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Analysis of Minnesota's
Catastrophic Health Expense Protection Program
(CHEPP)
F.Y. 1981
Historical Overview

Prepared by the CHEPP Office

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Summary of the Catastrophic Health Expense Protection Program

Fiscal Year 1981

- In FY 1981, 1156 CHEPP I cases were approved and opened with a total expenditure of \$5,844,851.
- During the same time period, 11 CHEPP II cases were approved resulting in \$93,058 reimbursed to the recipients.
- The number of eligible CHEPP I cases increased the previous FY by 119%.
- CHEPP I expenditures increased over FY '80 by 57%.
- The average amount of assistance received per case on CHEPP I was \$5034 (down 28%) and on CHEPP II was \$8369 (up 10%).
- Our computer processed an average of 1024 (up 24%) CHEPP I claims each month with the average amount of each claim being \$364 (no change).
- 84 out of 87 counties have taken applications during FY '81 (up 13%).
- \$8,500,000 was appropriated for FY 1981.
- We received an average of 114 CHEPP cases per month (up 133%).
- A total of 1353 CHEPP I cases were reviewed at DPW, 197 of which were denials (15% of applications submitted).
- A total of 12 CHEPP II cases were received by DPW, one of which was denied as they could not satisfy their deductible.

THE CATASTROPHIC HEALTH EXPENSE PROTECTION PROGRAM (CHEPP)

General Description of CHEPP

The CHEP Program is comprised of two (2) parts, CHEPP I, general medical, and CHEPP II, nursing home care; which differ significantly in their requirements and coverage.

The original CHEPP, later to be called CHEPP I, became effective July 1, 1977 after enactment by 1976 legislation (M.S. 62E.51 to M.S. 62E.55). Basically, CHEPP I may cover expenses for the following services for Minnesota residents when received on or after July 1, 1977:

1. hospital services
2. physician and physician-directed services excluding outpatient mental or dental
3. prescription drugs
4. nursing home care for not more than 120 days per year if placement occurs within 14 days following a hospital stay of at least three (3) days for the same condition (Skilled Nursing Facility only)
5. home health agency (up to 180 visits per year)
6. radium or other radioactive materials
7. oxygen
8. anesthetics
9. prostheses
10. rental or purchase of durable medical equipment
11. oral surgery (under specific conditions)
12. x-rays and laboratory tests
13. physical therapy
14. ambulance to nearest qualified health care institution
15. mileage for kidney dialysis.

A person may be eligible for CHEPP I when he/she owes or has paid for medical expenses for him/herself and his/her dependents which equal or exceed:

20% of household income up to \$15,000

plus 25% of household income between \$15,000 and \$25,000

plus 30% of household income in excess of \$25,000.

No third party may be liable for the medical expenses and the services received must be in a consecutive twelve (12) month period, after July 1, 1977.

When CHEPP I started (July 1, 1977), the respective deductible percentages were put at 40, 50 and 60 but were lowered to 30, 40 and 50 effective July 1, 1979. The current percentages became effective July 1, 1980. The \$2,500 minimum deductible was also eliminated effective July 1, 1979. The deductible charges for some selected incomes are shown in the following table:

Income	Effective Date of Deductibles		
	July 1, 1977	July 1, 1979	July 1, 1980
\$ 0	\$ 2,500	\$ 0	\$ 0
10,000	4,000	3,000	2,000
15,000	6,000	4,500	3,000
25,000	11,000	9,500	5,500

Income basically means the federal adjusted gross income, plus any non-taxable income. The income for the calendar year preceding the year in which a CHEPP application is filed, is the income which is used to determine eligibility. If an applicant becomes an eligible person, (s)he is responsible for a ten (10) percent co-payment on covered services, while the state pays 90 percent. Eligibility may include the dependents of an eligible person, and runs for twelve (12) consecutive months starting on the first day of the month and year of the earliest service resulting in expenses used to satisfy the deductible.

In 1977, the CHEPP legislation was amended to include "qualified nursing home expense". This additional coverage with separate requirements for eligibility became known as CHEPP II. CHEPP II covers only the per diem cost of nursing home care. Besides being a Minnesota resident, there are several basic eligibility requirements. The patient:

1. is under 65 years of age,
2. has been a nursing home resident for at least 24 consecutive months, and
3. can meet a deductible based on 20% of the preceding years annual gross household income.

"Nursing Home" is defined as a Skilled Nursing Facility or Intermediate Care Facility I. Eligibility is from the date of satisfaction of the deductible until June 30th, or not later than the last day of the month in which the patient becomes 65 years of age. After the 20 percent deductible is met, the state pays the reasonable cost of the eligible person's nursing home care. This payment is made to the patient, or patient's family, after the end of the state fiscal year. If insufficient funds are appropriated for CHEPP II, reimbursements will be prorated to all eligible individuals. The amount appropriated for CHEPP II is included in the \$8,500,000 appropriated for Fiscal Year 1981.

CHEPP I

Applicant/Recipient Characteristics

A purposive sample of 199 CHEPP I cases was drawn from the 1353 applications received for CHEPP during F.Y. 1981. Out of the 199 cases sampled, 36 of the applications had been denied and 163 were determined to be eligible for CHEPP. The reasons for denial were as follows:

<u>Reason</u>	<u>Cases</u>	<u>Percent</u>
Failed to complete application process	10	27
Unable to meet deductible	10	27
Noncooperative in eligibility determination	7	19
Withdrawn at own request	5	14
Eligible for other program	4	11
TOTAL	36	100

Marital Status

The marital status of the adult family member(s) in the application was used. If the application was made in behalf of a recently deceased spouse, the marital status married was used rather than widowed. If an application was made on behalf of a dependent child, the parents' marital status was used.

<u>Status</u>	<u>Number</u>	<u>Percentage</u>
Married	94	58
Single	28	17
Divorced	19	11.5
Widowed	19	11.5
Separated	3	2
TOTAL	163	100.0

Sex and Age

Although more than one family member may be eligible for CHEPP there is usually a primary recipient within the family. It is the age and sex of the primary recipient whom we have used in the following table:

<u>Age</u>	<u>Male</u>		<u>Female</u>		<u>Total</u>	
	<u>Persons</u>	<u>Percent</u>	<u>Persons</u>	<u>Percent</u>	<u>Persons</u>	<u>Percent</u>
0 - 18	7	10	4	4	11	6.5
19 - 34	24	33	25	28	49	30.0
35 - 49	9	12	12	13	21	13.0
50 - 64	19	26	38	42	57	35.0
65 - 79	13	18	11	12	24	14.5
80 - up	1	1	1	1	2	1.0
Total	73	100	91	100	164*	100.0

*Note: There is a total of 164 persons because one case had newborn twins as the primary recipients.

The average overall age was 44. The average age of the males was slightly lower at 42 and females slightly higher at 46. The largest age category of male recipients was 19-34 with 50-64 running a fairly close second. The largest female age category by a large margin was 50-64 with 19-34 running second. The overall largest age category was 50-64. Half of the recipients were 49 or under and half were 50 or over.

Rural V.s. Urban Usage

A rural user was any recipient who had a Rural Route or Box mailing address.

<u>Number</u>	<u>Percentage</u>
54 Rural	33
109 Urban	67
163	100

It is interesting to note that the most current figures from the Census Bureau show that the distribution of Minnesota's population is 33% Rural and 67% Urban.

Income

The average income of the CHEPP recipients which were sampled was \$7,690. The incomes varied from minus \$48,940 to \$26,190. The greatest number of recipients had income in the \$5,000 to \$9,999 range (41%) while 88% of the cases sampled had incomes in the lowest deductible brackett (under \$15,000).

<u>Income</u>	<u>Cases</u>	<u>Percent</u>
\$ minus - 4,999	50	31.0
5,000 - 9,999	67	41.0
10,000 - 14,999	26	16.0
15,000 - 19,999	9	5.5
20,000 - 24,999	10	6.0
25,000 - up	<u>1</u>	<u>.5</u>
Total	163	100.0

Deductible

This is the second F.Y. in which there has not been a minimum deductible of \$2,500. The deductibles in the sample ranged from \$0 to \$5,833. The average deductible for all the cases sampled was \$1,612. Slightly over 82% of the recipients sampled had a deductible which was lower than the previous minimum deductible of \$2,500.

Of those with deductibles under \$2,500, the average deductible was \$1,260. If the minimum deductible had been in effect the state may have saved \$166,160 on the sample cases. If we applied these averages to the entire file of CHEPP eligibles the savings might have been \$1,175,520 for F.Y. '81.

The distribution of the deductibles is as follows:

<u>Deductible Amount</u>	<u>Cases</u>	<u>Percent</u>
\$ 0	8	5.0
1 - 1,500	70	43.0
1,501 - 2,500	56	34.5
2,501 - 3,500	10	6.0
3,501 - 4,500	9	5.5
4,501 - 5,500	7	4.0
5,501 - 6,500	3	2.0
Total	163	100.0

On the average, it took 2.7 months for applicants to meet their deductibles. This gave the average CHEPP recipient 9.3 months of CHEPP coverage. More than two-thirds of CHEPP recipients had ten (10) or more months of eligibility. A summary of the months of CHEPP eligibility is reflected in the following table:

<u>Months of Eligibility</u>	<u>Cases</u>	<u>Percent</u>
1	5	3.0
2	1	.5
3	1	.5
4	3	2.0
5	5	3.0
6	14	8.5
7	5	3.0
8	13	8.0
9	12	7.5
10	17	10.5
11	37	23.0
12	49	30.0
Unknown	1	.5
Total	163	100.0

Occupation

The employment status of the cases sampled has changed somewhat from a similar sample of F.Y. '80 cases. The number of retired persons dropped by 12%, the number of farmers dropped by 7% and the number of unemployed rose by 10%.

<u>Occupation Status</u>	<u>Cases</u>	<u>Percent</u>
Employed	44	27
Retired	44	27
Self-Employed	23	14
Unemployed (disabled, homemaker, student)	21	13
Farmer	17	10
Unknown	14	9
Total	<u>163</u>	<u>100</u>

Health Insurance Coverage

In the 163 cases sampled, 76 (47%) had some type of health insurance, including Medicare. Of the 76 who were insured, 9 had exhausted their insurance coverage or had riders for pre-existing conditions which decreased the number of insured recipients to 67 (41%).

A surprising amount of employed persons indicated that they did not have health insurance. The table below shows how occupational status affected the lack of health insurance coverage:

<u>Occupational Status</u>	<u>Number Without Insurance</u>	<u>Percent</u>
Employed	21	24.0
Self-employed	17	20.0
Unemployed	15	17.0
Unknown	12	14.0
Farmers	11	12.5
Retired	11	12.5
Total	<u>87</u>	<u>100.0</u>

Note: No determination was made as to whether or not the insurance was cost effective.

CHEPP II

---There were 12 applications made for CHEPP II. One application was denied because the applicant could not meet the deductible.

---Of the 11 who were eligible 4 (36%) were male and 7 (64%) were female.

The average age of the recipients was 61 while the ages ranged from 59-64.

---During the eligibility period 36% (4) of the eligibles were terminated.

Three (27%) died before the year was up and one (9%) turned 65.

---The average assistance was \$8,460 per recipient. When the payments on behalf of the three deceased are removed, the average increases to \$10,298.

The overall assistance range was \$2,151 to \$13,129.

---On an average the recipients had been nursing home residents for 5 years with the range of time varying from 2 to 8 years. The following table shows how many years the recipients have been nursing home residents:

<u>Years in Nursing Home</u>	<u>Number of Persons</u>	<u>Percent*</u>
2	1	9.0
3	3	27.3
4	1	9.0
5	1	9.0
6	2	18.3
7	2	18.3
8	1	9.0
Total	11	99.9

*Does not add due to rounding.

The marital status of the CHEPP II recipients is reflected in the following table:

<u>Marital Status</u>	<u>Number</u>	<u>Percent</u>
Married	8	73
Separated	1	9
Divorced	1	9
Widowed	1	9
Total	<u>11</u>	<u>100</u>

The income distributions of CHEPP II recipients has historically been higher than that of CHEPP I recipients. This F.Y. reflects this fact with an average income of \$18,965. Incomes ranged from \$3,855 to \$33,265. Over 63% had incomes above \$15,000.

<u>Income</u>	<u>Cases</u>	<u>Percent</u>
\$ 0 - 4,999	1	9.1
5,000 - 9,999	0	0.0
10,000 - 14,999	3	27.5
15,000 - 19,999	2	18.2
20,000 - 24,999	2	18.2
25,000 - over	3	27.5
Total	<u>11</u>	<u>100.0</u>

The average deductible, 20% of gross household income, was \$3,897 and ranged from \$771 to \$6,653. On the average, it took about three months to reach the deductible. The following table shows the deductible amounts:

<u>Deductible</u>	<u>Cases</u>	<u>Percent*</u>
\$ 0 - 1,500	1	9.1
1,501 - 2,500	2	18.3
2,501 - 3,500	2	18.3
3,501 - 4,500	3	27.3
4,501 - 5,500	1	9.1
5,501 - 6,500	0	0.0
6,501 - 7,500	2	18.3
Total	<u>11</u>	<u>100.4</u>

*Does not add due to rounding.

CHEPP I COMPUTER PROCESSED CLAIMS

The majority of CHEPP I claims (77.3%) were computer processed. The computer processed a total of 12,287 claims. Each claim cost an average of \$.96 to process with a total claims processing cost of \$11,809.91. A break-down of computer processed claims by provider type and recipient age for F.Y. '81 follows. The largest category (33%) of recipients by age is 50-64. Also, the largest amount (40%) of the total expenditure was for the 50-64 age category. However, the highest average paid out per person is in the 80-up category. Inpatient hospital costs accounted for 80% of the total CHEPP I expenditure

Provider Type	Age						Total*
	0 - 18	19 - 34	35 - 49	50 - 64	65 - 79	80 - up	
Inp. Hosp.	\$391,186	\$671,732	\$538,872	\$1,415,826	\$337,668	\$263,094	\$3,618,378
Hosp. Outpt.	17,283	37,662	15,595	73,293	38,500	4,885	187,219
Rehab.	--	(2,781)	--	2,164	--	--	(617)
SNF	--	--	--	1,174	7,686	41	8,901
ICF-1	--	--	--	4,703	4,898	1,092	10,694
NH Rehab.	--	--	--	1,854	--	33	1,887
Home Health	42	74	471	6,855	2	--	7,444
Indep. Lab	--	54	17	547	8	--	626
Pub. Health Clinic	12	--	--	108	--	--	158
Recip. Recovery	(5,277)	(12,264)	--	(989)	(1)	--	(29,652)**
Fam. Planning	293	1,008	149	39	--	--	1,489
State MI/CD	--	--	--	163	--	--	163
Drugs	2,559	3,107	5,655	17,020	6,384	945	35,671
Supplies	3,886	2,608	2,552	5,119	1,652	693	16,511
Transportation	1,062	2,024	2,485	6,066	811	1,080	13,528
Physician	78,935	106,321	93,124	273,575	68,404	21,906	642,266
Dental	242	9	--	150	--	--	401
Chiropractor	27	338	54	97	61	--	578
Other	--	81	--	--	--	--	81
Total *	\$490,250	\$809,973	\$658,974	\$1,807,764	\$466,073	\$293,769	\$4,515,688
Undup. Persons	282	286	220	515	190	70	1,563
Ave. \$/Person	\$ 1,738	\$ 2,832	\$ 2,995	\$ 3,510	\$ 2,453	\$ 4,197	\$ 2,889

*NOTE: The remainder of the CHEPP I expenditure, \$1,329,163, was done through manual payments initiated by the CHEPP office and issued by the Accounting Department.

	<u># Claim Count</u>	<u>Avg/Claim</u>	<u># Cases</u>	<u>Avg/Per Case</u>
June	2,110	\$ 431	502	\$ 1,810
May	986	367	296	1,223
April	1,060	340	307	1,175
March	1,019	452	306	1,506
February	918	339	259	1,201
January	943	337	275	1,157
December	1,292	266	300	1,147
November	704	417	247	1,188
October	761	370	235	1,198
September	801	437	240	1,460
August	976	322	292	1,075
July	717	294	222	949
TOTAL	12,287	\$4,372	3,481	\$15,089
Monthly Avg	1,024	\$ 364	290	\$ 1,257

CHEPP I Payments and Recipients by County for FY 81

<u>County</u>	<u>Recipients</u>	<u>Expenditures</u>	<u>County</u>	<u>Recipients</u>	<u>Expenditures</u>
Aitkin	4	\$ 4,418	Martin	26	\$ 34,876
Anoka	46	106,315	Meeker	3	16,567
Becker	10	50,728	Mille Lacs	12	29,370
Beltrami	--	--	Morrison	7	7,828
Benton	6	11,171	Mower	17	32,400
Big Stone	6	1,756	Murray	9	51,048
Blue Earth	14	26,446	Nicollet	12	29,065
Brown	22	139,303	Nobles	6	21,669
Carlton	7	434	Norman	1	3,178
Carver	11	153,033	Olmsted	7	13,930
Cass	13	43,807	Otter Tail	42	56,471
Chippewa	11	49,298	Pennington	11	38,294
Chisago	7	28,647	Pine	21	29,439
Clay	10	15,797	Pipestone	10	40,777
Clearwater	14	65,477	Polk	18	22,309
Cook	--	--	Pope	2	17,069
Cottonwood	6	10,807	Ramsey	115	443,098
Crow Wing	19	173,050	Red Lake	3	5,853
Dakota	26	63,630	Redwood	4	5,396
Dodge	5	6,599	Renville	33	62,284
Douglas	8	19,744	Rice	20	31,300
Faribault	14	11,334	Rock	7	20,689
Fillmore	4	8,756	Roseau	6	8,805
Freeborn	18	9,032	St. Louis	96	185,429
Goodhue	8	(7,925)	Scott	16	39,000
Grant	23	49,396	Sherburne	5	21,185
Hennepin	332	1,200,373	Sibley	8	30,072
Houston	5	13,073	Stearns	30	111,800
Hubbard	10	4,273	Steele	8	42,669
Isanti	20	52,345	Stevens	23	64,739
Itasca	3	5,746	Swift	22	22,428
Jackson	12	55,908	Todd	30	18,631
Kanabec	1	(570)	Traverse	8	18,602
Kandiyohi	3	5,008	Wabasha	18	32,615
Kittson	4	42,767	Wadena	11	51,187
Koochiching	3	10,322	Waseca	10	33,602
Lac Qui Parle	10	34,752	Washington	27	84,080
Lake	1	382	Watsonwan	3	2,404
Lake of the Woods	2	8,833	Wilkin	1	10,248
LeSueur	31	71,456	Winona	24	45,159
Lincoln	5	13,988	Wright	14	39,589
Lyon	13	47,359	Yellow Medicine	8	10,110
McLeod	8	13,047			
Mahnomen	--	--	Recipient Recovery:		(11,121)
Marshall	34	21,437	County/Counties Unknown		
			State Total	1,563	\$4,515,688*

*Does not add due to rounding.

DIAGNOSIS

A program was run by the Department of Public Welfare Systems Division identifying payments for inpatient hospital care by costs and length of stay for the major diagnosis per admit. We have ranked the diseases on two levels, first by specific diagnosis such as angina pectoris and then by general diagnostic categories such as diseases of the heart and circulatory system.

The following are the top 10 specific diagnoses in five categories:

Ranking by Average Total Charges Per Stay

Burn of multiple site	\$81,274.11
AC/Subac endocarditis	44,315.61
Solid/Liquid pneumonitis	32,064.29
Other rheumatic heart dis.	25,228.09
Hereditary hemolytic anemia	21,535.70
Special symptom nec	19,566.53
Other anon. digestive system	19,456.08
Myeloid leukemia	18,200.71
Prot/cal malnutrition nec/nos	17,807.10
Pneumococcal pneumonia	15,501.25

The lowest average charge per stay is \$181 with a diagnosis of single liveborn. The average charge per stay for 950 admits was \$1,534.

Ranking by Total State Payments

Burn of multiple site	\$135,964.29
Chronic renal failure	110,531.98
Myeloid leukemia	84,278.04
Short gestation/low birthweight	78,187.96
Other chronic ischemic heart disease	71,398.21
CVA	63,992.80
Malignant neoplasm trachea/lung	58,971.06
Other endocardial disease	55,301.07
Angina pectoris	50,882.22
Depressive disorder nec	48,524.43

The average state payment per 302 different diagnosis was \$9,847.

The payments made by the state were 90% of the allowable charges used in Medical Assistance after liable third party payments and any residual deductible amount.

Ranking by Total Number of Admissions

Chronic renal failure	27
Aftercare nec & nos	23
Malignant neoplasm uterine adnexa	19
Other chronic ischemic heart disease	17
Normal delivery	17
Malignant neoplasm trachea/lung	14
General symptom	14
Malignant neoplasm nos	14
Schizophrenic disorders	13
Other abdomen/pelvis symptoms	13

Ranking by Total Days Stay

Depressive disorder nec	443
Chronic renal failure	317
CVA	276
Short gestation/low birthweight	234
Schizophrenic disorders	231
Malignant neoplasms trachea/lung	224
Neurotic disorders	221
Special symptoms	216
Myeloid leukemia	209
Other chronic ischemic heart disease	207

Total days stay can be somewhat misleading if taken at face value.

It does not include the days the person may have been in the hospital during the deductible period. There appears to be a high number of days in the top 10 for mental health disorders. (895 or 35% of the top 10 total.) This may be an indication that health insurance coverage of mental health disorders is more limited than it is for other health conditions.

Ranking by Average Length of Stay

Adjustment reaction	128 days
Burn of multiple site	83
Special symptom nec	72
Sprain of back nec/nos	64
Other femoral fracture	63
Malignant neoplasm bone/artic cart	58
Benign neoplasm other endocrine	56
Ac/Subac endocarditis	54
Acute reaction to stress	54
Observation-suspected condition	54

By taking the top ten diagnoses for each ranking and assigning a point value of 1-10 with 10 being the highest ranked diagnosis, we have compiled a list of the top 10 diagnoses. There was a total of 50 points possible.

<u>Diagnosis</u>	<u>Points</u>
1. Chronic renal failure and burn of multiple site(tie38 each	
2. Other chronic ischemic heart disease	22
3. Myeloid leukemia	20
4. Short gestation/low birthweight	19
5. Malignant neoplasm trachea/lung	18
6. CVA	17
7. Special symptoms nec	16
8. Depressive disorder nec	13
9. Ac/subac endocarditis	12
10. Schizophrenic disorder	11

We then took the listing and divided the 302 diagnoses into 26 related categories. All of the rankings within the categories were added together for a total picture. Once again we assigned point values for the 10 highest in each category to obtain a listing of the top 10 diseases. There was a total of 50 possible points. Diseases of the heart and circulatory system lead the ranking followed by malignant neoplasms.

<u>Category</u>	<u>Total Charges</u>	<u>Net Payments</u>	<u>Total Days</u>	<u>Number Admits</u>	<u>Avg. Chg. Per Day</u>	<u>Ranking Points</u>
1. Diseases of the heart & circulatory system	\$741,133	\$533,833	1,589	127	\$5,836	44
2. Malignant neoplasm	714,129	465,126	1,895	157	4,549	39
3. Trauma, violence, mishap	501,537	324,388	1,050	94	5,336	34
4. Mental health disorders	333,992	234,522	1,834	67	4,985	30
5. Diseases of the digestive system	392,517	252,986	879	99	3,965	28
6. Diseases of the urinary system	309,299	166,717	508	52	5,948	27
7. Respiratory diseases	238,110	170,456	588	55	4,329	18
8. Signs, symptoms & ill defined conditions	216,905	140,376	446	56	3,873	13
9. Bacterial diseases	49,237	35,663	91	6	8,206	10
10. Diseases of male reproductive organs	18,014	15,452	28	3	6,005	9
Congenital anomalies/conditions originating in perinatal period	156,953	131,718	351	28	5,605	9

Distribution of Hospital Charges

The following report is a listing of the distribution of CHEPP payments for hospital stays admitted in fiscal year 1981. The list is broken into \$1,000 increments for total charges per admission. While analyzing the data, we observed the following:

---47% of all admits had total charges which were under \$2,000 accounting for only 11% of total charges.

---Although 83% of admits had charges under \$6,000, the 83% of admits accounted for only 40% of total charges.

---Only 2% of the admits had total charges which were greater than \$25,000, but they accounted for 21% of the total charges.

---.3% of admits had total charges greater than \$55,000 but they accounted for 7% of the total charges.

The percentage of admits outweighed the percentage of total charges until the \$4,000 bracket. At that point both the admits and the total charges were 7% of their respective totals. From that point on the percentage of the number of admits becomes far less than the percentage of total charges per admit. It would appear that the true "catastrophic illness" would begin somewhere between the \$3,000 to \$5,000 level of expense where the gap between the percent of admits v.s. the percent of total charges begins to close thus ruling out the more frequent and routine types of hospitalization.

MINNESOTA CENTRAL WELFARE MEDICAL PAYMENTS SYSTEM

11/23/82

DISTRIBUTION OF HOSPITAL STAYS ADMITTED IN FISCAL 1981
(JULY 1980 - JUNE 1981), ARRANGED BY MAJOR PROGRAM
AND BROKEN INTO \$ 1,000 INCREMENTS IN TOTAL CHARGE PER ADMISSION

OR PROGRAM: CHEPP

THOUSANDS OF DOLLARS	NUMBER OF CLAIM RECORDS	NUMBER OF ADMITS	TOTAL CHARGES
>1	227.0	218 <i>25%</i>	\$139,086.66 <i>4%</i>
1	201.0	189 <i>22%</i>	\$285,261.82 <i>7%</i>
2	135.0	128 <i>15%</i>	\$324,786.96 <i>8%</i>
3	80.0	76 <i>9%</i>	\$271,142.35 <i>7%</i>
4	56.0	56 <i>7%</i>	\$250,694.87 <i>7%</i>
5	49.0	44 <i>5%</i>	\$256,671.09 <i>7%</i>
6	17.0	17 <i>2%</i>	\$111,586.86 <i>3%</i>
7	24.0	19 <i>2%</i>	\$163,157.55 <i>4%</i>
8	25.0	20 <i>2%</i>	\$185,702.63 <i>5%</i>
9	20.0	17 <i>2%</i>	\$182,011.49 <i>5%</i>
10	13.0	12 <i>1%</i>	\$136,418.73 <i>4%</i>
11	4.0	4 <i>.5%</i>	\$46,248.62 <i>1%</i>
12	8.0	8 <i>1%</i>	\$101,106.45 <i>3%</i>
13	5.0	3 <i>.3%</i>	\$53,908.35 <i>1%</i>
14	5.0	5 <i>.5%</i>	\$72,232.60 <i>2%</i>
15	3.0	2 <i>.2%</i>	\$30,983.15 <i>1%</i>
16	5.0	5 <i>.5%</i>	\$81,567.73 <i>2%</i>
17	5.0	5 <i>.5%</i>	\$87,403.74 <i>2%</i>
18	3.0	2 <i>.2%</i>	\$37,777.80 <i>1%</i>
19	1.0	1 <i>.1%</i>	\$19,456.08 <i>.5%</i>
20	1.0	1 <i>.1%</i>	\$20,837.36 <i>.5%</i>

THOUSANDS OF DOLLARS	NUMBER OF CLAIM RECORDS	NUMBER OF ADMITS	TOTAL CHARGES
21	1.0	1 <i>.1%</i>	\$21,478.85 <i>1%</i>
22	5.0	4 <i>.5%</i>	\$90,611.24 <i>2%</i>
24	2.0	2 <i>.2%</i>	\$48,662.84 <i>1%</i>
25	2.0	2 <i>.2%</i>	\$50,597.80 <i>1%</i>
27	3.0	2 <i>.2%</i>	\$55,186.89 <i>1%</i>
29	1.0	1 <i>.1%</i>	\$29,125.09 <i>1%</i>
31	5.0	2 <i>.2%</i>	\$62,635.52 <i>2%</i>
32	1.0	1 <i>.1%</i>	\$32,064.29 <i>1%</i>
35	2.0	1 <i>.1%</i>	\$35,602.14 <i>1%</i>
37	1.0	1 <i>.1%</i>	\$37,624.26 <i>1%</i>
38	1.0	1 <i>.1%</i>	\$38,420.32 <i>1%</i>
39	1.0	1 <i>.1%</i>	\$39,893.31 <i>1%</i>
40	3.0	1 <i>.1%</i>	\$40,026.35 <i>1%</i>
43	1.0	1 <i>.1%</i>	\$43,220.80 <i>1%</i>
44	1.0	1 <i>.1%</i>	\$44,315.61 <i>1%</i>
46	3.0	1 <i>.1%</i>	\$46,849.94 <i>1%</i>
55	1.0	1 <i>.1%</i>	\$55,265.30 <i>1%</i>
56	6.0	1 <i>.1%</i>	\$56,438.58 <i>2%</i>
161	6.0	1 <i>.1%</i>	\$161,776.02 <i>4%</i>
TOTAL	933.0	858	\$3,847,838.04

*98.6%**

100

MEDICARE CROSSOVERS AND REJECTED CLAIMS ARE OMITTED. INCOMPLETE
ABSTRACTS (LACKING ADMIT BILL OR FINAL BILL) ARE INCLUDED.

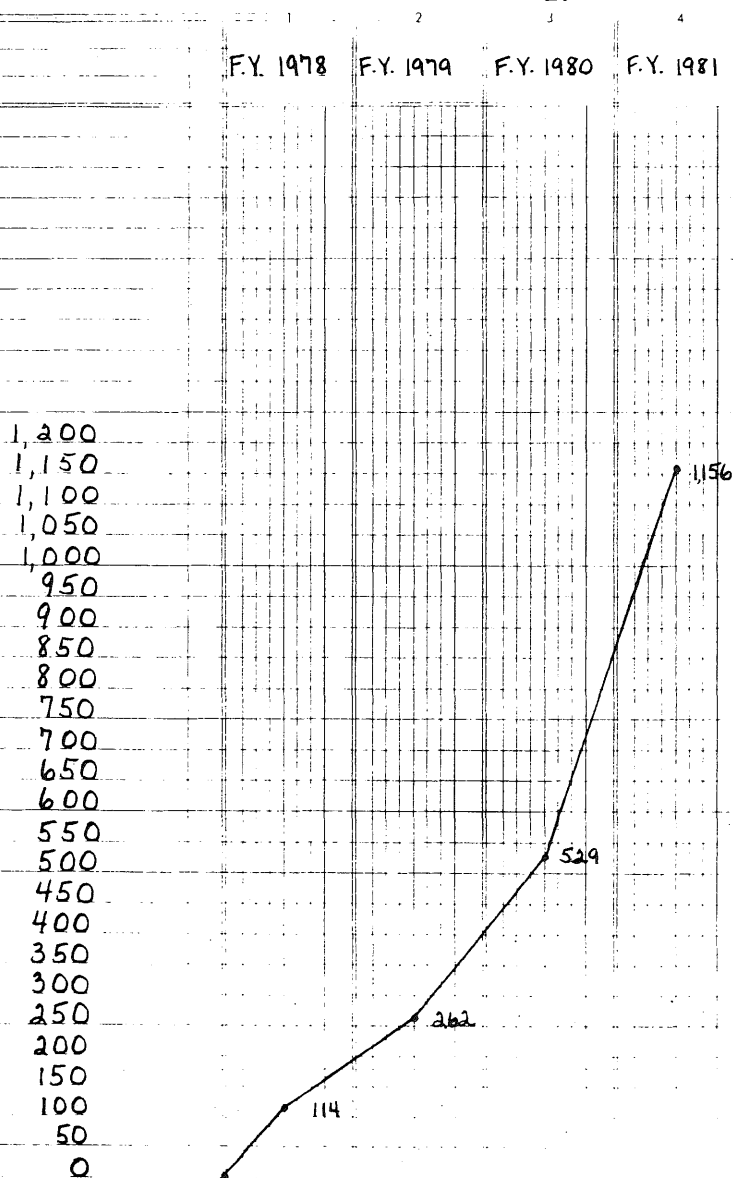
**Does not add due
to rounding*

Historical Overview

The following charts, graphs, and statistics give an historical picture of CHEPP during its four years of operation. They are intended to give some perception of the program's growth and utilization. Much of the information was generated from the CHEPP computer files. We were unable to retrieve information from the start of the program. However, the reports were for payments made from January 1, 1979 through September 14, 1982 which includes the heaviest usage of CHEPP. Manual payments made through the CHEPP office were not included in these statistics.

[illegible]

CHEPPI APPLICATIONS APPROVED

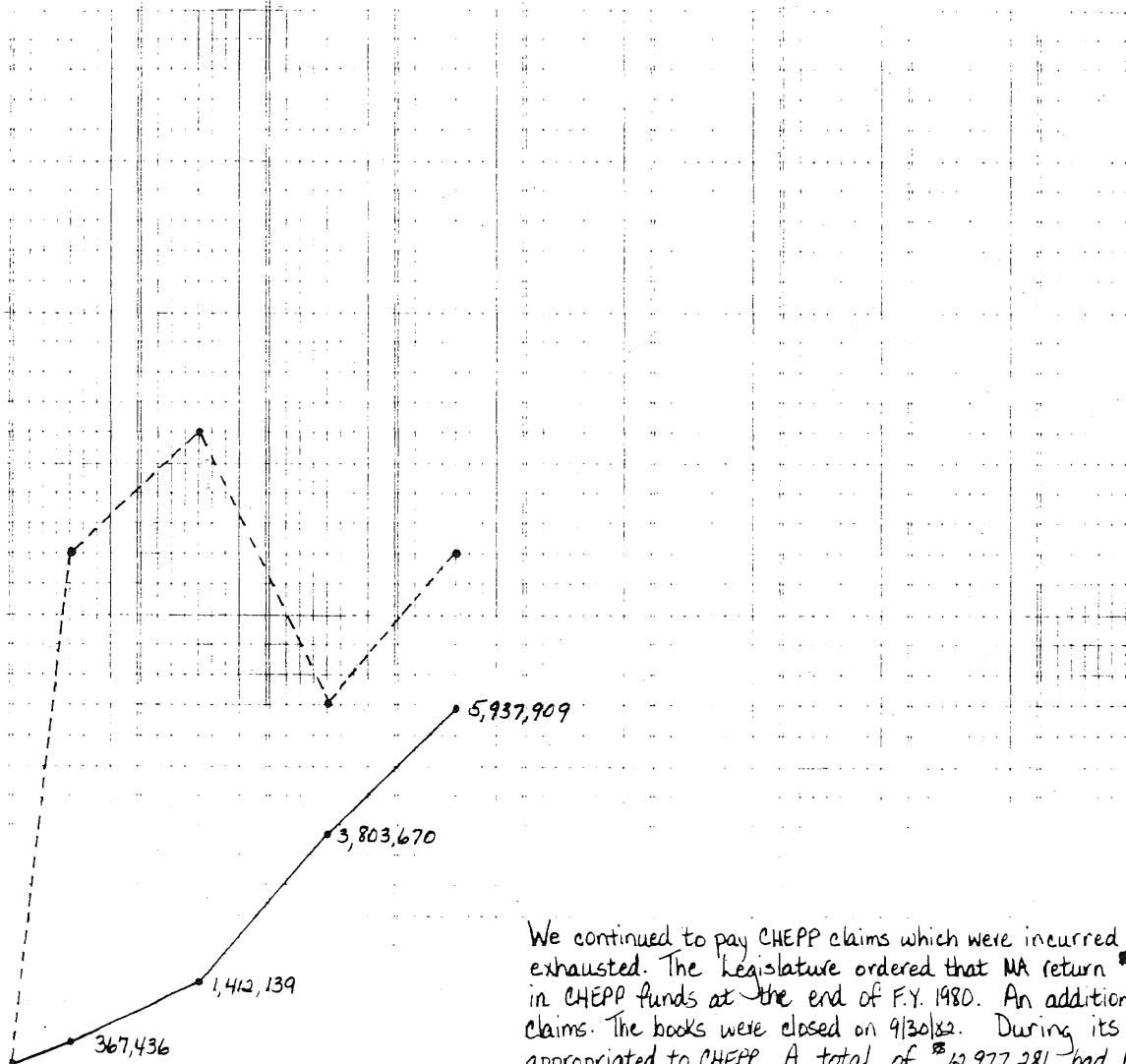


After June 30, 1981, we received an additional 193 applications which were approved. The 193 applications had been made before July 1, 1981 but the eligibility process had not been completed. The total number of CHEPP applications approved during the entire program history was 2,254.

Appropriations ---
Expenditures —

F.Y. 1978 F.Y. 1979 F.Y. 1980 F.Y. 1981

12,000,000
11,500,000
11,000,000
10,500,000
10,000,000
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We continued to pay CHEPP claims which were incurred before July 1, 1981 until the 8.5 million was exhausted. The legislature ordered that MA return \$2,142,078 to CHEPP. That amount was left in CHEPP funds at the end of F.Y. 1980. An additional \$1,456,127 was paid out on old CHEPP claims. The books were closed on 9/30/82. During its program history \$33,500,000 had been appropriated to CHEPP. A total of \$12,977,281 had been spent. (These figures combine CHEPP I & II)

Amounts Received By County

The following table shows the total paid by CHEPP for each county's CHEPP I recipients. It includes all payments made by the computer from January 1, 1979 through September 14, 1982.

<u>County</u>	<u>Total Paid</u>	<u>Cases</u>	<u>Largest Paid Out Case</u>
Aitkin	\$ 21,036	8	\$ 7,201
Anoka	258,119	42	37,665
Becker	75,226	11	29,456
Beltrami	14,928	4	9,806
Benton	30,578	7	13,963
Bigstone	24,086	10	8,297
Blue Earth	50,909	15	14,471
Brown	217,987	18	102,480
Carlton	46,881	8	34,128
Carver	222,726	15	160,898
Cass	160,531	21	25,830
Chippewa	162,558	14	68,162
Chisago	45,274	8	26,988
Clay	77,014	13	25,758
Clearwater	84,255	13	64,613
Cottonwood	41,978	10	10,811
Crow Wing	410,374	34	75,557
Dakota	309,972	51	45,218
Dodge	21,727	7	10,638
Douglas	88,681	17	12,642
Faribault	57,864	17	17,151
Fillmore	32,748	5	14,373
Freeborn	102,112	23	19,815
Goodhue	110,988	15	25,912
Grant	94,754	12	34,359
Hennepin	2,810,735	433	58,481
Houston	32,508	6	14,324
Hubbard	12,154	4	5,501
Isanti	95,479	17	20,780
Itasca	42,941	9	8,855
Jackson	79,680	13	42,907
Kanabec	21,623	5	17,459
Kandiyohi	13,527	7	3,579
Kittson	46,369	4	24,039
Koochiching	51,350	4	39,277
Lac Qui Parle	90,214	11	17,137
Lake	7,124	1	7,124
Lake of the Woods	11,496	2	11,082
Le Sueur	125,154	16	40,064
Lincoln	67,289	11	17,217
Lyon	116,281	11	52,409

Amounts Received By County (continued)

<u>County</u>	<u>Total Paid</u>	<u>Number of Cases</u>	<u>Largest Paid Out Cases</u>
McLeod	\$ 40,603	9	12,943
Marshall	93,805	22	25,090
Martin	61,624	18	10,125
Meeker	70,696	6	45,493
Mille Lacs	46,977	9	19,813
Morrison	24,752	8	8,905
Mower	69,686	20	9,584
Murray	103,311	7	52,183
Nicollet	97,152	11	22,986
Nobles	53,508	11	10,862
Norman	3,178	1	3,178
Olmsted	57,388	10	13,736
Ottertail	235,813	50	34,856
Pennington	98,125	22	26,120
Pine	67,763	23	17,882
Pipestone	73,893	11	17,879
Polk	49,751	18	7,032
Pope	24,997	4	18,518
Ramsey	1,070,078	160	67,254
Red Lake	9,181	3	5,881
Redwood	67,571	6	45,218
Renville	160,185	29	23,881
Rice	112,520	18	18,923
Rock	58,939	10	19,632
Roseau	40,638	11	12,684
St. Louis	421,485	94	46,378
Scott	102,462	11	63,272
Sherburne	59,052	9	21,945
Sibley	83,829	9	35,788
Stearns	220,339	36	62,054
Steele	85,204	11	33,021
Stevens	146,063	19	37,872
Swift	105,595	17	33,491
Todd	98,410	25	17,201
Traverse	19,250	6	12,754
Wabasha	82,032	11	20,236
Wadena	72,156	14	20,997
Waseca	96,880	9	28,550
Washington	234,401	35	30,359
Watsonwan	14,026	6	6,341
Wilkin	13,698	3	10,248
Winona	124,024	31	10,975
Wright	190,503	28	32,588
Yellow Medicine	25,536	5	9,578
TOTAL	*\$11,367,989	1,832	

*Does not add due to rounding

NOTE: These figures do not include payments made prior to January 1, 1979
(7/1/77-12/31/78) or manual payments made by the CHEPP office.

Amounts Received by Family

The following chart lists payments made, in behalf of families, in thousand dollar increments. This is for the history of the program so some of the figures for families are for multiple years. It is interesting to note that 894 families, or almost 50% of those eligible for CHEPP, received \$3,000 or under. These same 894 families (50%) only received 9% of the CHEPP expenditure. The majority of expenditure is used by the small number of recipients who truly incur a catastrophic debt.

<u>Total Paid/ Thousands</u>	<u>No. Cases</u>	<u>% of Total</u>	<u>Total Paid/ Thousands</u>	<u>No. Cases</u>	<u>% of Total</u>	<u>Total Paid/ Thousands</u>	<u>No. Cases</u>	<u>% of Total</u>
> 1	458	25.0	26	3	0.2	67	1	0.1
1	242	13.0	27	1	0.1	68	1	0.1
2	194	10.5	28	5	0.3	75	1	0.1
3	157	8.5	29	2	0.1	102	1	0.1
4	111	6.0	30	4	0.2	160	1	0.1
5	104	5.5	31	2	0.1	T. \$11,367,989	1,832	99.9*
6	75	4.0	32	3	0.2	*does not add due to rounding		
7	55	3.0	33	4	0.2			
8	49	2.5	34	5	0.3			
9	35	2.0	35	3	0.2			
10	46	2.5	37	4	0.2			
11	38	2.0	39	2	0.1			
12	27	1.5	40	1	0.1			
13	30	1.5	41	1	0.1			
14	20	1.0	42	2	0.1			
15	24	1.3	44	1	0.1			
16	11	0.6	45	3	0.2			
17	18	1.0	46	1	0.1			
18	16	1.0	50	2	0.1			
19	14	0.8	52	2	0.1			
20	9	0.5	55	1	0.1			
21	7	0.4	56	1	0.1			
22	11	0.6	58	1	0.1			
23	6	0.3	62	2	0.1			
24	5	0.3	63	1	0.1			
25	7	0.4	64	1	0.1			

The report also listed the admitting diagnosis for the highest total billed hospital charge for each family. We calculated the diagnosis for the more costly claims. The results concur with our previous statistics on which category of diseases are most costly to Minnesotans. They are as follows:

CHEPP Cases Which Received \$10,000-\$14,999 in Benefits

In this range of benefits, one third of the diagnoses were for diseases of the circulatory system followed by neoplasms and injuries. A total of 75% of the cases in this benefit range were diagnosed in six of the seventeen categories.

<u>Diagnosis</u>	<u>No. of Cases</u>	<u>% of Total</u>
Diseases of the circulatory system	33	20
Neoplasms	29	18
Injury and poisoning	16	10
Infectious and parasitic diseases	14	9
Symptoms, signs, and ill-defined conditions	14	9
Mental disorders	14	9
Diseases of the respiratory system	10	6
Diseases of the digestive system	10	6
Diseases of the genitourinary system	6	4
Congenital anomalies	5	3
Diseases of the nervous system and sense organs	3	2
Diseases of the musculoskeletal system and connective tissue	2	1
Certain conditions originating in the perinatal period	2	1
Unknown	2	1
Diseases of the skin and subcutaneous tissue	1	1
Endocrine, nutritional, metabolic diseases and immunity diseases	0	0
Diseases of blood and blood forming organs	0	0
Complications of pregnancy, childbirth and the puerperium	0	0
TOTAL	161	100

The total paid out in this benefit range was \$1,947,960 which was 17% of the total expenditure. There were 161 families who received benefits in this range or 9% of the total.

CHEPP Cases Which Received \$15,000-\$19,999 in Benefits

In this range of benefits neoplasms is the most frequent diagnoses followed closely by diseases of the circulatory system. Together they comprise 40% of the diagnoses in this range. Injuries/poisoning ranks third. These top three diagnoses account for over half of the diagnoses in this range.

<u>Diagnosis</u>	<u># of Cases</u>	<u>% of Total</u>
Neoplasms	17	20.5
Diseases of the circulatory system	16	19.3
Injury and poisoning	10	12.0
Diseases of the digestive system	8	10.0
Diseases of the genitourinary system	7	8.5
Infectious and parasitic diseases	6	7.3
Mental disorders	5	6.0
Symptoms, signs, and ill-defined conditions	3	4.0
Diseases of the respiratory system	2	2.5
Diseases of the musculoskeletal system & connective tissue	2	2.5
Unknown	2	2.5
Endocrine, nutritional, metabolic diseases & immunity disorders	1	1.0
Complications of pregnancy, childbirth & the puerperium	1	1.0
Diseases of the skin and subcutaneous tissue	1	1.0
Congenital anomalies	1	1.0
Certain conditions originating in the perinatal period	1	1.0
Diseases of blood and blood forming organs	0	0.0
Diseases of the nervous system & sense organs	0	0.0
TOTAL	83	100.1*

The total paid out in this benefit range was \$1,432,488 or 13% of the total expenditure. There 83 families who received benefits in this range or 4.5% of the caseload.

*does not add due to rounding

CHEPP Cases Which Received \$20,000-\$29,999 in Benefits

In this benefit range diseases of the circulatory system are at the top with 25% of the total. Injuries/poisoning rank second with 14% and neoplasms third with 11%. These three combined account for 50% of the total diagnoses.

<u>Diagnosis</u>	<u># of cases</u>	<u>% of Total</u>
Diseases of the circulatory system	14	25.0
Injury and poisoning	8	14.0
Neoplasms	6	11.0
Diseases of the digestive system	5	9.0
Infectious and parasitic diseases	4	7.0
Diseases of the genitourinary system	4	7.0
Mental disorders	3	5.0
Diseases of the respiratory system	3	5.0
Diseases of the musculoskeletal system & connective tissue	2	3.5
Congenital anomalies	2	3.5
Symptoms, signs, and ill-defined conditions	2	3.5
Diseases of the nervous system & sense organs	1	2.0
Diseases of the skin and subcutaneous tissue	1	2.0
Certain conditions originating in the perinatal period	1	2.0
Endocrine, nutritional, metabolic diseases & immunity disorders	0	0.0
Diseases of the blood & blood forming organs	0	0.0
Complications of pregnancy, childbirth & the puerperium	0	0.0
TOTAL	56	99.5*

*does not add due to rounding

The total paid out in this benefit range was \$1,333,801 or 12% of the total expenditure. There were 56 families who received benefits in this range or 3% of the caseload.

CHEPP Cases Which Received \$30,000-\$49,999 in Benefits

Neoplasms ranked first in this benefit range with 19% of the cases followed by injuries/poisoning with 11%. This benefit range appears to have the most evenly distributed diagnoses.

<u>Diagnosis</u>	<u># of Cases</u>	<u>% of Total</u>
Neoplasms	7	19
Injuries and poisoning	4	11
Infectious and parasitic diseases	3	8
Diseases of the circulatory system	3	8
Diseases of the digestive system	3	8
Diseases of the genitourinary system	3	8
Symptoms, signs and ill-defined conditions	3	8
Endocrine, nutritional, metabolic diseases & immunity disorders	2	6
Diseases of the nervous system & sense organs	2	6
Diseases of the blood & blood forming organs	1	3
Mental disorders	1	3
Diseases of the respiratory system	1	3
Diseases of the skin & subcutaneous tissue	1	3
Diseases of the musculoskeletal system & connective tissue	1	3
Certain conditions originating in the perinatal period	1	3
Complications of pregnancy, childbirth & the puerperium	0	0
Congenital anomalies	0	0
TOTAL	36	100

The total paid out in this benefit range was \$1,318,014 or 12% of the total expenditure. There were 36 families who received benefits in this range or 2% of the caseload.

CHEPP Cases Which Received \$50,000-\$99,999 in Benefits

Almost one third of the diagnoses in this range were neoplasms with neoplasms and diseases of the circulatory system comprising one half of the diagnoses.

*Note: In this range and the following range, because of the small numbers of cases, only diagnostic categories which were reported are used in the tables.

<u>Diagnosis</u>	<u># of Cases</u>	<u>% of Total</u>
Neoplasms	4	29
Diseases of the circulatory system	3	22
Certain conditions originating in the perinatal period	2	14
Endocrines, nutritional, metabolic diseases & immunity disorders	1	7
Mental disorders	1	7
Diseases of the respiratory system	1	7
Diseases of the digestive system	1	7
Symptoms, signs, and ill-defined conditions	1	7
	<u>14</u>	<u>100</u>

The total paid out in this benefit range was \$838,767 or 7% of the total expenditure. There were 14 families who received benefits in this range or .8% of the caseload.

CHEPP Cases Which Received Over \$100,000 in Benefits

There were only 2 families who received over \$100,000 in benefits or .1% of the caseload. The amounts paid out and the diagnoses were as follows:

Infectious and parasitic diseases	\$102,480
Injury and poisoning	\$160,898

The total paid out in this benefit range was \$263,378 or 2% of the total expenditure.

Over-all Ranking of Diagnosis Codes for CHEPP Cases Receiving Benefits Over \$10,000

<u>Diagnosis</u>	<u># of Cases</u>	<u>Percent</u>
Diseases of the circulatory system	69	20.0
Neoplasms	63	17.5
Injury and poisoning	39	11.0
Infectious and parasitic diseases	28	8.0
Diseases of the digestive system	27	7.5
Mental disorders	24	7.0
Symptoms, signs, and ill-defined conditions	23	6.5
Diseases of the genitourinary system	20	5.5
Diseases of the respiratory system	17	5.0
Congenital anomalies	8	2.3
Diseases of the musculoskeletal system & connective tissues	7	2.0
Certain conditions originating in the perinatal period	7	2.0
Diseases of the nervous system & sense organs	6	1.7
Endocrine, nutritional, metabolic diseases & immunity disorders	4	1.0
Diseases of the skin & subcutaneous tissue	4	1.0
Unknown	4	1.0
Diseases of blood & blood forming organs	1	0.3
Complications of pregnancy, childbirth & the puerperium	1	0.3
TOTAL	<u>352</u>	<u>99.6</u>