

December 9, 1998

FINAL

Ms. Lynn Sheets
Director, Children's Health Insurance Program
State of West Virginia
Bureau of Medical Services
7012 MacCorkle Ave., SE
Charleston, West Virginia 25304

RE: CHIPS PHASE II ACTUARIAL CERTIFICATION

Dear Ms. Sheets:

The West Virginia Health Policy Board (Board) requested that William M. Mercer, Incorporated (Mercer) complete an actuarial certification for Phase II of the West Virginia Children's Health Insurance Program (CHIP Phase II) initiative, as required by Title XXI of the Social Security Act. The purpose of this letter is to provide the Board with our opinion on the actuarial certification of the CHIP Phase II initiative.

ACTUARIAL CERTIFICATION REQUIREMENTS

The Balanced Budget Act of 1997 (BBA 1997) provided states with the opportunity to receive enhanced Federal funds if they provide health insurance coverage to certain uninsured children. To qualify for the enhanced match, an actuary must certify that the new health care offering has an actuarially equivalent or greater value than a defined benchmark plan.

The following steps were set forth in the BBA 1997 for completing the actuarial certification.

- 1. The health insurance must cover a basic set of services and have an aggregate actuarial value that is at least actuarially equivalent to one of three benchmark benefits packages:
 - Federal Employee Health Benefit Program (FEHBP);
 - . State employee coverage; or
 - Coverage offered through an HMO plan that has the largest insured commercial enrollment in the state.

Ms. Lynn Sheets December **9, 1998** Page 2 **FINAL**

The coverage must be actuarially equivalent for the following basic services:

- Inpatient hospital services;
- . Outpatient hospital services;
- . Physicians' surgical and medical services;
- . Laboratory and x-ray services; and
- . Well-baby and well-child care, including immunizations.

If offered, the coverage must also provide for 75% of the actuarial value of the following defined additional services:

- . Prescription Drugs
- . Mental Health Services
- Vision Services
- . Hearing Services
- 2. The actuarial report must be completed by an individual who is a member of the American Academy of Actuaries.
- 3. The report must be prepared in accordance with the principles and standards of the Actuarial Standards Board for such reports.
- 4. In preparing the report, the actuary must use generally accepted actuarial principles and methodologies.
- 5. The actuary must use a standardized set of utilization and price factors.
- 6. The actuary must use a standardized population that is representative of privately insured children of similar age to the children who are expected to be covered under the state child health plan.
- 7. The actuary must apply the same principles and factors in comparing the different coverage's (or categories of services), without taking into account any differences in coverage based on the method of delivery or means of cost control or utilization.



Ms. Lynn Sheets December 9, 1998 Page 3 FINAL

8. The actuary must factor in the ability of the state to reduce benefits by taking into account the increase in actuarial value of benefits offered under the state child health plan that results from the limitations on cost-sharing under such coverage.

BENCHMARK PLAN

The Board has chosen the State Employee Indemnity Plan sponsored by Public Employees Insurance Agency (PEIA) as its benchmark. The State Employee Plan benefits served as the foundation for the CHIP Phase II benefit package. This benchmark plan was used as a basis to illustrate the actuarial certification - requirements of the CHIP Phase II package.

ACTUARIAL CERTIFICATION RESPONSE

- 1. Appendix I shows the following actuarial equivalence requirements of CHIP Phase II as compared to the PEIA benchmark:
 - The basic services of CHIP Phase II are at least actuarially equivalent to the PEIA benchmark plan.
 - The additional services, as defined in the BBA 1997, are at least 75% of the actuarial value of the PEIA benchmark plan.
 - . The aggregate value of CHIP Phase II is at least actuarially equivalent to that of the PEIA benchmark plan.
- 2. Membership in the American Academy of Actuaries. Todd Galloway, ASA has completed and signed this document. Mr. Galloway is a member, in good standing, of the American Academy of Actuaries (MAAA). Appendix 2 contains a copy of his MAAA certification.
- 3. Actuarial Standards Board (ASB) Report Standards and Principles. This document complies with the ASB standards and principals for actuarial certification.
- 4. Generally Accepted Actuarial Principles and Methodologies. This report was developed in accordance with generally accepted actuarial principles and methodologies.

Ms. Lynn Sheets December 9,1998 Page 4 **FINAL**

- 5. Standardized Set of Utilization and Price Factors. Standard utilization and price factors used were from proprietary health data accumulated by William M. Mercer, Incorporated.
- 6. A standardized population of children who are expected to be covered under the state child health plan was used to price benefit differences.
- 7. Standard Coverage Principles and Factors. Standard coverage principles and factors were assumed in this analysis.
- 8. Cost Sharing Factors. No cost sharing is required for CHIP Phase II; therefore, cost-sharing factors were not applicable for CHIP Phase II.

If you have any questions about the certification process please call John Cohn-at (602) 667 1306 or me at (602) 667 1712.

Sincerely,

Todd Galloway ASA, MAAA

Tould M

cc: John Cohn, Mercer Ynez Cross, Mercer

G:\GHCP\WVirg\Comms\Kidcert3a.doc



Page i

The following tables serve as an illustration to compare the specific benefits of West Virginia's CHIP Phase II plan with the specific benefits of the benchmark plan.

West Virginia's CHIP Phase II plan offers at least the same basic service package as the State Employee Plan for all basic services; in addition, CHIP Phase II provides additional services not required by the BBA 1997. Specifically, Table 1 shows general program design parameters, Tables **2-6** provide a benchmark comparison of the required basic benefits, Tables 7-10 compare the additional services as required, and Tables 11-15 present CHIP Phase II additional coverage's that go beyond BBA **1997** requirements.

Table 1 - GENERAL DESIGN PARAMETERS

Benefit	CHIP Phase II Coverage	State Employee Plan Coverage (Benchmark)
Annual deductible:	Coverage	Coverage (Dencimark)
Individual	None	\$100
Family	None	\$200
Individual Out-of-Pocket		
Maximum:	N/A	\$7504 1,500
Coinsurance	None	80%
Lifetime Benefit	None	None
Maximum		

Table 2 - INPATIENT HOSPITAL SERVICES (Basic Service)

Benefit	CHIP Phase II Coverage	State Employee Plan Coverage (Benchmark)
Ambulance	100% (if emergency)	Subject to deductible and 20% coinsurance (if emergency)
Inpatient Hospital	100%	Subject to deductible and 20% coinsurance
Pre-Admission/ Continued Stay	Arranged through provider	Must be pre-certified



Page ii

Table 3 - OUTPATIENT HOSPITAL SERVICES (Basic Service)

Benefit	CHIP Phase II Coverage	State Employee Plan Coverage (Benchmark)
Outpatient Surgical Facility	100%	Subject to deductible and 20% coinsurance
Emergency Care	100% (if emergency)	Subject to deductible and 20% coinsurance (if emergency)

Table 4- PHYSICIANS' SURGICAL & MEDICAL SERVICES (Basic Service)

	CHIP Phase II	State Employee Plan
Benefit	Coverage	Coverage (Benchmark)
Inpatient Physician	100%	Subject to deductible and
		20% coinsurance
Outpatient Physician	100%	Subject to deductible and
Visits		20% coinsurance

Table 5- LABORATORY AND X-RAY SERVICES (Basic Service)

Benefit	CHIP Phase II Coverage	State Employee Plan Coverage (Benchmark)
T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	
Lab and X-Ray	100%	Subject to deductible and
		20% coinsurance
Pre-Admission Testing	100%	Subject to deductible and
-		20% coinsurance



Page iii

Table 6 - PREVENTATIVE CARE (Basic Service)

Benefit	CHIP Phase II Coverage	State Employee Plan Coverage
		(Benchmark)
Well-Baby Care	100%	Subject to 10%
		coinsurance
Well-Child Care	100%	Subject to 10%
		coinsurance
Routine Physicals	100%	Subject to 20%
(ages 13+)		coinsurance
		(Limit 1 annual
		physical) -
Immunizations	100%	100%

Table 7 - VISION SERVICES (Defined Additional Service)

Benefit	CHIP Phase II Coverage	State Employee Plan Coverage (Benchmark)
Eye Exams	100%	Not covered
Eyewear	100%	Not covered
(Glasses, lenses,	(Annual limit \$100)*	
contacts)		

^{*}Allowed to exceed annual Limit with prior authorization

Table 8 · HEARING SERVICES (Defmed Additional Service)

Benefit	CHIP Phase II Coverage	State Employee Plan Coverage (Benchmark)
Hearing Exam	100%	Subject to deductible and 20% coinsurance
Hearing Aids	100% (prior authorization needed)	Not covered



FINAL

Appendix I

Page iv

Table 9 - PRESCRIPTION DRUGS (Defined Additional Service)

Benefit	CHIP Phase II Coverage	State Employee Plan Coverage (Benchmark)
Prescription Drug	100%	Subject to deductible and member cost share below: In-network: Generic: \$2 copay
		Brand (preferred drug): \$2 copay + cost difference between Brand versus - Generic
		Brand (non-preferred): 20% coinsurance Out-network:
		Same as In-network + \$3
Family Planning Oral Contraceptives	100%	Subject to Prescription Drug coverage (excluded for dependents)

Table 10 - MENTAL HEALTH SERVICES (Defmed Additional Service)

Benefit	CHIP Phase II Coverage	State Employee Plan Coverage (Benchmark)
Mental Health:		
Inpatient	100%	Subject to deductible and 20% coinsurance
	30 day annual maximum	
Outpatient	100%	Subject to deductible and 20% coinsurance
	26 visits annual maximum*	26 visit maximum*

• Additional visits allowed if medically necessary.



Page v

Table 11 - CHEMICAL ABUSE SERVICES (Additional Service)

Benefit	CHIP Phase II Coverage	State Employee Plan Coverage (Benchmark)
Chemical Abuse:		
Inpatient (including detox)	100% 30 day annual maximum	Subject to deductible and 20% coinsurance
Outpatient	100%	Subject to deductible and 20% coinsurance
	26 visits annual maximum*	26 visit maximum*

^{*}Additional visits allowed if medically necessa y.

Table 12 - DENTAL SERVICES (Additional Service)

Benefit	CHIP Phase II Coverage	State Employee Plan Coverage (Benchmark)
Dental:		(Dencimark)
Exam	100%	Not Covered
	(limit 1 per calendar year)	
Cleanings	100%	
	(limit 1 per calendar year)	
X-Rays:		
Full	100%	
	(limit 1 per 3 calendar	
	years)	
Bitewing	100%	
	(limit 1 per calendar year)	
Fillings	100%	



Page vi

Table 13 - OTHER SPECIALTY SERVICES (Additional Services)

Benefit	CHIP Phase II	State Employee Plan	
	Coverage	Coverage	
		(Benchmark)	
Podiatrists	100%	Subject to deductible	
		and 20% coinsurance	
		Excludes routine care	
Chiropractors	100%	Subject to deductible	
		and 20% coinsurance	
	Annual \$1,000 maximum*	Annual \$1,000	
		maximum	

^{*}Can exceed with prior approval.

Table 14 - THERAPY SERVICES (Additional Services)

Benefit	CHIP Phase II	State Employee Plan	
	Coverage	Coverage	
	_	(Benchmark)	
Physical Therapy	100%	Subject to deductible	
		and 20% coinsurance	
	20 visits annual maximum	20 visits annual	
	(prior authorization needed)	maximum	
Occupational	100%	Subject to deductible	
Therapy		and 20% coinsurance	
	Annual \$1,000 maximum*	Annual \$1,000	
	(prior authorization needed)	maximum	
Speech	100%	Subject to deductible	
Therapy		and 20% coinsurance	
	Annual \$1,000 maximum	Annual \$1,000	
		maximum	
Inpatient	100%	Subject to deductible	
Rehabilitation		and 20% coinsurance	
	150 days annual maximum	150 days annual	
		maximum	

^{*} Can exceed with prior approval.



Page vii

Table 15 – OTHER SERVICES (Additional Services)

Benefit	CHIP Phase II	State Employee Plan
	Coverage	Coverage
		(Benchmark)
DME	100%	Subject to deductible
	with prior authorization	and 20% coinsurance
Prosthetics	100%	Subject to deductible
	with prior authorization	and 20% coinsurance
Family Planning	100%	Subject to deductible
		and 20% coinsurance
See Rx for Oral	Excluded: tubal ligation and	
Contraceptives	vasectomies	
Home Health	100%	Subject to deductible
	with prior authorization	and 20% coinsurance
	25 visit maximum	
Hospice	100%	Subject to deductible
		and 20% coinsurance
Skilled Nursing	100%	Subject to deductible
		and 20% coinsurance
	180 day annual maximum	180 day annual
		maximum

In accordance with and following the specific steps described in the Balanced Budget Act of 1997 (BBA 1997), Mercer has completed the following analyses.

- The basic services of CHIP Phase II are actuarially equivalent.
- The defined additional services are at least 75% of the actuarial value.
- . The aggregate value is at least actuarially equivalent.

FINAL

Appendix I

Page viii

Basic Services

To comprehensive plan of benefits, BBA 1997 requires that certain basic benefits be offered such that they are actuarially equivalent to the benchmark coverage. These basic benefits, as shown in Tables 2-6, are listed below:

- . Inpatient hospital services,
- Outpatient hospital services,
- Physicians' surgical and medical services,
- . Laboratory and x-ray services, and
- Well-baby and well-child care, including immunizations.

Since the basic benefits are offered at 100% coverage with no cost sharing, they are actuarially 20% greater than the benchmark plan, which are offered with an 80% coinsurance requirement. The basic benefits therefore meets BBA 1997's requirement that they be at least actuarial equivalent.

Defined Additional Services

BBA 1997 requires that the following services, as shown in Tables 7-10, be at a minimum equivalent to 75% the actuarial value of the benchmark plan:

- Vision Services
- Hearing Services
- . Prescription Drugs
- Mental Health Services

Since the benchmark plan does not offer vision services, BBA 1997 does not require CHIP Phase II to cover. However some vision benefits are offered as listed in Table 7.

Hearing services, as listed in Table 8, offer hearing exams and hearing aids at 100% coverage. Therefore these services are actuarially greater than the benchmark plan which offers only hearing exams at 80% coinsurance. These hearing services meet BBA 1997's requirement that they be at least 75% actuarially equivalent.

The prescription drug benefit, as shown in Table 9, offers the same drug benefit as the benchmark plan but with no copays or coinsurance. Therefore this benefit is at least 75% actuarially equivalent.





Page ix

CHIP Phase II also offers mental health coverage as listed in Table 10. CHIP Phase II offers mental health benefits at 100% coverage, while the benchmark plan offers this benefit with 80% coinsurance. However, the 30 day inside limit on the CHIP Phase II inpatient mental health coverage is more restrictive than the benchmark plan. Even though the actuarial value of the 20% coinsurance more than offsets the actuarial value of the 30-day inside limit, a mental health continuance table was not available to calculate the exact actuarial value of the 30 day inside limit. Nonetheless it can be shown that the inpatient component of the mental health benefit need not even be offered to meet the 75% actuarial equivalence requirement. This is illustrated below:

Assumptions:

Inpatient isn't offered in CHIP Phase II

PEIA actual experience indicates that inpatient mental health comprises 38% of the benchmark's total mental health actuarial value, while outpatient mental health comprises the other 62%.

Variables:

CHIP	Phase	Π	Outpatient actuarial value:	\$x
CHIP	Phase	II	Inpatient actuarial value:	\$0

Benchmark Outpatient actuarial value: $z = 0.80 \cdot x$ Benchmark Inpatient actuarial value: $y = (0.38 \div 0.62) \cdot z$

Benchmark Mental Health value = z + y $= z + (0.38 \div 0.62) \cdot z = 1.613 \cdot z$ $= 1.613 \cdot (0.80 \cdot x)$ $= 1.29 \cdot x$

CHIP Mental Health value = x

Therefore for the CHIP Phase II benefit to be at least 75% of the benchmark, then the value of CHIP mental health (x) must be greater than 75% of the PEIA benchmark value (= $0.75 \cdot 1.29 \cdot x = 0.97 \cdot x$). Therefore since x is greater than 0.97 . x, the 75% actuarial equivalence is met without even offering inpatient mental health. Therefore offering any inpatient mental health benefits, even with inside limits, further exceeds the 75% requirement.





Page x

Aggregate Actuarial Equivalence

The last requirement to be met is that the CHIP Phase II plan of benefits must be at least actuarially equivalent to the PEIA benchmark plan of benefits. This can best be illustrated by examining the components of the plan design that differ since the components that are the same are already actuarially equivalent. Then if it can be certified that plan design components that are lesser than the benchmark plan are more than offset by the plan components that are richer than the benchmark, then in total, the actuarial value of CHIP Phase II is at least equivalent to the benchmark plan.

The plan design components of CHIP Phase II which are actuarially less than the benchmark are the following:

- 1. Inpatient Mental Health 30 day inside limit
- 2. Inpatient Chemical Abuse 30 day inside limit
- 3. Home Health 25 visit limit

The plan design components of the benchmark, which are actuarially less than CHIP Phase II, are the following:

- 1. Plan Deductible
- 2. 20% Coinsurance (for most benefits)
- 3. Drug copays
- 4. No vision benefit
- 5. No dental benefit
- 6. Hearing aids not covered

As priced for the same population, the actuarial value of the CHIP Phase II mental health, chemical abuse, and home health benefits are of greater value (even with the inside limits) than the respecitive benefits under the benchmark plan since the plan deductible and coinsurance applies. When we add the incremental value for the CHIP Phase II richer coverage of Prescription Drug, Vision, dental, and hearing aids; the full actuarial value of the CHIP Phase II plan clearly exceeds the benchmark.

Therefore, I hereby certify that the benefits offered by the CHIP Phase II plan is at least actuarially equivalent to the PEIA benchmark plan.