

Proposed List has 3 Major Segments

SEGMENTS OF THE IHS LIST	EXTERNAL BENCHMARK
1. PERSONAL HEALTH CARE SERVICES (individuals)	
– Medical Care Services	FHP BCBS PPO Plan
– Dental Care Services	FHP MetLife PPO Dental Plan
– Vision Care Services	FHP BCBS Blue Vision Plan
– Selected supplemental IHS services	No Benchmark
2. PUBLIC HEALTH PROGRAMS (communities)	
– Public Health Nursing	No Benchmark
– Community Health Representatives	No Benchmark
– Environmental Health Services	No Benchmark
– Sanitation Facilities Construction	No Benchmark
3. AUGMENT INFRASTRUCTURE (system/network)	
– AIAN Health Professionals (loans & scholarships)	No Benchmark
– Self-Determination Partnerships (Tribes & IHS)	No Benchmark

Substance-abuse/mental/behavioral health services are largely covered in #1. The Urban IHP is separate

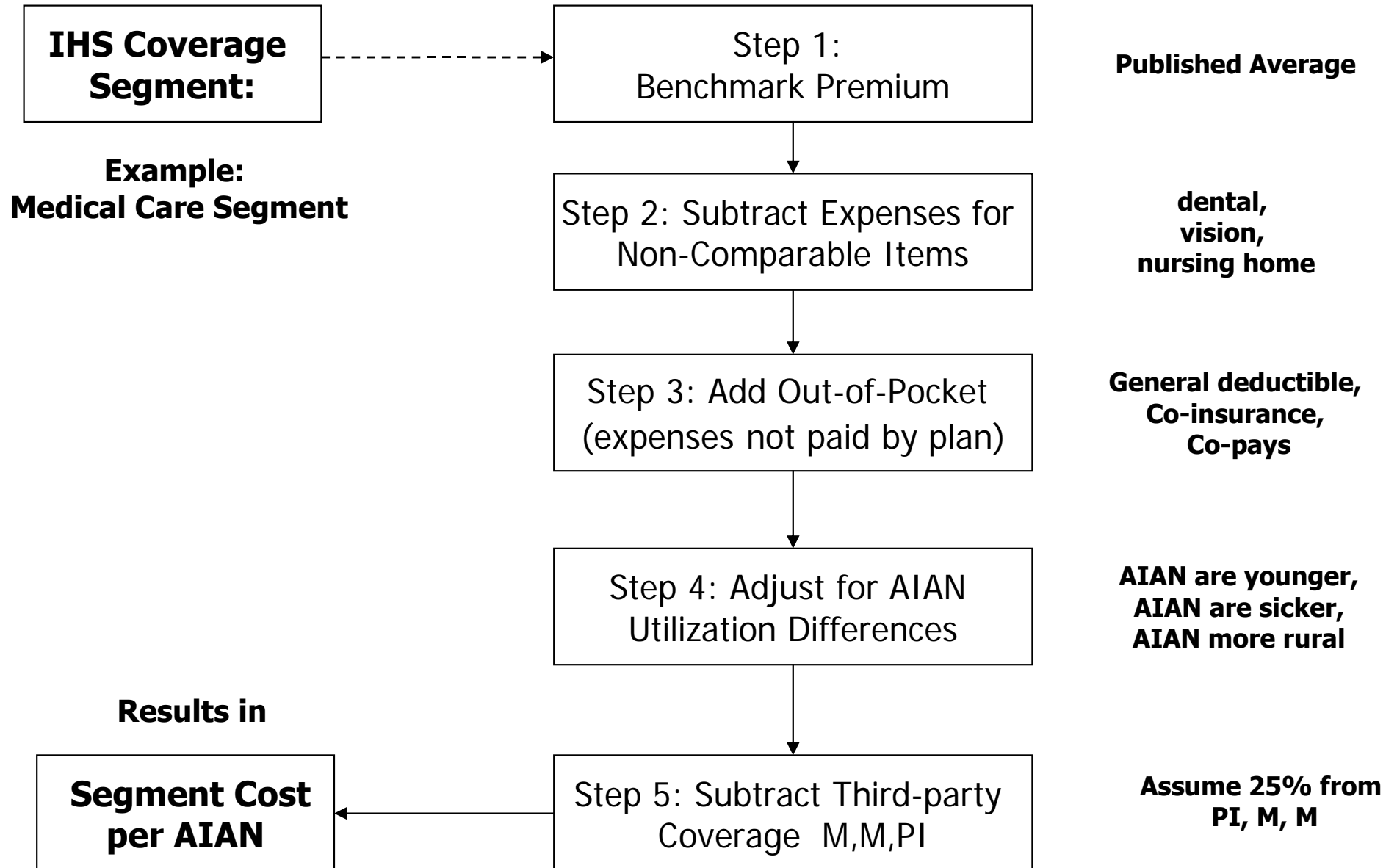
FEHP Plans with Published Cost Data

- **MEDICAL SERVICES: Blue Cross & Blue Shield Preferred Provider Organization (BCBS PPO).**
 - This plan is “main-stream” in content and extent of coverage, is available in all states, and is more flexible for how “in-network” provider systems are organized, e.g. more adaptable to diverse circumstances found within the IHS network.
- **DENTAL SERVICES: MetLife PPO Dental Plan**
 - This is a “main-stream” plan within the new Federal Employees Dental and Vision Insurance Program (FEDVIP), which has characteristics similar to those listed above.
- **VISION SERVICES: BCBS Blue Vision Plan**
 - This is a “main-stream” plan within the new Federal Employees Dental and Vision Insurance Program (FEDVIP), which has characteristics similar to those listed above.

Cost Forecast Approach

- Task -- estimate costs of the proposed covered services/programs.
- Published Federal Employee Health Program (FEHP) premium statistics are used to estimate costs for proposed services/programs in segment #1 -- personal health care services. FEHP premiums are adjusted for
 - differences in covered services
 - additional co-pay, co-insurance, and deductibles, and
 - usage differences caused by AIAN age, health, and geographic distribution
- Additionally, may
 - Assess costs for selected IHS sites understood to be funded more completely than other IHS sites which are substantially under-funded.
 - Assess service costs for items uniquely provided by the IHS
 - Calculate costs using existing IHS methodologies for other IHS coverage segments (e.g., public health and infrastructure)

Technical Approach

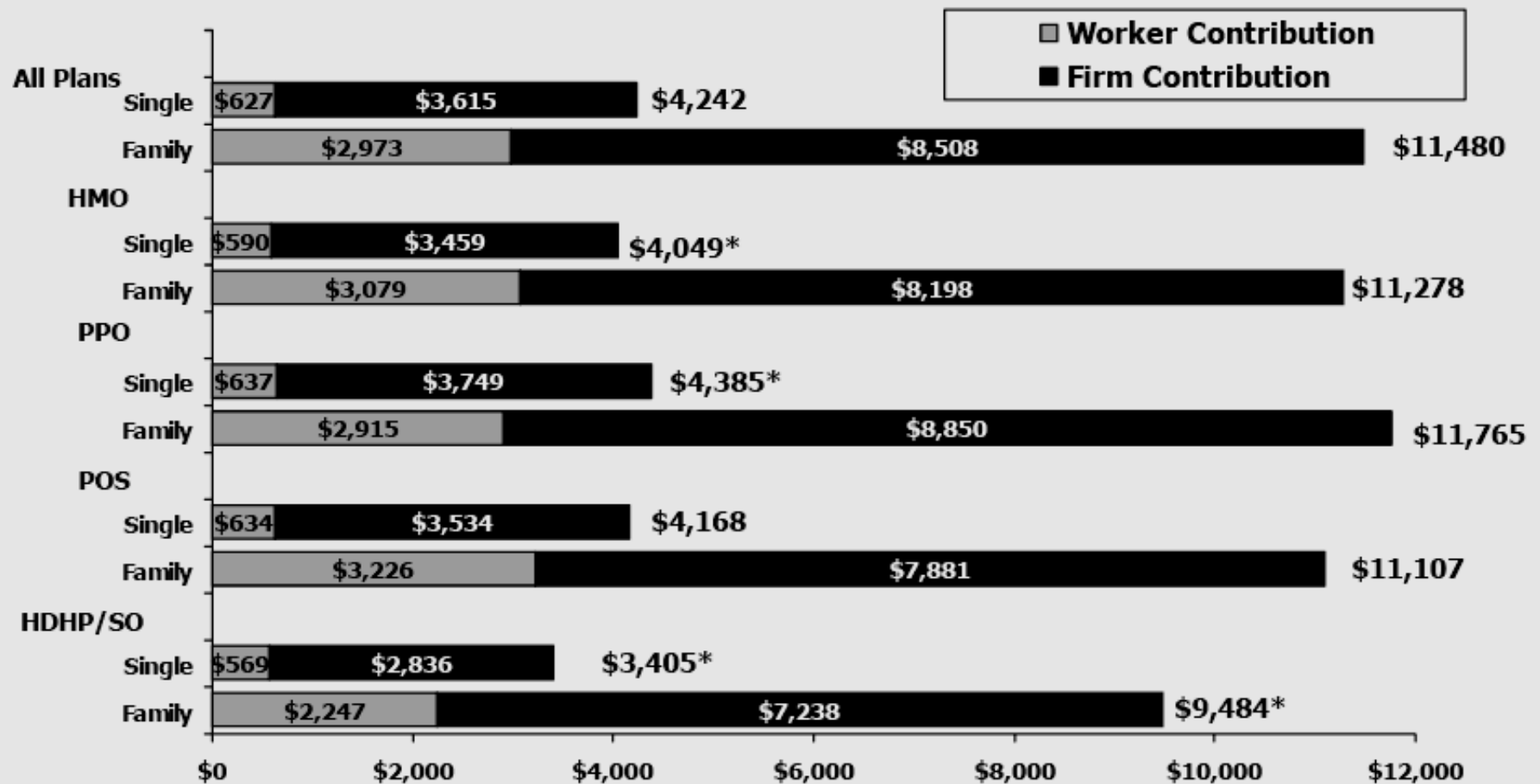


Step 1: Premiums Data and Assumptions

1. Self Coverage (single) – for enrolling individuals. The full premium relates to 1 person.
2. Self Plus One. The premium costs (which are on average 190% of self only) relate to 2 persons
3. Family Coverage – for the enrollee and immediate family members (.e.g. spouse and children). The premium costs (which are on average 270% of self only) relate to ?? persons, we assume 3.8 persons.

Step 1: Premiums Data

Average Annual Premiums for Covered Workers, by Plan Type, 2006



* Estimate of total premium is statistically different from All Plans estimate by coverage type at $p < .05$.

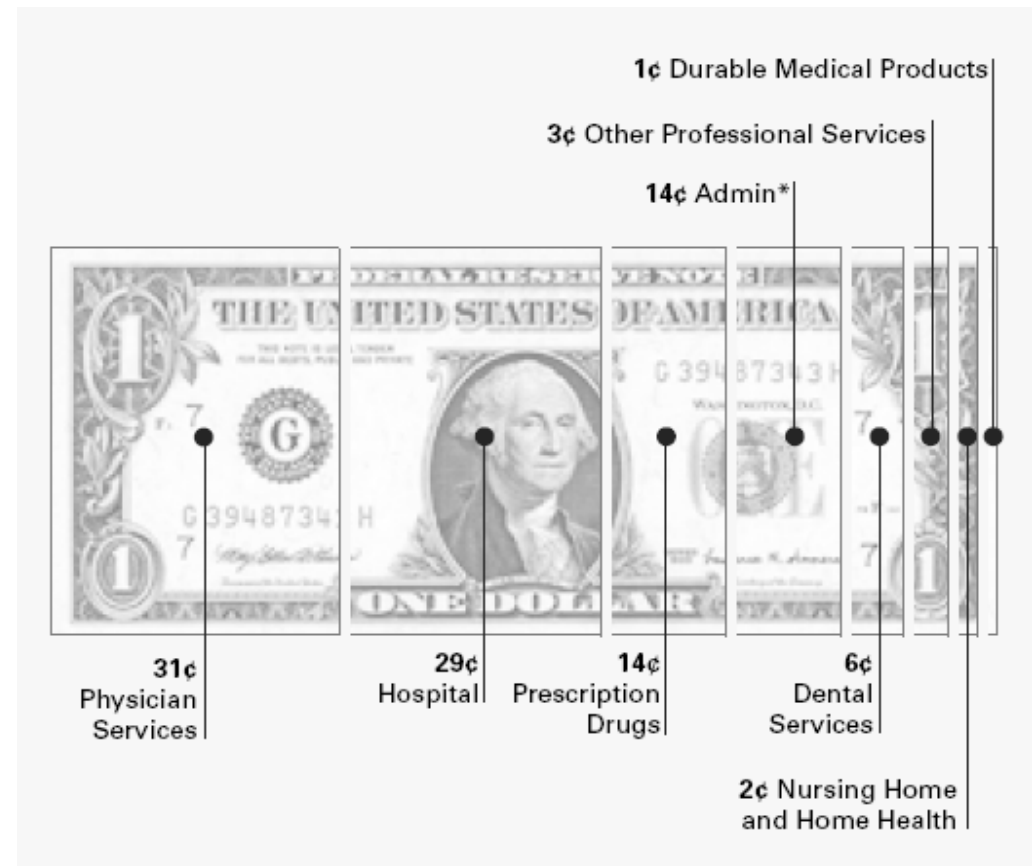
Note: Family coverage is defined as health coverage for a family of four.

Source: Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 2006.

Step 2: Subtract Non-Covered Items

1. FEHP BCBS PPO incompletely covers dental care, e.g., approximately 2/3 of dental costs are out of pocket. Because we cost IHS dental care services separately, we subtract 6% of private insurance expenditures that relate to dental expenses.
2. Neither the IHS proposal nor the BCBS PPO includes nursing home care or similar home health care. We subtract 2% of average private insurance expenditures related to these expenses in aggregate cost data.

Private Insurance Healthcare Dollar 2003



Step 3: Add "Out-of-Pocket" Costs

- Premiums cover only a portion of actual health care expenses. These "cost shares" are paid out of pocket. Generally, economic pressures in recent years have caused plans to shift a larger share of total health care expenses to the enrollees.
- Ordinarily, AIAN are not charged out-of-pocket costs because of long standing legal authority and IHS practice. Therefore, estimates of out-of-pocket costs typical of FEHP plans are added to premiums in the following categories:
 1. Annual Aggregate Deductibles
 2. Co-insurance (% paid by enrollee) for certain services
 3. Co-pays (fixed \$ amount) for office visits, etc.
 4. Co-pays or co-insurance for drugs and medicine



1. Average family deductible of private sector employees enrolled in a plan with a deductible in 2004 was \$1,120
2. Average co-pay was \$18 for an office visit of private sector employees enrolled in a plan with a co-pay in 2004
3. Average coinsurance percentage was 18% employees enrolled in a plan with a coinsurance percentage for an office visits, drugs, and other procedures.

Step 4: Adjust for AIAN Utilization Differences

- ❑ Because the covered AIAN population differs from the benchmark population in ways that impact total health care costs, benchmark cost estimates are adjusted where practical. In 1999, the LNF study studied these differences actuarially and set the following cost adjustments for IHS' user population.
- ❑ **-22%** less costly due to a younger AIAN population
- ❑ **+15%** more costly due to a sicker AIAN population
- ❑ **-6%** less costly due to rural location

Older people consume more health care

- The AIAN population is younger on average than the benchmark population covered by the FEHP

Sicker people consume more health care

- The AIAN population has lower health status and more needs for services than for covered persons of similar ages

Costs in rural areas is typically less than in urban areas

- A greater portion of IHS' AIAN service population lives in rural areas where prevailing costs are typically less

Step 5: Subtract Coverage for PI, M, M

- ❑ Some AIAN served by IHS are also eligible for other services including:
 - ❑ **Employer Sponsored Private Insurance**
 - ❑ **Medicare**
 - ❑ **Medicaid**
 - ❑ **SCHIP**
 - ❑ **Veterans**
- ❑ The extent of coverage among AIANs varies place to place and time to time depending on employment rates, income, and family factors.
- ❑ IHS collects reimbursement, chiefly M&M, which help to provide supplemental services that would not otherwise be possible.
- ❑ AIANs obtain an unknown amount of services outside of the IHS system whose cost value is not known either. Many commentators suggest that AIAN do not fully realize all benefits to which they are entitled.
- ❑ There is some disagreement about dollar value of coverage for IHS covered AIAN that would be expected to come from third parties. Since the LNF study in 1999, IHS has used a system-wide rate of **25%** for planning, budgeting, and resource allocation with an understanding that this factor is crude and would vary site-to-site.

Per Person Cost Benchmark for Personal Health Care Services (MEDICAL)

	Self-Only		Family	
	Source	Amount	Source	Amount
#1 Average PPO Premium 2006	<i>2006 average</i>	\$4,385		\$11,765
#2 Coverage Adjustments				
Deduct Dental Care	<i>6% average in 2004</i>	\$ (263)	<i>6% average in 2004</i>	\$ (706)
Deduct Nursing Home Care	<i>2% average in 2004</i>	\$ (88)	<i>2% average in 2004</i>	\$ (235)
#3 Out-of-Pocket Payment Adjustments				
Add-on for Annual Deductions	<i>avg annual deductions</i>	\$ 473	<i>250% of Self-Only Deductions</i>	\$ 1,183
Add-on for Co-Insurance Payments	<i>17% * 33% * Premium</i>	\$ 246	<i>250% of Self-Only Co-Ins.</i>	\$ 615
Add-on for Office Visit Co-pays	<i>3 Visits * \$15</i>	\$ 45	<i>11 Visits * \$15</i>	\$ 165
Add-on for Drugs/Medicine Co-pays	<i>3 prescriptions * \$15</i>	\$ 45	<i>11 prescriptions * \$15</i>	\$ 165
#4 AIAN Utilization Adjustments				
Adj. Cost of Plan	<i>higher avg cost of adults</i>	\$ 4,843	<i>lower cost due to children</i>	\$ 12,951
Cost per person		\$ 4,843	<i>plan cost / 3.8</i>	\$ 3,408
Self-Only or Family Enrollment %	<i>fewer AIAN are Self-Only</i>	25%	<i>Younger AIAN, more Family</i>	75%
Blended cost per person	<i>22% lower than self-only</i>		\$3,767	
Sicker AIAN cost 15% more	<i>15% * blended cost</i>		\$565	
Rural Locations cost 6% less	<i>-6% * blended cost</i>		(\$226)	
Projected Total Cost per Person	<i>younger, sicker, more rural</i>		\$4,106	
#5 3rd Party Coverage Adjustment				
Subtract 25% for other coverage	<i>-25% * AIAN Adj. Full Cost per Person</i>		(\$1,026)	
Net Cost/AIAN	<i>if 25% paid by others</i>		\$3,079	

Per Person Cost Benchmark for Personal Health Care Services

Data Sources Notes

#1: Average PPO Premium 2006	<u>2006 Average for PPO</u> Employee Health Benefits, 2006 Annual Survey 2006 Kaiser/HRET Employer Health Benefits Survey Chart 4, Chart Pack http://www.kff.org/insurance/7527/upload/7561.pdf
#2: Deduct 6% of Premium for Dental Care and Deduct 2% of Premium Nursing Home Care	<u>6% Dental average in 2004 and 2% Nursing Home average in 2004</u> National Healthcare Trends (CHARTS) Blue Cross and Blue Shield Association Publication Private Insurance Healthcare Dollar 2003, Page 9 Adapted from Centers for Medicare and Medicaid Services (2005c) http://www.bcbs.com/betterknowledge/mcrg/chap1/MCRG_chap1.pdf
#3: Add-On Annual Deductions	<u>average annual deductions</u> Employee Health Benefits, 2006 Annual Survey 2006 Kaiser/HRET Employer Health Benefits Survey 2006 Summary of Findings, Page 3, Employee Cost Sharing http://www.kff.org/insurance/7527/upload/7528.pdf
#3: Add-On Co-Insurance Payments 17% * 33% * Premium	<u>17% average coinsurance rate for inpatient care, surgery, and procedures</u> Employee Health Benefits, 2006 Annual Survey 2006 Kaiser/HRET Employer Health Benefits Survey 2006 Summary of Findings, Page 3, Employee Cost Sharing http://www.kff.org/insurance/7527/upload/7528.pdf <u>33% average private insurance inpatient spending</u> National Healthcare Trends (CHARTS) Blue Cross and Blue Shield Association Publication Private Insurance Healthcare Dollar 2003, Page 9 Adapted from Centers for Medicare and Medicaid Services (2005c) http://www.bcbs.com/betterknowledge/mcrg/chap1/MCRG_chap1.pdf
#3: Add-on for Office Visit Co-pays	<u>Assume 3 visits annually</u> \$15 is typical PPO co-pay for office visit
#3: Add-on for Drugs/Medicine Co-pays	<u>Assume 3 prescriptions annually</u> \$15 is typical PPO co-pay for office visit Average varies for generic, preferred, name brand. Assume 75% generic and 25% name brand.

Cost Calculations: MetLife PPO Dental Plan

	Self-Only		Family	
	Source	Amount	Source	Amount
FEP MetLife PPO Dental Plan	<i>Rating Area 3, standard self-only</i>		<i>Rating Area 3, standard family</i>	
#1 Premium for 2007	<i>@ \$8.69 bi-weekly</i>	\$226	<i>@ \$26.08 bi-weekly</i>	\$678
#2 Coverage Adjustments				
na	<i>na</i>	\$ -	<i>na</i>	\$ -
#3 Out-of-Pocket Payment Adjustments (in network standard option)				
Class A: Preventive	<i>0% for 30% of costs</i>	\$ -	<i>0% for 30% of costs</i>	\$ -
Class B: Intermediate	<i>45% for 30% of costs</i>	\$ 48	<i>45% for 30% of costs</i>	\$ 144
Class C: Major	<i>65% for 30% of costs</i>	\$ 64	<i>65% for 30% of costs</i>	\$ 192
Othodontia	<i>50% for 10% of costs</i>	\$ 18	<i>50% for 10% of costs</i>	\$ 54
#4 AIAN Utilization Adjustments				
Cost of Plan	<i>higher avg cost of adults</i>	\$ 356	<i>lower cost due to children</i>	\$ 1,068
Cost per person		\$ 356	<i>plan cost / 3.8</i>	\$ 281
Self-Only or Family Enrollment %	<i>fewer AIAN are Self-Only</i>	25%	<i>Younger AIAN, more Family</i>	75%
Age Adj. Cost/AIAN is 16% less	<i>16% lower than self-only due to younger AIAN</i>		\$300	
20% more AIAN Dental problems	<i>20% * age adj. cost</i>		\$60	
Rural Locations cost 6% less	<i>-6% * age adj. cost</i>		(\$18)	
Full Cost/AIAN	<i>younger, sicker, more rural</i>		\$342	
#5 3rd Party Coverage Adjustment				
Subtract 12% for other coverage	<i>Less alternate coverage than for medical</i>		(\$41)	
Net Cost/AIAN	<i>if 10% paid by others</i>		\$301	

Cost Calculations: BCBS PPO Vision Plan

	Self-Only		Family	
	Source	Amount	Source	Amount
#1 FEP BCBS Vision Plan Premium for 2007	<i>Standard self-only @ \$3.97 bi-weekly</i>	\$103	<i>Standard self + family @ \$11.92 bi-weekly</i>	\$310
#2 Coverage Adjustments	na	\$ -	na	\$ -
#3 Out-of-Pocket Payment Adjustments (in network standard option)				
1 Routine Vision Exam Annually	0%	\$ -	0%	\$ -
1 Pair Lenses Annually	0%	\$ -	0%	\$ -
1 Frame (standard type) Annually	0%	\$ -	0%	\$ -
1 Pair Contact Lenses (in lieu frames)	0%	\$ -	0%	\$ -
#4 AIAN Utilization Adjustments				
Cost of Plan	<i>higher avg cost of adults</i>	\$ 103	<i>lower cost due to children</i>	\$ 310
Cost per person		\$ 103	<i>plan cost / 3.8</i>	\$ 82
Self-Only or Family Enrollment %	<i>fewer AIAN are Self-Only</i>	25%	<i>Younger AIAN, more Family</i>	75%
Age Adj. Cost/AIAN is 16% less	<i>16% lower than self-only due to younger AIAN</i>		\$87	
Assume AIAN vision is no different	<i>0% * age adj. cost</i>		\$0	
Assume same cost for urban and rural	<i>-0% * age adj. cost</i>		\$0	
Full Cost/AIAN	<i>younger, sicker, more rural</i>		\$87	
#5 3rd Party Coverage Adjustment				
Subtract 12% for other coverage	<i>Less alternate coverage than for medical</i>		(\$10)	
Net Cost/AIAN	<i>if 10% paid by others</i>		\$77	

Supplemental Personal Health Care Services

- supplement typical BCBS medical benefits with additional services felt important to AIAN health. Proposed supplemental services include:
 - Exercise Programs
 - Hearing Aids/exams
 - Infant Car Seats
 - Traditional Healing Services
 - Family Counseling
- No benchmark cost data was available to estimate costs.

Segment 1 Cost Summary

#1: Personal Health Care Services (PHCS)

PHCS Category	FULL Cost/AIAN	NET Cost/AIAN
MEDICAL SERVICES	\$4,106	\$3,079
DENTAL SERVICES	\$342	\$301
VISION SERVICES	\$87	\$77
SUPPLEMENTAL PHCS	?	?
TOTAL PHCS	\$4,535 ?	\$3,457 ?

Reliability of Cost Estimates

- Premiums data for FEHP medical, dental and vision care plans --which correspond to roughly 80% of existing IHS expenditures-- are available to estimate costs the IHS could incur to cover comparable services, adjusting for known differences in coverage, out-of-pocket costs, and utilization. The FEHP data provide a reasonable, market-based, external standard for costing the proposed IHS list of services/programs.
- Of course, no external standard will perfectly predict costs the IHS would actually experience. Moreover, costs predicted from FEHP data are calculated as “point” estimates (e.g., \$4,106 per person). Such apparently precise numbers are better understood as the center of a uncertain cost range that may vary by several hundred dollars. Forecasting costs for individual IHS sites, especially if the population is small should be undertaken with even more caution as the range of uncertainty is wider.
- FEHP premiums correspond to the whole package of covered benefits. Benchmark cost data for individual items within the package is not publicly available. The workgroup categorized proposed IHS services into 3 tiers, but without corresponding benchmark cost data individual cost estimates for each tier are impractical. The work group is considering whether rough “back of the envelop” cost approximations for the tiers might be acceptable for some planning purposes.