merging the markets may require changes to administrative systems for both carriers and the State

Alternate Reform Scenario 2

In this scenario it is assumed that the State decides to establish a BHP. Individuals covered through a BHP would be comprised of adults with incomes between 138% and 200% FPL; however legal residents with incomes below this level would also qualify. Therefore, in this scenario these individuals would not be eligible to enroll in individual coverage through the Connector. Approximately 25,000 individuals are projected to enroll in the BHP. Projected enrollment in the individual market is approximately 20% lower (20,000 members) in the individual market than in the baseline scenario, and enrollment in the small group market is relatively unchanged.

Market 2010 2014 2015 2016 2017 2018 Individual - Subsidy Eligible 26,000 26,000 26,000 27,000 28,000 0 Individual - Non-Subsidy Eligible 44.000 53,000 57.000 60.000 63,000 68.000 Small Group8 151,000 207,000 210,000 211,000 213,000 215,000 Mid Group 63,000 0 0 0 0 0 Medicaid/CHIP (Excl. Duals) 250.000 253,000 254.000 251.000 193.000 250.000 BHP 25,000 27,000 27,000 26,000 24.000 33,000 104.000 40.000 36,000 34.000 Uninsured 33.000

Table 1.8: Membership by Key Market Segment and Year

Morbidity in the individual market is significantly lower in this scenario. The morbidity of those with incomes under 200% FPL who enrolled in the Individual Exchange under the baseline scenario is significantly higher than the morbidity of those with incomes above 200% FPL. Therefore, if a BHP were established, removing those individuals with higher morbidity from the individual market risk pool has a favorable impact on the individual market competitiveness. Rates in the individual market are projected to be 8.6% lower in this scenario than under the baseline scenario.

Removing individuals from the Connector is certain to impact its sustainability, as well as its leverage and ability to secure low cost coverage for residents while driving quality and efficiency in the State's healthcare delivery system. Our modeling found that with a BHP the number of subsidy eligible individuals enrolled in the Connector in 2014 would be roughly half the number if a BHP were not established, decreasing from 51,000 to 26,000. This does not mean total enrollment in the Connector would be reduced to half as there would be other non-subsidy eligible individuals and small groups that would also be enrolled in either scenario.

⁷ At this time it is uncertain whether the COFA population would be eligible for the BHP. The State is currently working with both HHS and the IRS to determine this population's eligibility.

⁸ Small group is defined as up to 50 employees in 2010 and up to 100 eligible employees in 2014 and later years

⁹ This result is consistent with analysis performed by the Kaiser Family Foundation which estimates that roughly half of those eligible for premium and cost sharing subsidies nationwide are below 200% FPL. http://www.kff.org/healthreform/upload/8283.pdf p.9.

Table 1.9: Projected Enrollment in the Connector

Market	2014	2015	2016	2017	2018
		Low T	ake-up Sc	enario	
Individual - Subsidy Eligible	26,000	26,000	26,000	27,000	28,000
Individual - Non-Subsidy Eligible	13,000	14,250	15,000	15,750	17,000
Small Group	52,000	52,500	52,750	53,250	53,750
Total	91,000	92,750	93,750	96,000	98,750
		High T	ake-up Sc	enario	
Individual - Subsidy Eligible	26,000	26,000	26,000	27,000	28,000
Individual - Non-Subsidy Eligible	26,000	28,500	30,000	31,500	34,000
Small Group	104,000	105,000	105,500	106,500	107,500
Total	156,000	159,500	161,500	165,000	169,500

Alternate Reform Scenario 3

The final scenario modeled includes the same underlying assumptions as the baseline scenario, with the exception that both the individual and small group markets are merged and a BHP is established. The lower morbidity that results from merging the individual market with the small group market and the favorable impact on individual market premiums when removing those with incomes under 200% FPL and moving them to a BHP are both present in this scenario.

As with Alternate Reform Scenario 2 (BHP with separate individual and small group markets), the size of the individual market is significantly lower due to the presence of the BHP. Premiums in the individual market are 10.1% lower in this scenario than in the baseline scenario, as compared to being 7.1% lower in Alternate Reform Scenario 1 and 8.6% lower in Alternate Reform Scenario 2. These even lower premium rates result in slightly more individuals with incomes over 400% FPL taking up coverage. The uninsured rate improves only slightly, and the impact on the Connector is essentially the same, as compared to Alternate Reform Scenario 2.

Increased Participation in the Connector

In order to ensure viability of the Connector, sufficient enrollment must be obtained. It will be important that an adequate mix of affordable plan choices be made available within the Connector in order to incentivize individuals and small groups who are not eligible for subsidies to participate. If broad choices at affordable rates cannot be found, these individuals and small groups will look to additional options made available in the outside market. Premium and cost sharing subsidies will draw many into the Individual Exchange; however, there are no comparable financial incentives to draw small groups into the SHOP Exchange with the exception of small business tax credits, which are temporary and only apply to a small number of groups.

There are several key items the State could consider to try to maximize enrollment in the Connector. These items, which are discussed in more detail in the report, include:

- Attract a sufficient number of carriers
- Ensure a broad selection of product choices
- Ensure easy access to information
- Engage brokers and agents
- Consider offering value-added services inside the Connector

Adverse Selection and Options for Mitigation

There are three primary types of adverse selection that have the potential to influence Hawai'i's individual and small group health insurance marketplace in the reformed environment:

- Adverse selection against the market If healthier individuals and groups choose not to participate in the fully insured market, either by going uninsured or self-insuring
- Adverse selection against the Connector If its design causes the Exchange to be more attractive to higher risk populations while healthier populations stay in the outside market
- Selection among carriers and products offered inside the Connector

Adverse selection against the market is likely to occur as a result of guarantee issue and adjusted community rating (ACR) rules. This could cause groups and individuals to delay the purchase of insurance until they need it. Without enough healthy individuals in the risk pool, premiums will be higher. Another potential source of selection against the small group market is self-insurance.

Adverse selection against the Connector could result if the Connector disproportionately attracts less healthy enrollees than the outside market. This type of environment could discourage carriers from offering coverage through the Connector, which would reduce consumer choice and threaten the ongoing viability of the Connector. There are a number of ACA provisions designed to discourage this type of selection, but there remain a number of areas that could contribute to it. Adverse selection against the Connector can occur as a result of:

- Product offerings designed to attract healthy individuals and offered only outside the Connector
- Narrow networks designed to attract healthy individuals outside the Connector
- Grandfathered plans outside the Connector, which will typically be comprised of healthier individuals, as they will benefit most from pre-ACA rating rules
- Self-funded Multiple Employer Welfare Arrangements (MEWAs) outside the Connector enrolling health groups willing to self-insure
- Exchange fees assessed only to policies sold inside the Connector
- Employee contributions set at levels such that they will be deemed unaffordable for low income employees in poor health

Adverse selection can also occur within the Connector. Greater choice afforded to individuals will likely result in healthy individuals selecting low-cost Bronze plans and less healthy individuals selecting higher cost Gold and Platinum plans. Given that plans must be priced based on the entire pool of individual business, this type of selection will lead to Bronze plans being over priced for the healthy individuals, but by less than the Gold and Platinum plans are underpriced for the less health individuals.

As noted earlier, the ACA includes a number of provisions designed to discourage adverse selection, but many sources of selection remain. Possible actions the State could take to mitigate these sources of adverse selection include:

- Eliminate the outside market
- Extend some or all QHP requirements to the outside market
- Require carriers to participate in the Connector
- Require carriers participating only in the outside market to offer Gold and Silver products (Only Gold products may apply to the small group market in Hawai'i for products to be PHCA compliant)
- Require carriers participating in the Connector to offer Bronze products (This may apply to the individual market and non-PHCA products in Hawai'i)
- Prohibit carriers from establishing affiliates which offer lean plans only outside the Connector
- Restrict products with narrow networks from being offered only outside the Connector
- Control the minimum level for specific and aggregate stop-loss
- Take actions to increase enrollment in the Connector
- Place restrictions on plan designs offered outside the Connector
- Do not allow employees in the SHOP Exchange to select from all products

The State must decide whether the Connector will follow an active purchaser model, a passive model of a market organizer/aggregator or a hybrid model, combining some features of each model. An active purchaser model would allow the Connector to selectively contract with QHPs and potentially impact health care costs, access and quality. As an active purchaser the Connector may be in a better position to control adverse selection by limiting the products offered and standardizing cost sharing. However, this type of model is very resource intensive and additional costs would be incurred. A passive market organizer model would function more like a clearinghouse, setting minimum standards for plans offered in the Connector. This type of model would likely provide for more consumer choice and less market disruption than the active purchaser model; however, it would not leverage the purchasing power of the Connector. A hybrid model would allow the Connector to impose stricter requirements in areas most effective for controlling adverse selection while allowing flexibility and product innovation that could be attractive to new carriers considering entering the market. Additional carriers would be beneficial in markets such as Hawai'i, which are dominated by only a few carriers.

2

Disclaimer

The Hawai'i Department of Commerce & Consumer Affairs (DCCA) engaged Oliver Wyman Actuarial Consulting, Inc. (Oliver Wyman) to assist the State of Hawai'i (the State) in assessing the impact of the Affordable Care Act (ACA) on the Hawai'i insurance marketplace. This analysis included microsimulation modeling to estimate the impact that the ACA could have on the size of various markets and the corresponding premiums in those markets.

Consistent with Paragraph 24 of the General Conditions of the Contract for Professional Services, this report was prepared for the sole use by the State. All decisions in connection with the implementation or use of advice or recommendations contained in this report are the sole responsibility of the State. This report is not intended for general circulation or publication, nor is it to be used or distributed to others for any purpose other than those that may be set forth herein or in the definitive documentation pursuant to which this report has been issued. The estimates included within were based on regulations issued by the United States Department of Health and Human Services (HHS), several of which were still in draft form at the time this report was prepared. Our work may not be used or relied upon by any other party or for any purpose other than for which they were issued by Oliver Wyman. Oliver Wyman is not responsible for the consequences of any unauthorized use.

All projections are based on information and data available as of March 1, 2013, and the projections are not a guarantee of results which might be achieved. The projections are subject to unforeseen and random events and so must be interpreted as having a potentially wide range of variability. Further, the estimates set forth in this report have been prepared before all regulations needed to implement the ACA have been issued and finalized, including clarifications and technical corrections, and without guidance on complex financial calculations that may be required. Therefore, decisions should be made only after the State's careful consideration of alternative future financial conditions and legislative scenarios, and not solely on the basis of the estimates illustrated within this report.

For our analysis, we relied on a wide range of data and information and other sources of data as described in this report. This includes information received from commercial carriers currently offering coverage in the State and various State agencies. Though we have reviewed the data for reasonableness and consistency, we have not independently audited or otherwise verified this data, and it should also be noted that our review of data may not always reveal imperfections. We have assumed that the data provided is both accurate and complete. The results of our analysis are dependent on this assumption. If this data or information is inaccurate or incomplete, our findings and conclusions may need to be revised.

In addition, the projections we show in this report are dependent upon a number of assumptions regarding the future economic environment, medical trend rates, carrier behavior, the behavior of individuals and employers in light of incentives and penalties, and a number of other factors. These assumptions are disclosed within the report and have been discussed with DCCA and other key stakeholders. While this analysis complies with applicable Actuarial Standards of Practice and

Statements of Principles, users of this analysis should recognize that our projections involve estimates of future events, and are subject to economic, statistical and other unforeseen variations from projected values. To the extent that future conditions are at variance with the assumptions we have made in developing these projections, actual results will vary from our projections, and the variance may be substantial.

Finally, Oliver Wyman is not engaged in the practice of law and this report, which may include commentary on legal issues and regulations, does not constitute, nor is it a substitute for, legal advice. Accordingly, Oliver Wyman recommends that the State secures the advice of competent legal counsel with respect to any legal matters related to this report or otherwise.

This report is intended to be read and used as a whole and not in parts. Separation or alteration of any section or page from the main body of this report is expressly forbidden and invalidates this report.

There are no third party beneficiaries with respect to this report, and Oliver Wyman does not accept any liability to any third party. In particular, Oliver Wyman shall not have any liability to any third party in respect to the contents of this report or any actions taken or decisions made as a consequence of the results, advice, or recommendations set forth herein.

The information contained in this document and in any of the attachments is not intended by Oliver Wyman to be used, nor can it be used, for the purpose of avoiding penalties under the Internal Revenue Code or imposed by any legislative body on the taxpayer or plan sponsor.

3

Introduction

The ACA represents the most significant government expansion and regulatory overhaul of the US healthcare system since the passage of Medicare and Medicaid in 1965. This sweeping legislation is designed to reform the healthcare system and ensure access to affordable coverage, regardless of one's health status. It has the primary goals of reducing both the number of uninsured and the overall cost of healthcare, while improving outcomes and streamlining the delivery of healthcare.

The ACA provides funding assistance for the planning and establishment of the American Health Benefit Exchanges (the Exchanges). Under the ACA, each state may elect to set up an exchange that will create a new marketplace for health insurance. The exchanges will offer individuals and small employers a choice of health plan options, oversee the certification of health plans offering coverage within the exchanges, calculate premium subsidies and provide information to assist consumers in their purchasing decisions. It is believed that the exchanges will also promote competition among carriers.

DCCA engaged Oliver Wyman to assist in assessing the impact of the ACA on the Hawai'i insurance marketplace. As part of our work, one of the first tasks was to conduct background research required to assess Hawai'i's current population and health insurance marketplace. The results of that research, which were presented in a report dated September 4, 2012, 10 serve as the basis for many of the inputs into the actuarial modeling that is the focus of this report.

Oliver Wyman's Healthcare Reform Micro-simulation Model (Oliver Wyman's HRM Model) was used to project potential premium levels and enrollment in various markets under four scenarios. The model is a tool for estimating potential behavioral and economic effects of public policies on decision-making units (individuals, households, and employers) and the government. A considerable amount of data from various sources was gathered and synthesized to populate the model, which was then calibrated to reproduce Hawai'i's 2010 population and insurance marketplace, prior to projecting estimated enrollment and premium from 2014 through 2018.

In the remaining sections of this report, we first describe the various data sources that were used in our analysis. We then provide a discussion of key aspects of the ACA and reform issues that will cause individual and employer behavior changes in the post-2014 market, which are reflected in our modeling. These changes are the result of many aspects of the ACA which will impact access to coverage, benefits covered, and the associated premiums.

¹⁰ Josh Sober, FSA, MAAA and Tammy Tomczyk, FSA, MAAA. "Current Status of Insurance Coverage in the State of Hawai'i." September 4, 2012.

Next, we describe the methodology upon which our model is based. We describe how the various data sources were synthesized and discuss key underlying assumptions of the model. This is followed by the presentation of our results for each of the following four scenarios:

- Baseline Scenario: Small group defined as up to 100 employees in 2014; separate individual and small group pools, no Basic Health Program
- Alternate Scenario 1: Small group defined as up to 100 employees in 2014; merged individual and small group pools, no Basic Health Program
- Alternate Scenario 2: Small group defined as up to 100 employees in 2014; separate individual and small group pools, Basic Health Program
- Alternate Scenario 3: Small group defined as up to 100 in 2014 employees; merged individual and small group pools, Basic Health Program

After the presentation of our model, modeling methodology and modeling results, we include two additional sections. The first of these sections includes a discussion of various potential sources for adverse selection and options for mitigation. Finally, we discuss various exchange models present in the market today, and various insurance standards that could be applied. The various appendices provide additional detail of the modeling performed, including a technical discussion of Oliver Wyman's HRM Model and documentation of the many key assumptions employed.

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Key Data Sources and Reliance

In performing the analysis that underlies this report, Oliver Wyman has relied on information from numerous sources, including but not limited to: the US Census Bureau, the Medical Expenditure Panel Survey (MEPS), Dun & Bradstreet (D&B), annual statutory financial statements of insurers issuing policies in the State and other sources. Most critically, we also relied on data provided by insurance carriers that participate in Hawai'i's current insurance marketplace. We discuss these key data sources below.

Population Data

Oliver Wyman relied on various data sources from the US Census Bureau in estimating both the overall size of the population in Hawai'i as well as in segmenting the market. In particular, we relied on these data to identify population characteristics, such as, type of insurance coverage, age, gender and income. Our primary source for these data was the 2010 American Community Survey (ACS), the most recently available survey data at the time our analysis was performed.

We felt it important that we have one primary data source to provide a demographic characterization of the State's population. Had we instead relied on data from different sources as the basis for various aspects of our analysis, we would have faced potential inconsistencies in definitions, time periods and data collection techniques among these various sources. As such, we found two primary data candidates for our analysis: the Current Population Survey (CPS) and the ACS. The CPS is conducted by the US Census Bureau and the Bureau of Labor Statistics. It includes interviews of 60,000 households and is primarily focused on reviewing employment levels. The ACS is also conducted by the US Census Bureau. It is sent to approximately 2.9 million housing units per year and gathers information that is only contained in the long form of the decennial census.

Ultimately, we chose to rely on the ACS data for our purposes (i.e., instead of CPS) for several reasons. First, there is a documented bias in most survey data where Medicaid enrollment is substantially lower than administrative counts. National analysis of this "Medicaid undercount" indicates that many individuals enrolled in Medicaid report their status as either privately insured or uninsured¹¹ and the ACS applies logical edits to the data to adjust for this. Second, the ACS questionnaire includes the question, "Is this person CURRENTLY covered by any of the following types of health insurance or health coverage plans?"¹² (Emphasis is from the survey.) In contrast, the CPS assesses insured status over an entire year. The first presentation of the question is more consistent with our approach to the model we present in this report, as it examines a population at a point in time. Third, enrollees are legally obligated to respond to the ACS, ¹³ so the response rate is

¹¹ http://www.shadac.org/publications/snacc-phase-v-report

¹² http://www.census.gov/acs/www/Downloads/QbyQfact/health_insurance.pdf

¹³ http://www.census.gov/acs/www/about_the_survey/why_were_you_selected/

quite high (i.e., 98% in 2009). ¹⁴ Fourth, and finally, the ACS includes measures that permit the calculation of standard errors from the sample.

As presented to the State in a prior report, we were unable to fully reconcile the Medicaid enrollment measures suggested by the ACS with the State's enrollment reports. See Appendix B for additional detail on this reconciliation. As such, we reclassified a number of people in the ACS data into Medicaid that were not originally identified in that program. Specifically, we revised the insurance classification to "Medicaid" for individuals who indicated they had Direct Purchase coverage who also satisfied one of the following criteria:

- Household earnings below 200% FPL (or whose income was not identified)
- Under the age of 18 with household income less than 301% of FPL
- Over the age of 17, not the primary resident, with household income over 200% of FPL, and personal income less than \$20,000

Through this process, we reclassified approximately 31,000 individuals from Direct Purchase to Medicaid. To support these modifications, we note that the Direct Purchase counts in the ACS data were approximately 40,000 enrollees higher than what was shown in the publicly available financial statements for commercial carriers. We assumed that anyone eligible for coverage under QUEST-Net or QUEST-ACE would obtain that coverage rather than purchase an individual policy even if the coverage is not as comprehensive. We also assumed that any child eligible for CHIP would be enrolled in that program even if his or her parents had purchased an individual policy. Finally, we assumed that there may be persons who still reside with their parents, who do not qualify for coverage as a child under their parents' policies, and who can obtain coverage under QUEST-Net or QUEST-ACE.

Medical Expenditure Panel Survey and Dun & Bradstreet

We also used the Agency for Healthcare Research and Quality's MEPS Insurance/Employer Component data from 2010 and 2011 to develop characteristics of the State's small employer market. MEPS identifies key statistics for the small employer market by state, including employer offer rates, employee take-up rates and premium contribution rates by tier. All statistics in the MEPS data were available by various employer group sizes. We used the average of the 2010 and 2011 survey results to enhance the credibility of our assumptions.

We also used the D&B employer data to establish distributions of group sizes by major industry classification. These distributions were critical for accurately classifying employees in the State into appropriate pools or groups. In preparing the D&B data, we removed any groups that reflected government employers (either domestic or foreign).

Carrier Data Call

Insurance carriers in Hawai'i's health insurance markets were the primary source for data that enabled us to calibrate premium, benefits and other rating factors in support of the micro-simulation model.

¹⁴ http://www.census.gov/acs/www/methodology/response_rates_data/

With the assistance of the DCCA, we submitted a request for data and received responses from the major market participants in Hawai'i. Our request for data focused on those rating elements that the ACA was most likely to affect. Specifically, we requested that carriers provide distributions by enrollment, premium and claims by the following factors from the 2010 and 2011 experience periods:

- Age/gender/family composition
- Group size
- Actuarial values
- Premium and claims
- Underwriting loads

Of the carriers that responded, we ultimately received enough information to reconcile the responses to financial statements for the market as a whole.

The information that the carriers provided suggested significant differences in rating practices. For example, some small group carriers develop rates by explicitly enumerating a number of rating factors (e.g., age and gender) while others employ an approach that relies on each group's historical experience. We have taken measures to address these differences by holding teleconference calls with the carriers to ensure that we understood their current rating practices.

Annual Financial Statement Data

We used the carriers' annual financial statements to identify enrollment, premium, claims and other data for Hawai'i's individual and small group insurance markets, in total and by carrier. The primary sources for this review were the 2010 and 2011 Annual Statutory Financial Statements filed on the Health blank or the Life, Accident and Health (LAH) blank. As part of new insurer reporting requirements under the ACA, annual statements include a new schedule, the Supplemental Health Care Exhibit (SHCE). The government requires insurers to report this schedule separately for each state in which they write comprehensive major medical business. The SHCE shows detailed income statement data based on individual, small group employer, large group employer, government business, other business and other health and self-funded plans. Small group employers are defined as groups with up to 100 employees, except in states exercising an option under the ACA to define small groups up to 50 employees until 2016. The large group employer category includes the Federal Employees Health Benefit Program (FEHBP) and State and local fully insured government programs. We obtained access to the Annual Statutory Financial Statement data through a subscription service.

¹⁵ Experience for individual plans sold through an association or trust is allocated to the issue state of the certificate of coverage. Experience for employer business issued through an association or trust is allocated based on the location of the employer. Experience for group plans with employees in more than one state is allocated to state based on the situs of contract.

¹⁶ Hawai'i used a 50 employee threshold for reporting small employer group in the 2010 and 2011 Supplemental Exhibits.

Current Population Survey

The CPS provides the starting assumptions for the population morbidity. CPS includes a self-reported health status indicator as well as fields classifying income, coverage type and other categories. Respondents to the survey classify their health into one of five categories; we then reflect these classifications numerically for use in the model.

Hawai'i's Department of Human Services Data

In support of our work, the State facilitated an engagement between Oliver Wyman and the Department of Human Services' (DHS's) Medicaid actuary. As part of this engagement, we were provided information and data characterizing Hawai'i's current Medicaid population. In particular, the information provided included utilization statistics for Med-QUEST members for various medical services. Using the fee schedule from the Med-QUEST Division's website, we were able to estimate average costs for Medicaid members for the specified services. This provided us with valuable information for use in assessing the morbidity of the Medicaid population relative to the commercial population. We also utilized enrollment reports produced by DHS for use in characterizing the current population.

Essential Health Benefits Benchmark Plan Selection

Information on the State's benchmark plan selection was used to model the impact of essential health benefits (EHBs) that must be offered per the ACA. Using the results of a study¹⁷ conducted for the State to assist them in selecting a benchmark plan, we compared the level of covered services among the primary carriers offering coverage in the small group market today. We supplemented these benefits with the required coverage for habilitative services, as well as pediatric oral and vision services and assumed all individual and small group plans would provide coverage for the same package of services in 2014.

Input from Key Stakeholders

In addition to the data described above, we were able to participate in several phone conversations with various key stakeholders. Input into key assumptions, feedback and guidance was received from State agencies including DCCA, DHS, and The Department of Labor and Industrial Relations (DLIR). We also received input from the Connector and representatives from the Governor's office. Hawai'i is unique in many ways and having this additional information enhanced our ability to calibrate our models. The significant stakeholder assistance allowed us to reflect the current status of insurance coverage in Hawai'i and account for the many factors that will influence changes in a post-reform market.

¹⁷ Tammy Tomczyk, FSA, MAAA, Randall Fitzpatrick, ASA, MAAA and Emily Volz. "Analysis of Hawai" s Essential Health Benefit Benchmark Plan Option." September 19, 2012.

5

Key Provisions of the ACA

With the passage of the ACA, there are many changes scheduled to occur within the insurance marketplace, including changes that will impact eligibility criteria, covered benefits, patient cost sharing, premium rates and more. At any point in time, there will be individuals moving in and out of the Connector and between various coverage statuses (e.g., between Medicaid and uninsured) for a variety of reasons. This movement will be driven not only by changes in individuals' characteristics (e.g., health status or employment status) and eligibility status for various types of coverage (e.g., Medicaid, Medicare), but also changes in employers' behavior regarding their decision to offer coverage to their employees.

In addition to these traditional drivers of coverage, there are many new provisions in the ACA that will impact the demand for health insurance. These include the expansion of Medicaid eligibility, Federal premium and cost sharing subsidies offered inside the Individual Exchange, individual penalties for not taking coverage, employer penalties for not offering coverage, and guarantee issue of coverage in the individual and small group markets, among other things. It is important to keep in mind that the employer penalty for not offering coverage does not apply to groups with fewer than 50 employees.

The option for states to establish a Basic Health Program (BHP) for individuals with incomes between 138% and 200% FPL¹⁸ also impacts the potential enrollment in the Individual Exchange. If a BHP is established, individuals in this income range would not be eligible to enroll in the Individual Exchange and receive subsidized insurance coverage. These individuals would instead be eligible to enroll through the State-run BHP and be charged premiums no greater than those they would have otherwise been required to pay in the Individual Exchange. Therefore, in our modeling we have not allowed these individuals to enter the subsidized exchange population in those scenarios where a BHP is present.

New provisions under the ACA will redesign the landscape of the individual and small group insurance markets starting in 2014. Requirements regarding minimum covered benefits and the standardization of coverage and rating rules will mean significant changes for insurance purchasers and companies issuing health insurance coverage. This section will discuss the key provisions of the ACA that are likely to impact Hawai'i's insurance market. We separately discuss those key provisions that impact carriers, individuals, employers, and the State.

Key Provisions Impacting Carriers

There are several provisions of the ACA that impact carriers and will alter the manner in which they will be allowed to calculate rates for individuals and small groups starting in 2014. Other provisions, such as the requirement to guarantee issue coverage, will impact who they cover, and in turn, rates.

¹⁸ Section 1331 of the ACA.

Issue and Rating Rules

Currently, each state establishes its own rules regarding how insurance products are issued and rated within the state, subject to some broad Federal requirements, such as the required guarantee issuance of coverage in the small group market under the Health Insurance Portability and Accountability Act of 1996 (HIPAA). Beginning in 2014, the ACA establishes a consistent framework of minimum standards for rating and issue rules throughout the country for the individual and small group markets. States that currently employ more restrictive rules may continue to impose them, as long as they do not conflict with the ACA. This would include the Prepaid Health Care Act in Hawai'i. The ACA defines a "small group" as an employer with up to 100 employees, but provides an option for states to define a small group as an employer with up to 50 employees until 2016. 19

In general, the ACA issue and rating requirements that apply to these markets are designed to encourage access to health insurance for all Americans by removing barriers associated with poor health status. These changes are paired with an individual coverage mandate, which is hoped to prevent healthy risks from fleeing the market in response to the changes with the intent of ensuring a balanced risk pool. An employer penalty for not offering coverage is also designed to maintain this employer channel for providing access to coverage.

To start, the ACA requires individual and small group carriers to issue insurance products on a "guarantee issue and renewal" basis, which means that applicants cannot be denied coverage due to their health status. For example, individuals without access to Employer Sponsored Insurance (ESI) coverage, and who currently are unable to purchase insurance in the private market due to their health status, will be able to purchase coverage in 2014 under the new rules during an annual open enrollment period.²⁰ The premiums that individuals and small groups will be charged will not reflect the relative level of their own risk, but the overall risk of the pool.

Although small group coverage already meets this standard in all 50 states, many states (including Hawai'i) currently allow insurers to deny coverage in the individual market. Small groups may be denied coverage today only if they do not meet minimum participation or employer contribution requirements. Starting in 2014, an annual open enrollment period is established from November 15 through December 15 during which small employers that are unable to comply with material provisions relating to employer contribution or group participation rules may enroll.²¹

Second, under the ACA, starting in 2014 premium costs may only be determined using adjusted community rating (ACR) rules. The basis of all rates within a market (i.e., individual or small group) must be based on a carrier's index rate. The index rate is defined as the carrier's anticipated allowed cost (i.e., claims after provider discounts but prior to member cost sharing) for EHBs, for the population the carrier anticipates covering during the period for which rates will be applicable. The index rate must then be adjusted on a marketwide basis to reflect total expected marketwide payments and charges under the risk adjustment and reinsurance programs in the state; it must also be adjusted for any exchange user fees.²²

¹⁹ Section 1304(b)(2) and (3) of the ACA.

²⁰ 45 CFR 147.104(b)(1)(ii)

²¹ 45 CFR 147.104(b)(1)(i)

²² 45 CFR 156.80(d)(1)

Five plan level adjustments may then be applied to the adjusted index rate.²³ These adjustments must be actuarially justified and include:

- The actuarial value and cost sharing design of the plan
- The plan's provider network, delivery system characteristics, and utilization management practices
- Benefits provided under the plan that are in addition to the EHBs. These additional benefits
 must be pooled with similar benefits within the single risk pool and the claims experience
 from those benefits must be utilized to determine rate variations for plans that offer those
 benefits in addition to EHBs
- Administrative costs, excluding exchange user fees
- With respect to catastrophic plans, the expected impact of the specific eligibility categories for those plans

The ACA limits the number of factors that can be used to set the premium to recognize the expected cost of providing coverage for a particular individual or group. This process, as outlined in the ACA,²⁴ allows the plan level index rates to be further adjusted based only on the following risk factors:

- Geographic rating (are based on state established rating areas numbering no more than the number of MSAs in the state, plus one)²⁵
- Age (no more than a 3:1 ratio across adult age bands within a coverage tier, based on a standardized age curve)
- Family composition²⁶
- Tobacco use (no more than a 1.5:1 ratio)

The carrier's experience of all individual policies, both inside and outside the Individual Exchange, must be pooled together for the purpose of determining premium rates. Likewise, the experience of all small groups inside and outside the SHOP Exchange must be pooled. In states that elect to merge their individual and small group markets, the experience of all individual and small group policies both inside and outside the exchanges must be pooled. Premiums will no longer be allowed to vary based on health status or gender. Further, in the small group market, premiums will no longer be allowed to vary based on group size or industry. The effect of these changes will be more

²³ 45 CFR 156.80(d)(2)

²⁴ Section 2701(a)(1) of the ACA.

²⁵ 45 CFR 147.102(b)

²⁶ 45 CFR 147.102(c)(1) requires that the total premium for family coverage must be determined by summing the premiums for each individual family member and that, with respect to family members under the age of 21, the premiums for no more that the three oldest covered children must be taken into account in determining the total family premium.

cross-subsidization in premium levels — younger insureds and those in better health will pay relatively more, so that older insureds, and those in poor health, can pay less.

These changes to rating and issue rules under the ACA will occur in conjunction with many other reform-related marketplace changes that will occur in 2014. These other changes include a shift to minimum required benefits, benefit packages with standardized actuarial values, an individual coverage mandate, and significant premium subsidies for low income populations. It is possible that new market entrants will introduce fundamental changes in the covered population demographics and risk levels on which premiums are based.

All else being equal, healthier market participants will pay higher premiums than they do today with medical underwriting. Older purchasers in the individual market will continue to pay higher premiums than younger people, but the difference will not be as great as it is today. In the small employer market, the smallest employers will no longer be levied extra charges related to their size. Any particular consumer's change in premium will likely reflect the interaction of a host of changes, and will depend on his or her current product choice, age and health status, among other things.

Marked premium changes, such as those expected in 2014, have a high potential to produce short-term churn in the marketplace.

Essential Health Benefits Package

Effective January 1, 2014, all individual and small group policies sold both inside and outside the exchanges must include the EHB package. The EHB package is defined to include three components.²⁷

- Coverage for all EHBs, as defined by the Secretary
- Limits placed on certain cost sharing amounts
- Defined actuarial coverage values

Coverage for Essential Benefits

All non-grandfathered policies sold in the individual and small group markets must include a minimum set of covered services, referred to as EHBs, starting in 2014. Per Federal law, this set of services must be based on offerings in a "typical employer plan" and include at least the following service categories:

- Ambulatory patient services
- Emergency services
- Hospitalizations
- Laboratory services
- Maternity and newborn care

²⁷ Section 1302(a) of the ACA.

- Mental health and substance abuse services, including behavioral health treatment
- Pediatric services, including oral and vision care
- Prescription drugs
- Preventive and wellness services and chronic disease management
- Rehabilitative and habilitative services and devices

Since some of the services included in the list above are not included in many individual policies today (e.g., maternity coverage or prescription drug coverage), the requirement to include the essential benefits in all policies will increase premiums in the individual market more than it will in the small group market.

The ACA allows carriers to substitute an EHB with another benefit, as long as the actuarial value of the substituted benefit is equivalent to the actuarial value of the benefit that is removed. There are certain restrictions on the substitutions that are allowed, including the requirement that the benefit being replaced is made within the same EHB category, and is not a prescription drug. States can decide to place more restrictive limits on the substitution of benefits, or potentially not allow substitutions at all.

Cost Sharing Limits

Annual maximums for out-of-pocket (OOP) cost sharing will be subject to thresholds applicable for qualified high deductible health plans (HDHPs).²⁸ The 2013 levels are \$6,250 for single coverage and \$12,500 for family coverage. HHS has estimated the 2014 levels at \$6,400 for single coverage and \$12,800 for family coverage.²⁹

In 2014, small group plans will be prohibited from offering a plan with a deductible greater than \$2,000 for self only coverage and \$4,000 for any other coverage; this amount will be adjusted annually thereafter. This will likely require some employers to change their plans; however in Hawai'i the requirements of the Prepaid Health Care Act (PHCA) already hold deductibles below this level. Employers that maintain their grandfathered plan status will not be subject to these ACA deductible thresholds. In its final rules on EHBs, HHS provided for an exception to the annual deductible limit. In cases where a plan may not reasonably reach the required actuarial value of a given level of coverage without exceeding the annual deductible limit, the deductible may be increased beyond the limit in an amount necessary to reach the required actuarial value. The state of the second state of the second sec

Actuarial Values

The ACA establishes various "tiers" of health insurance coverage, labeled as Bronze, Silver, Gold and Platinum. These coverage tiers will apply to all products offered in the individual and small

²⁸ Section 1302(c)(1) of the ACA.

²⁹ HHS Final Notice of Benefit and Payment Parameters for 2014.

³⁰ Section 1302(c)(1) of the ACA.

^{31 45} CFR 156.130(b)(3)

group insured markets starting in 2014.³² They allow for a level of standardization and comparison across products, without imposing a particular cost sharing structure.

The ACA's levels of coverage are defined using the concept of actuarial value. The following table summarizes the defined metal levels and their corresponding actuarial values.

Metal	Actuarial
Level	Value
Platinum	0.90
Gold	0.80
Solver	0.70
Bronze	0.60

Table 5.1: Actuarial Values by Metal Level

For example, a Gold plan with an actuarial value of 0.80 would be expected to pay approximately 80% of covered benefits for a standard population. The actual cost sharing paid by any particular individual enrolled in one of those plans will differ based on his or her specific service usage. Insurers may design a variety of cost sharing structures that produce a particular actuarial value. The ACA requires that HHS develop guidelines that provide for a de minimis variation in the actuarial values used in determining the level of coverage of a plan. In its final rules on actuarial value, HHS established a 2% de minimis threshold, indicating that the calculated actuarial value may be 2% higher or 2% lower than the required benchmark levels described above and still be considered to have met the requirements.

The Congressional Research Service (CRS) characterizes actuarial value as a summary measure of a health plan's benefit generosity.³⁵ All else being equal, a higher actuarial value is associated with a higher premium, and a lower actuarial value is associated with a lower premium. Given a choice, healthier individuals may choose a lower actuarial value plan with higher out-of-pocket cost sharing, reasoning that this choice is cost effective for them and provides the greatest economic utility. Conversely, individuals with greater health needs may be willing to pay a higher monthly premium to have lower direct service costs when they receive care.

HHS recently released an Actuarial Value Calculator (AV Calculator) that must be used by all carriers as the basis upon which they determine the actuarial value of the benefit packages they intend to offer in 2014 and beyond.³⁶ For those plans with benefit designs that are not compatible

³² The ACA also allows insurers to sell catastrophic plans with a lower actuarial value to persons in the individual market who are under the age of 30 or would otherwise be exempt from maintaining coverage because the coverage is unaffordable or enrollment in the available coverage would be a financial hardship.

³³ Section 1302(d)(3) of the ACA.

³⁴ 45 CFR 156.140(c)

³⁵ Hinda Chaiking, Bernadette Fernandez, Mark Newsome, and Chris Peterson. Congressional Research Service. "Private Health Insurance Provisions in the Patient Protection and Affordable Care Act (PPACA)." May 4, 2010.

³⁶ 45 CFR 156.135(a)

with the AV Calculator, HHS outlines acceptable alternate methodologies for calculating the plan's actuarial value.³⁷

Carriers are not yet generally marketing products targeted to these specific actuarial values, as they will be in the reformed market. Therefore, in 2014 when only products with these actuarial values will be permitted in the individual and small group markets, those with non-grandfathered plans will be required to change their benefits. This will mean, for example, that individuals and small groups with a plan having an actuarial value of 0.75 (i.e., a plan which is expected to pay for 75% of covered benefits) in 2013 will need to choose between increasing their benefits to a Gold plan with an actuarial value of 0.80 or decreasing their benefits to a Silver plan with an actuarial value of 0.70. As a result, additional premium shock will be introduced into the market. We note again that a de minimis variation around these actuarial values may result in changes that are slightly less than implied by this example.

New Taxes and Assessments Affecting Premiums

The ACA will impose new taxes and fees on health insurers, brand name pharmaceutical developers and medical device manufacturers. Given these new fees will increase the cost of providing coverage, it is more than likely that they will be passed along to consumers in the form of higher premiums, to the extent possible.

Insurer Tax³⁸

A non-tax deductible assessment of \$8.0 billion will be allocated across the health insurance industry based on net premium written in 2014. This amount will gradually increase to \$14.3 billion in 2018, with the amount increasing at the rate of premium growth thereafter. In May 2011 the Joint Committee on Taxation recognized the likely pass through of this tax to consumers, estimating premiums would increase between 2.0% and 2.5% as a result of the insurer tax.³⁹ A more recent study by Oliver Wyman estimates that in 2014 premiums would increase between 1.9% and 2.3%, and ultimately in 2018 and beyond the increase would be between 2.8% and 3.7%.⁴⁰

Tax on Pharmaceutical Manufacturers⁴¹

A new fee was imposed on manufacturers and importers of brand name prescriptions beginning in 2011. The cost is allocated among manufacturers in proportion to drug sales to government programs. Because these fees would not be imposed on prescriptions sold in the private market, the CBO estimates that it would not result in measurably higher premiums in the commercial market. However, it is likely that at least a portion of these tax assessments will be transferred to the private market through higher drug costs.

³⁷ 45 CFR 156.135(b)(2) and (3)

³⁸ Section 9010 of the ACA and Section 1406 of the HCERA of 2010.

³⁹ Joint Committee on Taxation. Letter to The Honorable Jon Kyl. May 12, 2011.

⁴⁰ Chris Carlson, FSA, MAAA. "Annual Tax on Insurers Allocated by State." November 2012.

⁴¹ Section 9008 of the ACA and Section 1404 of the HCERA of 2010.

⁴² http://www.cbo.gov/ftpdocs/107xx/doc10781/11-30-premiums.pdf

Tax on Medical Devices⁴³

Starting in 2013, the ACA places a 2.3% excise tax on most medical devices (certain devices such as eyeglasses, contact lenses and hearing aids are exempt). In order to reduce the impact of this new tax, companies may begin to manufacture more of these devices overseas. The extent to which this happens will impact the increased costs that consumers will see as the net effect of these taxes are passed along to them in the form of higher premiums.

Risk Adjustment, Reinsurance and Risk Corridors

The ACA creates three new programs for addressing risk that will be introduced into the commercial market in 2014: risk adjustment, reinsurance and risk corridors. Risk adjustment is a permanent program while reinsurance and risk corridors are temporary and will be in effect only through the end of 2016. The stated goal of these programs is to mitigate the potential impact of adverse selection and stabilize premiums in the individual and small group markets as major insurance reforms under the ACA are implemented starting in 2014.

Risk Adjustment⁴⁴

The risk adjustment program is intended to provide increased payments to health insurance issuers that attract higher risk populations, such as those with chronic conditions. It is also intended to reduce the incentives for issuers to avoid higher risk enrollees. The program provides for risk sharing among carriers based on the relative risk being insured by each carrier [Insureds are evaluated based on a risk score, and not the actual losses sustained by the plans], and will effectively require plans with low risk participants to make payments to plans with high risk participants. Risk adjustment transfer payments will occur among non-grandfathered plans, separately within the individual and small group markets, but across plans sold inside and outside the Exchanges.

Risk adjustment may help stabilize the experience among carriers which can reduce disruption for policyholders. While it can help to reduce adverse selection between carriers, it cannot reduce adverse selection against the market as a whole. This is because no new funds flow into the program from the Federal government. It is important to understand that, while risk adjustment can help adjust for differences in spending across carriers, no risk adjustment mechanism can perfectly adjust for the effects of adverse selection. Some level of adverse selection against specific carriers will likely remain.

States approved or conditionally approved to operate an exchange may establish a risk adjustment program or have HHS do so on its behalf. States electing to operate their own risk adjustment program may use the risk adjustment methodology developed by HHS, or develop their own methodology, subject to HHS approval. In states that do not operate their own risk adjustment program, HHS will assess a user fee against issuers of risk adjustment covered plans on a per member per month (PMPM) basis to cover its cost of operating the program. For 2014, HHS has established this amount at \$0.08 PMPM.

 $^{^{43}}$ Section 9009 of the ACA and Section 1405 of the HCERA of 2010.

⁴⁴ Section 1343 of the ACA.

⁴⁵ Section 1321(c)(1) of the ACA.

⁴⁶ HHS Final Notice of Benefit and Payment Parameters for 2014.

Payments and charges under the program are based on a transfer formula as outlined by HHS.⁴⁷ Transfers will be calculated at the geographic rating area level and are built from the difference between premium based on plan-specific risk selection and premiums without risk selection. Adjustment for the following items will be made in the transfer formula:

- Metal level
- Age
- Gender
- Diagnosis factors
- Geographic rating area
- Induced utilization

The factors above are relative measures, used to compare how plans differ from the market average with respect to cost. In the absence of these adjustments, transfers would reflect liability differences attributed to cost factors other than risk selection. For example, without adjusting for the metal level, Bronze plans that enrolls lower risk individuals would be overcharged because the statewide average premium would not be scaled down to reflect the fact that the plan's actuarial value is lower than the average actuarial value of all plans operating in the market in the state.

Transitional Reinsurance Program⁴⁸

For the years 2014 through 2016, a transitional reinsurance program will be in place to help stabilize premiums in the individual market immediately after significant reforms take effect. The program is designed to alleviate the need to initially build into premiums the full cost of risk associated with enrolling individuals with significant medical needs, and protect carriers from very high cost members entering the market. Initial costs may be higher in the individual market if more high risk individuals enroll (those that were previously covered under a high risk pool or were uninsured) than individuals with average or low risks.

Health insurance issuers and third party administrators of self-insured health plans will be required to make payments to the program for each of these three years. Total contributions will total \$25⁴⁹ billion over the three years with \$10 billion redistributed for 2014, \$8 billion redistributed for 2015 and \$4 billion redistributed for 2016. The reinsurance program will make payments to issuers that cover high risk beneficiaries in the individual market (excluding grandfathered plans), both inside and outside the exchange.

HHS outlined the parameters for the program for calendar year 2014 in the final Notice of Benefit and Payment Parameters for 2014. HHS intends to collect contributions from health insurers and self-insured group health plans in all states, allowing for a centralized and streamlined process for

⁴⁷ HHS Final Notice of Benefit and Payment Parameters for 2014.

⁴⁸ Section 1341 of the ACA.

⁴⁹ While \$25 billion in contributions will be collected under the program, only \$22 billion will be paid out to individual carriers under the program.

the collection of contributions. Further, the program is simplified by collecting a per capita uniform contribution rate which HHS states is simpler and easier to implement than other methods. The per capita contribution rate for 2014 is \$5.25 PMPM.

In addition, uniform reinsurance payment parameters will be used in all states. The parameters for 2014 include a \$60,000 claims attachment point after which reinsurance payments would begin and a \$250,000 reinsurance cap after which reinsurance payments would stop for a high-cost individual. A uniform coinsurance rate of 80% is applied to claims between the attachment point and the reinsurance cap. For example, for an individual claim of \$150,000, the carrier will receive 80% of \$90,000 (the excess of \$150,000 over the \$60,000 attachment point), or \$72,000.

By employing a uniform contribution rate per member across all states while tying reimbursements to actual claims experience, states with medical costs that are lower than the national average will be disadvantaged, paying more into the program than carriers in the state will receive in return. Likewise, states with higher than average claims costs will receive more in reimbursement under the program than issuers and self-insured plans in their state will pay into the program. Further, states that have small group markets relative to the size of the entities contributing to the program in comparison to other states will likely provide subsidies to other states. There is the potential for this to occur in Hawai'i given the presence of the PHCA, which will deter employers from dropping coverage and shifting employees to the individual market at levels that are anticipated to occur in other states. HHS acknowledges these effects, however states that since the program is temporary in nature, the intent is to have a "simpler approach that minimizes the administrative burden of collections."

States that administer their own reinsurance programs can offer supplemental reinsurance benefits in excess of the levels supported under the national program. In these states, reinsurance payment parameters that are more generous than the national parameters may be used by either lowering the attachment point, increasing the reinsurance cap, or raising the coinsurance rate. States that implement supplemental programs may fund the program with state provided funds, or by imposing additional assessments. If additional assessments are employed, the state will be required to collect supplemental contributions directly from issuers and self-insured plans; HHS will only collect the national contribution rate for the national program.

Temporary Risk Corridors⁵⁰

A temporary, Federally administered and funded risk corridor program will also be established for the first three years of implementation of the exchanges (2014 to 2016). The risk corridor program will protect Qualified Health Plans (QHPs) offered in the individual and small group markets, both inside and outside the exchange, against the uncertainty of setting rates during the first three years of operation.⁵¹ It will also prevent carriers from receiving significant financial gain. The program is intended to shift costs from plans that overestimate their risk to plans that underestimate their risk. The program will be established and administered at the national level.⁵²

⁵⁰ Section 1342 of the ACA.

⁵¹ 42 U.S.C. §18062

⁵² 45 CFR 153.510

Payments will be provided to carriers if their cost of benefits (net of payments under the risk adjustment and reinsurance programs) exceed premium collected less administrative costs by more than 3%. If a carrier's cost of benefits is less than premium less administrative costs by more than 3% a carrier will have to make a payment to the program. The payment will be equal to 50% of the amount between 3% and 8% plus 80% of the amount over 8%.

Other Key Benefit Changes Required Prior to 2014

In addition to the changes described above, there are several other aspects of the ACA that will affect premium rates which go into effect prior to 2014, many of which have already become effective.

Guarantee Issue Without Pre-existing Condition Exclusions for Children
Starting September 23, 2010, insurers were no longer able to deny claims for children under 19years of age related to a pre-existing condition. With the issuance of interim final regulations, ⁵³ the
waiver of the pre-existing condition exclusion was expanded to require guarantee issue of coverage
for all children younger than age 19. The addition of the guarantee issue requirement materially
increases the cost of a policy over the rates with only a prohibition on the application of exclusions
for pre-existing conditions. Given this additional cost will not be mitigated by the individual mandate
until 2014, the additional cost associated with covering these children put immediate upward
pressure on premiums, while at the same time expanding coverage opportunities for children with
pre-existing conditions.

Other Changes Effective September 23, 2010

In addition to requiring health insurers to guarantee issue coverage to children under age 19, there are several other changes that became effective on September 23, 2010. The primary changes that impacted premiums in the individual and small group markets are:

- Coverage for preventive services without cost sharing⁵⁴
- Prohibition of lifetime limits on EHBs⁵⁵
- Mandatory coverage of adult children up to age 26 (only required for grandfathered groups/policies if the dependent child does not have access to coverage through his/her own employer until 2014) ⁵⁶
- Limited annual dollar limits on EHBs until 2014 when annual dollar limits are prohibited ^{57, 58}

⁵³ "Patient Protection and Affordable Care Act; Requirements for Group Health Plans and Health Insurance Issuers Under the Patient Protection and Affordable Care Act Relating to Preexisting Condition Exclusions, Lifetime and Annual Limits, Rescissions, and Patient Protections." Issued by HHS on June 28, 2010.

⁵⁴ Section 1001 of the ACA amending Section 2713 of the PHSA.

⁵⁵ Section 1001 of the ACA amending Section 2711 of the PHSA and Section 2301 of the HCERA of 2010.

⁵⁶ Section 1001 of the ACA amending Section 2714 of the PHSA and Section 2301 of the HCERA of 2010.

⁵⁷ Section 1001 of the ACA amending Section 2711 of the PHSA and Section 2301 of the HCERA of 2010.

⁵⁸ Grandfathered policies in the individual market are exempt from this restriction.

 Cost sharing for emergency services out-of-network may not be higher than for services provided in-network⁵⁹

All of the items included in the list above increased the cost of providing insurance coverage under a given policy; however, the impact will vary by benefit plan. For example, some plans previously covered preventive services without cost sharing and the cost for this aspect of the ACA would not increase premiums for these policies. In addition, plans with lower actuarial values (and therefore lower premiums) that previously covered preventive services subject to cost sharing saw higher increases in premium.

Coverage of Women's Preventive Benefits Without Cost Sharing

Beginning August 1, 2012, individual and group health plans were required to cover certain benefits related to women's health and wellbeing, in accordance with HHS guidelines. Specifically, the following services must be covered without cost sharing:⁶⁰

- Annual well-women visits to obtain recommended preventive services that are age and developmentally appropriate, including preconception and prenatal care
- Screening for gestational diabetes
- Human papillomavirus (HPV) DNA testing every three years for women age 30 and older
- Annual screening and counseling for HIV and other sexually transmitted infections
- All FDA approved contraceptive methods and sterilization procedures and patient education and counseling
- Comprehensive lactation support and counseling, and costs of renting breastfeeding equipment
- Screening and counseling for domestic violence

Many of the services in the list above are covered today by most plans, but in many cases are subject to cost sharing. One notable exception is the fact that it is not uncommon for policies in the individual market today to exclude coverage for contraceptives. Therefore, the impact of these changes will have greater upward pressure on premiums in the individual market than they will in the group market.

It is also important to consider the fact that in some cases the lack of cost sharing for these services may increase costs by more than the value of any deductibles, coinsurance or copayments that are waived. In addition to increases in utilization that occur when cost sharing is removed, services may be substituted for other lower cost services that have cost sharing. For example, if coverage of tubal ligation is required with no cost sharing, these services in some cases may be substituted for much lower cost vasectomies. The elimination of cost sharing on more convenient forms of contraceptives such as the Ortho Erva patch could lead to substitution of these more expensive methods for lower

⁵⁹ Section 10101 of the ACA amending Section 2719A(b) of the PHSA.

⁶⁰ http://www.hrsa.gov/womensguidelines/

cost oral contraceptives used today. The net effect of these changes is a much larger increase on costs.

Minimum Medical Loss Ratio

In the individual and small group insurance markets, the ACA requires insurers to spend at least 80% of the premium received on the provision or improvement of healthcare services. Insurers that do not meet that standard must pay rebates to their customers. These requirements became effective January 1, 2011, and are expected to change many insurers' pricing arrangements. A review of 2011 Annual Statutory Financial Statements filed by the primary insurers in Hawai'i's individual and small group markets revealed that these new requirements could have minimal premium implications for Hawai'i consumers covered in the individual or small group market.

In 2011, no carrier in Hawai'i was required to make a refund under the MLR requirements in the individual or small group markets. Individual carriers achieved an aggregate MLR in 2011 well in excess of the minimum requirement, even before making allowable adjustments for taxes, quality improvement programs and credibility. Carriers in the small group market also experienced loss ratios above the required minimum. However, the results varied more by carrier than in the individual market. This means that carriers do have room to increase rates and still likely meet the MLR requirements; however this would be contingent upon the rate increases being approved by DCCA.

Grandfathered Plans

The ACA allows health plans that existed on March 23, 2010 to maintain "grandfathered" status. This status means that these plans are exempt from several of the requirements of the ACA and can only make minor changes to their coverage without being subject to all of the ACA requirements. Specifically, with respect to ACA provisions related to the individual and small group markets, grandfathered plans:

- Are not subject to the new rating rules
- Are not subject to essential health benefit package coverage standards
- Are not included in risk pooling for the purposes of premium development
- Are not included in risk adjustment arrangements
- Cannot be offered through the exchange

Because carriers will be able to continue to develop rates for grandfathered groups by applying current rating rules, grandfathered groups with healthier than average risks are more likely to retain their current policies and the associated underwriting discounts that they enjoy today. To the extent that grandfathered plans represent healthier than average risk, high rates of grandfathering will tend to cause remaining market premiums to be higher than they would be otherwise. The grandfathered

⁶¹ http://www.kff.org/healthreform/upload/8305.pdf

⁶² 2011 Supplemental Health Care Exhibits.

⁶³ 2011 Supplemental Health Care Exhibits.

status is most beneficial to young, healthy groups and individuals as it exempts them from many of the ACA changes that would result in premium increases — in many cases significant premium increases. Should extremely high grandfathering rates develop and persist into 2014 and beyond, the size and stability of the market risk pools could be affected. To retain "grandfathered" status, plans cannot:

- Significantly reduce benefits
- Raise coinsurance charges/percentages
- Significantly raise copayment charges (no more than \$5, adjusted annually for medical inflation or by a percentage equal to medical inflation plus 15%)
- Significantly raise deductibles (no more than a percentage equal to medical inflation plus 15%)
- Significantly lower employer contributions (no more than 5%)
- Add or tighten an annual limit on what an insurer pays

By 2014, there will likely be fewer grandfathered plans than observed in this first year after ACA passage, but the precise number cannot be known. It is expected that small employers and individuals will be more likely than large employers to make changes that cause them to lose grandfathered status. Shortly after ACA passage, the Federal government estimated that 70% of small employers might maintain grandfathered status in the first year, dropping to approximately 33% over several years. Individual grandfathered rates were expected to be lower. However, more recent surveys of insurers and employers suggest that this conclusion may not hold. A Hewitt survey found that out of 466 companies — representing 6.9 million employees — almost all (90%) expect to lose grandfathered status by 2014 because of health plan design changes (72%) and/or changes to company premium contribution levels (39%).

Qualified Health Plans

Carriers wishing to offer coverage through an exchange in 2014 must become certified as a Qualified Health Plan (QHP) issuer. ⁶⁶ QHP issuers must be licensed and in good standing, comply with benefit design and the adjusted community rating rules previously described, and meet quality standards. In addition, QHPs must:

- Charge the same premium for a plan, regardless of whether it is sold inside or outside the exchange
- Implement and report on a quality improvement strategy, disclose and report on healthcare quality and outcomes, and implement enrollee satisfaction surveys

⁶⁴ See analysis and projections available at http://www.healthcare.gov/news/factsheets/keeping_the_health_plan_you_have_grandfathered.html. Note that these projections were made prior to a rule revision allowing group grandfathered status to be retained despite a change in insurer.

⁶⁵ http://www.aon.com/attachments/Employer_Reaction_HC_Reform_GF_SC.pdf

^{66 45} CFR 156.200(a)

- Meet minimum network adequacy standards
- · Meet transparency requirements
- Pay any applicable exchange user fees assessed
- Comply with standards related to risk adjustment
- Offer at least one Gold and one Silver plan
- Offer a child-only plan
- Segregate funds such that Federal funds are not used for abortions
- Agree to comply with exchange processes, procedures and requirements

Key Provisions Impacting Individuals

In addition to changes in the issue and rating rules described above, there are several additional provisions of the ACA that will have a key impact on individuals. These range from a broad requirement that most individuals maintain coverage to premium and cost sharing subsidies designed to make coverage more affordable.

Individual Mandate

The ACA imposes an individual mandate to encourage healthy populations to stay in the market and balance the risk pool. If the individual mandate is successful in achieving its goal, the impact of the new rating and issue rules will be to further cross-subsidize risk between lower cost and higher cost populations. Beginning in 2014, all non-incarcerated US citizens must maintain minimum essential coverage. Exemptions are provided for religious beliefs, individuals who cannot afford coverage, individuals with income less than 100% of the Federal poverty level (FPL), and members of Indian tribes.

Minimum essential coverage is defined as coverage that meets one of the following:

- Coverage under a government sponsored program (e.g., Medicaid, Medicare)
- Coverage under an ESI plan offered in the small or large group market
- Coverage under a plan offered in the individual market
- Coverage under a grandfathered plan
- Coverage under a state risk pool as recognized by HHS

⁶⁷ Section 5000A of the ACA.

⁶⁸ Section 5000A(d)(2)(a)

⁶⁹ Section 5000A(e)(1) of the ACA defines these individuals as those for whom premium contributions for any coverage exceeds 8% of family income.

⁷⁰ Section 5000A(e)(2) of the ACA.

⁷¹ Section 5000A(e)(3) of the ACA.

The ACA imposes a penalty for those individuals who do not maintain minimum essential coverage. The mandate is not universal and provides a penalty exemption for certain low income individuals who cannot afford coverage, as described above.

The presence of the mandate is expected to bring more individuals into the market, particularly young, healthy individuals who have not found great economic utility in purchasing health insurance coverage up to this point. The addition of healthier individuals to the risk pool would have a favorable effect on rates and reduce adverse selection. The individual mandate penalty is low in 2014 and will increase until fully implemented in 2016. This may cause take-up rates to be lower during the first few years after 2014.

Among those who are not exempt, individuals not maintaining coverage will be subject to the following penalties, as outlined in the ACA:

 Year
 Penalty
 Percent of Income Penalty

 2014
 \$95
 1.0%

 2015
 \$325
 2.0%

 2016
 \$695
 2.5%

Table 5.2: Penalties by Year

The penalty is the larger of the flat annual penalty or the percent of income penalty shown in the table above, and is capped at the national average premium for QHPs which have Bronze level coverage. Children are assessed one half of the annual penalty shown in the table and the flat annual penalty for a family is capped at 300% of the amount shown in the table. After 2016, the fixed dollar penalty amounts will increase at a rate consistent with the cost of living.

Premium and Cost Sharing Subsidies

Starting in 2014, major provisions of the ACA will be implemented, and as previously discussed. Health insurance will become more affordable for low income residents, many of whom are uninsured today. Premium subsidies in the form of advance premium tax credits (APTCs) will be available to individuals and families with household incomes between 138% and 400% FPL⁷² who are eligible to enroll in the Individual exchange. Those with incomes below 250% FPL will also be eligible for cost sharing subsidies. Individual premium and cost sharing subsidies will only be available to individuals that enroll for coverage within the Individual Exchange. If the State establishes a BHP, individuals with incomes between 138% and 200% will not be eligible for subsidized coverage in the Individual Exchange and must instead enroll in the BHP. Table 5.3 summarizes the segments of the population (by FPL) that will be impacted by these changes.

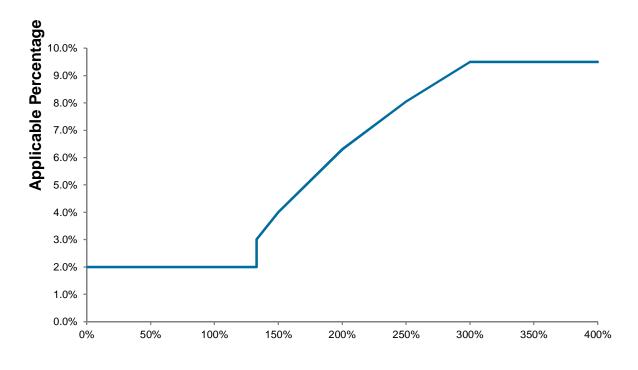
⁷² The lower FPL limit is 133% in the ACA, however after application of a 5% disregard, this limit essentially becomes 138%.

Table 5.3: Coverage Eligibility in 2014

Income as a % of FPL	Children	Adult Citizens and Residents	Adult Residents Not Eligible for Medicaid
> 400% FPL	No Subsidies		
300% - 400% FPL	Exchange Subsidies		
138% - 300% FPL	CHIP Exchange Subsidies		Subsidies
< 138% FPL	Medicaid		Exchange Subsidies

The amount of the APTC premium subsidy will be tied to both the household income and the premium associated with the second lowest cost Silver plan available within the Individual Exchange. The chart below and corresponding table that follow shows the maximum percentage of income that an individual or family will be required to pay in premium for coverage under the second lowest cost Silver plan in the exchange.

Figure 5.1: Applicable Percentage of Income Used in Subsidy Calculations



FPL

Table 5.4: Applicable Percentage of Income Used in Subsidy Calculations

Household Income as a % FPL	Maximum Premium as a % of Household Income
133% - 150%	3.00%-4.00%
150% - 200%	4.00%-6.30%
200% - 250%	6.30%-8.05%
250% - 300%	8.05%-9.50%
300% - 400%	9.50%

After the maximum premium is calculated using the table above, it will be subtracted from the cost of the second lowest Silver plan to determine the subsidy the individual or family is eligible to receive. The individual or family may then "go shopping" with this subsidy and select from any plan available within the Individual Exchange. The net premium paid will be equal to the premium for the plan selected, less the subsidy amount.

Table 5.5 below shows the applicable 2014 member premium contributions at various income levels, based on an estimate of \$13,330 as the Hawai'i specific 100% FPL for a single adult,⁷³ if they enrolled in the second lowest cost Silver plan in the Connector.

Table 5.5: 2014 Subsidized Premiums in the Connector

FPL Level	Annual Income ⁷⁴	Premium Offset Percentage	Annual Subsidized Premium	Monthly Subsidized Premium
70%	\$9,331	2.00%	\$187	\$16
100%	\$13,330	2.00%	\$267	\$22
133%	\$17,729	3.00%	\$532	\$44
144%	\$19,195	3.65%	\$701	\$58
150%	\$19,995	4.00%	\$800	\$67
175%	\$23,328	5.15%	\$1,201	\$100
200%	\$26,660	6.30%	\$1,680	\$140

Figures in the table may not sum due to rounding

⁷³ \$13,330 was calculated as the 2012 FPL level of \$12,860 projected forward using the statutory formula outlined in Section 673(2) of the Omnibus Budget Reconciliation Act (OBRA) of 1981 (42 U.S.C. 9902(2)) and CPI estimates from the 2011 Social Security Trustees Report, Table V.B.1.

⁷⁴ Annual income amounts reflect Hawai'i specific FPL levels.

Comparison of Single vs. Family Coverage

The applicable income percentages described above apply to both single and family coverage. However, the income that a household must earn to be considered at a given percentage of FPL varies based on the number of people in the family. For example, an individual earning \$13,330 in 2014 is estimated to be at 100% FPL while a family of four earning roughly twice that amount would be considered to be at 100% FPL. Therefore, applying the applicable percentages above produces the following table, which shows that at any given FPL level, a family would pay a premium roughly twice the amount that an individual at the same FPL level would for the second lowest cost Silver plan.

Table 5.6: Estimated 2014 Subsidized Monthly Premium in Hawai'i

	100%	200%	300%	400%
Single	\$22	\$140	\$316	\$421
Family of 4	\$46	\$289	\$654	\$872

Individuals who do not have qualified ESI coverage available to them may enter the Individual Exchange. In order for an employer's plan to meet the definition of qualified coverage for a given individual it must:

- Provide coverage that has an actuarial value of at least 0.60
- Require employee contributions for single coverage that are not more than 9.5% of household income

If either of the two conditions outlined above are not met, and the employee's household income is less than 400% FPL, the employee and their dependents may opt out of the employer's plan and would be eligible for premium subsidies within the exchange.

Cost sharing subsidies will also be made available to individuals and families with household incomes below 250% FPL. The purpose of the cost sharing subsidies is to protect lower-income individuals by reducing the total OOP costs required at the point of service. To receive cost sharing subsidies, individuals must enroll in a Silver level plan. The reduction in OOP costs essentially increases the actuarial value of the benefits they receive to levels above a Silver plan. The following table shows the enhanced actuarial value of benefits these individuals will receive, after the impact of cost sharing subsidies.

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⁷⁵ Section 1401 of the ACA.

Table 5.7: Enhanced Actuarial Values for Cost Sharing Subsidy Eligible Individuals

Household Income as a % FPL	Enhanced Actuarial Value of Benefits
0% - 150%	0.94
150% - 200%	0.87
200% - 250%	0.73

The table above shows that after application of the cost sharing subsidies, individuals with incomes between below 150% FPL would essentially receive coverage richer than that provided by a Platinum plan (0.90 actuarial value). Those with incomes between 150% and 200% FPL will receive coverage slightly below Platinum benefits, while those with incomes between 200% and 250% will receive coverage that is only slightly enhanced over the standard Silver level. The lower cost sharing levels at the lowest income levels will help smooth the transition as individuals move between Medicaid eligibility and subsidized coverage in the Individual Exchange.

Figure 5.2 demonstrates the portion of claims anticipated to be paid by the member, the health plan, and in the case of members receiving subsidized coverage, the amount paid by the Federal cost sharing subsidy, for various benefit levels.

100% 6% 10% 13% 90% 20% 27% 30% 24% 80% 40% 17% 3% 70% 60% 50% 90% 40% 80% 70% 70% 70% 70% 30% 60% 20% 10% 0% Gold Platinum Silver Silver Silver Silver **Bronze** 100-150% 150-200% 200-250% **FPL FPL FPL** Carrier Liability Cost Share Subsidy Member Cost Share

Figure 5.2: Cost Sharing Percentages by Benefit Level

How these cost sharing subsidy reductions would actually filter through the system is complex. The ACA entitles low income exchange enrollees to coverage with the enhanced actuarial values shown above, and it requires QHPs to provide that coverage. The Federal government will pay insurers directly for the difference between cost sharing under a Silver plan and the lower cost sharing that eligible individuals will pay. An advance payment will be made to insurers based on the population enrolled in their plans that are receiving cost sharing subsidies, with an end of year reconciliation, similar to the process used with the Medicare Part D program today. Therefore, these low income individuals will see the effects of the lower cost sharing up front at the time services are received.

The CBO estimates that 57% of people purchasing coverage in the individual market in 2016 will receive subsidized coverage through Individual Exchanges, and that the average subsidy would result in premiums for these individuals that are 56% to 59% lower than premiums they would have paid in the absence of the ACA.⁷⁶ This estimate is based on the assumption that individuals 138% up to 200% FPL are eligible to enroll in the exchange (i.e., assuming a BHP is not established).

Key Provisions Impacting Employers

In addition to changes previously described related essential health benefits and other provisions that will undoubtedly impact the cost of providing coverage to employees, the ACA includes additional provisions that will impact employers. These additional provisions are described in this section.

Employer Mandate

The ACA does not directly require that employers offer health insurance coverage to their employees. However, if they do not offer minimum essential coverage, they will be subject to annual penalties. Employers with less than 50 employees are exempt from the penalty; however it is important to note that many of these employers will offer coverage as they are subject to the PHCA. Employers with 50 or more full-time employees that do not offer minimum essential coverage will pay an annual penalty of \$2,000 for every employee, beyond the first 30, given at least one employee is eligible for, and enrolls, in subsidized coverage within the Individual Exchange.

Employers with 50 or more full-time employees that do offer coverage that meets minimum value⁷⁸ requirements will pay a penalty equal to the lesser of \$3,000 a year for each employee who is offered coverage but instead enrolls in the Individual Exchange and receives a premium subsidy, and \$2,000 per full-time employee. Employees offered coverage by their employer will not be eligible to enroll in the Individual Exchange and receive subsidies as long as coverage offered by the employer has at least a 0.60 actuarial value and the employee is not required to pay more than 9.5% of household income for single coverage. The impact of this requirement within the ACA for employers with 50 or more employees to provide minimum essential coverage is lessened for many employers in Hawai'i due to the higher required actuarial value of plans required to be offered under the PHCA.

⁷⁶ http://www.cbo.gov/ftpdocs/107xx/doc10781/11-30-premiums.pdf

⁷⁷ Section 1513 of the ACA.

⁷⁸ Coverage must have an actuarial value of at least 0.60 to be considered to have met minimum value requirements.

Temporary Small Business Tax Credits

The ACA made temporary tax credits available to small employers beginning in 2010. These credits will continue through 2013 at the current levels. The amount of the credit will increase in 2014; however, they may only be claimed for two years after 2014. The credits are designed to encourage small employers to offer coverage for the first time or maintain coverage already in place. In general, the credit is available to small employers that offer qualified coverage and pay at least 50% of the cost for single premiums for their employees.

In order to receive the credit today, an employer must have fewer than 25 full-time workers and an average annual payroll below \$50,000. The maximum credit is equal to 35% of the small employer's premium costs (25% for tax-exempt organizations) and available to employers with 10 or fewer full-time employees and an average payroll of \$25,000 or less. The amount of the credit phases out gradually as the number of full-time employees increases to 25 and the average annual payroll increases to \$50,000.

In 2014, the amount of the credit increases to 50% of the small employer's premium costs (35% for tax-exempt employers). Small employers must enroll in the SHOP Exchange in order to receive these tax credits.

Table 5.8 below illustrates how the tax credit is reduced as the number of full-time employees and average wage increases. As an example, an employer with 13 full-time equivalent employees has a tax credit that is 80% of the maximum (for employers of ten or fewer) if the average annual wage is \$25,000 but is reduced to zero if 0% if the average annual wage is \$45,000 or more.

Number of Full-time Equivalent Employees Average Annual Wage 10 13 16 19 22 25 \$25,000 100% 80% 60% 40% 20% 0% \$27,500 90% 70% 50% 30% 10% 0% \$30,000 80% 60% 40% 20% 0% 0% \$32,500 70% 50% 30% 10% 0% 0% \$35,000 60% 40% 20% 0% 0% 0% \$37,500 50% 30% 10% 0% 0% 0% \$40,000 40% 20% 0% 0% 0% 0% \$42,500 30% 10% 0% 0% 0% 0% \$45,000 20% 0% 0% 0% 0% 0% \$47,500 10% 0% 0% 0% 0% 0% \$50,000 0% 0% 0% 0% 0% 0%

Table 5.8: Percent of Premium Tax Credit

While these credits will undoubtedly reduce the cost of providing coverage for those employers that qualify and apply for the credit, the effect that they will have on small employers offering coverage beyond 2016 is questioned by some. First, as described above, the credits are temporary and may only be claimed for two years after 2014. Second, the employers that are eligible to receive the credits will not be subjected to a financial penalty if they do not offer coverage. Therefore, the incentive to offer coverage in order to avoid a penalty does not exist.

Wellness Programs

Beginning in 2014, employers offering both grandfathered and non-grandfathered plans can provide rewards to employees of up to 30% of the cost of employee-only coverage as part of a wellness program incentive, increased from the current limit of 20%. Certain programs such as fitness center rebates and diagnostic testing are not eligible, but rather programs that are based on health status, like reducing body mass index, qualify. Under the law, the Secretary of Health and Human Services may increase this limit to 50% if deemed appropriate. Rewards may be in the form of a premium discount, reduced cost-sharing, the absence of a surcharge, or a benefit that would not otherwise be provided under the plan. The program must be available to all similarly situated employees.

Waiting Periods

Waiting periods of more than 90 days are banned, effective January 1, 2014. This ban applies to all plans, including grandfathered plans and self-insured plans. Guidance from the Department of Labor⁷⁹ and HHS⁸⁰ suggests that employers that offer coverage would not be subject to penalties during the first three months after an employee's date of hire if the waiting period applies during that time.⁸¹ The notice indicates that employers' coverage eligibility requirements for part-time workers could include a specified number of cumulative hours worked below a to-be determined limit, after which the 90-day waiting period would begin.

Cadillac Tax

Beginning in 2018, a 40% excise tax will be imposed on the value of health insurance benefits exceeding a certain threshold. The thresholds are \$10,200 for individual coverage and \$27,500 for family coverage, with these amounts indexed to inflation thereafter. The initial thresholds could be altered depending on actual medical inflation that is observed between 2010 and 2018 by examining the Federal Employees Health Benefits program. The threshold may also increase for individuals in high risk occupations and for employers that have a disproportionate share of older employees.

The tax is permanent, absent Congress passing a law to change the requirements, and applies to both fully insured and self-insured employer plans. For fully insured coverage (to which the tax applies) the carrier is responsible for paying the tax; for self-insured plans, the plan sponsor is responsible for paying the tax.

Flexible Spending Accounts / Health Reimbursement Arrangements

Starting January 1, 2011 the cost of over-the-counter medications were no longer eligible for reimbursement under an employer sponsored flexible spending account (FSA) or health reimbursement arrangement (HRA), unless they were purchased with a prescription. This rule does

⁷⁹ http://www.dol.gov/ebsa/pdf/tr12-01.pdf

⁸⁰ http://cciio.cms.gov/resources/files/Files2/2708-guidance-8-31-2012.pdf

⁸¹ Department of Labor guidance reads "The upcoming guidance is expected to provide that, at least for the first three months following an employee's date of hire, an employer that sponsors a group health plan will not, by reason of failing to offer coverage to the employee under its plan during that three-month period, be subject to the employer responsibility payment under Code section 4980H."

not apply to reimbursement for the cost of insulin, which will continue to be permitted, even if purchased without a prescription.⁸²

The ACA also imposes a \$2,500 limit on salary reduction contributions to a health FSA offered under a cafeteria plan. This limit applies to grandfathered and non-grandfathered plans for plan years beginning after December 31, 2012. The \$2,500 limit will be indexed for cost-of-living adjustments for 2014 and later years.⁸³

Key Factors and Decisions for the State

While the ACA has many prescriptive features, it also provides some flexibility in shaping the postreform market in each state. Various policy decisions must be made, each of which could impact the number of residents covered in each market, and the associated premiums. While there are several decisions left to the states, the parameters and choices from which they may select are limited in most cases.

Coverage for Essential Benefits

As previously discussed, all policies in the individual and small group markets must include a minimum set of covered services, referred to as EHBs, beginning in 2014. One of the early steps in defining the EHBs was a request from the Secretary of Health and Human Services (HHS) to the Institute of Medicine (IOM) to develop recommendations related to the methods and processes for determining and updating the EHBs. The IOM report included criteria that framed the considerations HHS used in determining the final EHBs. The IOM developed criteria for three purposes of an EHB: criteria to guide content of the aggregate EHB package; criteria to guide EHB content on specific components; and criteria to guide methods for defining and updating the EHB. A summary of the criteria for each of these is provided below.⁸⁴

- Be affordable for consumers, employers and taxpayers
- Maximize the number of people with insurance coverage
- Protect the most vulnerable by addressing the particular needs of those patients and populations
- Encourage better care practices by promoting the right care to the right patient in the right setting at the right time
- Advance stewardship of resources by focusing on high value services and reducing the use of low value services (Value is defined as outcomes relative to cost)
- Address the medical concerns of greatest importance to enrollees in EHB-related plans, as identified through a public deliberative process
- Protect against the greatest financial risks due to catastrophic events or illnesses

http://www.irs.gov/uac/Affordable-Care-Act:-Questions-and-Answers-on-Over-the-Counter-Medicines-and-Drugs

⁸³ http://www.irs.gov/pub/irs-drop/n-12-40.pdf

⁸⁴ Essential Health Benefits, Criteria, IOM, October 2011.

Guidance was provided by HHS, and the approach outlined for 2014 and 2015 allowed each state the flexibility to designate a benchmark plan to serve as the state's EHBs. States had a choice from among the following ten possible benchmark plans:

- The largest plan in any of the three largest small group products in the state by enrollment;
- The three largest state employee health plans by enrollment;
- The three largest FEHBP⁸⁵ options by enrollment; or
- The largest HMO plan offered in the state's commercial market by enrollment.

In designating a benchmark, states were required to select an entire plan's benefit package from those listed above, selecting a market basket of services that will collectively be included in the EHB. The market basket of services was based on the benefits that are offered in 2012 by one of the plans listed above. The state was not allowed to pick and choose the benefits to include, in essence customizing the package. If a benchmark plan did not contain all ten categories of benefits identified in the ACA, the state was required to supplement the benchmark by selecting the missing benefits from one or more of the other benchmark options for that state. Certain categories, such as habilitative care, may not currently be provided in any benchmark option. In those instances, HHS outlined special rules for supplementing the benefits.

Under the regulations, insurers are able to substitute the benefits within the ten EHB categories; to the extent such substitutions are actuarially equivalent and consistent with state and Federal law. States, however, may restrict or even prohibit the substitution of benefits included in the benchmark plan.

Mandated Benefits

A health insurance benefit mandate is a state requirement that an insurer cover certain benefits, healthcare providers, or patient populations on fully insured products in a particular market. Section 1311(d)(3)(b) of the ACA requires states to reimburse enrollees (or health plans on behalf of enrollees) for the cost of any mandates that exceed benefits included in the EHB package. Thus, an important policy consideration for states included an evaluation of their existing mandates as compared to the EHB package, and estimation of costs associated with any mandates that exceed the EHBs.

Small Employer Definition

The ACA defines small employers as those with up to 100 employees but gives states the option to define small employers as those with up to 50 employees, until January 1, 2016. Fremium rates in the small group market will be calculated on the basis of adjusted community rating, and they can only vary based on a given group's demographic makeup. Allowable factors will include such things as age, gender and family size, as previously described. In contrast to the small group market, premiums in the mid-group market (i.e., groups with 51 to 100 employees) are currently based, in part, on the employer's experience (i.e., the health risk of the group's members).

⁸⁵ Federal Employee Health Benefit Program which offers benefits to federal employees.

⁸⁶ Section 1304(b)(2) of the ACA.

The ACA will introduce additional incentives for groups to self-insure their health benefits, beyond those which currently exist. The ACA includes an annual tax on health insurance providers that begins in 2014, as previously described. More significantly, a move to adjusted community rating for mid-sized groups would likely push some of the healthiest mid-sized groups to self-insure to avoid subsidizing the claims of less healthy groups.

In addition, we note that in states where self-insuring is allowed at relatively low attachment points, groups that choose to self-insure their medical programs do not necessarily need to assume significant financial risk. Further, under the proposed Federal regulations, the Small Business Health Options Program (SHOP) Exchange must "permit a qualified employer to purchase coverage for its small group at any point during the year." Therefore, groups in better than average health may elect to self-insure, knowing that they may obtain fully insured coverage through the SHOP at any time if their experience deteriorates. Electing to define small groups as those with no more than 50 employees until 2016 will delay, rather than eliminate this potential for adverse selection. However, this could allow states time to study the potential risk and implement mitigation techniques such as requiring minimum levels for stop loss coverage so that small groups electing to self-insure to take on measurable risk.

The advantages of opening the SHOP to mid-sized employers before 2016 would include the following: a moderate increase in the number of enrollees in the SHOP Exchange over which to spread fixed costs, potential access to lower cost insurance for mid-sized groups with high morbidity and potentially greater interest among carriers deciding whether to participate in the SHOP. However, opening the SHOP Exchange to mid-sized employers prior to 2016 would require the State to accept the ACA's definition of small employer for the operation of its insurance markets outside of the SHOP Exchange. This would subject all mid-sized employers to the ACA's modified community rating laws in 2014, which would, in turn, introduce significant premium rate disruption relative to the current market for groups with rates that are positively impacted by the incorporation of their own experience in the development of rates. There would also be the potential for deterioration in the morbidity of the SHOP Exchange pool as mid-sized employers with relatively healthy work forces could self-insure until their experience deteriorated and it became financially advantageous to enroll in the SHOP Exchange.

Opening the Exchange to Large Employers

Under the ACA, states have the option to allow health insurers to offer large employers, those with more than 100 employees, QHPs through the exchange beginning in 2017.⁸⁸ The large employer pool and its products and pricing would remain separate from the individual and small group pools.

While the products and pools can remain separate, all plans offered through the exchange must be QHPs requiring, among other things that EHBs be covered, products fall in the "metallic tiers," that certain network standards be met, and that products sold inside the exchange be sold at the same price as those sold outside of the exchange. ⁸⁹ This also means that carriers participating in this market would be required to use some form of community rating in offering products to large employers.

⁸⁷ 45 CFR 155.725

⁸⁸ Section 1304 of the ACA.

⁸⁹ Section 1301 of the ACA.

Large employers are relatively sophisticated purchasers, able to weigh various options regarding the provision of health benefits to their employees. In addition, large employers are generally able to self-insure. If large employers are given the choice of a modified community-rated product in the exchange and self-funding or an experience-rated product outside of the exchange, they will likely choose the lowest cost option. This means that the only large employer groups that are likely to purchase their coverage through the exchange are those groups with relatively high morbidity. This adverse selection will lead to needed premium increases that exceed marketwide premium increases which could, in turn, lead an untenable premium rate spiral and in the extreme, the death of the pool.

Opening the exchange to large employers would allow for the spread of the exchange's fixed costs over a broader base and may lower the per-person cost of operating the exchange. However, large employers' needs are very different from those of a small employer, and trying to service both markets could complicate the operation of the exchange. As an example, large employers may want reporting from the exchange that is not offered to small groups. Large employers typically have a human resources function that provides some of the services that small employers will expect the exchange to provide.

Expansion of Medicaid

The ACA includes a provision to expand Medicaid eligibility to 133% FPL. In most states, expanding Medicaid eligibility will particularly benefit childless adults, as well as many low income parents who do not currently qualify even if their children do.

In Medicaid today, the rules for counting income vary from state to state and also differ based on the aid category under which an individual would be covered. Under the ACA, the method for determining eligibility will be streamlined across states. Eligibility in all states will be tied to Modified Adjusted Gross Income (MAGI). There will be one standard disregard for most populations of 5%. Effectively, this means that a person's income can be up to 138% FPL and because of the 5% disregard they will be considered to have met the 133% FPL income threshold. Another change in the shift to using MAGI is that it standardizes and simplifies the income eligibility test by not counting assets, and essentially adopting a gross income test. Medicaid must consider the income of spouses and parents in determining an individual's eligibility, with income of other family members counted only if they are applying for coverage.

The Supreme Court decision clarified that states are not required to expand their Medicaid programs, but rather gave them the option to implement the Medicaid expansion. States also have the flexibility of whether and when to expand Medicaid. Although states have the flexibility to implement a partial expansion, only those states that implement the full expansion will have enhanced funding made available to them.

Hawai'i already has expanded coverage for childless, low income adults, and the Federal government will pay a larger share of the cost for covering these individuals starting in 2014 (with funds increasing to 90% by 2020). Effective July 2012, Hawai'i introduced changes to the Medicaid program and how it provides coverage to childless adults. In particular, the State decreased eligibility income thresholds for childless adults from 200% of FPL to 133% of FPL; along with these more restrictive eligibility requirements, Hawai'i also expanded the benefits provided to those that remain eligible in the program.

Basic Health Program

The ACA also outlines a process by which states may establish a BHP, a separate state run health program funded by Federal dollars to cover certain low income individuals that do not qualify for Medicaid. For the most part, individuals covered through a BHP would be comprised of adults with incomes between 138% and 200% FPL; however legal residents with incomes below this level would also qualify. The ACA anticipated that states could establish a BHP as early as January 1, 2014. However, on February 6, 2013 as this report was being finalized, the U.S. Department of Health and Human Services (HHS) issued a series of FAQs. One of those FAQs indicated that the earliest date of implementation for a BHP has been revised to January 1, 2015, with final guidance anticipated to be issued in 2014.

In states that establish a BHP, those eligible for the BHP would not be eligible for subsidized coverage through the Connector. States establishing a BHP would receive Federal funding equal to 95% of the advance premium tax credits (APTCs) and cost sharing subsidies that would have been expended had the individual instead participated in the Connector. In turn, states must use this Federal funding to provide coverage to BHP enrollees that is at least as comprehensive and affordable as the individual would have received through the Connector. Any excess funding may only be used to increase the benefits covered, reduce member cost sharing or increase reimbursement to providers.

While the BHP appears to represent the potential for states to reduce the number of uninsured, while at the same time lowering costs and increasing the continuity and quality of care for these low income adults, there are still many unanswered questions. A short-term, yet very significant, consideration for policy makers is the absence of Federal regulations related to the funding and operation of a BHP. Currently, the only provisions governing the operation of a BHP are those found in Section 1331 of the ACA.

Geographic Rating Areas

Geographic rating is allowed by the ACA because it is a well-established pricing factor independent of health status, and unit prices for health care services and supplies vary by state, and within states. The final Market Rules indicate that a state may establish geographic rating based on counties, 3-digit ZIP codes, or metropolitan statistical areas (MSAs).⁹¹ In determining the number of regions that may be established, the final Market Rules indicate that a state may establish no more geographic rating areas than the number of MSAs in the state, plus one.⁹² Therefore, since Hawai'i has only one MSA, no more than two geographic rating areas may be established. The limit of two rating areas is confirmed in sub-regulatory guidance issued by HHS on February 25, 2013.⁹³

⁹⁰ At this time it is uncertain whether the COFA population would be eligible for the BHP. The State is currently working with both HHS and the IRS to determine this population's eligibility.

⁹¹ MSAs encompass at least one urban core with a population of at least 50,000 people, plus adjacent territory that has a high degree of social and economic integration with the core. MSAs are always established along county boundaries, but may include counties from more than one state.

^{92 45} CFR 147.102(b)(3)(ii)

⁹³ http://cciio.cms.gov/resources/files/market-reforms-guidance-2-25-2013.pdf

The regulations do not require that the rating regions be the same for the individual and small group markets, unless a state has elected to merge the markets. The final regulations also do not require that the grouping of counties or 3-digit ZIP codes be contiguous. While the State would prescribe the rating areas, the factors would be established by the carriers, subject to them being non-discriminatory and actuarially justified. We note that some states have taken the interpretation that in order for the factors to be non-discriminatory they must reflect only differences in the costs of delivery (including both unit costs and provider practice patterns) and NOT reflect differences in morbidity. These states would allow carriers to develop their factors based on experience; however the experience must be adjusted for differences in morbidity.

Merging the Individual and Small Group Risk Pools

The ACA gives states the option to merge their individual and small group markets.⁹⁴ A state may make this election at any point in time, either prior to or after 2014. Merging the markets would result in a larger pool of insureds which could provide more rate stability and could simplify the administrative functions that carriers participating in the exchange would need to perform. As an example, carriers would only need to maintain one product portfolio. We suspect that if the markets are separate, carriers will need to maintain separate product portfolios for competitive purposes.

Merging the markets would allow employees losing group coverage to maintain their policies, provided their employers offered coverage that was available on the exchange or otherwise offered coverage that was available through the exchange, and it may encourage greater carrier participation, as carriers who would have otherwise only participated in the SHOP or the individual Exchanges would be forced to participate in both markets. Finally, we note that the SHOP Exchange must allow employee choice among all carriers within a metallic level. ⁹⁵ Allowing employees the choice among carriers within a given metallic level is similar to the choices that will be available in the Individual Exchange if the markets were to remain separate, though individuals may select among metallic levels as well as among carriers.

We note that in recently released regulations⁹⁶ HHS indicated that for plan years beginning on or after January 1, 2014 and before January 1, 2015, a SHOP would not be required to permit qualified employers to offer their qualified employees a choice of QHPs at a single metal level of coverage but would have the option of doing so. For plan years beginning on or after January 1, 2014 and before January 1, 2015, the Federally-facilitated SHOPs will not exercise this option, but would instead assist employers in choosing a single QHP to offer their qualified employees. Since Hawai'i will establish a state-based Exchange, the State must decide whether they will permit qualified employers to offer their qualified employees this choice in 2014.

Merging the markets may make it more difficult to meet the needs of the respective markets, and it may complicate the operation of the Exchange. As an example, the SHOP Exchange must offer a rolling open enrollment to employers, but individuals will only be allowed to enroll during an annual open enrollment period.⁹⁷ It may be more complicated for a single exchange to enforce both open

⁹⁴ Section 1311 of the ACA.

⁹⁵ 45 CFR 155.705

⁹⁶ HHS Final Notice of Benefit and Payment Parameters for 2014.

^{97 45} CFR 155.410

enrollment periods, depending on the type of enrollee than it would be for separate exchanges to enforce open enrollment periods specific to the markets they serve.

Finally, we note that if the markets are not merged, individuals would likely find different prices for similar products in the different markets. The impact on premiums of merging these markets in Hawai'i will be explored further in Section 7.

6

Model Design, Methodology and Assumptions

In this section we describe the design, methodology and basic assumptions underlying the reform modeling performed for Hawai'i. We present a general overview of the model, in which we describe the basic principles on which we have built the model. For the interested reader, we have included a technical discussion with a detailed description of Oliver Wyman's HRM Model in the Appendix A. Many aspects of the model are similar to other models being used for similar studies, including the Congressional Budget Office's (CBO's) simulation model. We calibrate the Oliver Wyman HRM model to a much more granular level than most of these other models. Specifically, we use very detailed, Hawai'i-specific information on premium rates, benefits, demographics and group composition as benchmarks to calibrate our model. As we understand them, many of these other models employ higher level, national average information as a basis for calibration. As a result, the Oliver Wyman HRM model captures the many unique characteristics specific to Hawai'i.

Model Design and Methodology

The Oliver Wyman HRM Model is comprised of three primary modules. The first module generates a synthetic population made up of individuals, families, employer groups and government programs. The second module uses the synthetic population to calibrate the model by solving for various model parameters, such that the model reproduces Hawai'i's current insurance marketplace. Using the simulated population, the solved-for model parameters and many other economic variables, the third module introduces the changes to the marketplace that will come about as a result of the ACA. Using these marketplace changes as assumptions, the model projects the migration of individuals among the various coverage statuses that will be available to them in the post-reform insurance marketplace.

There are two key similarities between the CBO's model and our model that we wish to introduce here. First, both models are a function of health insurance purchase decisions made at the health insurance unit (HIU)⁹⁸ level. Second, both models estimate these health insurance purchase decisions assuming these HIUs follow rational choice theory.⁹⁹ In reality, consumers will not always behave in an economically rational manner, and for this and other reasons, actual results will vary from those produced by our model. The model evaluates all options available to the HIU for obtaining health insurance (i.e., they select among various insurance options with various premiums and OOP cost sharing, public programs or chose to remain uninsured), and assumes the HIU elects the option with the highest economic utility. The utility function that we have chosen to use is similar to utility function that The RAND Corporation uses in its model, ¹⁰⁰ but we have calibrated it to

⁹⁸ A Health Insurance Unit (HIU) is defined as any grouping of family members where each person within the HIU might be eligible for coverage under the same policy.

⁹⁹ Rational choice theory is based on the assumption that individuals act as if comparing the costs against the benefits of various choices to arrive at the action that maximizes their personal satisfaction.

¹⁰⁰ The utility function utilized by The RAND Corporation was previously justified by research performed by Goldman, Buchanan and Keeler. (2000).

reproduce Hawai'i's current insurance marketplace. In modeling HIU behavior, we chose a utility function over an elasticity function (which postulates that behavior can be modeled on changes to historical prices) because the choices consumers will face in the reformed market are, in many cases, significantly different from those they have faced in the past.

While the individual purchasing decision will change significantly with the introduction of the Connector, premium and cost-sharing subsidies, adjusted community rating and the individual mandate, the decision from the employer perspective will essentially remain the same. That is, the employer will be subject to the provisions of the PHCA and the attendant risk of not offering coverage. Based on information we received from the State, we have assumed that the PHCA will compel small groups (currently offering coverage) to remain in the market. Therefore, we have assumed that the employer participation rates in the employer-sponsored insurance (ESI) market will not change.

Key Underlying Assumptions of the Model

The discussion above, and the corresponding Appendix A, focused on the model's underlying framework. We now turn to a discussion of the key assumptions that underlie the model.

Steady State Population

A key underlying assumption of the model is a steady State population. By this we mean that the underlying mix of the population does not change over the projection period with respect to most variables. Our modeling assumes that:

- The distribution of the population by income remains unchanged; however incomes themselves are modeled to increase each year based on salary inflation assumptions
- The population is projected to grow each year. However, significant migration of individuals
 of a specific age or gender into or out of Hawai'i is not assumed to occur. The distribution by
 age and gender changes slightly to reflect the aging of the population. The US Census
 Bureau's estimates of population growth by age range, specific to Hawai'i, are assumed
- The distribution of the overall population by health status, occupation, and family size are assumed to remain relatively constant through 2018, with the exception of the impact that aging of the population will have. The steady state assumption does not mean that the health status for specific individuals will not change over time, only that the overall distribution by specific subsets of the population (e.g., by FPL and age) does not change. Similarly, the family composition of a given household may change; however it is assumed that the overall distribution of the State's population by family composition does not change.
- The overall rate of employment over the period 2014 through 2018 is assumed to be consistent with current levels

Guarantee Issue

The Oliver Wyman HRM Model does not evaluate all coverage options for individuals unless they meet (or fail to meet) certain eligibility requirements (e.g., meet Medicaid eligibility requirements or work for an employer that offers coverage). However, carriers, as required under the ACA, must offer individual coverage on a guarantee issue basis. This guarantee issue provision prohibits

carriers from offering rates that vary by the health status of a prospective or current policyholder. This new restriction implies that individuals will be able to evaluate coverage options regardless of their own health status. The Oliver Wyman HRM Model reflects these new requirements.

Carrier Participation and Product Offerings in Hawai'i's Individual and Small Group Markets

We made the following assumptions regarding carrier participation:

- All major carriers participating in the State's individual and small group markets during the base period continue to participate in 2014 and beyond
- Any new carriers that enter the market will offer products with benefits and premiums similar to products and premiums that will be offered in 2014 by carriers currently participating in the market
- Carriers will offer products at all metallic levels
- All carriers participate in markets both inside and outside the Connector
- Carriers charge the same premium rates inside and outside of the Connector, for the same products, as required by the ACA
- Products offered in the Individual and SHOP Exchanges are similar to products offered
 outside the Individual and SHOP Exchanges, and premium rates are the same inside and
 outside the exchanges for the same benefit packages
- Carriers' products are priced based on the pooled experience of their entire individual block and their entire small group block, as required by the ACA. In the scenario where a merged market is modeled, the pooled individual and small group experience is used to develop rates

Large Employers Continue to Offer ESI

Large employers (defined as those with 101+ employees) are assumed to continue to offer ESI coverage at the same rate they did in 2011, and we have assumed that employees who are eligible and enroll in this coverage do so at the same rate they did in 2011. Employees who are not eligible to enroll, or those who are eligible to enroll but choose to remain uninsured, are reflected in our analysis.

Small Employer Coverage Assumptions

The model assumes that a small employer is defined as those with 2 to 100 employees starting in 2014. Further, we assume that small employers that did not offer coverage in 2011 will not begin to offer coverage in 2014. We note that the small employer tax credits were introduced in 2010, and we assumed that any small employers electing to offer coverage as a result of these credits would have done so by 2011. As a result, we assume any employers that might seek the credits are already reflected in the base experience used in the model.

In addition, we have assumed that the PHCA will not be diminished by the ACA, and small employers offering coverage today will continue to do so in 2014. Because union plans are not held

to the PHCA, there is a possibility that workers in these plans could exceed the ACA's affordability threshold and seek subsidized coverage in the Connector.

Individual Purchasing Decision

Individual HIUs are assumed to evaluate all of the options available to them, after which they select the option that maximizes their economic utility. The model only allows individuals to evaluate the coverage options for which they are eligible. For example, those who have incomes above the Medicaid eligibility limit will not be allowed to evaluate the option of enrolling in Medicaid.

Government Workers

If either the primary ACS respondent or the spouse is identified as working for the government and the HIU is identified as currently having ESI coverage, we have assumed that the ESI coverage is provided through a government employer. Our model assumes that these individuals will continue to receive this coverage and will not enroll in the Connector or the SHOP Exchange.

Medicaid/CHIP

Regardless of whether a BHP is established, Medicaid eligibility categories in 2014 were assumed as follows:

- Families and childless adults are covered up to 138% FPL (133% plus a 5% disregard)
- CHIP coverage to 300% FPL
- Pregnant women are covered up to 185% FPL

Compact of Free Association Individuals

Some legal immigrants that are not citizens may be eligible for premium and cost sharing subsidies based on their income, but are not eligible for Medicaid. This is particularly important for Hawai'i given the large Compact of Free Association (COFA) population that is present in the State. As we understand it, COFA is made up of a number of island nation-states that have access to certain domestic U.S. programs. Low income persons that are from these islands and not U.S. citizens might be eligible for premium and cost sharing subsidies, but not Medicaid.

Only ACS respondents where the ancestry field specifically identified a respondent with a COFA nation-state (e.g., Micronesian) were characterized as a COFA member. Also, we only identified survey respondents as COFA members if they reported themselves as 'Not a Citizen of the United States' in the ACS questionnaire. We assumed that those respondents with the appropriate ancestry designation but a different citizenship status (e.g., Born Abroad of American Parents) would be treated as any other Hawai'ian for the purpose of program and subsidy eligibility.

It is also our understanding that Hawai'i's Department of Human Services (DHS) is currently engaged in discussions with HHS and the IRS to determine whether the COFA population will be eligible to enroll in the BHP. Although their eligibility is not yet certain, we assume in this analysis that the COFA population will be eligible to enroll in the BHP in those scenarios where a BHP is assumed to be established. In the event the COFA population is not eligible for the BHP, our modeling results would need to be updated.

Uninsured Utilization and Pent-up Demand

Individuals without current health insurance do not seek medical services at the same level as those with insurance. We multiplied the expected claim cost for an individual with insurance by a factor of 0.60 when evaluating the utility associated with becoming or remaining uninsured.

Because individuals who are currently uninsured do not utilize services at the same level as those with insurance, they will have pent-up demand and utilize services at a higher rate during their first year with coverage. We have assumed that pent-up demand will increase the expected claims costs for a newly insured individual by 10% above average in the first year. We have assumed that their expected claims cost after the first year is the same as an average insured. (Here, 'average' signifies an individual of the same age, gender and health status that has insurance.)

Adverse Selection Due to Risk Pool Composition Changes

The relative morbidity associated with individuals (and small group enrollees) that enter and depart the market is a critical consideration in premium development estimates. To the extent that the risk pool composition changes, the premium levels will also change. Some of the factors that can adversely affect the average morbidity of the individual and small group pools are:

- Residents with current individual and small group insurance that leave the pool
- Residents without insurance that enter the pool
- Those with current ESI coverage that lose that coverage or voluntarily leave the pool
- Resident that lose Medicaid eligibility and enter the pool

In our model, we have assumed that health insurance carriers will anticipate adverse selection associated with the four items discussed above and prospectively price for it (to the extent that such actions are allowed). We derived the assumptions for these relative morbidity levels by iteratively applying adverse selection loads to premiums; we then observed the resulting changes in morbidity of the pool as enrollees entered and exited the market. For additional discussion, please see Appendix C.

Grandfathered Policies

We have assumed that there will be no individual or small group policies with grandfathered status in 2014. See Appendix A for additional discussion.

Key Model Input Assumptions

In addition to the underlying assumptions we have identified above, the Oliver Wyman HRM Model contains various parameters that will affect the model's results. We provide a summary the key assumptions here, however for a more detailed listing and further discussion on several of the assumptions below, please see Appendix C.

Medical Trend

We employed an estimate for annual medical trends between 2011 and 2018 of 7.0% based on research. We discussed our 7% trend assumption with DCCA, and they agreed it was appropriate to use in our modeling.

Targeted Medical Loss Ratios

Health insurers were required to meet new minimum loss ratio requirements beginning in 2011. In the individual and small group markets, the minimum loss ratio is 80%; in the large group market, the loss ratio is 85%. Our model assumes that insurers will prospectively develop their 2014 premiums based on loss ratio targets consistent with these minimum requirements.

Benefits and Actuarial Values

The CBO estimates that average premiums nationwide in the individual market in 2014 will be 27% to 30% higher because of greater coverage requirements. These increases result from the average insurance policy covering a substantially larger share of an enrollee's costs for healthcare and a wider range of covered benefits as a result of the EHB package. The current average actuarial value in the individual market for coverage offered in Hawai'i is significantly higher than in other states. Therefore, the impact on premiums will be significantly lower than the CBO's nationwide estimate since individual policies in Hawai'i already contain lower member cost sharing provisions for most plans.

- Average premiums in the State will increase by about 3.6% in the individual market as a result of needing to increase the actuarial values of plans offered to a minimum of 60%
- Average premium in the State in the small group market will not be impacted as a result of needing to increase the actuarial values of plans offered to a minimum of 60% as the PHCA already requires higher actuarial values be offered
- Average premium in both the individual and small group market will need to increase an
 additional 4.6% as a result of the requirement to cover essential health benefits, including
 habilitative services and pediatric oral and vision services

Coverage for Women's Preventive Services

Beginning August 1, 2012, carriers were required to provide certain women's preventive services without cost sharing. The 2011 premiums used as the base for our modeling are assumed to increase 4% in the individual market and 2% in the small group market as a result of this new requirement.

Increases in the Consumer Price Index

We have used increases in the Consumer Price Index (CPI) consistent with the middle estimate as reported in the 2011 Social Security Trustees Report, Table V.B.1.¹⁰² The following table shows the estimates employed in our modeling for Hawai'i.

http://www.cbo.gov/ftpdocs/107xx/doc10781/11-30-Premiums.pdf

http://www.ssa.gov/oact/tr/2011/lr5b1.html

Table 6.1: CPI Estimates

Year	CPI Estimate
2010	1.6%
2011	1.2%
2012	1.7%
2013	1.9%
2014	2.0%
2015	2.0%
2016	2.0%
2017	2.2%
2018	2.6%
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Increases in Annual Average Wage

We have used increases in the average annual wage from the middle estimate as reported in the 2011 Social Security Trustees Report, Table V.B.1, "Annual Percentage Change in Average Annual Wage in Covered Employment." The following table shows the estimates employed in our modeling.

Table 6.2: Annual Wage Increases

Year	Annual Increase
2010	4.0%
2011	4.1%
2012	4.5%
2013	4.6%
2014	4.2%
2015	3.9%
2016	4.0%
2017	4.0%
2018	4.4%

Penalties under the Individual Mandate

Penalties for 2014 through 2016 are prescribed in the ACA. The specific values employed in our modeling are shown in the following table.

¹⁰³ http://www.ssa.gov/oact/tr/2011/lr5b1.html

Table 6.3: Individual Mandate Penalties

Year	Dollar Penalty	Percentage Penalty
2014	\$95	1.0%
2015	\$325	2.0%
2016	\$695	2.5%
2017	\$700	2.5%
2018	\$700	2.5%

Premium Subsidies

Within the model, we employed premium subsidies consistent with those outlined in the ACA. The following table compares the subsidy levels included in the ACA with the income range subsidies employed in our model. Please see Appendix C for additional discussion of how these ranges were developed.

Table 6.4: Premium Subsidies

Federal FPL Range	Max Premium Contribution
< 100%	2.00%
100% - 138%	2.50%
139% - 150%	3.50%
151% - 200%	5.15%
201% - 250%	7.18%
251% - 300%	8.78%
301% - 350%	9.50%
351% - 400%	9.50%
·	

Cost Sharing Subsidies

The following cost sharing subsidies, consistent with the ACA, were applied for individuals and families with household incomes below 250% FPL. These subsidized cost sharing levels were used when calculating the utility associated with the purchasing choice "Individual Coverage."

Table 6.5: Cost Sharing Subsidies

FPL	Enhanced Actuarial Value of Benefits
138% - 150%	0.94
150% - 200%	0.87
200% - 250%	0.73

Transitional Reinsurance Program

The Federal government will establish a transitional reinsurance pool to help stabilize premiums in the individual market for the three years from 2014 through 2016. The following table shows our estimate of the net annual effect that the reinsurance program will have on premiums.

Table 6.6: Impact of Transitional Reinsurance on Premiums

Year	Individual Market	Small Group Market
2014	-9.10%	1.00%
2015	4.10%	-0.30%
2016	1.90%	-0.20%
2017	3.70%	-0.40%

Insurer Tax

Starting in 2014, a new insurer tax will be allocated across all insurers based on net premiums written; this tax will total \$8 billion in 2014 and increase to \$14 billion in 2018. Our analysis indicates that this new tax will increase premium by the following percentages.

Table 6.7: Insurer Tax

Year	Insurer Tax as a % of Premium
2014	2.1%
2015	2.7%
2016	2.7%
2017	3.3%
2018	3.3%

In our model, we have incorporated these increases into the projected premiums for both the individual and small group markets.

Tax Considerations for ESI

An employee's premium contributions under an ESI health plan may be purchased with pre-tax dollars. Our model recognizes these incentives when applying the utility function for individual purchasing decisions. We considered marginal State and Federal income taxes as well as Federal Insurance Contributions Act (FICA) and Medicare taxes. The specific tax rates at various income ranges that we employed in our modeling are provided in Appendix C.

Inertia Factor

We have employed a 10% inertia factor in the model. With this factor, we attempt to reflect a preference for one's current coverage over some other, new coverage. In order to model a change in an individual's coverage, we assume that the individual's utility change must exceed some minimum threshold. Specifically, we assume that an individual will only change coverage if the utility

associated with the new coverage is at least 10% greater than the utility under their current mode of coverage. In the absence of this adjustment, we might model coverage changes that are more volatile than what we see in the actual market (e.g., individual to uninsured to individual to uninsured as a migration pattern).

Take-up of Medicaid Coverage among Those Eligible but Not Enrolled

As with most states, there are residents of Hawai'i who are eligible for Medicaid but not enrolled today. We engaged in discussions with key stakeholders from Hawai'i and agreed on the following assumptions which were employed in our modeling:

- 70% of those eligible for Medicaid but currently uninsured will take-up Medicaid coverage
- 100% of those eligible for Medicaid but currently covered by an individual policy will take-up Medicaid coverage as they will not be eligible for subsidized individual coverage in 2014
- 50% of spouses and dependents eligible for Medicaid but with current employer coverage will take-up Medicaid coverage

Please see Appendix C for a detailed discussion of the information reviewed in arriving at these assumptions.

Participation in the Individual Exchange

While our economic and actuarially based HRM model is well suited for projecting premiums, claims and coverage take-up, it is not designed to model decisions which are non-financial in nature. Given premiums for comparable coverage must be the same inside and outside of the Connector, the decision to take-up coverage through the Connector or obtain coverage in the outside market is not a financial one for those ineligible for subsidies. In our modeling, we have assumed:

- Subsidy eligible individuals electing to take-up coverage will enroll in the Connector, rather
 than pay what in many cases may be significantly higher premiums for them in the outside
 market. In evaluating whether subsidy eligible individuals will purchase coverage, the
 subsidized premiums available to them are used
- That 25% of the non-subsidy eligible individuals electing to take-up coverage will obtain their insurance through the Connector in the low take-up scenario and that 50% will obtain their insurance through the Connector in the high take-up scenario

Please see Appendix C for a detailed discussion of the information reviewed in arriving at these assumptions.

Participation in the SHOP Exchange

Given premiums for comparable coverage in the SHOP must also be the same inside and outside of the Connector, the decision to take-up coverage through the SHOP or obtain coverage in the outside market is not a financial one. In our modeling, we assume both low and high take-up scenarios as a reasonable range of potential enrollment. In our modeling, we have assumed that 25% of small groups electing to purchase coverage will obtain their insurance through the SHOP in the low take-up scenario and that 50% of the small groups electing to purchase coverage will obtain

their insurance through the SHOP in the high take-up scenario. Please see Appendix C for a detailed discussion of the information reviewed in arriving at these assumptions.

We note that in our opinion the high take-up scenarios for both the individual and SHOP Exchanges are very aggressive when compared to experience from other states that have established exchanges to date. However, these existing exchanges are different from those that will be formed under the requirements of the ACA, and reluctance by carriers to participate in the past due to fears of adverse selection will be mitigated to a large extent through the risk adjustment program. At the same time, there is no empirical evidence as to how individuals, employers, and carriers may react in these new markets. Therefore, of all assumptions made related to our modeling, the assumptions around participation in the Connector should be used with the most caution.

7

Modeling Results

To understand how certain design scenarios could impact enrollment and premiums in the Individual and SHOP Exchanges, we used the Oliver Wyman HRM Model to test potential results for four scenarios. The ACA definition that small groups are defined as employers with up to 100 employees underlies all four scenarios. The four scenarios vary based on whether the individual and small group markets are merged, and whether a BHP is established. The focus of the following model findings is on the sensitivity of results under these scenarios.

As previously described, the model is based upon the assumption that consumers will select the option that maximizes the utility for the HIU. Employers' decisions to offer or continue offering coverage is based on a demand elasticity curve. As previously noted, we engaged in several discussions with various key stakeholders, and in our modeling, we assume that small employers not subject to the shared responsibility penalty under the ACA would continue to offer coverage due to the strength of the PHCA.

Significant rate shock for some individuals in Hawai'i will result in dropped coverage or movement among coverage levels in the new market, as younger and healthier consumers react to premium increases associated with the new rating rules. Other consumers who are currently not covered may be attracted to the marketplace as premiums become more affordable for them, or as financial penalties associated with the individual mandate reduces the utility associated with remaining uninsured. Finally, other consumers, many of whom will be newly eligible for Medicaid or newly aware of the program, will leave the insurance market to participate in that program.

The State requested scenarios that test the impact of merging the small group and individual markets, as well as the impact of establishing a BHP. A merger of the small group and individual markets would require carriers both to blend the experience in the two markets for the purposes of premium development as well as to apply a consistent set of rating rules. Carriers doing business in one market would by default be required to participate in both. The first scenario presents the results in the case where separate pools are maintained for the individual and small group markets, and a BHP is not established. We refer to this as our Baseline Reform Scenario. We then present three alternate scenarios, one where the individual and small group markets are merged, one where a BHP is established, and one where both of these changes occur.

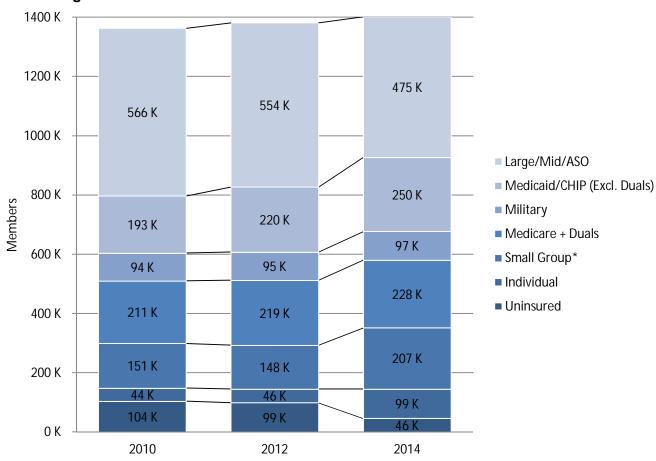
Baseline Reform Scenario

In the Baseline Reform Scenario separate individual and small group markets are maintained, and a BHP is not established. As mentioned above, the definition of a small group will include groups with up to 100 employees starting in 2014. Table 7.1 and Figure 7.1 that follow present the modeled total enrollment in various markets under this scenario.

Table 7.1: Membership by Key Market Segment and Year

Market	2010	2012	2014	2015	2016	2017	2018
Individual - Subsidy Eligible	0	0	51,000	54,000	57,000	58,000	60,000
Individual - Non-Subsidy Eligible	44,000	46,000	48,000	53,000	56,000	57,000	60,000
Small Group ¹⁰⁴	151,000	148,000	207,000	210,000	212,000	213,000	215,000
Mid Group	63,000	63,000	0	0	0	0	0
Medicaid/CHIP (Excl. Duals)	193,000	220,000	250,000	253,000	254,000	251,000	250,000
BHP	0	0	0	0	0	0	0
Uninsured	104,000	99,000	46,000	39,000	35,000	36,000	34,000

Figure 7.1: Pre- and Post-Reform Insurance Market Estimates in Hawai'i



^{*}Small group is defined as up to 50 employees in 2010 and 2012 and up to 100 employees in 2014 and later years; Mid-Individual (51-100) is included in Large Individual in 2010 and in Small group in 2014 and later years.

The base year for our modeling was 2010, which was the most recently available ACS data at the time our modeling was performed. We have relied on more recent information from various sources

¹⁰⁴ Small group is defined as up to 50 employees in 2010 and up to 100 eligible employees in 2014 and later years

to supplement the 2010 ACS data, including but not limited to 2011 Supplemental Health Care Exhibits from carriers' statutory financial statements, 2011 MEPS data, and monthly Med-QUEST enrollment reports through November 2012 along with conversations with key staff at DHS. In addition, the 2011 ACS data became available just as we began to prepare our modeling output for presenting to key stakeholders. We reviewed the 2011 ACS data to ensure that for select population segments it was not significantly different from the information used in our modeling.

While our modeling focuses on changes that will occur in 2014 and beyond when key provisions of the ACA become effective, we have included the results from our model for 2012 in Table 7.1 and Figure 7.1 above for the interested reader. The modeling results for 2012 were compared with the more recent known information described above, and modeling assumptions were adjusted as needed in order to calibrate the results to this more recent information.

Projected Average Premium

Table 7.2 below presents the resulting average premiums PMPM. It is important to note that because these are average premiums they include more than just changes in trend, average morbidity of the risk pool, the impact of ACR requirements, and new taxes and fees. These average premiums also include changes in average benefits and demographics, as well as the impact of the Transitional Reinsurance Program on the individual market. While premium subsidies are considered in the model, the premiums shown in the table below are prior to reduction for any subsidies, and therefore reflect total premium dollars flowing to insurers. While average premiums are not helpful in determining the impact on an individual consumer, it may be helpful to the Connector in the case that it would like to explore the option of a Connector user fee as a percent of premium.

Market 2014 2015 2010 2016 2017 2018 Individual \$2,769 \$4,152 \$4,570 \$4,804 \$5,152 \$5,476 % Increase 50% 10% 7% 5% 6% Small Group \$3,772 \$4,890 \$4,956 \$5,232 \$5,547 \$5,899 % Increase 31% 1% 6% 6% 6%

Table 7.2: Average Premiums Per Member Per Year

A large part of the increase from 2010 to 2014 represents four years of trend at the assumed rate of 7% per year. Backing out three years of trend between 2010 and 2013, the estimated increase in the average premium between 2013 and 2014 is 22% for the individual market and 6% for the small group market. Again, it is important to note that these average increases also reflect the changes in benefits and demographics, as well as the impact of the Transitional Reinsurance Program on the individual market.

It should be noted that a variety of factors and influences will affect how the State's enrollment and premiums develop between now and 2014, and beyond. The results shown here will be different from actual results to the extent that experience emerges differently than the assumptions used. These results should be considered point estimates within a wide range of possible outcomes. In particular, longer projection timeframes introduce greater uncertainty so the projections for later years are even more uncertain than those for the earlier years in the projections.

As Table 7.1 showed, the individual market is anticipated experience significant change in 2014, growing from 46,000 members in 2012 to 99,000 members in 2014. The members migrating into the individual market will come from various sources. Many will come from the current individual market. The introduction of premium and cost sharing subsidies will incentivize many who are currently uninsured to take-up coverage. As outlined in Appendix A, the morbidity of the currently uninsured population is higher than those currently covered in the individual market. In addition, some individuals who were covered by the QUEST-Net and QUEST-ACE programs with incomes above 138% FPL will no longer qualify for coverage and instead will qualify for significant premium and cost sharing subsidies in the individual market. The change in enrollment in the small group market is not significant when compared to the current small group and Mid-group markets on a combined basis. Table 7.1 also showed a significant increase in enrollment in the Medicaid program as childless adults become eligible for coverage under the expanded eligibility requirements.

Projected Change in Morbidity

Figure 7.2 below depicts the projected change in the relative morbidity of various markets. The average morbidity is projected to increase significantly (by 38%) in the individual market and remain relatively unchanged in the small group market.

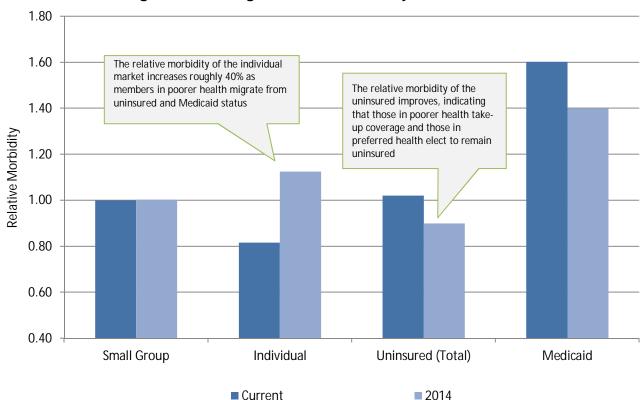


Figure 7.2: Change in Relative Morbidity of the Markets

The chart also shows improved morbidity in the uninsured population. This is expected as those who are uninsured with the poorest health status would be anticipated to be the first to enroll in the Connector, once the current barrier of medical underwriting is removed. In addition, the lowest income uninsured will benefit the most from premium subsidies, and are currently in poorer health

than the uninsured with higher incomes, all else equal. As these uninsured in poorer health migrate to the individual market, those who remain uninsured have lower morbidity than the current uninsured pool as a whole.

Individual Market Distribution by Income

Table 7.3 shows how the individual market is anticipated to change by income. There are currently very few people with incomes below 138% FPL in the individual market, as expected, since these individuals would likely qualify for Medicaid. Over half of the current individual market is comprised of those with incomes of more than 400% FPL. However, in 2014 when premium subsidies make coverage much more affordable for those with lower incomes, the distribution shifts significantly.

FPL	2010	2014
Under 100%	0.5%	3.6%
100% - 138%	0.3%	2.0%
139% - 150%	0.0%	4.6%
151% - 200%	2.3%	17.1%
201% - 250%	11.1%	11.3%
251% - 300%	5.7%	6.1%
301% - 350%	13.9%	6.9%
351% - 400%	5.7%	5.6%
Over 400%	60.5%	42.8%

Table 7.3: Distribution of the Individual Market by FPL

As one might expect, lower income individuals represent a larger portion of the individual market in 2014 as premium and cost sharing subsidies make coverage more affordable for them. The increase in the number of individuals with incomes below 138% FPL primarily represents the COFA population. The ACA provides that premium and cost sharing subsidies for lawfully present immigrants with incomes below 100% FPL who are ineligible for Medicaid due to not meeting minimum residency requirements are calculated as if their income were 100% FPL. 105 106 As previously mentioned, we have assumed in our modeling that this population would be determined to be eligible for premium, and if applicable, cost sharing subsidies in 2014. These individuals are not eligible for Medicaid, and as a result, the most affordable means of coverage for them in 2014 would be to purchase subsidized coverage through the Connector.

It is important to note that, for those higher income ranges where the percentage decreases, it does not mean that there are fewer enrolled individuals with incomes in that range, but rather the number enrolled at lower income levels increases significantly, causing the population with higher incomes to represent a smaller share of the total. For example, an insured with income over 400% FPL represent 60.5% of the of 44,000 enrolled in the individual market in 2010, or roughly 26,600 individuals while 42.8% of 99,000, or 42,400 individuals, have incomes over 400% FPL in 2014.

¹⁰⁵ Sections 1401(c)(1)(B)(ii) and 1402(b)(2) of the ACA.

¹⁰⁶ At this time it is uncertain whether the COFA population would be eligible for the BHP. The State is currently working with both HHS and the IRS to determine this population's eligibility.

Projected Changes in Average Premium in the Individual Market

It is also interesting to examine the various drivers of average premiums increases in 2014. Table 7.2 showed that average annual premiums in the individual market are projected to increase from \$2,769 in 2010 to \$4,152 in 2014, and Figure 7.3 below demonstrates the impact of each of the drivers on a PMPM basis.

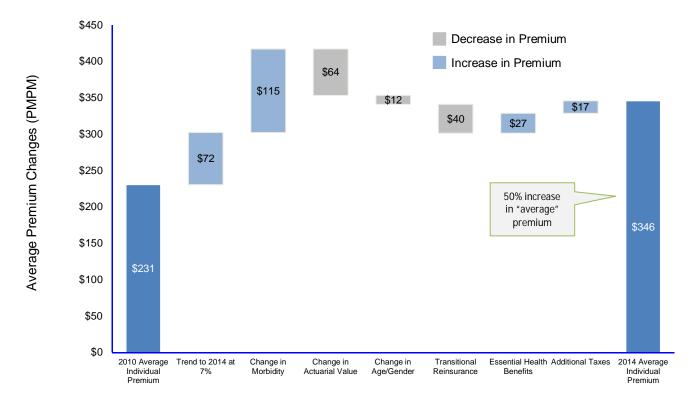


Figure 7.3 Key Drivers of Average Increase in Individual Market Premiums

Transitional reinsurance includes assessment and recoveries; additional taxes includes insurer, pharmaceutical and medical device taxes; addition of prescription drugs and maternity coverage to those currently not covering these services is included in the "change in actuarial value"

The key drivers are four years of medical trend at 7% and increases in the average morbidity of those enrolled in the individual market. The increase in average premium is offset, in part, by a shift to plans with a lower actuarial value and the effect of reinsurance recoveries under the Transitional Reinsurance Program.

Even though premiums in the individual market are projected to increase significantly, a large number of those in the individual market will only pay a portion of the higher 2014 premium due to receiving subsidies. The average premium for a 55-year old non-smoker enrolled in the second lowest cost Silver level plan is projected to be \$601 PMPM in 2014. The figure below shows the portion of this premium that will be required to be paid by individuals at various income levels. The subsidized premiums are based on 2012 FPL levels for Hawai'i, trended forwarded to 2014 using the statutory growth formula based on CPI.

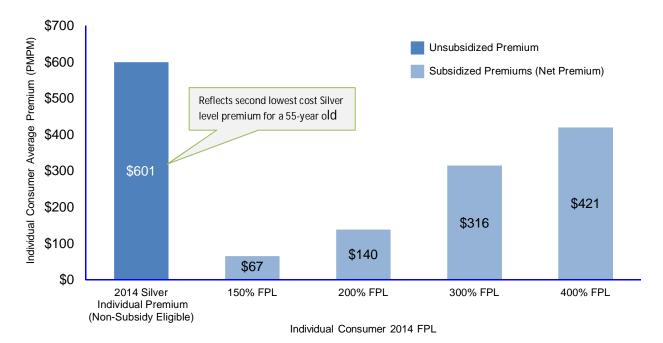


Figure 7.4 2014 Premiums in the Individual Market for a 55-Year Old Non-smoker

Even those 55-year olds at 400% FPL will pay only 70% of the full cost of coverage as a result of the subsidies. The figure also shows the significant "cliff" that will occur for those at older ages who experience an increase in income that causes them to lose eligibility for subsidies. Specifically, as a 55-year old individual's income increases by 1%, from 400% FPL to 401% FPL, their premium will increase 43%, from \$421 to \$601. This increase is a result of unsubsidized premiums being based on age, and therefore higher at the older ages, and subsidized premiums being based on income, independent of age.

While the premium subsidies have a significant impact for lower income individuals at older ages, the savings are not as great for younger individuals. The average premium for a 35-year old non-smoker enrolled in the second lowest cost Silver level plan is projected to be \$329 PMPM in 2014, almost half that for a 55-year old. However, the maximum subsidized premium a 35-year old is required to pay is the same as for a 55-year old since the subsidized premium calculation is not a function of age.

The figure below shows that the effective subsidy that a 35-year old earning 400% FPL receives is \$0. This is because the subsidized premium calculated using the formula prescribed by the ACA results is \$421, which is greater than the full amount of the premium. Therefore, the 35-year old does not receive the same benefit from the subsidies as the 55-year old does. The 35-year old also does not experience the same premium cliff that the 55-year old does.

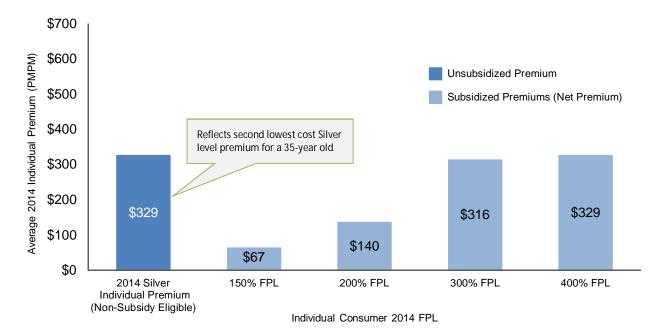


Figure 7.5 2014 Premiums in the Individual Market for a 35-Year Old Non-smoker

Costs for the Low Income Population

The following table presents the estimated average monthly cost a 40-year old non-smoker would have to pay for subsidized premium and cost sharing in the Connector, at various income levels, over the period from 2014 through 2018. The premiums were calculated using the applicable percent of income as outlined in the ACA; cost sharing amounts are based on microsimulation modeling performed to estimate average claims costs for a 40-year old with average morbidity in the individual market with reduced cost sharing requirements for the applicable income level.

Table 7.4: Subsidized Premium and Cost Sharing in the Connector 2014-2018

Income as a					
% of FPL	2014	2015	2016	2017	2018
100%	\$47	\$50	\$51	\$54	\$57
138%	\$75	\$78	\$81	\$84	\$87
144%	\$83	\$87	\$89	\$93	\$96
150%	\$121	\$126	\$130	\$136	\$143
175%	\$154	\$160	\$165	\$172	\$179
200%	\$194	\$201	\$207	\$215	\$222
250%	\$324	\$336	\$346	\$360	\$373
300%	\$428	\$443	\$456	\$473	\$489
400%	\$534	\$551	\$566	\$587	\$604

We note that ACA provides that premium and cost sharing subsidies for lawfully present immigrants with incomes below 100% FPL who are ineligible for Medicaid due to not meeting minimum

residency requirements are calculated as if their income were 100% FPL.¹⁰⁷ Therefore, they would have expected costs equal to those in the 100% FPL row in the table above.

The table below presents the costs from Table 7.4 as a percent of income.

Table 7.5: Subsidized Premium and Cost Sharing as a Percentage of Income 2014-2018

Income as a					
% of FPL	2014	2015	2016	2017	2018
100%	4.2%	4.4%	4.4%	4.5%	4.7%
138%	4.9%	5.0%	5.0%	5.1%	5.2%
144%	5.2%	5.3%	5.3%	5.4%	5.5%
150%	7.2%	7.4%	7.5%	7.6%	7.9%
175%	7.9%	8.1%	8.1%	8.2%	8.5%
200%	8.7%	8.9%	8.9%	9.0%	9.2%
250%	11.7%	11.8%	11.9%	12.1%	12.3%
300%	12.8%	13.0%	13.1%	13.2%	13.5%
400%	12.0%	12.1%	12.2%	12.3%	12.5%

Projected Enrollment in the Connector

We previously discussed the difficulty in estimating what portion of the projected membership in the individual and small group markets would enroll in coverage through the Connector. The following table presents long-term estimates under the low take-up and high take-up scenarios. All subsidy eligible individuals are projected to take-up coverage through the Connector in both scenarios. In the low take-up scenario 25% of the non-subsidy eligible individuals and small groups are projected to enroll through the Connector; in the high take-up scenario, 50% of the non-subsidy eligible individuals and small groups are projected to enroll through the Connector

Table 7.6: Projected Enrollment in the Connector

Market	2014	2015	2016	2017	2018	
	Low Take-up Scenario					
Individual - Subsidy Eligible	51,000	54,000	57,000	58,000	60,000	
Individual - Non-Subsidy Eligible	12,000	13,250	14,000	14,250	15,000	
Small Group	51,750	52,500	53,000	53,250	53,750	
Total	114,750	119,750	124,000	125,500	128,750	
		High T	ake-up Sc	enario		
Individual - Subsidy Eligible	51,000	54,000	57,000	58,000	60,000	
Individual - Non-Subsidy Eligible	24,000	26,500	28,000	28,500	30,000	
0 11 0	400 500	105 000	100 000	10C F00	107.500	
Small Group	103,500	105,000	106,000	106,500	107,500	

¹⁰⁷ Sections 1401(c)(1)(B)(ii) and 1402(b)(2) of the ACA.

Projected Uninsured

As a result of the increased take-up of coverage in the individual market and expanded Medicaid eligibility, the uninsured rate is projected to decline significantly. In 2014, the first year after major reforms take effect, just over 3% of the population is projected to remain uninsured. The modeling indicates that there is potential for additional improvement in the uninsured rate through 2016 after which point it stabilizes. The primary driver of the additional improvement in the uninsured rate between 2014 and 2016 is the phasing in of the penalty under the individual mandate.

 Year
 Uninsured Rate

 2010
 7.8%

 2014
 3.2%

 2015
 2.7%

 2016
 2.4%

 2017
 2.4%

Table 7.7: Uninsured Rate

These projected uninsured rates are much lower than projections nationwide; this is in large part due to the fact that the current uninsured rate in Hawai'i is roughly half the current uninsured rate nationwide. Hawai'i's PHCA and the State's large military presence make Hawai'i unique from other states, and contribute to this lower uninsured rate.

2.3%

2018

We also examined the changes in the uninsured population in the baseline scenario. The following table shows the distribution of the uninsured population by age, in 2010 and after major reforms in 2014.

Table 7.8: Distribution of the Uninsured by Age

Age	2010	2014
< 19	11%	9%
19 - 26	17%	21%
27 - 29	8%	13%
30 - 39	17%	21%
40 - 49	19%	16%
50 - 59	17%	14%
60 - 64	8%	4%
65+	4%	2%

In 2014, a larger percentage of the uninsured population is made up of individuals under age 40, and correspondingly those over age 40 make up a small percentage. This is driven by the fact that premiums will increase more for those at younger ages as a result of the requirement that rates for adults may vary by age by no more than a three to one ratio starting in 2014. Rates at older ages will see increases that are less than the marketwide average.

Finally, the following table shows the current status of the 46,000 individuals projected to be uninsured in 2014.

Table 7.9: Current Status of Those Uninsured in 2014

Prior Market	Members	Percentage
Employer	1,000	2%
Individual	11,000	24%
Medicaid	5,000	11%
Uninsured	29,000	63%
Total	46,000	100%

Roughly two-thirds of the projected uninsured individuals are currently uninsured today. These are most likely healthy individuals who are electing not to purchase coverage today and will choose to pay the penalty under the individual mandate over the even higher premiums in 2014. The next largest group is represented by individuals that are covered in the individual market today. These are mostly younger and/or healthier individuals that will experience a larger than average increase in premium in 2014 due to the elimination of medical underwriting discounts and rate compression by age.

Alternate Reform Scenario 1

In this scenario it is assumed that the State decides to merge the individual and small group pools into one. Merging these markets would mean that the rates for the individual and small group markets would be based on the combined morbidity of both markets, which would have the effect of spreading risk across a wider pool of participants and potentially providing greater rate stability for all. Morbidity in the current individual market is approximately 18% lower than in the small group market. However, the average morbidity in the individual market is projected to increase by 38% in 2014, while the average morbidity of the small group market is projected to be relatively unchanged. Therefore, the average morbidity in the individual market is projected to be approximately 12% higher than in the small group market in 2014, and merging the markets will have a favorable impact on premiums in the individual market and an unfavorable impact on premiums in the small group market. The following table and corresponding figure show the projected enrollment under the merged market scenario.

Table 7.10: Membership by Market Key Segment and Year

Market	2010	2014	2015	2016	2017	2018
Individual - Subsidy Eligible	0	50,000	53,000	55,000	57,000	59,000
Individual - Non-Subsidy Eligible	44,000	53,000	57,000	59,000	60,000	63,000
Small Group ¹⁰⁸	151,000	207,000	209,000	211,000	212,000	214,000
Mid Group	63,000	0	0	0	0	0
Medicaid/CHIP (Excl. Duals)	193,000	250,000	253,000	254,000	251,000	250,000
BHP	0	0	0	0	0	0
Uninsured	104,000	43,000	38,000	33,000	34,000	33,000

¹⁰⁸ Small group is defined as up to 50 employees in 2010 and up to 100 eligible employees in 2014 and later years

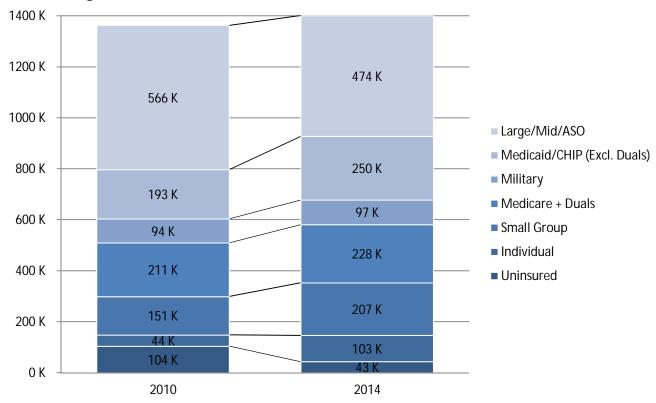


Figure 7.6: Pre- and Post-Reform Insurance Market Estimates in Hawai'i

*Small group is defined as up to 50 employees in 2010 and 2012 and up to 100 employees in 2014 and later years; Mid-Individual (51-100) is included in Large Individual in 2010 and in Small group in 2014 and later years.

Projected enrollment relative to the baseline scenario is approximately 4% higher in the individual market if the individual and small group risk pools are merged. This is due to premium rates being 7.1% lower in the individual market under Alternate Reform Scenario 1. It is important to note that only those over 400% FPL would enjoy the savings of the lower premiums since premiums for subsidized individuals are tied to income and are independent of actual premium rates in the market.

Supporting the lower premium rates in the individual market are higher premium rates in the small group market. Small group premiums are estimated to be 4.1% higher if the markets were merged. In most states, these higher small group premiums could, at least in part, be shifted to employees in the form of higher employee contributions. However, for those employers subject to the PHCA who are already requiring employees to pay the maximum contribution allowed, the additional cost of the increased premium would need to be entirely paid for by the employer.

The projected changes in average premiums are shown in the following table. The average premium in the individual market decreases by slightly more than the premium rates. This is due to the fact the average premiums in the table also reflect changes in average demographics and actuarial value of benefits. The lower premium in the merged market draws slightly more young individuals in, as compared to the baseline scenario, who have a lower premium rate, all else equal.

Table 7.11: Average Premiums Per Member Per Year

Market	2010	2014	2015	2016	2017	2018
Separate Individual and Sma	II Group Ma	arkets				_
Individual	\$2,769	\$4,152	\$4,570	\$4,804	\$5,152	\$5,476
Small Group	\$3,772	\$4,890	\$4,956	\$5,232	\$5,547	\$5,899
Merged Individual and Small	Group Mar	kets				
Individual	\$2,769	\$3,803	\$4,202	\$4,478	\$4,830	\$5,103
Small Group	\$3,722	\$5,142	\$5,224	\$5,493	\$5,815	\$6,218
Difference						
Individual		-8%	-8%	-7%	-6%	-7%
Small Group		5%	5%	5%	5%	5%

The changes in average morbidity under the merged market scenario are shown in Figure 7.7 below. The figure shows the lower average morbidity of the merged market as compared to the average morbidity in the individual market in 2014 under the baseline scenario. The figure shows an increase in the morbidity used to develop rates for the small group market. The average morbidity of the uninsured and Medicaid populations are relatively unchanged in this scenario as compared to the baseline scenario.

Figure 7.7: Change in Relative Morbidity of the Markets

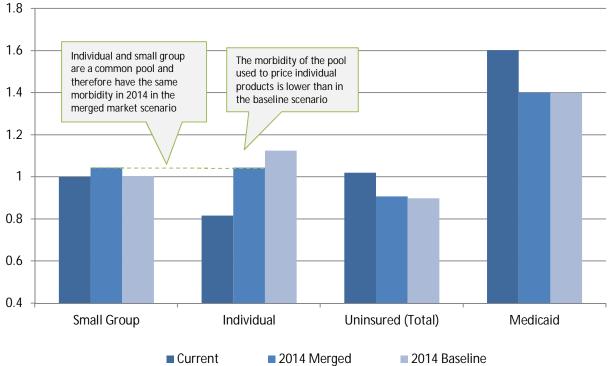


Table 7.12 below shows that the uninsured rate in the merged market scenario improves slightly over the baseline scenario.

Merged Year **Baseline Markets** 2010 7.8% 7.8% 2014 3.0% 3.2% 2015 2.7% 2.6% 2016 2.4% 2.3% 2017 2.4% 2.3% 2018 2.3% 2.2%

Table 7.12: Uninsured Rate

Because small group plan costs would increase if the individual and small group risk pools were to be merged, there is higher potential for adverse selection. Healthier small groups may choose to self-insure, knowing that if an employee becomes very sick they could enter the fully insured pool under guarantee issue requirements of HIPAA. This scenario illustrates added risk not captured in the modeling, and would impact premium rates both inside and outside the Connector due to the requirement under the ACA that a carrier's rates for comparable plans be the same inside and outside the Connector.

The ACA allows states to make the decision to merge their risk pools at any time. Merging them in 2014, when other disruption is already expected, may allow the State to reduce the rate shock that would otherwise occur in the individual market, while burying the adverse impact it would have on small groups with other items that will have upward pressure on rates. On the other hand, waiting to merge the markets until after 2014, when the State has a better picture of the make-up of the enrollment in both the individual and small group markets, may allow the State to better assess the impact. By implementing the merged market after 2014, the increase in cost to the small group market can be offset in part by the wearoff of the assessment for the transitional reinsurance program.

Potential Advantages and Disadvantages of Merging the Risk Pools

Potential Advantages of Merging the Risk Pools

- A larger pool is created over which a carrier's costs are spread, which could lead to greater stability of rates
- Rates in the individual market are anticipated to decrease 7.1% in a merged market (however it
 is important to note that only non-subsidy eligible individuals will realize savings from these
 reduced premiums)
- The same products are required to be sold to both individuals and small groups, which could reduce administrative expenses for carriers with one product portfolio
- Individuals leaving group coverage would able to maintain their coverage if the same products are offered in the individual market

 Consumer choice may be increased among carriers since carriers would be required to participate in both the individual and small group markets

Potential Disadvantages of Merging the Risk Pools

- Rates for small employers are anticipated to increase 4.1%, all else equal. This could lead to small employers with more favorable experience electing to self-insure, which would put further upward pressure on fully insured rates
- Carriers specializing in only one market today (individual or small group) may decide not to participate if required to participate in both markets
- A merged market may make it more difficult to tailor products, customer service, and marketing to meet the respective needs of the respective markets
- Carriers would only be allowed to change rates in the small group market once per year
- The same products are required to be offered to both individuals and small groups, which could work to increase administrative difficulties for the Connector given the PHCA
- Carriers not currently in the Hawai'i market may view a merged market to be burdensome and as a result may elect not to enter the market
- Merging the markets may require changes to administrative systems for both carriers and the State

Alternate Reform Scenario 2

Alternate Reform Scenario 2 includes the same underlying assumptions as the baseline scenario, with the exception that a BHP is established. The ACA outlines a process by which states may establish a BHP, a separate state-run health program funded by Federal dollars to cover certain low income individuals that do not qualify for Medicaid. For the most part, individuals covered through a BHP would be comprised of adults (ages 19-64) with incomes between 138% and 200% FPL; however, legal residents with incomes below this level would also qualify. The ACA anticipated that states could establish a BHP as early as January 1, 2014. However, on February 6, 2013 as this report was being finalized, the U.S. Department of Health and Human Services (HHS) issued a series of FAQs. One of those FAQs indicated that the earliest date of implementation for a BHP has been revised to January 1, 2015, with final guidance anticipated to be issued in 2014.

In states that establish a BHP, those eligible for the BHP would not be eligible for subsidized coverage through the Connector. States establishing a BHP would receive Federal funding equal to 95% of the advance premium tax credits (APTCs) and cost sharing subsidies that would have been expended had the individual instead participated in the Connector. In turn, states must use this Federal funding to provide coverage to BHP enrollees that is at least as comprehensive and affordable as the individual would have received through the Connector.

¹⁰⁹ At this time it is uncertain whether the COFA population would be eligible for the BHP. The State is currently working with both HHS and the IRS to determine this population's eligibility.

The BHP appears to represent the potential for states to reduce the number of uninsured, while at the same time lowering costs and increasing the continuity and quality of care for these low income adults. However, it does lead to lower potential enrollment for the Connector. Without a BHP, individuals who would have been eligible for significant premium and cost sharing subsidies by enrolling in the Connector must instead enroll in the BHP. These individuals would not be eligible for Medicaid or subsidized individual coverage through the Connector in this scenario.

We also assumed that 100% of those with current employer sponsored coverage that meet the eligibility requirements for the BHP would enroll. However, the presence of the PHCA and the corresponding cap on employee contributions of 1.5% of income means that most families would meet the ACA affordability test, precluding them from meeting the eligibility requirements for the BHP. Therefore, our simulation modeling resulted in very few individuals with current employer sponsored coverage enrolling in the BHP.

Only 85% of the uninsured population that is eligible for the BHP was assumed to take-up coverage. One might anticipate that anybody eligible would take-up coverage considering the cost of coverage is minimal. This phenomenon of less than 100% enrollment may be a result of eligible people that are unaware of the program, those who enroll only when they have acute healthcare needs, or some other reason. The assumption is that 85% take-up coverage is consistent with what is realized in the current Medicaid program, 110 increased slightly to reflect the additional awareness of programs for the low income as well as the presence of an individual mandate and its corresponding penalty.

Table 7.13 below and Figure 7.8 that follow show the projected enrollment in each market if the State were to establish a BHP.

Table 7.13:	Membership	by Key	Market	Segment	and Ye	ar

Market	2010	2014	2015	2016	2017	2018
Individual - Subsidy Eligible	0	26,000	26,000	26,000	27,000	28,000
Individual - Non-Subsidy Eligible	44,000	53,000	57,000	60,000	63,000	68,000
Small Group ¹¹¹	151,000	207,000	210,000	211,000	213,000	215,000
Mid Group	63,000	0	0	0	0	0
Medicaid/CHIP (Excl. Duals)	193,000	250,000	253,000	254,000	251,000	250,000
BHP	0	25,000	27,000	27,000	26,000	24,000
Uninsured	104,000	40,000	36,000	33,000	34,000	33,000

¹¹⁰ Dec 2012 Robert J. Wood Foundation Study of 2009/2010 enrollment: http://www.rwjf.org/content/dam/farm/reports/reports/2012/rwjf403218

¹¹¹ Small group is defined as up to 50 employees in 2010 and up to 100 eligible employees in 2014 and later years.

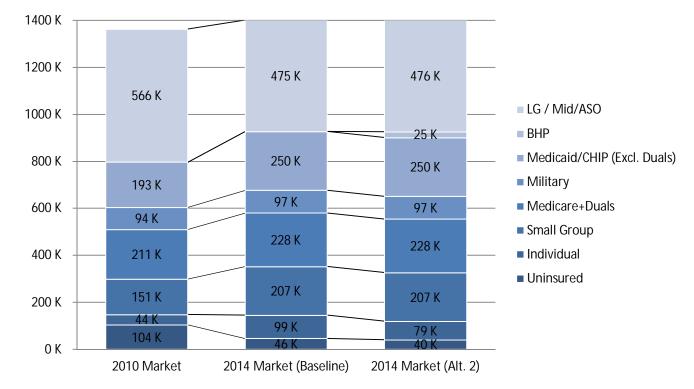


Figure 7.8: Pre- and Post-Reform Insurance Market Estimates in Hawai'i

*Small group is defined as up to 50 employees in 2010 and 2012 and up to 100 employees in 2014 and later years; Mid-Individual (51-100) is included in Large Individual in 2010 and in Small group in 2014 and later years.

The figure above shows that approximately 25,000 individuals are projected to enroll in the BHP. Almost all of these individuals would have enrolled in the Individual Exchange under the baseline scenario. Figure 7.8 above show the BHP enrollment is offset by a 25,000 decrease in the individual market, however an additional 5,000 non-subsidy eligible individuals projected to take-up coverage under this scenario results in a net 20,000 decrease in the individual market.

Morbidity in the individual market is significantly lower in this scenario. The morbidity of those with incomes under 200% FPL who enrolled in the Individual Exchange under the baseline scenario is significantly higher than the morbidity of those with incomes above 200% FPL. Therefore, if a BHP were established, removing those individuals with higher morbidity from the individual market risk pool has a favorable impact on the premium in the individual market. Rates in the individual market are projected to be 8.6% lower in this scenario than under the baseline scenario.

Projected Uninsured

The uninsured rate is also lower in this scenario. Approximately 5,000 individuals with incomes above 400% FPL that were modeled to remain uninsured in the baseline scenario are projected to be covered under the BHP in this scenario. The table below shows an uninsured rate that is 0.3% lower than in the baseline scenario in 2014, however over time as the individual mandate is phased in, the uninsured rate is approximately the same under both scenarios.

Table 7.14: Uninsured Rate

Year	Baseline	ВНР
2010	7.8%	7.8%
2014	3.2%	2.9%
2015	2.7%	2.5%
2016	2.4%	2.3%
2017	2.4%	2.3%
2018	2.3%	2.2%

Projected Impact on the Connector

Having a robust and competitive market will provide the Connector with more leverage to promote innovative coverage designs that improve quality and lower cost. The effectiveness of the Connector at driving this change will depend in large part on its size. The impact of reduced enrollment due to the introduction of a BHP will depend in part on how many people remain eligible to enroll through the Connector. The Connector's sustainability as well as its leverage and ability to drive quality and efficiency in the State's healthcare delivery system would also likely be impacted.

Our modeling found that with a BHP the number of subsidy eligible individuals enrolled in the Connector in 2014 would be roughly half the number if a BHP were not established, decreasing from 51,000 to 26,000. This does not mean total enrollment in the Connector would be reduced to half as there would be other non-subsidy eligible individuals and small groups that would also be enrolled in either scenario. The following tables show the number of individuals projected to be covered in each market segment if a BHP were established.

Table 7.15: Projected Enrollment in the Connector

Market	2014	2015	2016	2017	2018
		Low T	ake-up Sc	enario	
Individual - Subsidy Eligible	26,000	26,000	26,000	27,000	28,000
Individual - Non-Subsidy Eligible	13,000	14,250	15,000	15,750	17,000
Small Group	52,000	52,500	52,750	53,250	53,750
Total	91,000	92,750	93,750	96,000	98,750
		High T	ake-up Sc	enario	
Individual - Subsidy Eligible	26,000	26,000	26,000	27,000	28,000
Individual - Non-Subsidy Eligible	26,000	28,500	30,000	31,500	34,000
Small Group	104,000	105,000	105,500	106,500	107,500

This result is consistent with analysis performed by the Kaiser Family Foundation which estimates that roughly half of those eligible for premium and cost sharing subsidies nationwide are below 200% FPL. http://www.kff.org/healthreform/upload/8283.pdf p.9.

Alternate Reform Scenario 3

Alternate Reform Scenario 3 includes the same underlying assumptions as the baseline scenario, with the exception that both the individual and small group markets are merged and a BHP is established. Enrollment in this scenario is very similar to Alternate Scenario 2 (BHP with separate individual and small group markets); however, premiums in the individual market are even lower. The premiums in Alternate Reform Scenario 3 are lower than the baseline scenario for two reasons. First, lower morbidity results from merging the individual market with the small group market, and a favorable impact on individual market premiums results when removing those with incomes under 200% FPL and moving them to a BHP. Figure 7.9 below shows the projected enrollment in each market if the State merged the individual and small group markets and established a BHP.

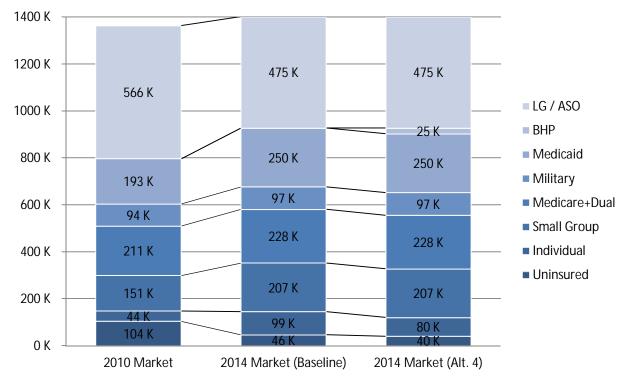


Figure 7.9: Pre- and Post-Reform Insurance Market Estimates in Hawai'i

*Small group is defined as up to 50 employees in 2010 and 2012 and up to 100 employees in 2014 and later years; Mid-Individual (51-100) is included in Large Individual in 2010 and in Small group in 2014 and later years.

As with Alternate Reform Scenario 2, the size of the individual market is significantly lower due to the presence of the BHP. Premiums in the individual market are 10.1% lower in this scenario than in the baseline scenario, as compared to being 7.1% lower in Alternate Reform Scenario 1 and 8.6% lower in Alternate Reform Scenario 2. These even lower premium rates result in slightly more individuals with incomes over 400% FPL taking up coverage. The uninsured rate improves only slightly over that in Alternate Reform Scenario 2, and the impact on the Connector is essentially the same.

Summary of Scenarios for Policy Considerations

Under all scenarios, the morbidity of the individual market is likely to increase significantly from current levels (impact of uninsured entering the market and being in poorer health than those currently in the select individual market), and the size of the individual market is expected to grow.

Merging the markets would put downward pressure on the individual market at the expense of upward pressure to small group market. Many individuals may not benefit from a merged market as they are subsidy eligible and pay premium equal to a fixed percent of their income. Therefore, premium subsidies paid by the government decrease at the expense of increases to small employers. Merging the market will also impact the small group market in that rates for the market would only be allowed to change once per year, whereas not merging them would preserve carriers' ability to increase rates periodically throughout the year.

Establishing a BHP would remove a large number of people from the individual market, and the Connector. This would reduce the number of individuals over which the Connector could spread its fixed costs, and it would impact the level of any fees on a per member basis required to be assessed against carriers for sustainability.

Although the Connector itself may work to increase consumer choice, it is unlikely that any of the scenarios will themselves impact the level of consumer choice available within the Connector.

Implementation of the ACA, including premium and cost sharing subsidies and expanded Medicaid coverage, are expected to significantly reduce the number of uninsured. However, the incremental impact on the uninsured rate due to merging the markets or implementing a BHP is not anticipated to be significant.

Increased Participation in the Exchange

As part of their planning, states are studying what actions they could take to maximize participation in their exchange. It will be important that an adequate mix of affordable plan choices be made available within the exchange in order to incentivize individuals and small groups who are not eligible for subsidies to participate. If broad choices at affordable rates cannot be found in the Connector, these individuals and small groups will look to additional options made available in the outside market. Under the ACA, carriers are only required to offer coverage at the Silver and Gold level inside the exchanges. To increase exchange participation, the Connector may consider requiring health insurance carriers to offer coverage at the Bronze level inside the Connector as well. This will eliminate the scenario where carriers only sell Bronze level coverage in the outside market and individuals cannot find this low level of affordable coverage within the Connector.

While premium and cost sharing subsidies will draw many into the Individual Exchange, there are no comparable financial incentives to draw small groups into the SHOP Exchange with the exception of small business tax credits, which are temporary, and only apply to a small number of groups. In our modeling, we assumed 25% of all small groups offering coverage would enroll in the SHOP Exchange in our low take-up scenario and 50% would enroll in our high take-up scenario. This assumption is significantly higher than the enrollment levels observed by existing exchanges to date, but could potentially be reasonable because of the employee choice option that must be made available inside the exchange. This flexibility is expected to draw some employers in. At the same

time, states recognize the need to explore options to increase enrollment in order to have a financially sustainable SHOP Exchange, and they are beginning to study methods to do this.

In order for have a viable SHOP Exchange, efforts beyond just attracting small employers will be required. Benefits and other options will also be needed to attract employees; the engagement of brokers will also be critical. Attracting carriers to participate in the exchange will be a necessity for both the Individual and SHOP Exchanges. Below, we discuss several items the State may consider, all of which may help to increase participation in the Connector.

Attract a Sufficient Number of Carriers

In order for the Connector to be viable and ensure affordable rates, participation in the Connector must be attractive to carriers. Participation by a number of carriers will mean more choices for individuals and small groups and a greater chance that they will purchase coverage through the Connector. Greater carrier participation will also likely mean more competition for a fixed pool of individuals, which may in turn help to keep rates affordable. In order to encourage carriers to participate though, the Connector must be able to demonstrate that they have "rules" in place to control adverse selection; carriers who perceive they will be selected against inside the exchange may choose not participate. At the extreme, the State could require that all carriers that wish to do business in the State participate in the Connector; however, this option must be explored with caution, as it could lead carriers that planned to participate only in the outside market to exit the State altogether.

Ensure a Broad Selection of Product Choices

Having a number of carriers participate in the Connector increases the chances that product offerings inside the Connector will provide a wide variety of deductibles, coinsurance and providers from which individuals and small employers may choose. A wide variety of products is needed to ensure enough choice to attract individuals and small groups; it is also needed to create robust competition among carriers. If the choices inside the Connector are more limited than those available in the outside market, participation by non-subsidized individuals and small groups could be reduced. Options are available to the Connector to limit or standardize the benefit offerings; however, if this same restriction is not applied to the outside market, these restrictions may also hinder enrollment. Therefore, if the State does decide to standardize benefits, a balance must be struck to ensure a variety of deductible and coinsurance options are available at each metallic level.

While choice will be important, the State should also take care to ensure the Connector does not overwhelm individuals and small employers with so many options that the process of selecting a plan becomes overly complicated. The standardized benefit form that will be required for all products sold inside the Connector will assist individuals and small groups when comparing plans. Different plans offered by the same carrier should be meaningfully different.

Ensure Easy Access to Information

Individuals and small group carriers must be able to access carrier and benefit information with relative ease. The process should be no more cumbersome than obtaining this same information from the market outside of the Connector. Exchanges are required to contract with navigators to assist with providing information to consumers, which could lead to greater enrollment in the

Connector. One of the roles of the navigator is to facilitate the distribution of information about plans in a culturally and linguistically appropriate manner. Given the State's diverse population, the navigator's role will be particularly important. To the extent that the outside market does not meet these diverse needs at the same level, the exchange may have an advantage. Some of the functions related to facilitation of information might include:

- Information related to price and quality should be easily accessible through the navigator program in a single location
- Provide small groups with a summary of each employee's benefit plan choice, coverage tier and premium to facilitate employee premium contribution calculations
- Provide small employers with estimated small business tax credits

Engage Brokers and Agents

Brokers and agents play a significant role in the current market. They advise individuals and small businesses of the most appropriate coverage for them, and they help them shop among different carriers. While the navigator will perform these functions, brokers and agents provide additional advisory services and many small businesses rely heavily on their brokers for this advice. The Connector must recognize the need to rely on brokers and agents to help them build their market and ensure affordable rates. To protect against a scenario where agents and brokers are not as active within the Connector as they are in the outside market, the Connector should ensure that navigators are able to assist agents with their functions. At the same time, rules must be in place to ensure agents are not incentivized to steer small groups comprised of unhealthy individuals into the Connector while steering healthy Individuals only to the outside market.

Consider Offering Value-added Services and Benefits Inside the Exchange

Many small businesses do not have human resource departments, and the small business owner fills this role. This takes time that they could otherwise spend focusing on their business. An exchange that could provide business services might be especially appealing to a small group. Additional services the SHOP Exchange could consider researching to see if they could provide include but are not limited to:

- New employee education and enrollment facilitation
- COBRA administration
- Flexible spending account administration
- HSA administration
- Human resource reference desk
- Business counseling

8

Potential Adverse Selection and Options for Mitigation

Adverse selection can occur when the average risk profile of the individuals enrolled in a product is higher than the risk profile embedded (or assumed) in that product's rates. Whenever individuals and employers have choices among health insurance options (including the option to forgo insurance altogether), there is potential for this type of selection to occur. Unlike other types of insurance, such as automobile or homeowner's coverage, the upcoming year's healthcare expenditures are relatively predictable for most people. Unrestrained risk selection can produce an unstable marketplace; so, striking a balance between preserving choice and mitigating the potential for adverse selection is a key challenge for states implementing exchanges.

There are three primary types of adverse selection that have the potential to influence Hawai'i's individual and small group health insurance marketplace in the reformed environment that will exist beginning in 2014:

- Adverse selection against the market, if healthier individuals and groups choose not to participate in the fully insured market, either by going uninsured or self-insuring
- Adverse selection against the Connector, if its design causes the Connector to be more attractive to higher risk populations while healthier populations stay in the outside market
- Selection among carriers and products offered inside the Connector

The ACA includes a number of provisions designed to discourage adverse selection, but many sources of selection remain. This section of the report discusses each of these primary types of selection further, describes the ACA's provisions designed to address them, and identifies additional options we recommend the State evaluate to further mitigate potential selection.

Adverse Selection Against the Market

Guarantee issue and ACR rules, described earlier, could cause groups and individuals to delay purchase of insurance until they need it. Without enough healthy individuals in the risk pool, premiums will be higher. In the past, states that have adopted issue and rating rules similar to those specified by the ACA have experienced challenges in their individual markets related to the departure of healthy populations and resulting premium increases. One study of eight states with guarantee issue and/or community rating requirements found that the individual markets deteriorated after the introduction of guarantee issue and community rating reforms. Often insurance companies chose to stop selling individual insurance in the market after reforms were enacted, which resulted in a decrease in competition and enrollment, and premium rates tended to increase, sometimes dramatically.¹¹³

¹¹³ Leigh Wachenheim, FSA, MAAA and Hans Leida, Ph. D. "The Impact of Guaranteed Issue and Community Rating Reforms on Individual Insurance Markets." July 10, 2007. http://alankatz.files.wordpress.com/2007/09/milliman-study-on-gi-20070912.pdf

In a given health insurance marketplace, individuals with greater health needs are more likely to enroll in products with higher actuarial values than other individuals. Individuals purchasing insurance could be influenced in their coverage choice if they expect that their claims will be higher than normal. Carriers typically do not have this information or are unable to price known information fully into rates due to restrictions imposed on them.

The ACA includes a "carrot and stick" approach to mitigating the potential for this type of selection against the insurance market. The premium and cost sharing subsidies are available to defray the cost of individual insurance, while the individual mandate will introduce a penalty for not having insurance. Both of these provisions are designed to draw more individuals into the market and provide a cross section of risks.

In combination, the subsidy and responsibility provisions included in the legislation could provide sufficient incentive to mitigate some of the potential for adverse selection against the market. However, some feel that the individual mandate is too weak to produce the incentive required to ensure a good cross section of risk. The penalty costs are lower than the cost of maintaining coverage, and it is possible that some healthy individuals will choose to pay the penalty rather than to enroll in coverage. In theory, states could establish a state individual insurance mandate and apply additional penalties for non-compliance, strengthening the financial incentive for individuals to purchase coverage. We are not aware of any states considering this type of action at this time.

Another potential source of selection against the small group and individual market is self-insurance, particularly when the definition is expanded to include small groups with up to 100 employees. Rate shock introduced by an ACR methodology will cause large increases for small groups comprised of healthy individuals, as these groups are likely receiving underwriting discounts today that will be prohibited under the ACA. Some small groups could choose to self-insure if they are in good health and are able to obtain attractively priced reinsurance at relatively low attachment points. An incentive to self-insure could result in more of the preferred risks staying out of the fully insured risk pool. In turn, it could reduce the size of the risk pool and lead to adverse selection and reduced rate stability. The availability of value-added services could be used to make the SHOP Exchange attractive to these small employers and keep them in the risk pool.

Adverse Selection Against the Connector

One of the main concerns to states in the post-reform marketplace is the adverse selection that can occur against the exchange. In states that maintain individual and/or small group markets outside the exchange, it is possible that the exchange could disproportionately attract less healthy enrollees than the outside market. This type of environment could discourage carriers from offering coverage through the Connector, reducing consumer choice and threatening the ongoing viability of the Connector. There are a number of ACA provisions designed to discourage this type of selection, but there remain a number of areas that could contribute to it.

The concept of a "level playing field" between products in the Connector and products in the outside market is another critical component of minimizing selection against the Connector. If carriers and products in both markets are subject to the same rules, the opportunity for selection is reduced. To this end, ACA provides a number of rules meant to put the Connector and outside markets on a consistent basis:

- Reforms related to rating, issue and renewal in the individual and small group markets apply to both QHPs in the Connector and the outside market
- Plans inside and outside the Connector must contain the EHB package, must abide by the same cost sharing limitations and must standardize benefit packages into the Bronze, Silver, Gold and Platinum levels of coverage
- Carriers must consider all enrollees in their individual products, inside or outside the Connector, as a single risk pool, and they must establish their small group risk pool similarly
- Carriers who offer a QHP in the Connector must agree to charge the same premium rate for that product whether it is offered inside or outside the Connector
- A risk adjustment mechanism is required to be applied across non-grandfathered individual health plans both inside and outside the Connector; a similar risk adjustment must apply across non-grandfathered small groups both inside and outside the Connector
- If a disproportionate share of high risk individuals enrolls in Individual plans in the Connector, the transitional reinsurance program will compensate these plans for the additional risk
- Recently finalized Market Rules require that user fees charged by the Connector be incorporated into rates as a marketwide adjustment, therefore being spread across the entire individual or entire small group markets

However, even with these leveling features, there are several possible sources of selection against the Connector that remain.

Product Offerings

The ACA does not require that all products offered inside the Connector also be offered outside the Connector. Likewise, some products may be offered only outside the Connector. While there is a requirement that carriers operating in the Connector offer at least Silver and Gold product levels, no such requirement exists for carriers operating outside the Connector. Therefore, carriers could choose to offer only Bronze plans in the outside market, which would be most attractive to relatively healthy populations.

Network Design

The ACA places requirements regarding provider network access standards on products sold within the Connector. Lack of these same requirements outside the Connector can drive adverse selection. Minimum standards of network adequacy and quality should also apply outside the Connector to avoid wide disparities between networks inside and outside the Connector. Network design could be used to avoid enrollment of members with certain chronic conditions. Establishing minimum network requirements outside the Connector could help reduce the potential for this type of selection.

Grandfathered Plans

The presence of grandfathered plans outside the Connector also has the potential to cause adverse selection inside the Connector. Maintaining grandfathered status will be most valuable to young, healthy individuals and small groups since carriers will be allowed to continue using pre-ACA rating

rules for these plans. This provision could allow lower age factors and underwriting discounts for these grandfathered groups and individuals; in turn, it could produce lower rates than are available inside the Connector. The exclusion of these plans from the risk pool will affect risk sharing mechanisms, such as risk adjustment and risk corridors set by the ACA for addressing adverse selection.

Self-Funded Multiple Employer Welfare Arrangements

MEWAs provide health and welfare benefits to employees of two or more unrelated employers who are not parties to bona fide collective bargaining agreements. An example of a MEWA would be a plan sponsored by a trade association for its members. MEWAs can be fully insured, or self-insured. Fully insured MEWAs covering small employers will be subject to the same rating rules that will govern the small employer market in general in 2014 and beyond, (e.g., 3:1 rate bands for age, and premiums based on experience pooled across the entire small group market). However, self-insured MEWAs would be able to have the cost of their benefits be based on the experience of the MEWA. This would be attractive to those groups that expect their health claims to be lower than the small group pool as a whole. The ACA includes several provisions related to MEWAs, including giving the Secretary of Labor the authority to make a MEWA subject to state regulatory jurisdiction. The State may want to consider a means for monitoring the extent to which MEWAs are selecting against in the Connector or the small group market in general, and may want to begin developing options for addressing the situation should it begin to occur.

Exchange Fees

While the recently released final Market Rules require that user fees charged by the Connector be spread across a carrier's products sold both inside and outside of the Connector, there is no requirement that fees be applied to products sold only outside the Connector. If user fees are assessed only against policies sold inside the Connector and some carriers sell only outside the Connector, this could lead to adverse selection. This adverse selection would occur when carriers outside the Connector are able to avoid the fees and offer comparable products at a lower price. Carriers that sell inside and outside the Connector would be assessed these fees against their Connector products. Since these carriers are required to charge the same premium for a plan sold both inside and outside the Connector, the fees assessed against their policies sold inside the Connector would essentially be spread across their policies outside the Connector as well.

Employee Contributions

In general, employers could set employee contributions at a level high enough so that the contribution for single coverage exceeds 9.5% of the employee's household income. At this point, the coverage would be deemed unaffordable, and if the employee's household income is less that 400% FPL, the employee would be eligible to enroll in the Connector and receive premium subsidies. Employers could take this action in order to avoid covering low wage individuals with health conditions while still continuing coverage for other employees. This approach could lead to adverse selection against the Connector. It is important to note that due to the presence of the PHCA, the probability of this occurring in Hawai'i is significantly lower than in other states.

http://caselaw.lp.findlaw.com/scripts/ts_search.pl?title=29&sec=1002

¹¹⁵ PPACA Sec. 6604.

Other ACA Provisions that Apply Only to Plans Inside the Connector

In §1311(c)(1), the ACA includes certain requirements that apply only to plans sold inside the Connector. Some of these requirements may influence risk attraction patterns, while others might lead to higher administrative costs. The list below summarizes the minimum requirements for QHPs. QHPs must:

- Not employ marketing practices or benefit packages that discourage enrollment of individuals with significant health needs
- Ensure a sufficient choice of providers and provide information to consumers regarding provider availability and network status
- Include essential community providers in their provider networks
- Maintain accreditation related to quality standards
- Implement a quality improvement strategy
- Use a uniform enrollment form and a standardized format for presenting benefit plan options
- Provide information to the Secretary of HHS, the Connector and consumers on certain quality measures

As a result of the factors outlined above, it is possible for carriers to choose to operate only outside the Connector and in such a manner that they are able to attract the healthiest risk. Reallocation of premium through the risk adjustment mechanisms will address this type of risk selection to some extent, but current risk adjustment tools are imperfect predictors of risk.

There are two additional areas where careful evaluation and appropriate policy setting can assist in mitigating risk against the Connector. First, health insurance brokers and agents play an important role in the current market; they help individuals and small groups to choose health insurance products. If exchanges do not include a role for brokers and agents with comparable compensation inside and outside the exchange, there is potential for steering patterns that produce disproportionate risk enrollment between the exchange and the outside market. Second, the ACA provides the State the option to allow large employers (over 100 employees) to purchase insurance through the Connector beginning in 2017. This option, if the State elects to enact it, would have a distinct potential to produce adverse selection against the Connector. It is much easier for larger groups to self-insure. As a result, it is likely that the large employers that elect to purchase insurance through the Connector will have higher than average risk profiles.

Selection Among Carriers and Products Inside the Connector

The third type of selection is selection among plans and insurers offering products inside the Connector. When provided a choice among health insurance products, individuals tend to choose the plans that provide the most value to them. Healthier individuals tend to favor products with low premiums, and they are not deterred by the narrow networks and higher cost sharing that may go along with those low premiums. Higher utilizing individuals will look for products with broader provider networks and low cost sharing; they are willing to accept the higher prices those products

¹¹⁶ Section 1312(f)(2)(B) of the ACA.

require. If high and low risk enrollees concentrate among different insurers in the Connector, some of this selection may be reflected in the premiums. These premium differences could lead to lower affordability for some consumers and fewer insurers willing to participate in the Connector.

Certain provisions in the ACA are expected to influence the risk distribution within the Connector.

- Insurers that participate in the Connector must offer at least one QHP in each of the Silver and Gold coverage levels¹¹⁷
- Premium tax credits for qualified individuals are based on the cost of the second lowest cost Silver product available.¹¹⁸ It is likely that this policy will cause many subsidized individuals to select coverage in the Bronze or Silver tiers to minimize the OOP premium cost they must pay
- Cost sharing reductions for eligible individuals are available only if they are enrolled in Silver coverage level plans¹¹⁹
- States may decide to offer a BHP to individuals with incomes below 200% FPL who are ineligible for Medicaid.¹²⁰ This policy decision is likely to considerably reduce the enrollment in the Silver plans that would otherwise be produced by the cost sharing reductions

It seems likely that, because the premium subsidy and cost sharing reductions are tied to the Silver plan level, these incentives will cause significant enrollment in the individual market to concentrate at the Silver plan level. Healthier individuals, particularly those at higher income levels (e.g., above 250% FPL) may be attracted to Bronze level products as well. Without additional state action, there may be little incentive for insurers to offer robust Platinum level products in the individual market. Those that do offer Platinum level products may experience significant selection in those products. Risk pooling across all individual market enrollees, combined with the risk adjustment mechanism may mitigate the premium effects of that selection somewhat. However, insurers that do not achieve sufficient enrollment of healthy individuals at lower coverage levels may still experience poor results on rich products.

Techniques for Mitigating Selection against the Connector

There are several measures that the State could take to address the various sources of adverse selection against the Connector. While each of the options presented below has the potential for mitigating adverse selection, they should be studied with care and considered alongside other design aspects of the Connector; they may have unexpected ramifications on the broader insurance market in the State.

¹¹⁷ Section 1301 of the ACA.

¹¹⁸ Section 1401 of the ACA.

¹¹⁹ Section 1402(b)(1) of the ACA.

¹²⁰ Section 1331 of the ACA.

Eliminate the Outside Market

The State could decide to make the Connector the sole distribution channel for individual and/or small group insurance coverage. Under this option, all products available to individuals and/or small groups would be required to be offered through the Connector and meet the standards for QHPs. This policy option would eliminate the opportunity for adverse selection against the Connector in a particular market, because the Connector would be the only source of coverage available for that market. It would also potentially allow carriers to shift more administrative costs to the Connector, where economies of scale might produce overall administrative cost reductions and lower premiums.

Despite its effectiveness as a solution to the adverse selection issue, there are a number of disadvantages to this option. First, there could be distinct political challenges with this policy. Second, elimination of the outside market could constrain the State's ability to selectively certify plans offered in the Connector if the Connector decides to take an active role in selecting plans. Third, the additional requirements under §1311(c)(1) could ultimately raise administrative costs with no offsetting efficiencies. If that occurs, an unintended side effect might be increased costs and premiums across the entire market. To our knowledge, only the State of Vermont and the District of Columbia are currently actively pursuing the elimination of a market outside of their Exchange.

Extend Some or All QHP Requirements to the Outside Market

This policy would extend the concept of the "level playing field" further than the existing ACA provisions do. A common set of requirements would neutralize any selective or cost influences of the additional QHP requirements. Retaining markets outside of the Connector but requiring that plans meet QHP requirements such as network adequacy, marketing and essential community provider requirements could reduce selection against the Connector.

The primary disadvantage associated with this policy option is the potential for increasing administrative costs in the outside market through the imposition of new requirements. An alternative is to extend some, but not all, of the additional requirements to the outside market.

Require Carriers to Participate in the Connector

A third option the State could consider is to require carriers to offer products in the Connector as a condition of offering small group and/or individual products in the State. This policy would protect against carriers targeting a particularly healthy risk outside the Connector and benefiting from known imperfections in risk adjustment. It would also protect against carriers establishing a subsidiary to avoid the requirement that experience inside and outside the exchange be pooled for pricing purposes. The ACA provision that carriers must pool their risk inside and outside the Connector is effective in managing risk selection only to the extent that carriers participate in both marketplaces.

While requiring carriers to participate in the Connector may have some intuitive appeal, there may be limitations to its effectiveness. Requiring carriers to participate in the Connector does not necessarily ensure that they will design and offer attractive exchange products at competitive prices. The rate review process may prevent premium levels that are excessive, but carriers determined to avoid risks that may be present in the Connector could be creative in network or benefit design (i.e., they could produce products that are unattractive to Connector populations).

Require Carriers Participating Only in the Outside Market to Offer Gold and Silver Products

Because healthier individuals tend to be attracted to lower cost insurance products (e.g., Bronze and Silver coverage levels rather than Gold and Platinum), there is a distinct opportunity for adverse selection if carriers have the opportunity to specialize solely in low cost plans in the outside market. With this approach, they may be successful at attracting a lower than average risk, without being required to pool that risk with higher-cost consumers in other product levels. Premiums for the remainder of the market will be higher than they would be if these individuals were included in the risk pools. The risk adjustment mechanism is designed to address this kind of risk selection, but it will not produce a perfect reallocation of funds.

Require Carriers Participating in the Connector to Offer Bronze Products

Absent this requirement, there is the potential for carriers to offer only rich plans inside the Connector while offering leaner Bronze plans outside. This could allow carriers to enroll only the least healthy individuals inside the Connector and draw healthier risks out. The State could require carriers participating in the Connector to offer Bronze plans, in addition to Silver and Gold plans. This requirement would ensure that there will be more low cost options offered inside the Connector; these low cost options typically attract a healthier population. The presence of these low cost plans would improve the chances that healthier individuals would enroll in the Connector.

Control the Minimum Level for Specific and Aggregate Stop Loss

As described earlier, another risk of selection against the market, and therefore against the Connector, is adverse selection that might occur if small employers self-insure. The State may wish to set minimum levels for stop loss coverage in an effort to control this selection. For example, if small groups are allowed to self-insure and purchase specific stop loss with a \$5,000 attachment point, the risk is not much different than that of a \$5,000 deductible fully insured plan offered in the market today. However, the cost of self-insuring could be much lower than the cost of a fully insured plan for certain employers with younger, healthier employees. This rate difference could occur for several reasons including:

- The ability to have the cost of coverage reflect the Individual's actual experience rather than subsidizing older, sicker Individuals
- The ERISA exemption from the requirement to cover state mandates
- Elimination of the carrier's risk and profit charge on the self-funded portion of costs
- Potential for lower administrative expenses

We find that some states are regulating this coverage in an effort to control this potential for selection. These states will require minimum specific stop loss attachment points of \$10,000 to \$15,000 and an attachment point for aggregate stop loss of at least 115% of expected claims.

Take Actions to Increase Enrollment in the Connector

The risk of adverse selection is closely tied to overall enrollment in the Connector. If the Connector is large, it will be much less likely to have an imbalance of risk. Outreach and enrollment efforts will help the stability of the Connector. However, additional targeted efforts may be needed to reach

and draw in healthier consumers, since consumers with health problems are the most receptive to information about new coverage options.

While the presence of premium and cost sharing subsidies will attract those eligible for them into the Individual Exchange, there are limited financial incentives to attract small employers into the SHOP Exchange. (There are small business tax credits which are temporarily available to only a limited subset of employers.) Therefore, additional efforts to engage brokers and offer value-added benefits and services to draw in small employers should be explored.

Place Restrictions on Plan Designs Offered Outside the Connector

Plans with many different cost sharing combinations (e.g., deductibles, coinsurance, copayments) can be configured to achieve a specific actuarial value, and some cost sharing designs can be used to attract low risk individuals. In addition, plans with narrow networks will also tend to attract healthier individuals, all else equal. The State may consider placing restrictions on the benefit plans that can be offered outside the Connector. At the extreme, the State could consider requiring that only plans offered inside the Connector can be offered outside the Connector in order to prevent this type of selection from occurring. However, such requirements could stifle innovation (e.g., value based benefit packages that are starting to emerge).

Other states have sought to level the playing field in different ways. For example, Massachusetts requires insurers to offer the same health plans and premiums inside and outside their Connector, while Utah requires carriers to offer their most popular non-exchange plans within the exchange to help ensure carriers do not target only high or low risk individuals in one of the markets.¹²¹

Do Not Allow Employees in the SHOP Exchange to Select From All Products The Connector must make available the option for an employer that purchases coverage in the SHOP Exchange to select a metallic level from which their employees then have the option to select any plan (from all carriers). This flexibility inside the Connector is required under the ACA, but it is unlikely to be available outside the Connector, and as a result may draw employers in. However, this flexibility also comes with the risk of increased selection among carriers. The ACA also affords exchanges the option to decide whether or not to open up further this employee choice model. At the discretion of the states, the ACA allows employers to allow their employees to select from any available plan offered inside the SHOP Exchange. This option introduces selection at yet another level. Healthy employees could select low cost Bronze coverage while unhealthy employees could select richer Gold and Platinum plans. Given plans will be priced based on the average morbidity of the carriers' pool, the amount by which the Bronze plan is overpriced for a healthier than average individual is not likely to be enough to offset the amount by which the Gold or Platinum plan is underpriced for the less healthy individual. This premium shortfall will put upward pressure on rates, all else equal. Offering this additional choice may be attractive to employers, and therefore it could be helpful in raising the level of participation in the SHOP Exchange. However, we recommend the State study this potential for adverse selection carefully before deciding to offer this additional level of choice inside the SHOP Exchange.

¹²¹ http://www.commonwealthfund.org/~/media/Files/Newsletters/States%20In%20Action/Feb March 2011 StatesInAction_v2.pdf

Some experts wonder if the ACA's provisions will go far enough to minimize adverse selection between plans sold inside and outside the exchanges, and across plans and tiers within the exchanges. Several of the options discussed above could have material repercussions on the individual and small group markets in the State. It is important to balance the need to discourage adverse selection with the need to retain choice, flexibility and innovation in the marketplace. There are important provisions established by the ACA that may be successful at managing some selection, however many sources for selection remain. Carefully designed market rules that work to create a level playing field between the Connector and the outside market is essential. We recommend the State study these and similar options further.

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Exchange Models

Exchanges can play various roles in developing a fair insurance market place for consumers depending on the philosophy, the insurance environment, and the goals of the Exchange. The ACA requires exchanges to only offer QHPs that cover the EHB package, offer prescribed actuarial value plans and meet cost sharing standards. In addition to these requirements, QHPs also need to meet certification criteria, such as marketing, network adequacy, accreditation, quality, standardization and transparency standards as described below.

Certification of QHPs is one of the important responsibilities of an exchange. The comments here apply equally to a SHOP Exchange, Individual Exchange or an exchange where the SHOP Exchange and the Individual Exchanges have been merged. The certification process has to be repeated periodically, and the exchanges could also decertify plans based on plans or carriers' inability to meet the criteria set forth by the exchange. Some of the criteria for certification of QHPs are established under the ACA but the exchange has considerable latitude in setting and enforcing additional guidelines to manage adverse selection and to help ensure an optimal set of insurance options inside the exchange.

Even though the ACA sets minimum Federal standards for QHPs and QHP issuers to be able to participate in the exchange, the states have considerable flexibility to set state specific standards to meet public health, provider access, delivery system reform, quality and transparency needs.

Exchange models can vary from a passive model of market organizer/aggregator of QHPs to a more active purchaser or even a hybrid model combining some features of each model.

Active Purchaser Model

An Exchange as an active purchaser of healthcare could selectively contract with QHPs, set standards and have the ability to impact healthcare costs, access and quality. The exchange could consider implementing a bidding process, recertify restrictively, be actively involved with setting standards, monitoring compliance with these standards and have the ability to negotiate with QHPs and providers. The exchange could recruit new entrants into the exchange if desired, limit the number of products offered, standardize cost sharing, encourage new delivery system strategies, require application of new health technology initiatives, and align with other State health purchasers such as State employee plans or Medicaid.

An active purchasing strategy will be resource intensive and will need market research, infrastructure, outreach to stakeholders and expertise to monitor the impact of various actions and initiatives. Advantages of an active purchaser model would be the ability to impact different aspects of the health delivery system. It is a well-known fact that Medicaid Programs have been able to impact healthcare trends nationwide, set up a bidding process for Medicaid, set provider fee schedules and require plans to meet key criteria including network standards imposed by these programs. Medicaid programs have also demonstrated selective contracting and negotiating with issuers/health plans and are a good example of an active purchaser model. The State could consider a similar strategy for the Connector, but would face challenges since the small group and

individual markets are currently dominated by a few carriers. As previously mentioned this is a resource intensive model, and additional expenses would be incurred to cover resources needed before adopting such a strategy. It is also important to include a cost benefit analysis and evaluate the impact of this strategy on the financial sustainability of the exchange.

The Massachusetts Connector model is an active purchaser model and similar in many ways to the model under the ACA. The Massachusetts model has been able to limit the number of plan options inside their Connector, but has had difficulty controlling costs or attracting small group employers into their Connector. The presence of subsidies, community rating, mandated benefits and guaranteed issue have increased healthcare costs.

Market Organizer/Aggregator Model

A passive exchange would act more like a clearinghouse for QHPs and set minimum standards for plans offered in the Connector. The Connector would play the more facilitative role of a market organizer. While this would provide individual and small group markets with more organized healthcare purchasing opportunities than they have had before, it may not leverage the collective power of the combined markets to negotiate better healthcare value. Advantages of a passive model are that it would likely reflect more consumer choice, less market disruption and encourage more carriers to participate than an active purchaser model might. On the other hand, disadvantages are that it could result in confusion when faced with numerous choices for members making healthcare purchase decisions. It could also be more challenging to implement any changes such as provider reform, quality improvement and other cost containment initiatives easily over a short-term period than could be done under an active purchaser model. Changes in the healthcare space would be gradual and over time, depending on voluntary market based change and cooperation from many stakeholders. This model would definitely be less resource intensive and less expensive than the active purchaser approach. Given the market domination by a few carriers this would be easier to implement and could work easily with any type of administrative model selected by the State.

The Utah Health Exchange is an example of a market organizer which facilitates and aggregates health plan options in the exchange. This model basically lets the market shape itself and facilitates insurance options for consumers by acting as a clearinghouse. This is a good example of a passive certification model which facilitates the development of an insurance marketplace. The Utah Health Exchange has been successful in enabling small employers to provide more employee choice, defined contribution options for healthcare purchasing, good carrier participation and collective decision making on items such as risk adjustment and reinsurance. In some ways the Utah model is successful in increasing consumer choice and encouraging greater dialog between carriers. However, achievement of goals related to cost containment, quality and health technology initiatives may take much longer and be achievable through gradual self-reform by the marketplace.

Hybrid Model

A hybrid model would reflect a combination of the active purchaser and the passive market organizer models. The Connector could selectively choose to impose stricter criteria on certain issues, such as standardizing cost sharing and limiting the number of products offered. In markets dominated by a few carriers such as Hawai'i's, it could encourage and assist new entrants into the market and the Connector. Depending on the needs or the environment in the State, it could choose to focus on delivery system reform, align with other State purchasers, or work to help sponsor pilots on ACOs and medical homes. Strategies under this type of a model could be phased

in and evolved on over time depending on the need, and as the Connector matures. Resources and infrastructure could also be added over time with increased evidence of financial sustainability. This may a good model for the State to consider given the market concentration in the State by a few carriers and less initial financial outlay required compared to an active purchaser model. This would help the State select a more balanced approach and allow the Connector to be able to enforce some standards while letting the market shape other considerations.

The CBIA model in Connecticut is an example of a hybrid between the passive market organizer and an active purchaser of care. While the CBIA does not perform some of the roles that a typical active purchaser would, such as negotiating with carriers regarding rates, it does take on active purchaser roles such as limiting the number of plans that can be offered in the exchange to encourage competition, etc. 122

A hybrid model will allow phasing in of various standards by reacting to employer and carrier actions in the initial year of implementation of major ACA provisions, and actions needed to balance network and quality standards. The Connector can use any early "lessons learned" to adjust standards or negotiate better options for the insurance marketplace. Currently a few carriers dominate the State insurance market place and it is quite possible that this could continue. The potential size of the Individual Exchange and the SHOP Exchanges are smaller than those in most other states, due to the smaller overall population of the State and the high military presence. This issue of scale would impact financial sustainability parameters and therefore insurance standards.

Finally, the model adopted by the Connector for administration and governance, and the anticipated impact of the ACA rating parameters on the market will have an impact on the type of model that would be best for the State to adopt. All of these issues suggest that the use of a hybrid model would be the most appropriate for the State in the first year or two, providing opportunities for change in the future as needed, and a degree of active purchasing that can be adjusted and phased in over time as necessary. The application of this model will give the Connector opportunities to balance the needs of carriers and consumers, which will help establish a healthy insurance marketplace in the State. A careful evaluation of costs and benefits of a hybrid model should then be conducted and decisions should be made based on long-term financial sustainability.

¹²² http://www.rwjf.org/files/research/72457healthexchange201106.pdf

Appendix A

Oliver Wyman Healthcare Reform Microsimulation Model

The Oliver Wyman Healthcare Reform Microsimulation Model (HRM Model) was used to assess potential premiums and enrollment in a Hawai'i run Exchange (i.e., the Connector) under various scenarios. This model is a leading edge tool for analyzing the impact of various healthcare reform provisions, as well as proposed legislation. Economic modeling that captures the flow of individuals across various markets based on their economic purchasing decisions is integrated with actuarial modeling designed to assess the impact that the various aspects of the ACA have on insurance markets and premiums. It is this rare integration of economic and actuarial modeling that allows us to capture the complex migration likely to occur as a result of the ACA.

The model has three primary modules. The first module characterizes the current population; the second module calibrates the simulated population to the current market; and the third module projects the simulated population in future years given coverage options, choice and market reforms.

Characterization of the Current Population

In the first module, the population module, the current population was built from several data sources. The 2011 American Community Survey (ACS) was selected as the primary data source which covers the entire population. The ACS includes information for each respondent's age, gender, income, insurance coverage type, employment status, geographic place of work, geographic place of residence, industry in which they are employed, and many other characteristics. The ACS requests information on households, however our model is built on decisions made at the Health Insurance Unit (HIU) level. An HIU is defined as any grouping of family members where each person within the HIU might be eligible for coverage under the same policy. Therefore, when preparing the ACS data for our model, it is adjusted to reflect HIUs.

While there are various sources of data that could be used as a primary data source, we chose to rely on the ACS data for our purposes (i.e., instead of the Current Population Survey, for example) for several reasons. First, there is a documented bias in most survey data where Medicaid enrollment is substantially lower than administrative counts. National analysis of this "Medicaid undercount" indicates that many individuals enrolled in Medicaid report their status as either privately insured or uninsured¹²³ and the ACS applies logical edits to the data to adjust for this. Second, the ACS questionnaire includes the question, "Is this person CURRENTLY covered by any...health insurance or health coverage plans?" (Emphasis is from the survey.) In contrast, the Current Population Survey (CPS) assesses insured status over an entire year. The first presentation of the question is more consistent with our approach to the model we present in this report as it examines a population at a point in time. Third, enrollees are legally obligated to respond to the ACS, 125 so, the response rate is quite high (i.e., 98% in 2010). 126 Fourth, and finally,

¹²³ http://www.shadac.org/publications/snacc-phase-v-report

¹²⁴ http://www.census.gov/acs/www/Downloads/QbyQfact/health_insurance.pdf

¹²⁵ http://www.census.gov/acs/www/about_the_survey/why_were_you_selected/

http://www.census.gov/acs/www/methodology/response_rates_data/

the ACS includes measures that permit the calculation of standard errors from the sample.

The ACS data were supplemented and synthesized with several other data sources in order to approximate the current marketplace. Information from Dun and Bradstreet (D&B) was used to create the current Hawai'i employer market. Synthetic groups were created by assigning working individuals from the ACS data to the D&B employers. Individuals are strategically placed into groups based on their occupation. Information from the Insurer/Employer component of the Medical Expenditure Panel Survey (MEPS) is used to simulate which groups offer insurance coverage and which employees within those groups are covered. The blended results from the 2010 and 2011 MEPS insurance/employer component data were used to establish rates at which coverage was offered in the State at various group sizes. Membership reports from MedQuest were used to size the current Medicaid population, and CMS reporting was used to size the Medicare population.

Health Status

Health status is strategically assigned to various sub-populations based on statistical analysis of self-reported health status obtained from the CPS. The CPS, which is conducted by the Census Bureau, provides the starting assumptions for the population morbidity. CPS includes a self-reported health status indicator as well as fields classifying income, coverage type and other categories. Respondents to the survey classify their health into one of five categories; the model then reflects these classifications numerically by assigning them the following cost relativities:

Category	Morbidity
Excellent	1.00
Very Good	1.10
Good	1.70
Fair	1.90
Poor	5.90

Table A.1: Self-Reported Health Status

It is important to note that the data in the CPS models reflect certain anomalies. For example, using the values above and the responses from Hawai'ians in CPS, the average morbidity for individuals that purchase individual coverage is higher than the morbidity of those that have coverage through an employer. Carriers that provide individual coverage in Hawai'i are currently allowed to reject applicants that they assess as too unhealthy, but no such latitude is available for carriers providing coverage to small groups. And so, it seems unrealistic that the morbidity of the direct purchase population would be higher than the morbidity of the employer sponsored population. In addition, we have observed this anomaly in other states, both in work that we have done and in work that states have contracted through other consulting groups. Based on observations from other markets and proprietary data sources, we adjusted the individual morbidity measures so they were consistent with our expectations.

In addition, we employed data from other sources to assess the appropriate morbidity. Specifically, we relied on data provided by the State's Medicaid actuary; data from the Medical Expenditure Panel Survey (MEPS); and data from a proprietary claims database. Our final estimate of the morbidity is a blend of various methods. First, the CPS self-reported health status information was used. Second, a linear regression was performed to estimate differences in billed charges by

income was developed using the MEPS data. 127 The regression analysis was controlled for differences in age, gender, and insurance status. Third, a comparison of the Medicaid data provided by the State's Medicaid actuary to commercial costs from our proprietary claims database was used in setting the morbidity of the Medicaid population relative to the commercial population. Starting from the base Medicaid claim costs, we adjust the data to commercial reimbursement levels and recognize the utilization that we would expect in the presence of cost sharing. We then compare these adjusted claim costs to estimates of commercial claims using the proprietary data set.

Ultimately, we estimated that specified key populations would exhibit the following relative costs as a consequence of their morbidity alone. These morbidities translate to costs, following individuals through the HRM Model to their ultimate expected coverage categories.

Coverage Type	Morbidity
Mid Group (51 – 100)	0.996
Small Group (< 50)	1.000
Individual	0.816
Medicaid	1.603
Uninsured	1.020

Table A.2: Morbidity Adjustments

Synthetic Insurance Carriers

With the assistance of DCCA, a data call was issued to those carriers writing business in the State with the largest market share in 2011. The information obtained through the data call, in combination with information gathered through 2011 Supplemental Health Care Exhibits, benefit information from carriers' websites and other available reports, allowed us to develop theoretical, or synthetic insurance carriers.

The information obtained from each carrier participating in the data call included premium, claims, enrollment, and associated distributions by rating characteristics and variables (e.g., actuarial value, underwriting load factor) for 2010 and 2011. We also conducted calls with these carriers to understand their current methodology used for developing rates. Using this information, we were then able to develop a synthetic rating manual for each carrier. The manuals were developed to reproduce current premiums and benefit coverage distributions for each carrier by market. The observed premiums were normalized for all rating variables to arrive at a manual rate representing a 1.00 level for all rating variables.

A set of theoretical revised rating manuals for 2014 and beyond that reflects the adjusted community rating methodology required under the ACA were also developed. We constructed these 2014 rating manuals by adjusting the current rating manuals to compress rating based on age and eliminate the impact of rating based on health status, gender, group size and industry. We developed new rating manual factors such that the average impact on rates across the carrier's entire block was premium neutral. The manuals are used to simulate coverage options and

¹²⁷ Billed charges were used to normalize for differences in provider reimbursement between different insurance coverage.

corresponding premiums for individuals and synthetic groups, based on the demographic characteristics and morbidity of the individual HIU or group.

Synthetic Groups

In addition to assigning health status to each person, we also assigned each person with group coverage to a theoretical, or synthetic group. In describing their micro-simulation model, the CBO discusses their approach to creating these synthetic groups. As we understand it, the CBO pooled individuals with similar incomes to develop their synthetic groups; 128 in our model, we have pooled individuals in similar industries. The ACS data include industry classification for those persons that are employed. As we created synthetic groups, we ensured that healthcare providers were included in groups with other healthcare providers, that lawyers were included in groups with other lawyers, etc.

Our model also reflects the industries and corresponding group sizes in Hawai'i based on existing distributions of employers. For these distributions we relied on data prepared by D&B. The D&B data show each employer in the State, their industry, the number of employees at each establishment in the State, and the number of employees across the entire organization. These D&B data do not provide any information related to employee health benefits, so we used data from the MEPS to supplement the missing information. Specifically, we relied on the blended results from the 2010 and 2011 MEPS insurance/employer component data to establish the rates at which coverage was offered at various group sizes. We also used the MEPS data to examine rates of eligibility and enrollment at various group sizes.

Based on these assumptions, the micro-simulation model assigned employees from the ACS data to groups of similar industries (at various group sizes) until all covered employees in the ACS data were assigned. For example, a lawyer in one iteration might be assigned to a large law firm, and in the next iteration, that same lawyer might be assigned to a small practice. Employees in synthetic groups were then summarized and assigned a current carrier based on each carrier's market share. The groups were assigned a premium based on the groups' characteristics, their carriers' rating practices, and the synthetic rate manual of their assigned carriers.

In addition to examining the premium based on the carriers' present rating practices, we also examined the rate change (called "rate shock") that each group would experience in 2014 as a result of new rating restriction imposed on carriers by the ACA. These restrictions will limit rating for age, while eliminating rating for gender, health status, group size, and industry. Consequently, groups that have benefited historically with lower premiums as a result of their characteristics (e.g., those who are younger and healthier) will potentially see very large rate increases, while groups that have paid higher premiums as a result of their characteristics (e.g., those who are older and more unhealthy) will see rate decreases. The original group premium and the group premium resulting from the rate shock are both carried with the employee into subsequent modules.

For each small group, we also estimate whether or not the group might be eligible for temporary tax credits under the ACA. As discussed in the background research report, 129 small groups meeting

¹²⁸ http://www.cbo.gov/ftpdocs/87xx/doc8712/10-31-HealthInsurModel.pdf

¹²⁹ Josh Sober, FSA, MAAA and Tammy Tomczyk, FSA, MAAA. "Current Status of Insurance Coverage in the State of Hawai'i." September 2012.

certain size, average wage, and employer contribution requirements might be eligible for tax credits. Based on the simulated individuals in the synthetics groups, we have attempted to estimate eligibility for these credits.

Finally, we estimated the cost of individual coverage for every HIU in the model. The cost of individual coverage is critical for estimating the behavior of those who currently have individual coverage, but it is equally important for those with ESI or even those who are uninsured. As with our estimates for group costs, we assigned an individual carrier to each HIU based on the carrier's market share. We then built a premium for that HIU based on the carrier's rating practice and the rating characteristics of the HIU. Finally, we estimated a rate shock that the HIU would experience as a result of new rating restrictions under the ACA (e.g., elimination of rating based on health status, gender, etc.) The original individual premium and the individual premium resulting from the rate shock are both carried with the HIU in subsequent modules.

The results are examined to ensure the appropriate number of people were simulated to have each type of current coverage (e.g., individual, small group, Medicaid, etc.). Within the individual and small group markets, the average premiums developed through the application of the synthetic rating manuals were also reviewed to ensure they were consistent with known premiums of \$247 PMPM in the individual market and \$329 PMPM in the small group market.

The distribution of rate shock anticipated in 2014 is reviewed. Since the groups included in the simulations may possess somewhat different combinations of age, gender, group size, industry and morbidity characteristics, the calibration process ensures that the distribution of overall rate shock resulting from the aggregation of these individual factors is consistent with the distribution of overall anticipated rate shock based on the known carrier data. A similar process is employed for the individual market.

Ensuring consistency of carriers' morbidity loads was critical. We calculated the cumulative probability distribution for the morbidity loads as assigned by each carrier. We then mapped these morbidity loads to the synthetic populations. During this process, we were careful to map morbidity loads so that the probability distribution of health statuses matched the probability distribution of morbidity loads.

Calibration of the HRM Model

Once the current market has been created, it was used to calibrate the market migration module of the HRM Model. The calibrated market migration module projects the market into which individuals will enroll, based on the options and corresponding premiums available to them.

The purpose of the calibration is to solve for the model parameters that replicate the characteristics (e.g., size, premium, claims cost) of the known insurance markets during the base period. This step is critical to ensure that the appropriate utility functions are utilized in the market migration module. While a utility function can model people's desire for consumption of healthcare services, as well as their aversion to financial risk, it cannot predict certain behaviors, such as why people eligible to enroll in Medicaid do not enroll, or why individuals with sufficient financial means to purchase health insurance chose to be uninsured. It is because of these behaviors that the model calibration is important and necessary.

To perform this calibration, all of the information resulting from the simulation module is considered except the known market in which the individual was enrolled in 2011. Individuals with coverage through Medicare, military coverage and coverage through State or Federal government employee programs were excluded from the calibration, as individuals with these types of coverage are assumed to continue with those coverages throughout the projection. Individuals with Medicaid were also excluded as the majority of individuals with this coverage are also assumed to continue to be covered by Medicaid. For each of the remaining HIUs, the various coverage options available to them in 2011 are examined and the utility associated with each option is calculated. HIUs with household incomes greater than 138% FPL are not allowed to evaluate the option of enrolling in Medicaid. Once a utility is calculated for each of the allowable options, the option with the greatest utility is selected and the HIU is assumed to enroll in that health insurance option.

For HIUs where the current coverage is not the same for all family members, these "split decisions" were also an option that was evaluated. For example, if the primary respondent to the ACS is reported to have ESI coverage, but the spouse is reported to have individual coverage, an option where the primary individual enrolls in single coverage under the simulated employer group plan is evaluated in combination with the spouse enrolling in any of the coverage levels modeled to be available in the individual market.

For a portion of 2011, the reforms that became effective September 23, 2010 were not in effect, as the ACA did not require them to become effective until the first policy anniversary on or after this date. Of particular importance for the calibration was the requirement that dependents be allowed to remain on their parent's coverage up to age 26. Therefore, in performing this calibration, dependents under age 19 were handled separately from those ages 19 to 26. For the 19 to 26 year-old population, we examined the actual coverage that the 19 to 26-year olds had in 2011, relative to the rest of the HIU. If the primary respondent to the ACS had ESI or individual coverage, but the 19 to 26-year old dependent did not, we assumed it was because they were not eligible to enroll under the same coverage as the primary individuals. In this case, the 19 to 26-year old was evaluated as a separate HIU for purposes of the calibration. It is important to note that this rule was only used for the calibration, as these 19 to 26-year olds would be eligible to enroll on their parent's coverage in 2014 and beyond.

The process of determining which coverage option(s) each HIU would enroll in based on application of the utility maximization methodology was repeated for each iteration of results from the population module. The projected enrollment in each market was aggregated across all simulations and compared to the known 2011 distribution (the distribution resulting from each iteration of the population model is referred to here as the known 2011 distribution) by market at several subpopulation levels.

If the projected enrollment results did not replicate the known 2011 distribution, the various parameters in the utility function were revised until the projected enrollment was consistent with the known enrollment at several key sub-population levels. This step is critical to the modeling as without such calibration reliability of the results is diminished significantly. The model is calibrated to ensure the known market is replicated at several levels, such as by broad age and income ranges within various markets. The following table compares a distribution of the known population by market segment with the distribution produced by the calibrated model for key market segments of the current population. As you can see, the calibrated model was able to replicate the known purchasing preferences in key market segments of interest in Hawai'i quite well.

Table A.3: Microsimulation Model Calibration Results

Current Coveres	Known	Modeled
Current Coverage	Distribution	Distribution
Uninsured	30.5%	28.1%
Individual	12.6%	13.3%
Small Group	40.6%	41.9%
Mid-Group	16.3%	16.8%
Total	100.0%	100.0%
Uninsured - < 150% FPL	17.1%	16.7%
Uninsured - 150% - 400% FPL	9.2%	8.3%
Uninsured - > 400+% FPL	4.1%	3.1%
Total	100.0%	100.0%
Uninsured - Age < 30	7.9%	7.8%
Uninsured - Age 30-49	11.9%	11.9%
Uninsured - Age 50+	10.7%	8.4%
Total	100.0%	100.0%

Projection of the Future Populations

Once the model has been calibrated, the model is ready to be used to project the markets into which individuals will enroll based on the coverage options available to them, and the resulting premiums for those markets. The process of determining which coverage option each HIU elects to enroll in was based on the application of economic utility maximization. Employer decisions as to the level of coverage offered, if any, were based on an elasticity curve. The response from employers to changes in premiums and other financial incentives is a critical element of the model. It was particularly important to consider the impact of the Hawai'i Prepaid Health Care Act (PHCA) on these decisions.

The model incorporates the various aspects of the ACA and other economic assumptions that will impact premiums and enrollment. These items include but are not limited to:

- Premium and cost sharing subsidies available to low income individuals
- Individual coverage mandate and penalties for not taking coverage (unless exempt)
- Medicaid eligibility rules that include coverage for childless adults up to 133% FPL (138% when including a 5% income disregard)
- Application of an affordability test to determine whether individuals offered employer coverage are eligible for subsidized coverage in the individual Exchange
- Changes in FPL in future years
- Regional population growth estimates consistent with the US Bureau of the Census projections
- Medical inflation

- Consumer Price Index (CPI) growth consistent with the Social Security Trustees Report
- Wage inflation consistent with the Social Security Trustees Report
- Income tax rates specific to the state including state, Federal, FICA, and Medicare taxes
- Pent-up demand for newly insured individuals
- Differences in utilization between individuals with insurance and similarly situated individuals without insurance, based on a study by the Congressional Budget Office
- An inertia factor to model the likelihood of an individual switching to alternate coverage

For each iteration of the market simulation module, the resulting simulated population is input into the calibrated market migration module, and the purchasing decisions for each HIU are modeled for each of the years 2014 through 2018. Individuals currently enrolled in Medicare, those having coverage through the military and those receiving coverage as a result of being an employee or a dependent of an employee that works for the State or Federal government are assumed to retain that coverage. In addition, as described in the body of the report, large employers are assumed to continue offering coverage at the same rate at which they do today and small employers subject to the PHCA are assumed to continue offering coverage.

Incomes are increased each year by the assumed salary inflation factors, and FPL levels are projected based on the statutory formula for calculating FPL in Hawai'i. Based on the income, family size and composition of each HIU, income as a percentage of FPL is calculated for each projection year. These FPL percentages are then used for:

- Determining whether the HIU is eligible for Medicaid or children within the HIU are eligible for CHIP
- Determining whether the HIU is eligible for premium subsidies within the Individual Exchange
- Determining whether the HIU is eligible for cost sharing subsidies within the Individual Exchange
- Determining whether the HIU is eligible for exemption from the individual mandate penalty if they elect not to enroll in coverage
- Determining whether the ESI coverage made available to HIU is deemed "unaffordable" and as a result the HIU is eligible to enroll in the Individual Exchange and receive premium and cost sharing subsidies

The market migration module evaluates several different options in which the HIU is eligible to enroll. The model calculates the utility for each one of these options. HIUs are only allowed to evaluate ESI coverage if they are currently enrolled in this market as the model does not assume new offerings of ESI coverage. HIUs are only allowed to evaluate the option of enrolling in Medicaid or subsidized coverage inside the Individual Exchange if they meet the income eligibility requirements.

The potential options that are evaluated for each HIU (where eligible) include:

- All individuals in the HIU enroll in ESI coverage at the level made available by the employer for the year modeled
- All individuals in the HIU currently enrolled in ESI coverage enroll in ESI coverage at the level made available by the employer for the year modeled, and those currently not enrolled in ESI enroll in Bronze level coverage in the individual market
- All individuals in the HIU currently enrolled in ESI coverage enroll in ESI coverage at the level made available by the employer for the year modeled, and those currently not enrolled in ESI enroll in Silver level coverage in the individual market
- All individuals in the HIU currently enrolled in ESI coverage enroll in ESI coverage at the level made available by the employer for the year modeled, and those currently not enrolled in ESI enroll in Gold level coverage in the individual market
- All individuals in the HIU currently enrolled in ESI coverage enroll in ESI coverage at the level made available by the employer for the year modeled, and those currently not enrolled in ESI enroll in Platinum level coverage in the individual market
- All individuals in the HIU currently enrolled in ESI coverage enroll in ESI coverage at the level made available by the employer for the year modeled, and those currently not enrolled in ESI remain uninsured
- All individuals in the HIU enroll in Silver coverage within the Individual Exchange and receive premium subsidies, and cost sharing subsidies where applicable
- All individuals in the HIU enroll in non-subsidized Bronze level coverage in the individual market
- All individuals in the HIU enroll in non-subsidized Silver level coverage in the individual market
- All individuals in the HIU enroll in non-subsidized Gold level coverage in the individual market
- All individuals in the HIU enroll in non-subsidized Platinum level coverage in the individual market
- All individuals in the HIU elect to remain uninsured

Individual Utility

Individual HIUs are assumed to make insurance purchasing decisions by evaluating the various options above and making an economically rational decision to select the option that maximizes the utility for the HIU. In cases where different members of an HIU enroll in different markets (e.g., the primary AC Survey respondent enrolls in ESI coverage but the spouse enrolls in individual coverage), the utilities for all members of the HIU are aggregated to develop the corresponding utility for the HIU under that option.

In order to model this behavior, a utility function and associated parameters were selected. As previously described, the utility function and parameters selected were those that replicated the

status quo upon application of the market migration module to the simulated population, across several iterations. The underlying utility function utilized is as follows:

$$U_{i,j} = -E(OOP_{i,j}) - premium_{i,j} - \frac{1}{2}rVAR(OOP_{i,j}) + u(H_{i,j})$$

In the equation above, $OOP_{i,j}$ is the OOP health expenditures for HIU i under purchasing option j, r is the risk aversion coefficient and $U(H_{i,j})$ is the utility associated with consuming health services. $U(H_{i,j})$ is assumed to be proportional to the expected value of the total expenditures for healthcare services with the ratio a. In calibrating the model, we elected to vary the parameters r and a at three different ranges of incomes to reflect the fact that individuals with higher incomes are more risk averse. We also varied the parameters at three different ages to reflect the fact that individuals with similar incomes may behave differently at different ages. For example, an early retiree with greater accumulated assets drawing income from a lifetime of investments may be more risk averse than a young individual with a similar income but more limited assets.

Personal Claims Cost

Within the model, a personal claims cost (PCC) is developed for each Hawai'i resident for the base calibration year, and each subsequent year modeled. This PCC, or some multiple of it, is used as an approximation for the expected value of total expenditures for healthcare services utilized in the utility function above.

The PCC for each individual is calculated as the base claims cost for the insured market for the year, multiplied times an adjustment to reflect the relative level of claims expected for someone of their age/gender relative to someone of the age/gender underlying the base claims cost, multiplied times an adjustment to reflect the relative level of claims expected for someone of their health status relative to someone with the health status underlying the base claims cost.

In evaluating the utility associated with being uninsured, the PCC for the individual is reduced by a factor to account for the fact that those without current health insurance do not seek medical services at the same level as those with insurance. In evaluating the utility associated with a currently uninsured individual taking up insurance, the PCC is increased by a factor to account for pent-up demand in the first year of coverage.

Employer Demand Elasticity

The response from employers to changes in premiums and other financial incentives is a critical element of the model. Because of new rating requirements in the ACA, many groups will see substantial rate changes (both up and down). In addition, there are provisions in the ACA that we assume will only increase the cost of coverage (e.g., fees collected by the Federal government from insurers). These additional costs will generally discourage employers from offering coverage at their existing benefit levels. When trying to model the specific response a group will have to a price change, we rely on elasticity assumptions.

Generally speaking, these elasticities measure changes in behavior in response to changes in price (e.g., an increase in the price of bread causes a decrease in the quantity demanded). In our model, we have characterized an employer's response to increasing premiums by decreasing the benefits

that the employer offers in their health plan. For example, an increase in premium might cause an employer to offer a Silver plan instead of a Gold plan. The employer responds to increasing premiums this way until the benefit levels no longer justify offering coverage. However, this is not as likely in Hawai'i since the Silver plan may not meet the 7a or 7b PHCA requirements as set forth by the PHCA, and therefore may not be approved to sell in the marketplace.

One significant challenge with this particular assumption is the uncertainty associated with it. Employer coverage decisions occur in an environment with numerous financial incentives as well as qualitative considerations. (For example, a small group employer in today's market may absorb very high premium changes as long as it means that her employee's ill spouse is able to receive their required care.) Any attempt to model behavior of this sort is going to have shortcomings. In an effort to obtain the strongest assumptions available, we reviewed numerous published sources. In particular, we relied on a review of existing research into price elasticity of the demand for health insurance as published by Mathematica. This report identifies ranges for price elasticity of employer offer from -0.14 to -5.80. In addition, we also relied on the CBO's assumptions employed in its own micro-simulation model. The final assumptions we employed varied by group size (identified as GS), were generally consistent with the results published in the Mathematica Report, and are characterized by the following equations:

GS 1 to 10: -1.14

GS 11 to 50: 0.4722 * ln (GS) – 2.2273 GS 51 to 350: 0.1182 * ln (GS) – 0.8424

As we reviewed the results from the model, we found that the expected group behavior was generally consistent with other estimates we have seen from independent studies of the ACA's effect on small group coverage.

While the above description of employer elasticity for demand underlies Oliver Wyman's model used for estimating changes in the Hawai'i market, the impact of the PHCA was also considered, given its significant impact on whether or not an employer offers coverage. In consultation with stakeholders, we were advised to assume that all small employers offering coverage today will continue to do so in 2014 and beyond, that that the PHCA and the employer mandate will not be diminished. Therefore, this assumption overrode the standard elasticity methodology employed in the model.

Inertia Factor

In many cases, the evaluation of two competing options using the selected utility function results in utility values that are very similar. For example, the utility associated with purchasing Bronze level coverage in the individual market may be only marginally different than the utility associated with being uninsured. From year to year, the impact of medical trend and the change in the penalty under the individual mandate for not taking coverage do not change at the same rate. This can result in individuals alternating back and forth between these two options in subsequent years under a pure utility maximization approach.

Several studies have documented the inertia related to individual decision making, where people elect the status quo even though utility theory indicates it is rational to elect an alternate option.^{130,} Therefore, to reflect this behavior and add stability to the modeled results, we have built an inertia factor into the model such that if the utility associated with an option that has the maximum utility for a given year is not at least a stated percentage higher than the utility associated with the current option, the change in coverage is not made.

Model Application

The modeling results include premium, claims and enrollment by market and projection year. The model is driven based on several input assumptions and as a result has the flexibility and power to help answer many policy related questions. Some of the question the model has been used to answer in previous assignments include but are not limited to:

- What is the size of the individual, small group, Medicaid and uninsured populations pre- and post-reform? Where do the shifts in enrollment occur?
- What are the premiums in the individual and small group markets pre- and post-reform?
- What is the impact on premiums and enrollment if the individual and small group markets are merged?
- What is the impact on premiums and enrollment in the small group market if the definition of small group is expanded to 100?
- What is the impact on the size of the Connector and premiums in the individual market if a BHP is established? How many individuals would enroll in the BHP and what is the income and morbidity distribution of that population?
- What is the impact on premiums from changes in morbidity of the pool, and from other effects such as essential health benefits, taxes, fees, and reinsurance?
- What is the income distribution within a given market before and after 2014?
- What do the uninsured look like before and after 2014 by age, income?

¹³⁰ Su, X. (2009). "A Model of Consumer Inertia with Applications to Dynamic Pricing. Production and Operations Management." 18: 365–380. doi: 10.1111/j.1937-5956.2009.01038.x

¹³¹ "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior." Brigitte Madrian and Dennis Shea.

Appendix B

Additional Medicaid Edits

During our review of the ACS data, there were clear inconsistencies with two external sources. First, the Med-QUEST Division identified Medicaid enrollment at the beginning of 2010 totaling 254,000;¹³² the ACS data only accounted for 204,000 Medicaid enrollees. Second, statutory financial statements filed by insurers in Hawai'i's market suggest that the ACS overstated those residents with Direct Purchase coverage by approximately 40,000.

We first note that Med-QUEST's reports reflect what would seem to be the upper limit of possible Medicaid enrollment. Medicaid enrollees in households with enrolled children are passively re-enrolled. This dynamic makes it more difficult to assess how many individuals are covered by Hawai'i's Medicaid program at any one point in time.

In addition to passive enrollment, there are other potential sources for data differences. First, in the ACS, the US Census Bureau attempts to address the Medicaid undercount phenomenon identified above. However, their edits do not account for coverage of low income childless adults. Although the ACS may do a good job of adjusting those enrollees that would traditionally qualify for Medicaid (e.g., Temporary Assistance for Needy Families (TANF), Supplemental Security Income (SSI)), they have no edits for non-traditional enrollees (e.g., those that would qualify for the QUEST-Net and QUEST-ACE programs). In addition, there may be COFA enrollees recognized in the Medicaid program that are not recognized in the ACS. According to DHS, they estimate that there are between 10,000 and 12,000 COFA enrollees with Medicaid coverage; ACS recognizes only 5,000. Third, with the disruption to the economy in 2008 and 2009, we would expect volatility (and thus, inconsistency) in enrollment estimates as the number of Medicaid covered persons grows.

http://www.med-quest.us/ManagedCare/MQDquestenroll.html; for 2012, the enrollment is closer to 287,000.

¹³³ Oliver Wyman teleconference call with DHS on August 1, 2012.

Appendix C

Modeling Assumptions

This appendix contains the assumptions employed in our modeling, including a discussion of the information reviewed as a basis for setting the assumptions.

Steady State Population

A key underlying assumption of the model is a steady state population. By this we mean that the underlying mix of the population does not change with respect to most variables. Annual increases in income and population growth are included, which also include anticipated changes in the distribution of the population by age to reflect the increasing age of the population as the baby boomers age. However, the distribution of the State's overall population by income, gender, health status, occupation, family size and other variables is assumed to remain relatively constant over the projection period.

For example, we have not attempted to project rates of employment in 2014, but have assumed that rates of employment in 2014 will be the same as current levels. This steady state assumption does not mean that the health status or specific individuals will remain unchanged over time, only that the overall relative health status by specific subsets of the population (e.g., by FPL and age) do not change. However, as described below, we expect that people will move between various modes of insurance (e.g., small group, individual and uninsured) and that this migration will result in changes to the average morbidity of those markets.

These assumptions can be summarized as follows:

- The distribution of the population by income remains unchanged; however incomes are modeled to increase each year based on salary inflation assumptions
- The population is projected to grow each year. However, significant migration of
 individuals of a specific age or gender into or out of Hawai'i is not assumed to occur. The
 distribution by age and gender changes slightly to reflect the aging of the population. The
 US Census Bureau's estimates of population growth by age range, specific to Hawai'i,
 are assumed
- The distribution of the overall population by health status, occupation, and family size are assumed to remain relatively constant through 2018, with the exception of the impact that aging of the population will have. The steady state assumption does not mean that the health status for specific individuals will not change over time, only that the overall distribution by specific subsets of the population (e.g., by FPL and age) does not change. Similarly, the family composition of a given household may change; however, it is assumed that the overall distribution of the State's population by family composition does not change

 The overall rate of employment over the period 2014 through 2018 is assumed to be consistent with current levels

Guarantee Issue

The Oliver Wyman HRM Model does not evaluate all coverage options for individuals unless they meet (or fail to meet) certain eligibility requirements (e.g., meet Medicaid eligibility requirements or work for an employer that offers coverage). However, carriers, as required under the ACA, must offer individual coverage on a guarantee issue basis. This guarantee issue provision prohibits carriers from offering rates that vary by the health status of a prospective or current policyholder. This new restriction implies that individuals will be able to evaluate coverage options regardless of their own health status. The Oliver Wyman HRM Model reflects these new requirements.

Carrier Participation and Product Offerings in Hawai'i's Individual and Small Group Markets

We made the following assumptions regarding carrier participation:

- All major carriers participating in the State's individual and small group markets during the base period continue to participate in 2014 and beyond
- Any new carriers that enter the market will offer products with benefits and premiums similar to products and premiums that will be offered in 2014 by carriers currently participating in the market
- Carriers will offer products at all metallic levels
- All carriers participate in markets both inside and outside the Connector
- Carriers charge the same premium rates inside and outside of the Connector, for the same products, as required by the ACA
- Products offered in the Individual and SHOP Exchanges are similar to products offered outside the Individual and SHOP Exchanges, and premium rates are the same inside and outside the exchanges for the same benefit packages
- Carriers' products are priced based on the pooled experience of their entire individual block and their entire small group block, as required by the ACA. In the scenario where a merged market is modeled, the pooled individual and small group experience is used to develop rates

Large Employers Coverage Assumptions

Large employers (defined as those with 101+ employees) are assumed to continue to offer ESI coverage at the same rate they did in 2011, and we have assumed that employees who are eligible and enroll in this coverage do so at the same rate they did in 2011. Employees who are not eligible to enroll, or those who are eligible to enroll but choose to remain uninsured, are reflected in our analysis.

Definition of Small Employer Group

The ACA requires that small employers be defined as those with up to 100 employees and the corresponding small group market rules outlined in the law (e.g. adjusted community rating, essential health benefits, etc.) be applied to these groups. The law provides states the option to define small group as up to 50 employees until 2016.

Small Employer Coverage Assumptions

The model assumes that a small employer is defined as those with 2 to 100 employees starting in 2014. Further, we assume that small employers that did not offer coverage in 2011 will not begin to offer coverage in 2014. We note that the small employer tax credits were introduced in 2010, and we assumed that any small employers electing to offer coverage as a result of these credits would have done so by 2011. As a result, we assume any employers that might seek the credits are already reflected in the base experience used in the model. To the extent that coverage is newly offered by small employers in 2014 and beyond, the projected enrollment figures we develop in this report may be understated.

In addition, we have assumed that the PHCA will not be diminished by the ACA, and small employers offering coverage today will continue to do so in 2014. Because union plans are not held to the PHCA, there is a possibility that workers in these plans could exceed the ACA's affordability threshold and seek subsidized coverage in the Connector.

Individual Purchasing Decision

Individual HIUs are assumed to evaluate all of the options available to them, after which they select the option that maximizes their economic utility. The utility curve utilized for this purpose had the following characteristics:

$$U_{i,j} = -E(OOP_{i,j}) - premium_{i,j} - \frac{1}{2}rVAR(OOP_{i,j}) + a \cdot u(H_{i,j})$$

The parameters r and a in the formula above were solved for as part of a calibration phase. In the calibration phase, the parameters are set so that the modeled take-up in the base year in the various markets, and demographic and socioeconomic segments equals the observed levels. Nine sets of parameters are solved for based on the combination of three broad age ranges and three broad income ranges. The model only allows individuals to evaluate the coverage options for which they are eligible. For example, those who have incomes above the Medicaid eligibility limit will not be allowed to evaluate the option of enrolling in Medicaid.

Direct Purchase (Individual)

This purchasing option is evaluated for all individuals, with the exception of those eligible for Medicare, Medicaid, Military and BHP coverage (in the scenario where a BHP is modeled).

Employer Sponsored Insurance – Non-Government Workers

This purchasing option is evaluated if the individual is eligible for employer sponsored insurance (ESI) coverage based on coverage status indicated on the ACS record.

Medicare

Individuals eligible for Medicare are assumed to remain eligible for Medicare based on the steady state assumption described above and no other purchasing options are evaluated for them.

Medicaid/CHIP

This purchasing option is evaluated if the requirements for Medicaid eligibility are met based on family income reported on the ACS record and the scenario being modeled (i.e., BHP or no BHP). This option is not evaluated for those receiving Military coverage as indicated on their ACS record, regardless of income. For individuals with incomes that meet Medicaid eligibility requirements and who currently have ESI coverage, the employer coverage option will continue to be evaluated alongside Medicaid.

Uninsured

This purchasing option is evaluated for all individuals with the exception of those currently enrolled in Medicaid (and whose income allow them to retain Medicaid eligibility), Medicare or Military coverage as indicated on their ACS record.

Military

Individuals whose ACS record indicates that they are covered by the Military are assumed to retain such coverage. No other coverage options are evaluated for these individuals.

Government Workers

If either the primary ACS respondent or the spouse is identified as working for the government and the HIU is identified as currently having ESI coverage, we have assumed that the ESI coverage is provided through a government employer. Our model assumes that these individuals will continue to receive this coverage and will not enroll in the Connector or the SHOP Exchange.

Compact of Free Association Individuals

Some legal immigrants that are not citizens may be eligible for premium and cost sharing subsidies based on their income, but are not eligible for Medicaid. This is particularly important for Hawai'i given the large Compact of Free Association (COFA) population that is present in the state. As we understand it, COFA is made up of a number of island nation-states that have access to certain domestic U.S. programs. Low income persons that are from these islands and not U.S. citizens might be eligible for premium and cost sharing subsidies, but not Medicaid.

The ACS provides certain measures to help assess the potential size of this population. In particular, we relied on fields identifying detailed ancestry and citizenship status. The ACS provides generic identifiers for some ancestries (e.g., Pacific Islander); we chose to omit these survey respondents from our estimates of the COFA population. Unless the ancestry field specifically identified a respondent with a COFA nation-state (e.g., Micronesian), we did not characterize that survey respondent as a COFA member. Also, we only identified survey respondents as COFA members if they reported themselves as 'Not a Citizen of the United States' in the ACS questionnaire. We assumed that those respondents with the appropriate ancestry designation but a different citizenship status (e.g., Born Abroad of American Parents) would be treated as any other Hawai'ian for the purpose of program and subsidy eligibility.

Before the implementation of the ACA, Hawai'i has covered certain low income COFA members under Medicaid. As a means of validating our COFA population estimates, we compared COFA members in Medicaid according to ACS to the COFA members in Medicaid as estimated by DHS. In their estimates, DHS noted that there were between 10,000 and 12,000 COFA enrollees with Medicaid coverage; ACS recognized 5,000. Given prior discussions about Medicaid undercount in the ACS for Hawai'i (which is likely exacerbated with non-citizen respondents), the estimates were consistent with our expectations. Ultimately, the coverage status for COFA members in the model was simulated based on the COFA identifier and the corresponding income of a COFA member's HIU.

It is also our understanding that Hawai'i's Department of Human Services (DHS) is currently engaged in discussions with HHS and the IRS to determine whether the COFA population will be eligible to enroll in the BHP. Although their eligibility is not yet certain, we assume in this analysis that the COFA population will be eligible to enroll in the BHP in those scenarios where a BHP is assumed to be established. In the event the COFA population is not eligible for the BHP, our modeling results would need to be updated.

Medicaid/CHIP

Regardless of whether a BHP is established, Medicaid eligibility categories in 2014 were assumed as follows:

- Families and childless adults are covered up to 138% FPL (133% plus a 5% disregard)
- CHIP coverage to 300% FPL
- Pregnant women are covered up to 185% FPL

In the ACS data we attempted to identify women who were covered by Medicaid who were likely pregnant and we allowed these women to remain on Medicaid by examining whether they were currently enrolled in Medicaid with incomes over 138% FPL and had a spouse who was not enrolled in Medicaid. All other adults over 138% of FPL and children over 300% of FPL were flagged as no longer being eligible for Medicaid in the baseline model. We understand that some of these individuals are in fact eligible for Medicaid under other eligibility requirements (e.g. asset tests), however the ACS data does not contain information on assets. Therefore, these

individuals were modeled to lose Medicaid eligibility and enter the individual market or become uninsured.

Current Individual Coverage

Based on information gathered from carriers, public financial statements, and information from carriers' websites, we made the following assumptions related to current market share, distribution of membership by actuarial value, and premiums in the individual market. This information was used to calibrate the model in the base year and as the starting point for projecting premium rates in 2014. Because the information on actuarial values and the corresponding membership distribution was provided to us in confidence, that information cannot be included. However, the membership distribution and average premium from the publicly available 2011 Supplemental Health Care Exhibit produced the following assumptions.

Table C.1: Current Market Share – Individual Market

Carrier	Market Share
Carrier 1	53.1%
Carrier 2	46.9%

Table C.2: Current Average Premiums PMPM – Individual Market

	Carrier 1	Carrier 2
Average Premium PMPM	\$262.19	\$230.44

Current Small Group Coverage

Based on information gathered from carriers, public financial statements, and information from carriers' websites, we made the following assumptions related to current market share, distribution of membership by actuarial value, and premiums in the small group market. This information was used to calibrate the model in the base year and as the starting point for projecting premium rates in 2014. Because the information on actuarial values and the corresponding membership distribution was provided to us in confidence, that information cannot be included. However, the membership distribution and average premium from the publicly available 2011 Supplemental Health Care Exhibit produced the following assumptions.

Table C.3: Current Market Share - Small Group Market

Carrier	Market Share
Carrier 1	51.6%
Carrier 2	15.5%
Carrier 3	17.8%
Carrier 4	15.1%

Table C.4: Current Average Premiums PMPM – Small Group Market

	Carrier 1	Carrier 2	Carrier 3	Carrier 4
Average Premium PMPM	\$374.94	\$309.50	\$295.51	\$260.07

Uninsured Utilization and Pent-up Demand

Individuals without current health insurance do not seek medical services at the same level as those with insurance. The CBO estimates that the uninsured currently use about 60% as much medical care as insured individuals after taking into consideration differences in age and morbidity. 134 We have used this assumption in our model and, therefore, multiply an individual's expected claim costs by a factor of 0.60 when evaluating the utility associated with becoming or remaining uninsured.

Because individuals who are currently uninsured do not utilize services at the same level as those with insurance, they will have pent-up demand and utilize services at a higher rate during their first year with coverage. We have assumed that pent-up demand will increase the expected claims costs for a newly insured individual by 10% above average in the first year. (Here, 'average' signifies an individual of the same age, gender and health status that has insurance.) Therefore, when calculating the utility associated with various purchasing options for an uninsured individual, the individual's expected claim costs are multiplied by a factor of 1.10 for each health insurance option they evaluate. The pent-up demand factor is not included in calculating the utility associated with the person remaining uninsured, and if the individual elects to purchase coverage, we have assumed that their expected claims cost after the first year is the same as an average insured. (Again, 'average' in this context signifies an individual of the same age, gender and health status.) In other words, we remove the pent-up demand adjustment after the first year of insurance.

Adverse Selection Due to Risk Pool Composition Changes

The relative morbidity associated with individuals (and small group enrollees) that enter and depart the market is a critical consideration in premium development estimates. To the extent that the risk pool composition changes, the premium levels will also change. Some of the factors that can adversely affect the average morbidity of the individual and small group pools are discussed below.

Residents with Individual Insurance That Leave the Pool

Many residents currently covered by policies through the State's individual market will experience significant rate shock resulting from the new adjusted community rating methodology requirements. These individuals may find it economically beneficial to become uninsured. Given young and healthy individuals will experience the most upward pressure on rates resulting from

¹³⁴ ibid

the new rating methodology, the exit of these healthy individuals from the market can lead to an increase in the average morbidity of the individual pool.

Residents without Insurance That Enter the Pool

Many of these individuals are residents who are currently uninsured and were previously denied coverage in the individual market due to their health status. As these individuals will now be able to enter the individual market under new guarantee issue rules, their presence will increase the average morbidity of the pool. In addition, these individuals will have pent-up demand, as described above, which will put further upward pressure on the utilization rates of the individual pool in 2014.

Further, low income individuals tend to have higher morbidity than those in higher income brackets. That poorer health is associated with lower income is well established. Recent research revealed that the impact of income on health is greater for older children, implying that the effect of income on health accumulates as one ages. This means that, not only are poorer children in worse health from birth, but their health falls further behind as they age, with likely adverse consequences for educational attainment and earnings. As the premium and cost-sharing subsidies draw the low income individuals into the individual pool, the average experience in the pool will deteriorate.

Those with Current Employer-Sponsored Coverage That Lose Coverage Individuals with current ESI coverage will have the option to enter the individual Exchange if their employer terminates coverage. Because of the presence of the PHCA (and on the direction of the State), we have assumed that there will be no significant loss of employer coverage once 2014 arrives.

In our model, we have assumed that health insurance carriers will anticipate adverse selection associated with the three items discussed above and prospectively price for it (to the extent that such actions are allowed). We derived the assumptions for these relative morbidity levels by iteratively applying adverse selection loads to premiums; we then observed the resulting changes in morbidity of the pool as enrollees entered and exited the market. As discussed above, we expect that enrollment of previously uninsured market entrants will bring a pent-up demand for services; we included the effect of this phenomenon in the premium development.

¹³⁵ Case A, Lubotsky D, Paxson C. "Economic Status and Health in Childhood: The Origins of the Gradient." American Economic Review. 2002;92:1308–34.

Grandfathered Policies

Shortly after passage of the ACA, the Federal government estimated that 70% of small employers might maintain grandfathered status in the first year, dropping to approximately 33% over several years. For individual (i.e., direct purchase) policies, the incidence of plans with grandfathered status was expected to be even lower.¹³⁶

However, a more recent survey found that out of 466 companies – representing 6.9 million employees – almost all (90%) expect to lose grandfathered status by 2014 because of health plan design changes (72%) and/or changes to company premium contribution levels (39%). Given the limitations on benefit changes permitted by the ACA before a plan will lose its grandfathered status and the pressure on employers and individuals to limit premium increases (pressure that is often addressed through benefit changes), our model assumes that there will be no individual or small group policies with grandfathered status in 2014. Therefore, we assume all individual and small group policies are subject to the market reforms outlined in the ACA.

Medical Trend

We employed an estimate for annual medical trends between 2011 and 2018 of 7.0%. Since only benefit packages meeting the prescribed metallic levels may be offered starting in 2014, benefits will be required to be reviewed each year and adjusted if necessary. Therefore, a deductible leveraging component is not required to be applied and premium and claims are both assumed to increase at the same rate.

Oliver Wyman's July 2012 Carrier Trend Report formed the starting point for developing this trend assumption. The report is based on a survey sent to healthcare carriers and presents pricing trends used by the participating companies in the development of their rates for July 2012. These trends are used to develop premiums for approximately 112.7 million group members and about 5.8 million members with individual health policies. The median trends reported were as follows:

¹³⁶ See analysis and projections available at http://www.healthcare.gov/news/factsheets/keeping the health plan you have grandfathered.html. Note that these projections were made prior to a rule revision allowing group grandfathered status to be retained despite a change in insurer.

http://www.aon.com/attachments/Employer_Reaction_HC_Reform_GF_SC.pdf

Table C.5: Median Trends – Oliver Wyman Carrier Trend Report – July 2012

Coverage	Median Trend
Group Medical PPO	10.35%
Group Medical POS	9.20%
Group Medical HMO	8.40%
Individual Medical PPO	8.70%
Individual Medical POS	8.60%
Individual Medical HMO	8.50%

We believe trends going forward will be slightly lower than those shown in the table above for several reasons.

- The impact of new methods of organizing the delivery of healthcare services and the adoption of electronic information systems will test and reward healthcare organizations that are accountable for achieving better outcomes, higher quality, and lower costs
- The projected decrease in the uninsured rate will reduce the level of uncompensated care provided and corresponding shifting of these costs to the commercial insurance market
- The CBO estimated and used a lower 5.7% trend assumption in their modeling ¹³⁸

We discussed our 7% trend assumption with DCCA and they agreed it was appropriate to use in our modeling.

Targeted Medical Loss Ratios

Health insurers were required to meet new minimum loss ratio requirements beginning in 2011. In the individual and small group markets, the minimum loss ratio is 80%; in the large group market, the loss ratio is 85%. Our model assumes that insurers will prospectively develop their 2014 premiums based on loss ratio targets consistent with these minimum requirements.

Synthetic Employer Groups

Information from D&B was be used to determine the current make-up of the employer market by industry. This information was blended with employer offering rates and employee take-up rates by group size from the MEPS for Hawai'i. A blend of 2010 and 2011 MEPS data was used to enhance credibility. The MEPS data reflects variations in these offering and coverage statistics by group size, and this variation is reflected in the assignments we make in the model.

¹³⁸ http://www.cbo.gov/sites/default/files/cbofiles/attachments/03-13-Coverage%20Estimates.pdf

Individuals from the ACS who currently have employer coverage were assigned to Individuals based on their reported occupation, and the industry of the employer reported in D&B.

Benefits and Actuarial Values

In order to model benefits and premiums in 2014 and beyond, we first needed to understand how insurance products currently available in Hawai'i compare to the ACA coverage tiers. Oliver Wyman actuaries obtained information from the largest carriers in the State. For small group business, this information included group-level premium, claims, membership and, for some carriers, rating factors (e.g., age/gender). The carriers made these data available from their 2010 and 2011 calendar year experience periods. However, the carriers did not provide the actuarial value of the benefit plan associated with each small group and group's premium.

Using the available information, Oliver Wyman normalized the premium for the assumed rating factors; this calculation, in effect, resulted in normalized premiums that only reflected benefit differences. As most employers offer either the 7a or 7b plans under the PHCA, this estimate was consistent with our expectations. In 2010 and 2011, the carriers offering individual products were not yet designing benefits targeted to specific actuarial values (as they will in the reformed market); those carriers that responded provided enough information that we were able to estimate typical actuarial values in this market.

The CBO estimates that average premiums nationwide in the individual market in 2014 will be 27% to 30% higher because of greater coverage requirements. These increases result from the average insurance policy covering a substantially larger share of an enrollee's costs for healthcare and a wider range of covered benefits as a result of the EHB package. Based on the information provided by the carriers and a review of benefit plans found on their respective websites, the average actuarial value in the individual market for coverage offered in Hawai'i is significantly higher than in other states. Therefore, the impact on premiums will be significantly lower than the CBO's nationwide estimate since individual policies in Hawai'i already contain lower cost sharing provisions. The impact of the EHB package will have a greater impact on premiums in the State's individual market, where roughly 14% of insureds have coverage with an actuarial value less than 60%.

Our estimates indicate that the average individual premium in the State will increase by about 3.6% as a result of needing to increase the actuarial values of plans offered to a minimum of 60%. In addition, we estimate that the average premium in both the individual and small group market will need to increase an additional 4.6% as a result of the requirement to cover essential health benefits, including habilitative services and pediatric oral and vision services.

Coverage for Women's Preventive Services

In order to reflect coverage of women's preventive services without cost sharing (effective August 1, 2012), we applied an average 4% increase to premiums in the individual market and a 2% increase to premiums in the small group market. The average increase is higher for the

¹³⁹ http://www.cbo.gov/ftpdocs/107xx/doc10781/11-30-Premiums.pdf

individual market as it is more common for policies sold in the individual market today to not provide coverage for prescription drugs.

Penalties Under the Individual Mandate

Penalties for 2014 through 2016 are prescribed in the ACA. The ACA specifies that after 2016 the flat dollar penalty is increased based on the cost of living, with any increase that is not a multiple of \$50 rounded to the next lowest multiple of \$50. Therefore, using this formula and the assumed increases in CPI outlined above, we projected the penalties under the individual mandate, and have used those projections in our model. The specific values are as follows:

Percentage Year **Dollar Penalty** Penalty 2014 \$95 1.0% 2015 \$325 2.0% 2016 \$695 2.5% 2017 \$700 2.5%

2.5%

Table C.8: Individual Mandate Penalties

Increases in the Consumer Price Index

2018

We have used increases in the Consumer Price Index (CPI) consistent with the middle estimate as reported in the 2011 Social Security Trustees Report, Table V.B.1.¹⁴⁰ The following table shows the estimates employed in our modeling for Hawai'i.

\$700

Table C.6: CPI Estimates

Year	CPI Estimate
2010	1.6%
2011	1.2%
2012	1.7%
2013	1.9%
2014	2.0%
2015	2.0%
2016	2.0%
2017	2.2%
2018	2.6%

¹⁴⁰ http://www.ssa.gov/oact/tr/2011/lr5b1.html

Increases in Annual Average Wage

We have used increases in the average annual wage from the middle estimate as reported in the 2011 Social Security Trustees Report, Table V.B.1, "Annual Percentage Change in Average Annual Wage in Covered Employment." The following table shows the estimates employed in our modeling.

Year	Annual Increase
2010	4.0%
2011	4.1%
2012	4.5%
2013	4.6%
2014	4.2%
2015	3.9%
2016	4.0%
2017	4.0%
2018	4.4%

Table C.7: Annual Wage Increases

Premium Subsidies

Within the model, we employed premium subsidies consistent with those outlined in the ACA. For individuals that meet the income requirements to qualify for a premium subsidy, the model uses the subsidized premium when evaluating whether or not they will purchase individual coverage. Individuals with employer sponsored coverage made available to them where the required employee contribution toward single coverage exceeds 9.5% of the family's income are allowed to enter the Individual Exchange and receive premium subsidies. These individuals may also be eligible for cost sharing subsidies described below, assuming their income levels correspond with the requirements for these subsidies.

For simplicity, the model places individuals into narrow income ranges based on their percentage of FPL and applies the same subsidy to all individuals within a given range. This is slightly different from the ACA in that, under the ACA, subsidies at specified income levels are prescribed based on an HIU's income within an income range. The specific subsidy is based on an interpolation between the income ranges identified for each HIU; so, two HIU's within a given income range can receive two slightly different subsidy amounts.

For the model, we translated the subsidies included in the ACA into an average premium subsidy for each income range in the model. We selected the specific income ranges to coincide with eligibility thresholds for various public programs, premium subsidies and cost-sharing subsidies; these ranges are narrow enough so that they neither introduce bias nor lack

¹⁴¹ http://www.ssa.gov/oact/tr/2011/lr5b1.html

significant specificity. The following table compares the subsidy levels included in the ACA with the income range subsidies employed in our model.

ACA Subsidy Modeled Subsidy **Federal Max Premium** Modeled Max Premium FPL Range Contribution **FPL Range** Contribution < 100% 2.00% < 100% 2.00% 100% 2.00% 100-138% 2.50% 133% 3.00% 139-150% 3.50% 150% 4.00% 151-200% 5.15% 201-250% 200% 6.30% 7.18% 250% 8.05% 251-300% 8.78% 9.50% 301-350% 300% 9.50% 350% 9.50% 351-400% 9.50%

Table C.9: Premium Subsidies

Cost Sharing Subsidies

The following cost sharing subsidies, consistent with the ACA, were applied for individuals and families with household incomes below 250% FPL. These subsidized cost sharing levels were used when calculating the utility associated with the purchasing choice "Individual Coverage."

FPL	Enhanced Actuarial Value of Benefits
138% up to 150%	0.94
150% up to 200%	0.87
200% up to 250%	0.73

Table C.10: Cost Sharing Subsidies

Transitional Reinsurance Program

The Federal government will establish a transitional reinsurance pool for the three years from 2014 through 2016. The Federal government expects the reinsurance program to allocate \$10 billion to carriers in the individual market in 2014, \$6 billion in 2015 and \$4 billion in 2016. They further expect that these payments will offset roughly 10% of the 2014 premium for carriers in the individual market, all else being equal; with each subsequent year, the carriers' premium relief from the government will decline. These payments to the individual market will result in assessments against all markets (including the individual market) of about 1% of the 2014 premium. While recoveries are only available in the individual market, the program affects both the individual and small group markets. The following table shows our estimate of the annual

effect that the reinsurance program will have on premiums; we have built these assumptions into our model.

Please note that the 9.1% reduction in the individual market (for 2014) is the net of the 10% reinsurance reduction and the 1% of premium assessment within the individual market.

Table C.11: Impact of Transitional Reinsurance on Premiums

Year	Individual Market	Small Group Market
2014	-9.10%	1.00%
2015	4.10%	-0.30%
2016	1.90%	-0.20%
2017	3.70%	-0.40%

Risk Adjustment and Temporary Risk Corridors

The impact of these programs is assumed to be revenue neutral across the entire markets to which they apply. Therefore, no explicit adjustments were included in the migration modeling for these programs. This assumption does not imply that the impact of risk adjustment and risk corridors will not be significant, only that they are anticipated to be revenue neutral across the market.

Insurer Tax

Starting in 2014, a new insurer tax will be allocated across all insurers based on net premiums written; this tax will total \$8 billion in 2014 and increase to \$14 billion in 2018. Our analysis indicates that this new tax will increase premium by the following percentages.

Table C.12: Insurer Tax

Year	Insurer Tax as a % of Premium
2014	2.1%
2015	2.7%
2016	2.7%
2017	3.3%
2018	3.3%

Tax Considerations for ESI

An employee's premium contributions under an ESI health plan may currently be purchased with pre-tax dollars, and we assume this will remain unchanged over the projection period. Our model recognizes these incentives when applying the utility function for individual purchasing decisions. We estimated State and Federal tax rates for various modified adjusted gross income

(MAGI) ranges. We used 2012 Federal income tax rates and current State tax rates for Hawai'i. 142 We considered Federal Insurance Contributions Act (FICA) taxes at the current 6.2% level. That is, we assumed that rates in 2014 and later will correspond with current 2013 rates. 143 We have also assumed Medicare taxes will remain at the current 1.45% rate for both employees and employers.

In factoring FICA and Medicare taxes in, we have used both the employee and employer portion in our estimates, recognizing that the employer-paid portion is effectively in the employee's wages. We have also reflected the income cap on which individuals and employers are required to pay FICA taxes; this cap results in a lower effective rate as income increases. Using these assumptions, we developed marginal tax rates for various income ranges, and we employed these estimates in our model. The specific tax rates we employed for singles are shown below. Corresponding rates were used for other family status.

Modified Adjusted Hawai'i **FICA Tax** Federal Medicare Total **Gross Income Tax Rate Tax Rate** Rate **Tax Rate** Tax Rate \$0 - \$9,999 3.90% 10.65% 12.40% 2.90% 29.85% \$10,000 - \$19,999 6.60% 15.00% 12.40% 2.90% 36.90% \$20,000 - \$29,999 7.40% 15.00% 12.40% 2.90% 37.70% \$30,000 - \$39,999 7.72% 19.70% 12.40% 2.90% 42.72% \$40,000 - \$49,999 7.97% 25.00% 12.40% 2.90% 48.27% \$50,000 - \$74,999 8.25% 25.00% 12.40% 2.90% 48.55% \$75,000 - \$99,999 8.25% 27.10% 12.40% 2.90% 50.65% \$100,000 - \$199,999 8.88% 29.10% 12.40% 53.28% 2.90% \$200,000 - \$299,999 10.00% 33.00% 0.00% 2.90% 45.90% \$300,000 - \$349,999 11.00% 33.50% 0.00% 2.90% 47.40% \$350,000 - \$399,999 48.90% 11.00% 35.00% 0.00% 2.90% \$400,000 - \$499,999 11.00% 35.00% 0.00% 2.90% 48.90% \$500,000 - \$999,999 11.00% 35.00% 0.00% 2.90% 48.90% \$1000000+ 11.00% 35.00% 0.00% 48.90% 2.90%

Table C.13: Marginal Tax Rates as a Percent of Income

Inertia Factor

While Oliver Wyman's model evaluates individual purchasing decisions based on economic utility theory, other factors exogenous to the model will cause actual decisions to differ. A small change in utility (as we have modeled it) may not accurately predict an individual's actual behavior. For example, an individual may not elect to change carriers for slightly lower premiums if their doctor is not in the new carrier's network. Likewise, individuals may not elect to move between uninsured and individual coverage status for small changes in utility. Ultimately, an individual's preference is not as sensitive to cost (and certain other factors) as our 'raw' utility

¹⁴² http://www.tax-rates.org/hawaii/income-tax

¹⁴³ http://ssa.gov/pubs/10003.pdf

function would suggest. Put differently, a person will likely not change coverage for a few dollars in savings.

Therefore, we have employed a 10% inertia factor in the model. With this factor, we attempt to reflect a preference for one's current coverage over some other, new coverage. In order to model a change in an individual's coverage, we assume that the individual's utility change must exceed some minimum threshold. Specifically, we assume that an individual will only change coverage if the utility associated with the new coverage is at least 10% greater than the utility under their current mode of coverage. In the absence of this adjustment, we might model coverage changes that are more volatile than what we see in the actual market (e.g., individual to uninsured to individual to uninsured as a migration pattern).

Take-up of Medicaid Coverage Among Those Eligible but Not Enrolled

As with most states, there are residents of Hawai'i who are eligible for Medicaid but not enrolled today. There are many possible reasons why these individuals may choose not to enroll in Medicaid. Some may make this election because they are healthy, they do not currently need services, and they know they can enroll when they do. A US Government Accountability Office (GAO) study found that many do not enroll because of the perceived stigma associated with filing for public assistance. The same study reported that some individuals found the application process to be burdensome.

With an integrated "single front door" approach to the Connector and Medicaid, some of the stigma associated with enrolling in Medicaid today may be reduced. In addition, the navigators have a mission to educate consumers, raise awareness of the exchanges, and facilitate enrollment. Their presence may also increase the number of these individuals that enroll in Medicaid. For these reasons, the model includes an assumption that many of the individuals currently eligible for Medicaid, but not enrolled, will enroll by 2014.

We reviewed current take-up rates among those eligible for Medicaid. A recent study showed that Hawai'i is well above the national average in terms of the number of Medicaid eligible individuals that are enrolled in the program. Hawai'i is ranked 11th overall for the percentage of children eligible for either Medicaid or CHIP that are enrolled, and 6th overall for parents. The following table provides a comparison of the take-up rates between Hawai'i, the nation as a whole, and the three states with the highest take-up rates.

¹⁴⁴ http://archive.gao.gov/t2pbat4/150626.pdf

¹⁴⁵ December 2012 Robert Wood Johnson Foundation Study of 2009/2010 enrollment: http://www.rwjf.org/content/dam/farm/reports/reports/2012/rwjf403218.

Table C.14: Current Take-up Rates Among those Eligible for Medicaid

Children		Parents			
Hawai'i	Nationwide	Average Highest 3 States ¹⁴⁶	Hawai'i	Nationwide	Average Highest 3 States
90.7%	85.1%	95.9%	79.9%	65.5%	87.9%

In addition, we reviewed a report prepared for Hawai'i's Department of Human Services (DHS) which presents anticipated changes in Medicaid enrollment under the ACA. The report describes two effects that would lead to an increase in the number of eligible individuals that would enroll in Medicaid. The first of these, the woodwork effect, is based on the premise that expanded media coverage of the Medicaid expansion will lead to many eligible individuals that are currently uninsured to enroll in the Medicaid program. The second, the crowd out effect, assumes that low income individuals currently covered in the private insurance market find the benefits more appealing than those offered through Quest-ACE and Quest-Net would migrate to Medicaid once they become eligible for "full" Medicaid benefits with no premium payment or out-of-pocket cost sharing.

We engaged with key stakeholders in discussing the information above and agreed on the following assumptions which were employed in our modeling:

- 70% of those eligible but currently uninsured will take-up Medicaid coverage
- 100% of those eligible for Medicaid but currently covered by an individual policy will takeup Medicaid coverage as they will not be eligible for subsidized individual coverage in 2014
- 50% of spouses and dependents eligible for Medicaid but with current employer coverage will take-up Medicaid coverage

Participation in the Individual Exchange

Premium and cost-sharing subsidies will only be made available within the Connector. Therefore, individuals qualifying for subsidies will have strong financial incentives to purchase coverage through the Connector rather than in the outside market. In our modeling, we have assumed that subsidy eligible individuals electing to take-up coverage will enroll in the Connector, rather than pay what in many cases may be significantly higher premiums for them in the outside market. In evaluating whether subsidy eligible individuals will purchase coverage, the subsidized premiums available to them are used.

While our economic and actuarially based HRM model is well suited for projecting premiums, claims and coverage take-up, it is not designed to model decisions which are non-financial in nature. Given premiums for comparable coverage must be the same inside and outside of the

¹⁴⁶ Average of rates for Massachusetts, Vermont and the District of Columbia.

Connector, the decision to take coverage through the Connector or obtain coverage in the outside market is not one driven by the financial impact of the required premiums for those ineligible for subsidies. Other non- price considerations in making this decision include but are not limited to product offerings inside vs. outside the Connector, carriers that participate inside vs. outside the Connector, the ability to access an agent's services inside vs. outside the Connector, and other value added benefits that may be offered through the Connector.

We have assumed significantly lower participation in the Connector among HIUs with incomes in excess of 400% FPL. A recent Kaiser survey of people with individual insurance found that 36% of those respondents purchased their coverage with the use of an insurance broker. Roughly three-quarters of the remaining individuals purchased coverage directly from the insurance company while only one-quarter, or 13%, purchased coverage through the Internet. We note that the survey did not report these statistics separately by income range. A recent Pew Research study found that those with incomes over \$40,000 are twice as likely to consider themselves high-access Internet users than those individuals with incomes under \$40,000. FPL, we assumed that the current rate at which they purchase coverage over the Internet is at least twice the average 13% figure reflected in the Kaiser survey.

In its January 18, 2013 report to the Legislature, the Connector outlines the Community Outreach Committee's efforts to host meetings to educate and inform consumer stakeholders about the Connector. The Connector Outreach Team has conducted more than 75 outreach events across the State. They have met with chambers of commerce, economic development boards, community health centers, and Native Hawai'ian Health Systems. Additional educational sessions are scheduled to be held with individuals and small businesses. Connector committee meetings provide a forum for individuals and small business to provide input and dialogue with Connector staff on policy concerns and issues the Board has recently made decisions on.

Once the Connector is up and running, individuals will see more of their friends and neighbors making online insurance purchases than they do today. The requirement that coverage be offered only at select actuarial values and the requirement to utilize a standardized format for benefit descriptions will allow for easier comparison of choices by consumers. With attention given to the Connector as an alternate vehicle for purchasing insurance, individuals are sure to increase the rate at which they use this method for obtaining coverage. In addition, the Connector will raise awareness both through public education and by making people aware of the availability of QHPs. Additional advertising and outreach programs from the State can work to increase the awareness even more.

Even with all of this information it is still difficult to predict who among the non-subsidy eligible population might purchase their coverage through the Connector. Given the fact that the exchanges created under the ACA are new, there is no significant empirical evidence upon

¹⁴⁷ http://www.kff.org/kaiserpolls/upload/8077-R.pdf

¹⁴⁸ http://www.pewinternet.org/~/media//Files/Reports/2007/Pew_UI_LibrariesReport.pdf.pdf

which to base an assumption related participation in the Connector versus the outside market among those with incomes over 400% FPL. Therefore, in our modeling we assume both low and high take-up scenarios as a reasonable range of potential enrollment. In our modeling, we have assumed that 25% of the non-subsidy eligible individuals with direct purchase coverage will obtain their insurance through the Connector in the low take-up scenario and that 50% of the non-subsidy eligible individuals with direct purchase coverage will obtain their insurance through the Connector in the high take-up scenario.

Participation in the SHOP Exchange

As with the estimation of participation in the Individual Exchange, there is no significant empirical evidence upon which to base an assumption related to employers in the SHOP versus the outside market. An examination of enrollment by small employers in the Massachusetts Connector, the Utah Health Exchange, and HealthPass New York reveal that significantly less than 10% of the small groups in the state are enrolled. While these "exchanges" are different from the SHOP Exchanges under the ACA, they do provide a starting point for setting enrolment estimates.

The impact that individual employee choice among carriers in the SHOP will have must be considered. Specifically, the ACA requires the option be made available which allows employers to select a given metallic level and then individual employees to select any plan offered among all carriers at that metallic level. There is nothing in the ACA that prohibits carriers from joining together to offer this same level of employee choice outside of the Connector. The perceived risk of adverse selection or dilution of market share when some employees are allowed to select another carrier may lead to this not occurring. The Massachusetts Connector required employee choice through its Connector and experienced only a couple of carriers that participated initially, with the dominant carrier in the State electing not to participate. Carriers feared adverse selection, which will be mitigated through the risk adjustment program that will be in place with the ACA carrier choice model. If employee choice does not exist in the outside market and employers see the employee choice option offered inside the Connector as highly valuable, it could increase participation in the SHOP significantly beyond that which has been observed in these early exchanges.

The role that brokers play and their influence on the employer purchasing decision could significantly impact participation in the SHOP. Oliver Wyman had conducted focus groups with small employers and one thing that was evident is that they rely heavily on their brokers. Final HHS regulations¹⁵⁰ require that broker commissions paid on QHPs sold inside the Federally Facilitated SHOP (FF-SHOP) be the same for similar plans sold outside the FF-SHOP. If Hawai'i does not set similar requirements and carriers are allowed to compensate brokers at higher rates outside of the SHOP, it could incentivize them to steer groups to the outside market.

¹⁴⁹ http://www.smallbusinessmajority.org/reports/shop_exchange.pdf

¹⁵⁰ HHS Final Notice of Benefit and Payment Parameters for 2014.

Given there is no difference in the premiums that a group would pay inside vs. outside of the SHOP, with the exception of temporary tax credits to the smallest groups with low average payrolls, employers may view other "value added" services offered inside the SHOP as an attractive draw for them. These could consist of both services to the employers and services that make the brokers' job easier.

As mentioned earlier, the Connector has, through its community outreach efforts, been hosting meetings to educate and inform consumer stakeholders about the Connector. Given the uncertainty of the impact of these efforts at this time, it is difficult to project which employers will purchase their coverage through the SHOP in Hawai'i. Therefore, in our modeling we assume both low and high take-up scenarios as a reasonable range of potential enrollment. In our modeling, we have assumed that 25% of small groups electing to purchase coverage will obtain their insurance through the Connector in the low take-up scenario and that 50% of the small groups electing to purchase coverage will obtain their insurance through the Connector in the high take-up scenario.

Separate or Merged Individual and Small group Markets

The State has the option to merge the individual and small group markets into one rating pool upon which the rates are based, or maintain separate pools as there are today. However, with separate pools each insurer is still required to merge all of their individual experience together into one pool, and all of their small group experience together into another pool. We modeled both separate and merged market scenarios.

Inclusion of High Risk Pool Insureds in the Individual Market

Individuals currently enrolled in the PCIP high risk pool were assumed to migrate to the individual market in 2014. If these individuals have incomes that qualify them for premium and cost sharing subsidies, the subsidies were applied.

Basic Health Program

The ACA provides states with the option of setting up a BHP starting in 2014. If the BHP is established, individuals with incomes at or below 200% of FPL will not be eligible to enroll in the exchange and receive premium and cost sharing subsidies. We modeled scenarios with both the presence and absence of a BHP.



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