



A Report to the Joint Standing Committee on Insurance and Financial Services of the 125th Maine Legislature

Review and Evaluation of Health Insurance Geographic Area Factors

October 2012

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I. Executive Summary

The Joint Standing Committee on Insurance and Financial Services of the 125th Maine Legislature directed the Bureau of Insurance to conduct an analysis of the geographic rating factors used by health insurance carriers in the individual and small group markets. The Joint Committee requested the analysis to explain how carriers develop rating factors by geographic area, criteria used by carriers, and differences in rating based on geographic area throughout the State.

Health insurance carriers use case characteristics such as age, group size, tobacco use, and geography to price products to reflect anticipated claim costs and provide competitive products. Carriers may vary premium rates due to geographic region to reflect differences in claim costs by area. According to a National Association of Insurance Commissioners (NAIC) issue brief entitled "Rate Regulation," states often regulate insurers' use of rating factors through rate banding to preserve "the pooling of risk between low-cost and high-cost individuals, [which is] the core function of insurance." Current Maine law restricts geographic area rating factors to a 1.5 to 1 rating band in the individual and small group markets.

The Bureau of Insurance (the Bureau) surveyed carriers in the individual and small group markets for their rate factor development. MEGA and Harvard Pilgrim Health Care (HPHC) for DirigoChoice use geographic factors in the individual market. MEGA uses area factors by ZIP code groups and DirigoChoice factors are by county. Anthem, the largest carrier in the individual market, does not use geographic factors for individual policies. The carriers currently writing policies in the small group market are Anthem, Aetna, HPHC (both for DirigoChoice and for its own small group customers), and UnitedHealthcare. They all use geographic factors developed by county. The specific area factors are provided in the Background section of the report.

Each carrier has a slightly different approach to setting their geographic rating factors. Basic to all the carriers is the consideration of hospital costs, provider contracts, and competitive concerns. Loss ratios by county may be an indication of whether factors should be adjusted relative to the other counties; however, loss ratios can differ from county to county for reasons other than differences in medical costs. For example if the carrier covers an older population in one county than in another, that will increase the loss ratio because premiums do not fully reflect the extra cost of older members due to rating band restrictions. Loss ratios are used by some carriers as a secondary factor to supplement their analysis of hospital claim costs and provider contracts. Some carriers use outside purchased data from consultants or other carriers to supplement their own data, especially in areas where they have fewer policies. Several carriers provided average age by county for their block of small group business. For some it was relatively similar across the state. For one carrier it ranged from age 35 to 42 with the lower ages in the South and higher in the North. The carriers' specific explanations of how they develop their geographic factors are provided in the body of the report.

Rule Chapter 945 requires all health insurance carriers writing medical expense insurance in Maine to report annually to the Bureau information about the number of insured lives, premiums, and claims. Some data is reported by ZIP code groupings specified in the regulation that combine data for counties, making it difficult to match to the carrier's area rating factors. The Bureau did observe that for the reporting years 2010 and 2011, the per member per month (PMPM) claims cost for the individual and small group markets combined in southern areas (York and Cumberland) is the lowest for the ZIP code groupings and Aroostook is the highest.

Prior to October 1, 2011, rate variations due to age, industry, and geographic area combined were limited to a range of 1.5 to 1 in the small group market. With the implementation of P.L. 90 on October 1, 2011, separate bands for age and geographic area were permitted, resulting in shifts in rates. The Bureau charted the proportions of renewing groups that received rate decreases and increases of various sizes during the first 12 months that P.L. 90 was in effect. These rate changes reflect increases in medical costs as well as the shifts in rating factors for age and geographic area. The South and Central regions saw the greatest percentages of rate decreases (17.7% and 6.6%, respectively) and 0-20% increases (62.8% and 56.5%). The East and North regions had the greatest percentages in the 60%-100% rate change band (7.6% and 5.8% respectively).

Due to the limited time available to research and develop this report, it focuses on the information provided by the carriers on their rate development methodology and data readily available to the Bureau as well as information from an additional report and presentation from other sources. Dirigo Health Agency's Maine Quality Forum and Maine Health Data Organization issued a report, "All-Payer Analysis of Variation in Healthcare in Maine" in April 2009 that suggests "geographic variation observed in the analysis provides a guide to begin analyzing reasons for the variation and the development of community specific strategies to address the variation." While much of the report did not directly address cost differences between counties for commercial insurance, they did report that for at least 3 of the outpatient categories for ages 46-64 commercial coverage, the following Hospital Service Areas (HSAs) were consistently higher than the mean: Skowhegan, Norway, Caribou/Ft. Kent and Presque Isle. HSAs below the mean for at least 3 outpatient categories include: York, Portland, Biddeford, Brunswick, Farmington, Rockland and Lewiston.

Further information may be available through the Maine Health Management Coalition Foundation. Their MaineCare Redesign Task Force recently issued an analysis entitled "Results of Health Care Cost Workgroup: Savings Opportunities," that showed PMPM professional and facility costs by county. Their chart, found in Section VI of this report, showed that the unadjusted claim costs PMPM by County were lowest in Cumberland, Sagadahoc and Androscoggin. Washington, Aroostook and Piscataquis were at the highest end of the counties for cost.

II. Background

Health insurance carriers use case characteristics such as age, group size, tobacco use, and geography to price products to reflect anticipated claim costs and provide competitive products. Carriers may vary premium rates due to geographic region to reflect differences in claim costs by area.

The Joint Standing Committee on Insurance and Financial Services of the 125th Maine Legislature directed the Bureau of Insurance to conduct an analysis of the geographic rating factors used by health insurance carriers in the individual and small group markets. The Joint Committee requested that the analysis explain how carriers develop rating factors based on geographic area and what criteria are used by carriers and differences in rating based on geographic area throughout the State.

According to a National Association of Insurance Commissioners (NAIC) issue brief entitled "Rate Regulation" states often regulates insurers' use of rating factors through rate banding to preserve "the pooling of risk between low-cost and high-cost individuals, [which is] the core function of insurance..." There may be geographic rating restrictions in a state "depending on the variation in medical costs within the state and range from no variation in the District of Columbia to 1.9:1 in Florida." Current Maine law restricts geographic area rating factors to a 1.5 to 1 rating band in the individual and small group markets. For example, if the lowest factor a carrier uses is 0.85, then the highest allowable factor would be 1.275, which is 1.5 times 0.85.

The Bureau surveyed carriers in the individual and small group markets. MEGA and Harvard Pilgrim Health Care (HPHC) DirigoChoice use geographic factors in the individual market. MEGA uses area factors by ZIP code groups and the Dirigo factors are by county, as shown in Tables 1 and 2 below. Anthem, the largest carrier in the individual market, does not use geographic factors for individual policies. The carriers currently writing policies in the small group market are Anthem, Aetna, HPHC (both for Dirigo and for its own small group customers), and UnitedHealthcare. They all use geographic factors developed by county that are provided in Table 3 below.

County Factors					
Androscoggin	0.965	Knox	0.95	Sagadahoc	0.95
Aroostook	1.15	Lincoln	0.975	Somerset	1.15
Cumberland	0.9	Oxford	0.975	Waldo	10.5
Franklin	1.025	Penobscot	1.015	Washington	1.15
Hancock	1.15	Piscataquis	1.15	York	0.9
Kennebec	0.925				

 Table 1: Geographic Factors for HPHC DirigoChoice

Table 2: Geographic Factors for MEGA Individual Policies

ZIP Code	New Area	ZIP Code	New Area	ZIP Code	New Area
Prefix	Factor	Prefix	Factor	Prefix	Factor
039	1.000	043	1.050	047	1.050
040	0.784	044	1.050	048	1.050
041	0.784	045	1.050	049	0.952
042	1.103	046	1.103		

Current Factors Effective	7/1/2012	7/1/2012	8/1/2012	10/1/2012	
	Anthem	Aetna	Harvard/HP HC	HPHC Dirigo	UnitedHealthcare
Androscoggin	1.000	1.000	1.000	0.970	1.050
Aroostook	1.250	1.275	1.300	1.150	1.100
Cumberland	0.850	0.850	0.867	0.900	1.000
Franklin	1.100	1.000	1.050	1.025	1.100
Hancock	1.250	1.200	1.300	1.200	1.100
Kennebec	1.000	0.950	1.000	0.930	1.050
Knox	0.950	0.950	1.000	0.950	1.000
Lincoln	0.975	1.000	1.000	0.975	1.000
Oxford	0.975	1.000	1.000	0.975	1.100
Penobscot	1.100	1.050	1.100	1.150	1.000
Piscataquis	1.100	1.275	1.100	1.150	1.100
Sagadahoc	0.950	0.950	0.950	0.950	1.000
Somerset	1.125	1.200	1.050	1.150	1.100
Waldo	1.100	1.000	1.000	1.050	1.100
Washington	1.275	1.275	1.300	1.200	1.100
York	0.950	0.950	0.950	0.900	1.000

Table 3: Geographic Factors for Small Group Business

Each carrier has a slightly different approach to setting their geographic rating factors. Basic to all the carriers is the consideration of hospital costs, provider contracts, and competitive concerns. Loss ratios by county may be an indication of whether factors should be adjusted relative to the other counties; however, loss ratios can differ from county to county for reasons other than differences in medical costs. For example, if the carrier covers an older population in one county than in another that will increase the loss ratio because premiums do not fully reflect the extra cost of older members due to rating band restrictions. Loss ratios are used by some carriers as a secondary factor to supplement their analysis of hospital claim costs and provider contracts. Some carriers use purchased data to supplement their own experience data especially in areas where they have fewer policies. Several carriers provided average age by county for their block of small group business. The spread between the county with the youngest average age and the county with the oldest varied among the carriers from $3\frac{1}{2}$ to 7 years. For the carrier with the widest spread, it ranged from age 35 to 42 with the lower ages in the South and higher in the North. The carriers' explanations of how they develop their geographic factors are provided in Section V of this report.

Due to the limited time available to research and develop this report, it only covers information provided by the carriers on their rate development methodology and data reported to the Bureau, as well as information from an additional report and presentation from other sources discussed in Section VI.

III. Rule 945 Data Collection

Maine Insurance Rule Chapter 945 requires all health insurance carriers writing medical expense insurance in Maine to report annually to the Bureau information about the number of insured lives, premiums, and claims. These reports are posted to the Bureau's website for the major carriers. If the carrier writes more than \$2 million in premium, detailed claims and premium data is also provided by ZIP code groupings. The ZIP code groupings specified in the rule combine counties, making it difficult to compare to the carrier's area rating factors. Table 4 provides a rough match of the ZIP code groupings to counties along with the carriers' area factors.

945		Area Factors						
Regions	Counties	Anthem	Aetna	HPHC	HPHC Dirigo	UHIC		
039 040 041	York Cumberland	0.85 0.95	0.85 0.95	0.867 0.95	0.90	1.0		
042	Androscoggin Oxford	0.975 1.0	1.0	1.0	0.97 0.975	1.05 1.1		
043 045 046 048 049	Kennebec Sagadahoc Lincoln Hancock Washington Knox Waldo Franklin Somerset	0.95 0.975 1.0 1.1 1.125 1.25 1.275	0.95 1.0 1.2 1.275	0.95 1.0 1.05 1.3	0.93 0.95 0.975 1.025 1.05 1.15 1.2	1.0 1.05 1.1		
044	Penobscot Piscataquis	1.1	1.05 1.275	1.1	1.15	1.0 1.1		
047	Aroostook	1.25	1.275	1.3	1.15	1.1		

Table 4: ZIP Code Matching to Counties in Maine for Rule 945 Data Reporting

The Bureau analyzed 2011 data by market to determine the per member per month (PMPM) claim costs shown in Table 5. The PMPM claim costs varied somewhat by market, being highest for large group and lowest for individual. This is at least in part due to the richer benefits typically found in large group plans and the higher deductibles in individual plans. To compare geographic areas, the Bureau normalized the data to remove distortions resulting from some counties having a larger or smaller proportion of coverage in a particular market. For example, all things being equal, a county with a higher proportion in the large group market would have higher PMPM claim costs. To normalize the data for each county, the average PMPM claim costs in each market for the county were weighted by the statewide proportions in each market. Table 5 shows the normalized PMPM claim costs for each county for all markets combined and for just the regulated markets.

PMPM Claim Cost									
ZIP Codes	Large Group	Small Group	Individual	All Markets	All Markets: Normalized	Sm & Ind Markets: Normalized			
039, 040, 041	\$332.12	\$286.20	\$274.14	\$315.36	\$313.62	\$282.93			
042	\$299.81	\$276.51	\$331.44	\$294.55	\$296.65	\$291.40			
043, 045, 046, 048, 049	\$457.19	\$298. <mark>1</mark> 6	\$262.83	\$386.65	\$393.79	\$288.58			
044	\$313.15	\$337.66	\$297.76	\$318.58	\$318.30	\$326.85			
047	\$320.67	\$361.48	\$327.65	\$333.05	\$332.57	\$352.31			
All Zip Codes	\$359.01	\$296.31	\$279.31	\$333.70	\$333.70	\$291.70			

Table 5: 2011 Data from Rule 945 Carrier Reports

Table 6 shows the normalized PMPM claim costs for the regulated markets for 2010 and 2011 combined. Both Tables 5 and 6 show that for the reporting years 2010 and 2011, claims costs in southern areas (York and Cumberland) are the lowest for the ZIP code groupings, and claims costs in Aroostook are the highest.

Table 6: Combined 2010 and 2011 Data from Rule 945 Carrier Reports

20	10-2011 Small & Indivi	dual Markets Norm	alized
ZIP Codes	PMPM Claim Cost	Zip Codes	PMPM Claim Cost
039, 040, 041	\$275.52	044	\$312.13
042	\$278.40	047	\$338.60
043, 045, 046, 048, 049	\$285.55	All ZIP Codes	\$284.29

IV. Small Group Renewals by Geographic Area

Prior to October 1, 2011, rate variations due to age, industry, and geographic area combined were limited to a range of 1.5 to 1 in the small group market. With the implementation of P.L. 90 on October 1, 2011, separate bands for age and geographic area were permitted, resulting in shifts in rates. Table 7 shows the proportions of renewing groups that received rate decreases and increases of various sizes during the first 12 months P.L. 90 was in effect. These rate changes reflect increases in medical costs as well as the shifts in rating factors for age and geographic area.

70.0% Percentage of Groups 60.0% 50.0% 40.0% 30.0% 20.0% 10.0% 0.0% < 0% (rate 0-20% 20-40% 40-60% 60-80% 80-100% > 100% decrease) Central 6.6% 56.5% 29.9% 4.0% 1.7% 0.8% 0.4% 0.9% East 4.4% 40.8% 34.5% 12.8% 5.2% 1.5% North 3.5% 40.5% 33.4% 16.8% 3.6% 1.4% 0.8% South 17.7% 62.8% 2.7% 0.1% 15.4% 0.9% 0.4% West 5.0% 53.7% 27.9% 10.4% 2.2% 0.8% 0.0%

Table 7: Rate Changes by Geographic Area Post-P.L. 90 (4th Quarter 2011 – 3rd Quarter 2012: Aetna, Anthem, and HPHC combined)

Size of rate increase:	< 0% (rate decrease)	0-20%	20-40%	40-60%	60-80 <mark>%</mark>	80-100%	>100%	Total
Central	96	818	433	58	25	11	6	1447
East	57	534	451	167	68	20	12	1309
North	35	407	335	<u>169</u>	36	14	8	1004
South	760	2692	661	114	37	17	5	4286
West	25	268	139	52	11	4	0	499

	Area Key:							
Central	East	North	South	West				
Androscoggin,	Knox, Hancock, Lincoln, Waldo,	Aroostook, Penobscot,	Cumberland,	Franklin, Oxford,				
Kennebec, Sagadahoc	Washington	Piscataquis	York	Somerset				

- The South and Central regions saw the greatest percentages of rate decreases (17.7% and 6.6%, respectively) and 0-20% increases (62.8% and 56.5%).
- The North, East, and West regions had the greatest percentages in the 20-60% rate change band (50.2%, 47.3%, and 38.3% respectively).
- The East and North regions had the greatest percentages in the 60%-100% rate change band (7.6% and 5.8% respectively).

V. Carriers' Geographic Area Factor Development

Anthem

As reported by Anthem, their methodology for developing area factors takes into account hospital costs and loss ratios. First, they review their hospital contracts and unit cost. They normalize the unit cost to get the weighted index and then an indexed unit cost by hospital. For example, in the December 2011 area factor filing, the weighted average index was 1.032 and so each hospital index was divided by that weighted average to produce revenue-neutral factors.

The relative unit cost by hospital is based upon severity-adjusted allowed claims cost. In other words, it is based on the billed amount that the insurance company deems payable, adjusted to remove the effect of differences in the severity of the illness or condition of the patient. For inpatient severity, Anthem uses CMS DRG (diagnosis-related group) weights that are updated and published each year. For outpatient severity, they use a Medicare relative value units (RVU) weight table. The severity-adjusted allowed costs at each hospital are compared to the statewide allowed costs. Because costs are severity-adjusted, this comparison provides value differences based upon contractual pricing. To get an area rating factor, the normalized unit costs are aggregated to the county level.

Second, Anthem reviews loss ratios by county. Area factors are then set, by county, using the relative unit cost analysis coupled with an attempt to achieve projected loss ratios at the aggregate target loss ratio. Business decisions could change area factors based upon the indexed unit hospital costs by county combined with a loss ratio review and competitive position. A loss ratio may perform differently from the overall target due to provider cost differences, economic and societal factors, and, to some extent, Anthem's competitive position in each market. Changes in loss ratio performance may change the area factor for a given county.

In the most recent area factor update they focused on Southern Maine because of anticipated contract changes in York County and decided to increase that area factor. The loss ratio in that county runs just slightly higher than the book of business, but the unit cost index based on contracting updates justified an increase to the factor. The unit cost study also showed that Cumberland County was in line with the old factor; however, the favorable loss ratio in that county suggested that they could lower the factor. Washington County runs at a very high loss ratio, but the area factor was lowered to comply with a 1.5 to 1 rating band requirement.

Anthem plans to enhance its area factor methodology. To improve the approach, they will analyze allowed per member per month claim costs. They will normalize the allowed claims for age and group size and then determine a relative allowed cost as a further basis for the area factors. Once completed and the results are analyzed, they will determine how to combine this new approach with the current methodology to enhance the development of area factors.

Aetna

Aetna uses allowed charges by county to develop their area factors, typically from the most recent 24-month period. The use of allowed claims in the determination of area adjustments eliminates the impact of benefit plan values and related cost-sharing behaviors. Allowed PMPM costs are calculated by county and for the state. Large claims are removed from the experience in areas with smaller membership to allow for the lack of credibility in the data.

Due to the similarity in provider discount structure, experience from both Aetna legal entities¹ can be combined to improve credibility and provide consistency in rating practices. Historically, the impact of provider network contracting has been very minimal, but they expect it to change going forward due to the developments allowed under P.L. 90. Each county's relativity to total is compared to its existing area factor.

The following are used in the decision-making process to revise an area factor:

- The degree of difference between the actual relativity to total and the existing area adjustment;
- The county's membership (credibility);
- The results of surrounding counties (i.e., is the location of services provided affecting results and is this a consistent pattern or an anomaly); and
- How will all potential changes combine to affect revenue neutrality (i.e., will base rates need to be increased or decreased to maintain the same total statewide premium?).

Aetna limits revisions to a maximum of 5% to avoid adversely impacting the marketplace and existing consumers. Final recommended changes are reviewed and approved by management. Aetna does not currently utilize the allowed rating factors of industry, wellness, or tobacco-usage.

There is no significant variation in average age between counties, with all averages falling within the 45-49 age bracket. Aetna asserts that the minor differences that do exist between average employee ages are not enough to impact claim results.

Harvard Pilgrim Healthcare

Harvard Pilgrim uses claims relativities, provider relativities, and DxCG (Diagnostic Code Group) scores to determine area factors for small group rating in Maine. DxCG is a risk score based on diagnostic codes. There are two measures, a concurrent score which reflects the current risk level and a prospective score for future expected risk.

Additional consideration is given to the current loss ratio experience by area, future contracting changes, and shifts in membership by area to provide supporting information in the final area factors. Harvard Pilgrim starts with 12 months of claims that have been normalized for benefits and age. The resulting claims PMPM are then converted to claims relativities using the average claims PMPM weighted by

¹ Aetna Group consists of Aetna Health, which is a Maine HMO, and Aetna Life Insurance Company, which writes PPO products.

current membership. Both large and small group experience is included to provide greater credibility. The second data element is provider contracting. Provider relativity factors are derived based on current contract arrangements with Maine providers. The provider relativities measure the relative cost of providers within each defined area. Factors less than 1.00 correspond to areas in which provider costs are lower relative to the overall average and factors greater than 1.00 corresponding to higher cost areas. These were the two primary factors in determining the area factors.

Harvard Pilgrim provided an example comparing York and Cumberland counties. Both counties were included under the previous area rating for the South. Cumberland has a claims relativity significantly lower than the claims relativity for York County. The provider contracting factor is also lower for Cumberland when compared to York. The DxCG scores indicate both counties have better than average risk, while the MLRs indicate that the Cumberland is better than York. Based on these observations, Harvard reduced the area factor for Cumberland and left the York factor unchanged. For counties with a low number of members data is combined with other counties before evaluating the data. Loss ratios are only considered as supporting information for the results indicated by the claims cost factors and the provider contracting factors. With very low membership in many counties, the loss ratio is not a reliable indicator of experience for those counties.

Table 8 reflects new area factors that were filed for 8/1/12 and factors that were considered in making changes to the factors.

SG Area	By County	Current Rating Factors	Revised Factors	Claims Relativity	Provider Relativity	DXCG Predictive	% Membership	MLR	MLR (Excluding HCC)
South	Cumberland	0.95	0.867	0.975	0.997	0.997	49%	83.7%	79.9%
South	York	0.95	0.950	1.096	1.011	1.011	13%	95.0%	87.7%
Central	Androscoggin	1.05	1.000	1.160	1.005	1.005	5%	87.9%	84.6%
Central	Kennebec	1.05	1.000	0.911	1.003	1.003	8%	82.3%	77.2%
Central	Sagadahoc	1.05	0.950	1.514	0.999	0.999	0%	101.1%	101.1%
West	Franklin	1.05	1.050	1.042	1.009	1.009	5%	96.4%	83.6%
West	Oxford	1.05	1.000	0.854	1.015	1.015	4%	67.3%	67.3%
West	Somerset	1.05	1.050	1.052	0.983	0.983	3%	78.5%	75.6%
East	Knox	1.1	1.000	0.714	0.997	0.997	1%	64.6%	64.6%
East	Lincoln	1.1	1.000	0.820	1.002	1.002	1%	65.4%	65.4%
East	Waldo	1.1	1.000	0.631	0.995	0.995	1%	55.5%	55.5%
North	Aroostook	1.3	1.300	1.138	0.969	0.969	1%	71.5%	71.5%
North	Hancock	1.3	1.300	1.365	0.975	0.975	2%	95.9%	88.1%
North	Penobscot	1.3	1.100	0.971	0.978	0.978	4%	78.5%	77.4%
North	Piscataquis	1.3	1.100	0.903	0.969	0.969	3%	77.4%	76.2%
North	Washington	1.3	1.300	1.419	0.998	0.998	1%	91.8%	84.9%

Table 8: Harvard Pilgrim Area Factors Filed for August 1, 2012

UnitedHealthcare Insurance Company (UHIC)

UHIC develops their geographic area factors using a cost model, which is based on their commercial claims database and does not reflect the demographic differences in the UHIC small group covered populations in the various locations. The commercial claims database contains far more experience than just the small number of UHIC small groups in Maine.

The following process was used to derive the factors:

- Running the model using the same age and gender distribution for all locations.
- Running the model assuming the same benefit plan (an average plan) and the same provider reimbursement discounts off of billed charges.
- Compare the net medical-only (no Rx) PMPM claims in each metropolitan statistical area (MSA) and Maine non-MSA to Portland, which was set at 1.00. Round the ratios to the nearest 0.05, and adjust the factor for far southern Maine downward, based a desire not to have multiple factors for York County.

UHIC also supplements the claims data in their database with purchased data, which is particularly important for locations with smaller populations. The data will reflect the average commercially-insured population in each location. To the extent that one location has an older (under 65 population only) population than another, this difference will cause some variation in the reported utilization rates per 1,000 in the database. This difference would not affect to any significant degree the other component of PMPM costs, unit costs per service.

MEGA

Historically, area factors used by MEGA to calculate premium rates had only represented a loose relationship to the actual costs in the various areas of the state. MEGA's area factors are defined by three digit zip code and not by county. Previously, the factors in the highest cost areas were 5% higher than the factors in the lowest costs areas due to the Maine requirement that the combined age and area factors could not produce a variation of more than 50% from the lowest resulting rate to the highest resulting rate.

MEGA filed changes to the current area factors based on the claim costs of the existing book of individual business due to the passage of P.L. 90 which allows a 50% variation in the area factors (rather than the previous requirement of the 50% variation in the combined age and area factors). The experience utilized was based on the base plan forms (which primarily cover hospital inpatient services) over a two year period. The area factors were developed to produce factors to reflect the variation in costs by geographic area. The analysis was based on the average incurred paid claim cost PMPM by three digit zip code. This produced a straight forward calculation with reasonable accuracy. A more robust analysis would have included adjustments for age and benefit levels (as well as tobacco use), but MEGA decided that the additional adjustments would not significantly change the results of the study.

Table 9 shows PMPM claim costs by three digit zip codes. While some three digit zip codes appear to justify an even higher factor than MEGA requested, the area factors were dampened by limiting the total

difference from the highest cost area to the lowest to 41% (1.103 to 0.784). Based on area only, the largest increase in rates will be 16.5% for three digit zip code 046, while the most significant decrease will be in three digit zip codes 040 and 041 which will both receive a 17.2% reduction in rates. A decrease to the base rate will be made such that the changes are revenue neutral. MEGA's small group book of business is very small and has been closed for quite some time. MEGA will review those area factors sometime in the future.

MEGA reviewed the average age factor by three digit zip code and found that the average age factor of most three digit zip codes came relatively close to the state average. Additional time and effort was not expended on adjusting claim costs for age and benefit levels because the calculated relativities are not used directly in determining the area factors. For example, zip code 041 had a relativity factor of 0.47 which would indicate that this area factor should be cut in half; however, this area only had \$790,000 in claims over the 24 months of data used in the study, so the factor was reduced 17% to keep it in line with zip code 040. Another example is zip code 046 that has a relativity factor of 1.26 which indicates that the factor could be increased 26%, while this zip code's area factor was increased only 16.5%.

Because area factors are rounded to the nearest 5% and the calculated relativities are used only directionally, the small variation in age factors was not felt to be significant enough to warrant a more detailed analysis.

Zip Code	Claim Cost PMPM	Prior Area Factor	New Area Factor
039	73.38	0.784	1.000
040	62.63	0.784	0.784
041	32.78	0.784	0.784
042	92.14	0.823	1.103
043	58.93	0.784	1.050
044	79.36	0.784	1.050
045	67.65	0.784	1.050
046	87.42	0.784	1.103
047	76.25	0.823	1.050
048	67.62	0.823	1.050
049	68.83	0.784	0.952

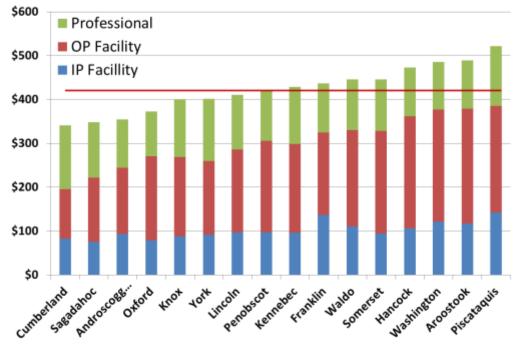
Table 9: MEGA Individual Geographic Rate Factors

VI. Other Reports with Geographic Area Results

Dirigo Health Agency's Maine Quality Forum and Maine Health Data Organization issued a report, "All-Payer Analysis of Variation in Healthcare in Maine" in April 2009 that suggests "geographic variation observed in the analysis provides a guide to begin analyzing reasons for the variation and the development of community specific strategies to address the variation." The report analyzed claims in the all-payer database that includes commercial, Medicare, and MaineCare claims. They grouped claims into Acute Inpatient, Outpatient, Emergency Room, and other types of care across Health Service Areas (HSAs). While much of the report did not directly address cost differences between counties for commercial insurance, they did report that for at least three of the outpatient categories for age 46-64 commercial coverage, the following HSAs were consistently higher than the mean: Skowhegan, Norway, Caribou/Ft. Kent and Presque Isle. HSAs below the mean for at least three outpatient categories include: York, Portland, Biddeford, Brunswick, Farmington, Rockland, and Lewiston.

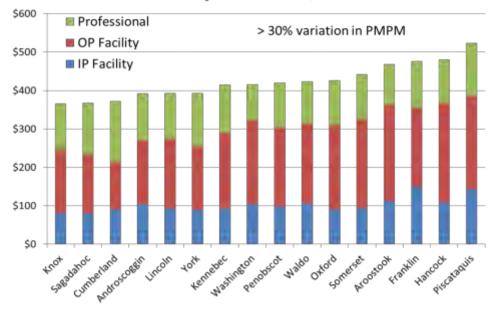
More information may be available through the Maine Health Management Coalition Foundation. Their MaineCare Redesign Task Force issued a presentation September 12, 2012, entitled "Results of Health Care Cost Workgroup: Savings Opportunities," that showed per member per month professional and facility costs by county. The chart below shows that for the unadjusted PMPM by county, Cumberland has the lowest cost and Washington, Aroostook, and Piscataquis are at the highest end of the counties for cost for total professional, outpatient facility, and inpatient facility. The adjusted PMPM by county chart is also included below.

Maine Health Management Coalition Foundation: MaineCare Redesign Task Force Presentation September 12, 2012, "Results of Health Care Cost Workgroup: Savings Opportunities



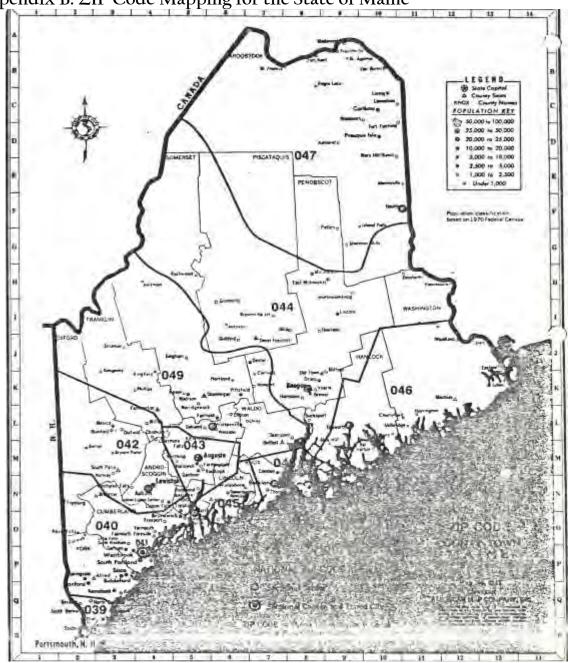
Unadjusted PMPM by County

Risk Adjusted Total \$ PMPM



VII. Appendices

Appendix A: Request Letter from IFS



Appendix B: ZIP Code Mapping for the State of Maine

Appendix C: References

- National Association of Insurance commissioners (NAIC) and the Center for Insurance Policy & Research. "Rate Regulation," <u>http://naic.org/documents/topics health insurance rate regulation brief.pdf</u>.
- Robert Wood Jonson Foundation, "The Rural Implication of Geographic Rating of Health Insurance Premiums," May 2012, <u>www.shadac.org/share</u>.
- Dirigo Health Agency's Maine Quality Forum and Maine Health Data Organization, "All-Payer Analysis of Variation in Healthcare in Maine," April 2009
- Maine Health Management Coalition Foundation -MaineCare Redesign Task Force Presentation, "Results of Health Care Cost Workgroup: Savings Opportunities," September 12, 2012