Solano County Wellness/CMSP Planning Project
Improving Health Care for Uninsured Adults

Executive Summary

The Solano County Wellness/CMPS Planning Project is a nine-month planning project to build upon ongoing local efforts to improve access, quality, and cost-effectiveness of health care for low-income people. This is the first of two reports for this project. In this report, we address system reforms which are readily achievable within the existing framework of CMSP and County-funded safety net services. In the second report—which will be completed by February 28, 2001, we will chart a course for fundamentally reorganizing CMSP and other county-funded services into a managed health care system for medically indigent adults.

Central Findings regarding the existing system:

1. CMSP enrollees represent about half of the uninsured poor in Solano County;
2. CMSP resources are highly skewed toward hospital-based services; nearly three-quarters of all CMSP costs were for hospitalization and emergency room care. Only 6% was for outpatient treatment.
3. CMSP eligibility and physician reimbursement procedures make it extremely difficult for beneficiaries to obtain primary or specialty care. Some individuals receive charity care from physicians or from the county's safety-net providers. Most defer seeking care until they are acutely ill. This leads to unnecessary emergency room visits, avoidable hospitalizations, and even avoidable deaths.
4. One result of this is a highly skewed distribution of benefits. Over 80% of CMSP costs are expended for 10% of CMSP beneficiaries. About 1% of beneficiaries account for half of all expenditures.
5. Very few CMSP enrollees remain enrolled for an extended period of time. In 1999, the average enrollee was only enrolled for 3.67 months. This pattern appears to arise from two factors, 1) the lack of a consistent relationship with a primary care provider, and 2) the difficulty of the reapplication process in contrast with any real financial benefit accruing to the beneficiary.
6. Client transience poses a significant problem for wellness promotion strategies within CMSP. It is not possible to conduct health promotion, health education, chronic disease management, or basic medical oversight with a population that is only enrolled when it is ill, that has no established relationship with a provider, and that regards the hospital emergency room as its medical home.
7. Although substance abuse is a significant underlying factor impacting treatment costs, the majority of recipients do not have a significant substance abuse problem. In fact, the majority of CMSP eligibles would utilize primary care effectively and would be compliant with medical regimens, if only they had access to primary care through CMSP.

Recommendations for CMSP system reforms:

Recommendation 1:

We are proposing a pilot initiative to provide Assertive Case Management for a targeted population of CMSP clients with high-cost high-risk diagnoses. Elements of this pilot would include:

1) Determine from the highest cost CMSP diagnoses a subset proven to respond positively to non-acute, primary care maintenance.
2) Develop a surveillance system in which those CMSP clients that present with these illnesses can be identified and enrolled in a comprehensive case management system, with funding to purchase primary and specialty care if it cannot be otherwise obtained.
3) Implement an assertive treatment model in which case managers work in the field for relapse prevention.

Recommendation 2:

Needle use appeared to be clearly implicated among a number of the most costly diagnoses. However, currently, although CMSP does pay for methadone treatment in some counties, there is no methadone program in Solano County and CMSP will not pay for methadone treatment in neighboring counties. We are proposing one of two options:

1) Establish a methadone program in Solano County;
2) Seek CMSP waivers to pay for transportation and treatment for Solano County clients at a methadone program in a neighboring county. This would include van-based transportation to and from the program for identified users. It might also include compliance incentives for participants and tied to the assertive case management program discussed in Recommendation 1.

Recommendation 3:

The third recommendation involves a system reform to develop more effective referral and treatment systems for CMSP beneficiaries who are alcohol or other drug abusers. This would include a more carefully crafted CMSP Mental Health/Substance Abuse benefit for those clients (self- identified and/or provider assessed) as having an early or moderate level substance abuse problem. This project would entail:

1) Incorporating screening, assessment, referral, and follow-up into the practice of hospital emergency rooms, acute care institutions, and front-line primary care providers;
2) Reexamining the existing menu of County substance abuse programs with an eye towards expanding outpatient/day treatment options (with adjunct dual diagnosis services available). This expansion could be funded on a pilot basis through cost savings from reductions in inappropriate emergency room use and avoided hospitalizations.

Recommendation 4:

We are proposing a system that will provide at least one targeted Public Health Nursing Visit to each CMSP beneficiary who visits an emergency room for a condition that would be better treated in a primary care setting, and for each beneficiary who is diagnosed with a condition that would benefit from education and referral related to chronic disease management. We feel that this position could be funded by blending a variety of payment sources, with supplemental revenue from CMSP cost-savings. Also included in this would be maintenance and distribution (in English and Spanish) of regularly-updated lists of CMSP primary care providers who are accepting new patients.

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Section I: Quantitative Data Analysis

1. Background and Purpose

Solano County has a record of innovation in health care reform that is unrivaled in California. The Partnership HealthPlan of California, founded in 1991, has been one of the most successful MediCal managed care systems in the State. In 1993, in recognition of its work in setting up the HealthPlan, the Solano Coalition for Better Health (the Coalition) received one of The Healthcare Forum's prestigious "Healthier Communities" awards. Solano followed this success by becoming California's first (and still the only) fully capitated, fully at-risk, organized Mental Health System. More recently, the Solano Coalition for Better Health has been extremely successful at expanding health coverage through the SKIP Program for low-income children who are not eligible for MediCal.

As a result of this decade of sustained effort, health care access has improved dramatically for large segments of the low-income, formerly uninsured, population of Solano County. The largest section of the population for whom health access remains a major problem is low-income and indigent adults who are neither covered by an employer-provided health plan, nor eligible for MediCal-funded health services. These adults live in a contradictory medical netherworld in which costly emergency and hospital treatment is readily available, while primary care, specialty care, prevention services, and chronic disease management are priced out of their reach.

The Solano County Wellness/CMPS Planning Project is a nine-month planning project to build upon ongoing local efforts to improve access, quality, and cost-effectiveness of health care for low-income people. Major objectives of this planning process include:

1. Strengthen the network of community clinics through information sharing, improved organizational efficiencies and countywide services planning.
2. Design and test innovative service delivery models that address issues of access barriers, compliance with medical regimens, and other barriers to wellness experienced by the indigent adult population.
3. Effect long term systems change within Solano County through greater involvement of all affected constituencies in the planning and delivery of health services, and thereby develop a system that is responsive to local needs, maximizes service efficiency and effectively utilizes available resources.

This is the first of two reports for this project. In this report, we will address system reforms which are readily achievable within the existing framework of CMSP and County-funded safety net services. In the second report—which will be completed by February 28, 2001, we will chart a course for fundamentally reorganizing CMSP and other county-funded services into a managed health care system for medically indigent adults.

2. Characteristics of CMSP Beneficiaries

A. Enrollees and potential enrollees

The first challenge is to roughly estimate the "universe" of potential CMSP clients in the County. Normally, in planning a health system, one would attempt to quantify the pool of potential "beneficiaries". In fact, CMSP eligibility and payment regulations make "CMSP-eligible" a problematic concept. Every adult aged 21-64 who is not MediCal-eligible and who meets personal property limit restrictions is eligible for CMSP, no matter how high their income.[1] However, individuals whose monthly income exceeds the "maintenance of need standard" must pay a *share of cost* equal to the entire amount by which the individual's income exceeds the maintenance of need level. While this may seem like meaningless bureaucratic detail, understanding the impact of these regulations on actual health-seeking behavior is critical to reforming CMSP. Consider the concrete example of a single adult whose income is at the 1999 Federal Poverty Level of $8,501 per year, or $708 per month, and has no savings and no personal property. Because this individual is above his/her "maintenance of need" level of $600 per month, his/her share of cost is $108 per month. This means that the first $108 of medical expenses are the beneficiary's responsibility. If the same individual worked full-time at the California minimum wage, he/she would earn the munificent sum of $989 per month and would have a share of cost of $389 per month. In effect, this means that the individual is uninsured for routine medical care, health screening, most medicines, and outpatient chronic disease management. On the other hand, if that individual experiences a catastrophic illness requiring a $10,000 hospitalization, all but $108 (or $389) would be covered—in other words 99% (or 97%) of the total cost. However, hospitals must provide acute care to indigent individuals, so that individual will receive acute care regardless of CMSP status.[2] While there is a benefit of CMSP coverage accruing to the hospital (who will lose less money in providing care), no benefit accrues to the covered beneficiary who would have been treated without cost in any case. Consequently, in one sense, CMSP covers everyone—however high their income—with few assets; in another sense, it covers no one whose income is not well below the poverty level.

A somewhat different question is: "who are the uninsured poor in Solano County?" A rough formula for estimating this number is as follows: 1) take the most recent State estimate of total adult population in Solano (250,427); 2) estimate the number of people living below the poverty line in Solano County (7.5% below the poverty level and 14.5% below 200% of poverty, according to census data for Solano County); and 3) subtract the County number of adults actually enrolled in MediCal in 1999 (15,234). The result leads us to make an estimate of approximately 3,548 uninsured individuals living below the Federal poverty level and 21,077 uninsured individuals living below 200% of poverty.

[1] For a single individual, the personal property limit is $2000, excluding the individual's home and $6,000 in real property.

[2] Ironically, in this situation, the individual is $109 ahead by *not* having CMSP, since it is very likely that the whole amount would be written off as bad debt..

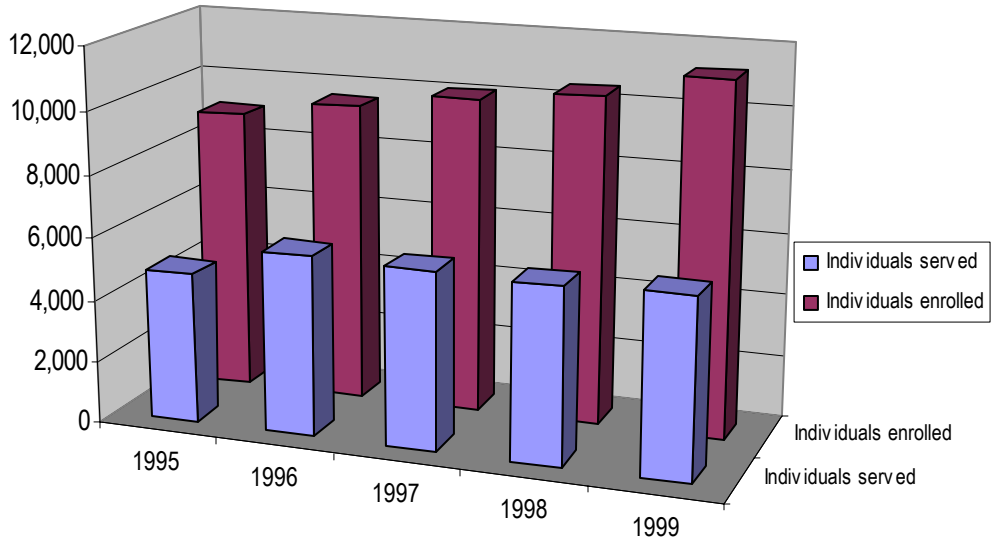
In 1999 the actual number of people enrolled in CMSP was 11,267 – 53% of the estimated uninsured population below 200% of poverty. This is a relatively respectable penetration rate, especially given the disincentives to enrollment.

In 1999, about half (51%) of those enrolled in CMSP submitted a claim for services (5,729). Table 1 below shows the enrollment and utilization counts for CMSP for the past five years.

Table 1: CMSP Enrollment vs. Service Utilization

	Enrolled	Received Service
1999	11,267	5,729
1998	10,494	5,618
1997	10,094	5,674
1996	9,619	5,770
1995	9,066	4,806

Chart 1: CMSP Individuals enrolled vs individuals served



B. Age and Gender Characteristics of the CMSP Population

As Table 2, below, indicates, there are slightly more females than males overall in the program. Enrollment tends to decline over age 50 for both groups, but it declines more slowly for women than for men, leaving women in the majority at ages above 50. Although women have more visits than men, men are more costly in every age category. The differential cost per patient between men and women is highest after age 50. These trends appear to result from the confluence of two factors:

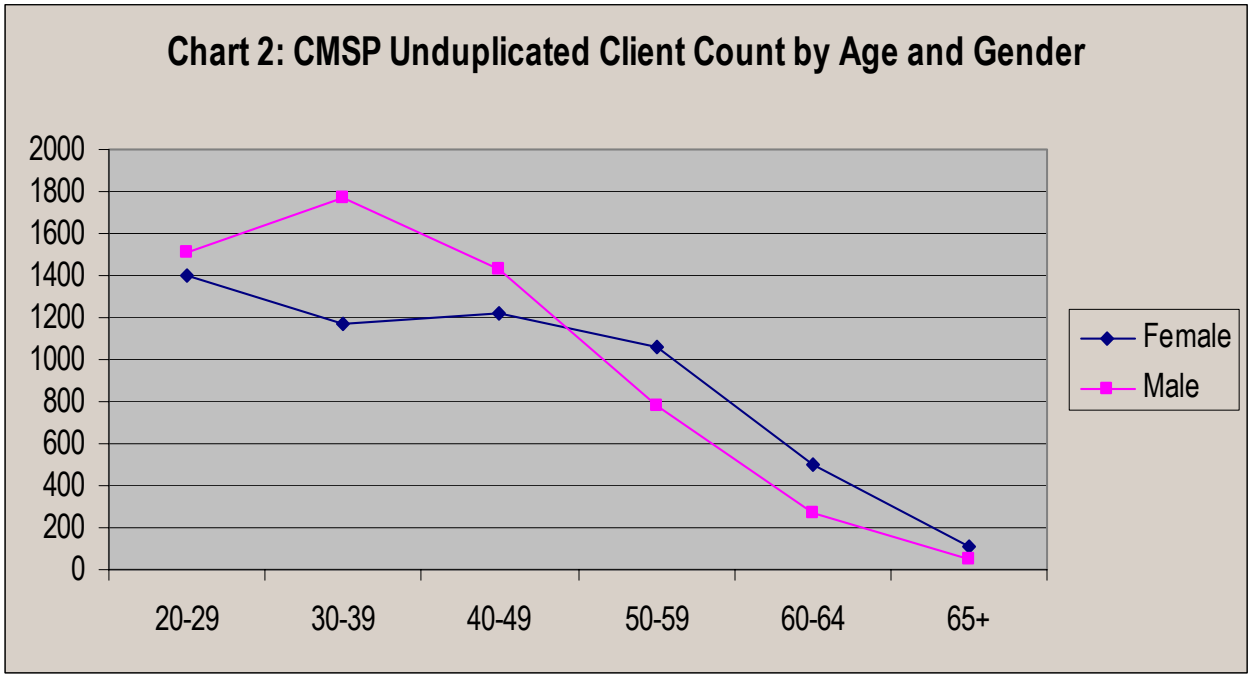
1. Men tend to age-out of poverty more completely and securely than do women. While the data does not bear out the idea that the female population is largely displaced homemakers—women in middle age who have been divorced from a primary wage-earner—it does mirror the overall lower income of women in our society, and the greater insecurity throughout life of their sources of income.

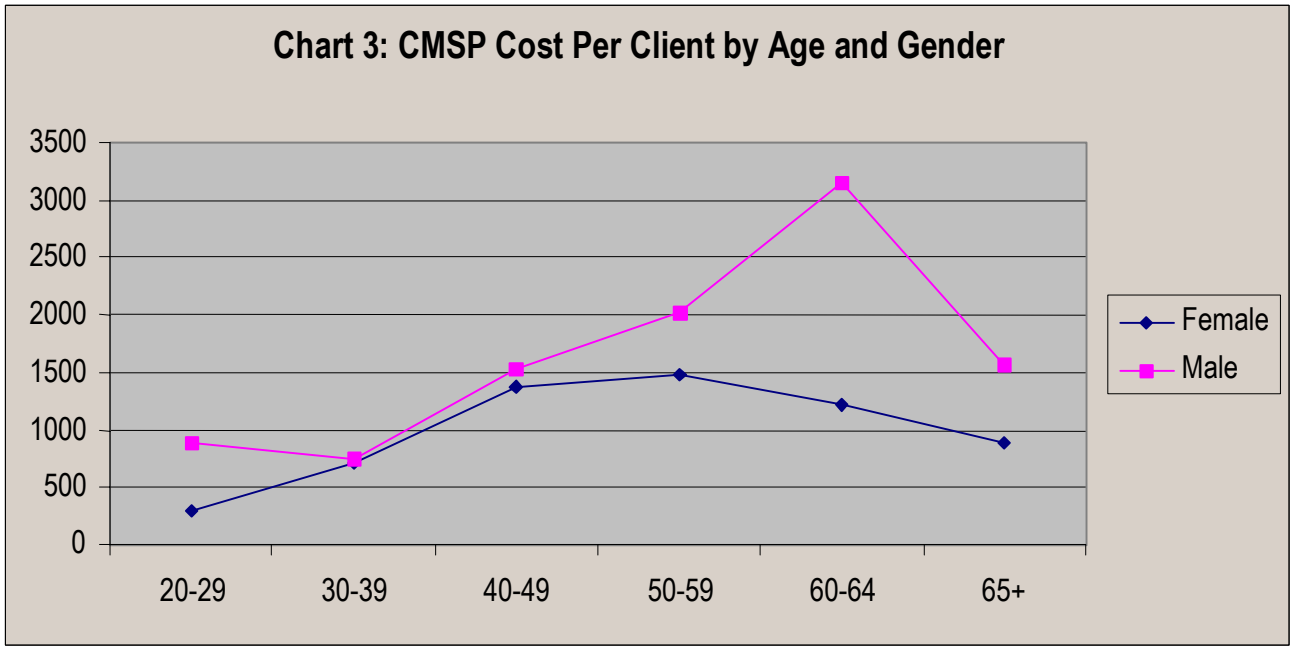
2. The high per capita cost of male beneficiaries—which peaks after age 50—seems to be related to life-style issues. As discussed in more detail below, the high incidence of trauma and of conditions related to late-stage alcohol and drug use appears to dispose males to more high-cost acute conditions. On the other hand, the data do not bear out the previous suggestion that the CMSP population includes a high number of young male accident victims. In fact, service costs for males are much more explained by an extended history of hard living than by a single catastrophic injury arising from youthful misjudgment.

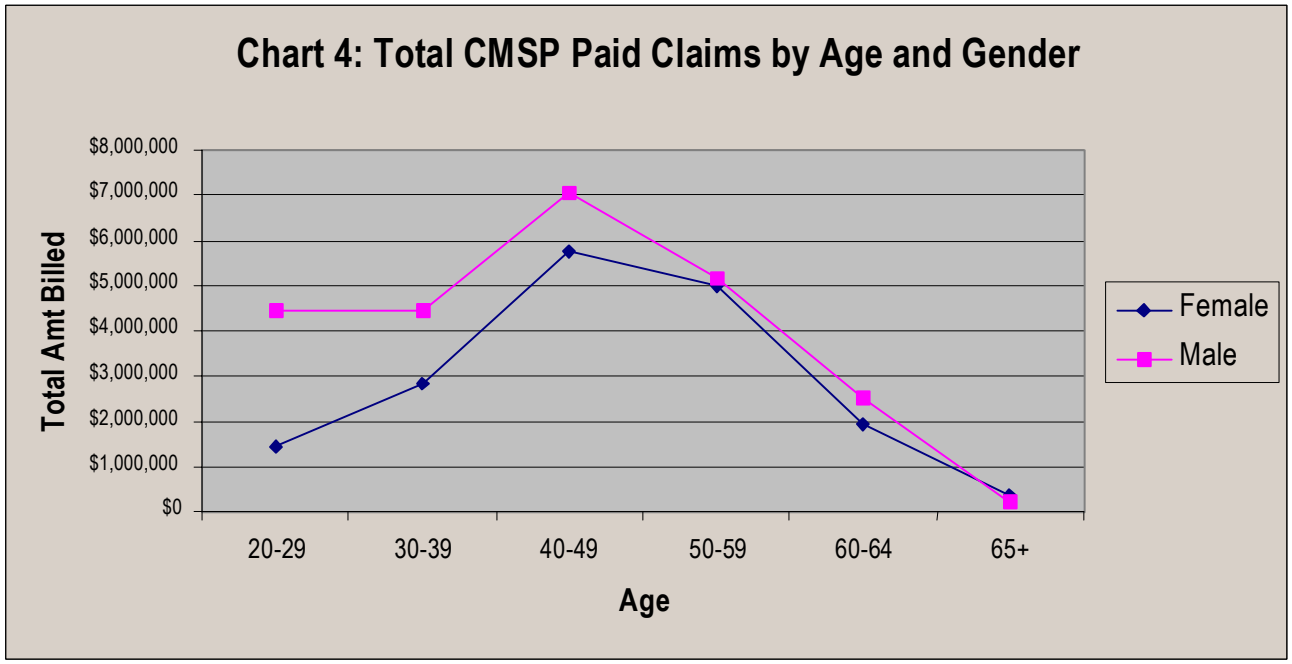
Table 2: 1999 CMSP Clients by Age and Gender

	Females			Males		
Age	**Total Clients**	**Total Visits**	**Total Paid Claims**	**Total Clients**	**Total Visits**	**Total Paid Claims**
20-29	1,397	5,004	414,882	1,513	5,078	1,337,233
30-39	1,171	7,782	841,295	1,766	8,289	1,324,490
40-49	1,219	15,669	1,683,189	1,426	11,127	2,174,342
50-59	1,062	16,858	1,569,975	779	9,143	1,575,752
60-64	499	8,004	611,538	270	3,217	850,757
65+	111	1,485	99,377	49	414	76,427
Total	**5,459**	**54,802**	**5,220,256**	**5,803**	**37,268**	**7,339,001**

SOURCE: CMSP Automated Enrollment File.







3. Patterns of Care

As table 3 indicates, nearly 75% of all CMSP paid claims were for hospital-based acute care, hospital physicians groups, emergency medical transportation, and hospital-based follow-up to acute care. Less than 6% was for outpatient care. Interviews with physicians, hospitals, and community clinics identified a number of outpatient access barriers underlying this pattern:

1. As described above, CMSP share of cost regulations place the cost of outpatient care out-of-reach for most low-income individuals.
2. CMSP reimbursement rates (while quite generous for hospitals) return about $.10 on the dollar for outpatient claims. In addition, CMSP reimbursement is slow and claims are frequently questioned. Most private providers find that CMSP is not worth the trouble. Either they provide charity care for CMSP clients, or they refuse to see CMSP clients at all.
3. Because the paperwork burden on individuals applying for CMSP is so high, it is very difficult for providers to enroll clients in CMSP. Even if the initial paperwork is completed at the first office visit, additional documentation is virtually always necessary. When patients do not complete their applications, potential reimbursement from CMSP is so low that it is not cost effective for outpatient providers to follow-up with clients to encourage them to complete the application.
4. CMSP clients are seen as a particularly difficult, non-compliant, and sick population. Consequently, many private providers are reluctant to accept CMSP clients onto their caseload.

It is important to note here that this entire section could have been written about the fee-for MediCal System and its beneficiaries before 1994, when the Partnership Health-Plan was established in Solano. In fact, it seems likely that—now as then—the problem is neither with difficulty of the clients nor the willingness of providers to serve them, but with the fact that CMSP controls costs by controlling utilization rather than by promoting wellness. One implication of this strategy is that only the sickest, most problematic individuals present for care, creating the illusion of a large, desperately-ill, non-compliant population. In fact, our consumer interviews—described below—revealed a large pool of CMSP beneficiaries who would use primary care appropriately if only they could have access to it.

Table 3: CMSP Patient Claims by type of Provider, 1999

Vendor Code	Vendor Type	Total Paid	Visits	Paid per visit	Total Paid as % of Total Paid Claims
60	Acute Inpatient-Comm Hosp	$8,308,752	851	$9,763.52	66.13%
26	Pharmacy	$1,591,209	46,137	$34.49	12.66%
22	Physicians Group	$653,539	12,717	$51.39	5.20%
62	Outpatient-Comm Hosp	$487,270	6,878	$70.84	3.88%
20	Physicians	$408,700	8,406	$48.62	3.25%
75	Outpatient Clinic	$182,078	7,617	$23.90	1.45%
24	Phys Lab	$148,772	5,349	$27.81	1.18%
42	Medical Transportation	$130,646	501	$260.77	1.04%
77	FQHC	$96,362	1,121	$85.96	0.77%
28	Optometrist	$63,849	806	$79.22	0.51%
40	Other	$46,898	530	$88.49	0.37%
32	Podiatrist	$21,043	482	$43.66	0.17%
Total of top 12 vendor types		**$12,139,119**	**91,395**	**-----**	**96.61%**

4. Patterns of Illness and Treatment

A. Diagnoses

Chart 4, below, shows the top 25 diagnoses, by amount paid, for CMSP recipients in 1999. Of the total reimbursements for conditions to which medical diagnoses were attached (i.e. excluding pharmacy and excluding mental health hospitalization), 36.0% were for ambulatory-care-sensitive conditions.[3] In addition, as will be discussed below, our chart abstractions uncovered many case histories in which there was no ACS condition, but in which expensive acute treatment could have been avoided with more effective screening and ambulatory care.

Table 4: Solano CMSP: TOP 25 Diagnoses by Amount Paid, 1999: All CMSP Patients by three-digit ICD-9 Code

Rank by Amt. Paid	ICD9 Code	Description	Amount Paid	Total Claims
1	000.xx	Pharmacy	$1,584,666	46,001
2	577.xx	Diseases of pancreas	$475,435	212
3	410.xx	Acute myocardial infarction	$460,469	159
4	518.xx	Other Lung Diseases	$300,584	195
5	421.xx	Endocarditis	$278,706	55
6	786.xx	Resp Sys/Oth Chest Symp	$263,515	1,990
7	562.xx	Diverticula of intestine	$249,924	67
8	414.xx	Oth Chr Ischemic Hrt Dis	$248,633	299
9	250.xx	Diabetes Mellitus	$235,200	2,563
10	V580	Screening, NOS	$228,747	192
11	682.xx	Other Cellulitis/Abscess	$223,868	358
12	493.xx	Asthma	$205,604	927
13	486.xx	Pneumonia, organism nos	$188,646	193
14	532.xx	Duodenal Ulcer	$171,856	20
15	574.xx	Choletithiasis	$167,481	182
16	218.xx	Uterine leiomyoma	$148,342	130
17	430.xx	Subarachnoid hemorrhage	$146,788	28
18	722.xx	Intervertebral Disc dis	$134,739	256
19	861.xx	Heart & Lung injury	$130,592	7
20	225.xx	Benign Neo Nervous Sys	$129,403	13
21	998.xx	Oth Surgical Compl Nec	$126,595	76
22	808.xx	Pelvic Fracture	$124,445	29
23	853.xx	Oth Traumatic Brain Hem	$110,215	9
24	780.xx	General Symptoms	$107,285	892
25	205.xx	Myeloid Leukemia	$101,954	43
		TOTAL	**$6,543,691**	**59,450**
		ALL Others	**$5,812,187**	**32,706**

[3] Ambulatory-care-sensitive (ACS) conditions are conditions for which hospitalizations might have been reduced had timely and appropriate outpatient treatment been provided.

B. Stability of Utilization

Very few CMSP enrollees remain enrolled for an extended period of time. In 1999, the average enrollee was enrolled for 3.67 months.[4] Since the minimum enrollment period is 3 months, this translates into fewer than 25% of all enrollees continuing their enrollment for even one additional quarter.

Utilization also manifests the same pattern of instability. Only 574 individuals out of 24,780 unique individuals enrolled during the 1995-1999 period had at least one medical visit in each year 1995-1999. Among 1999 service recipients, only 52% were also service recipients in 1998; only 16% were service recipients in 1995.

Once again, this pattern of inconsistent enrollment and inconsistent utilization appears to arise from two factors already discussed, 1) the lack of a consistent relationship with a primary care provider, and 2) the difficulty of the reapplication process in contrast with any real financial benefit accruing to the beneficiary.

Client transience poses a significant problem for wellness promotion strategies within CMSP. It is not possible to conduct health promotion, health education, chronic disease management, or basic medical oversight with a population that is only enrolled when it is ill, that has no established relationship with a provider, and that regards the hospital emergency room as its medical home. Wellness promotion in any meaningful sense cannot proceed without fundamental reform in the structure of CMSP.

C. Distribution of Costs

Table V, below, shows the distribution of costs by beneficiary-decile. In 1995, 1999, and over the entire 1995-1999 period, the top 10% of beneficiaries accounted for over 80% of paid claims. The bottom 70% of beneficiaries accounted for 3% - 5% of paid claims.

In 1999, 129 individuals (1.1% of all individuals enrolled in that year) utilized just over 50% of the total resources of the system. In 1995, 100 clients used just over half of total Solano CMSP resources. It should not be assumed, however, that it is the same individuals who are the high-cost patients from year-to-year. In fact, the fluctuation in utilization is even more extreme for this population than for the beneficiary pool as a whole. Table 6, below tracks the prior utilization history of the 129 individuals who were the highest cost patients in 1999; it also tracks the subsequent utilization history of the 129 individuals who were the highest cost patients in 1995. Fewer than one-quarter of the individuals who were the highest cost individuals in 1999 received even $1 of CMSP services two years before. Similar, two-thirds of the 1995 highest-cost patients were gone from the system within two years.

This extremely top-heavy distribution of costs implies that there are potentially great cost savings to be obtained from better medical management of high-risk cases. However, because high-risk individuals do not maintain consistent CMSP enrollment, these cost control strategies need to be accompanied with assertive outreach to the targeted individuals. Alternatively, a more fundamental reform of CMSP, in which

[4] In 1998, the average enrollment was 4.16 months; in 1997, 4.39 months.

individuals are enabled to develop a consistent relationship with a primary provider would be very likely to yield susbstantial returns in controlling high-end costs and increasing the overall health status of the CMSP population.

Table V
CMSP Paid Claims by Recipient Decile

	1999		1995		1995-99	
Decile	Amt Paid	%	Amt Paid	%	Amt Paid	%
1	$ 11,310,534	89.6%	$ 11,356,835	84.7%	$ 54,014,720	86.9%
2	$ 859,693	6.8%	$ 1,667,023	12.4%	$ 5,465,830	8.8%
3	$ 304,764	2.4%	$ 248,615	1.9%	$ 1,588,435	2.6%
4	$ 117,458	0.9%	$ 103,925	0.8%	$ 664,539	1.1%
5	$ 27,799	0.2%	$ 36,960	0.3%	$ 293,100	0.5%
6	$ 146	0.0%	$ 2,347	0.0%	$ 94,545	0.2%
7	$ -	0.0%	$ -	0.0%	$ 3,073	0.0%
8	$ -	0.0%	$ -	0.0%	$ -	0.0%
9	$ -	0.0%	$ -	0.0%	$ -	0.0%
10	$ -	0.0%	$ -	0.0%	$ -	0.0%
	$ 12,620,394	100.0%	$ 13,415,705	100.0%	$ 62,124,242	100.0%

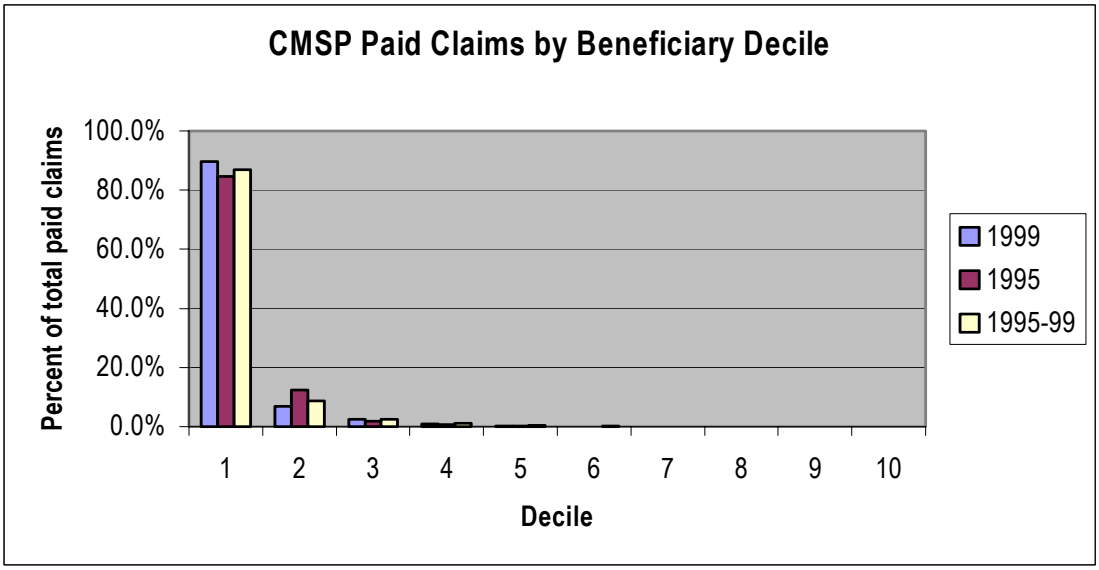


Table VI

History of CMSP System Use--129 most expensive CMSP recipients in 1999

	1995	1996	1997	1998	1999
Individuals Enrolled	15	22	28	129	129
Paid claims	13,242	100,920	207,325	952,623	6,304,684

History of CMSP System Use--129 most expensive CMSP recipients in 1995

	1995	1996	1997	1998	1999
Individuals Enrolled	129	96	43	19	15
Paid claims	6,882,829	969,246	234,594	89,177	26,266

D. Behavioral Health Issues

The stereotypic image of the CMSP clients as chronically mentally-ill or a chronic substance abuser was not born out by our data, although both substance abuse and mental illness clearly play a significant role in the lives and health histories of many CMSP clients.

To examine the behavioral health histories of CMSP beneficiaries, we linked three years (1997-99) of mental health and substance abuse service histories from the Solano County Health and Social Services Department MIS system. Since County mental health and substance abuse services extend well beyond those that are funded through CMSP, this strategy provided us with a broader look at behavioral health care recipients than we could obtain simply by examining CMSP claims themselves.

During the 1997-99 period, 1408 different CMSP beneficiaries had at least one mental health treatment episode. Table VII below shows the service utilization history of these individuals.

Table VII: CMSP Beneficiaries with County Mental Health Episodes 1997-1999

	CMSP Paid Claims--All services for County MH Clients		Mental Health Service Expenditures for CMSP Beneficiaries	
	$	% of Total CMSP Claims	$	% of Total MH Expenditures
1999	1,372,496	11%	2,823,433	23%
1998	1,567,037	13%	2,786,389	16%
1997	1,243,831	11%	2,459,920	16%

CMSP beneficiaries received between 16% and 21% of the total County Mental Health Services treatment cost during this three-year period. Conversely, County Mental Health Clients accounted for 11%-13% of the total CMSP paid claims during this period. Only

13 of the top 129 highest-cost CMSP clients were also Mental Health clients. These clients were relatively expensive to the Mental Health system as well, averaging $5,021 in mental health treatment costs for the year. Since chronically mentally ill individuals qualify for SSI and, hence, for Medi-Cal, this statistic may indicate that a more aggressive effort to qualify mentally ill CMSP clients for SSI might be a cost-effective initiative (as well as benefiting the clients by increasing their public benefit amount).

The Drug and Alcohol service data was more surprising and more problematic. Between 1997 and 1999, approximately 839 CMSP beneficiaries received county-funded alcohol and drug treatment services. This represents 8% of all individuals who received CMSP services in that period. Although alcohol/drug treatment cost data was not available, CMSP beneficiaries accounted for approximately 7% of all county-funded treatment episodes.

One would have expected the numbers of individuals treated for substance abuse to be considerably higher, both in absolute terms and relative to mental health. Our other data analysis efforts point to about one-third of the CMSP beneficiaries having some substantial substance abuse involvement. Moreover, unlike mental illness, substance abusers do not generally qualify for SSI. We would therefore have expected to have proportionately more, rather than fewer, substance abuse treatment clients on CMSP. In discussions with our key informants and with the planning team, the following factors were adduced to explain this:

- The County Substance Abuse program, being less well-funded than mental health, serves a smaller proportion of the total population in need.
- Substance abuse services are targeted to end-stage users, limiting the penetration of their services into the general substance abusing population.
- Due to the availability of Drug MediCal funding, and of additional funding for MediCal recipients through CalWORKS and the Partnership Health Plan, there are relatively few treatment slots for CMSP (or any other non-MediCal) clients. Other local dollars are used to leverage MediCal funding rather than to provide non-MediCal treatment slots.
- Because the CMSP beneficiaries do not have regular primary care providers, they are less likely to be assessed for substance abuse and referred into treatment.
- Because there is no central intake or appointment line for substance abuse, as there is for mental health, CMSP clients, especially those with cognitive, emotional, or physical impairments, encounter relatively high access barriers in obtaining treatment.

SECTION II: Qualitative Data Analysis

1. Overview of the data collection process

The overall purpose of this aspect of the planning process was to develop a more in-depth profile of the client population in terms of health access, health needs, and primary care compliance. In particular, the intention was to compare and contrast the "profiles" of the "mainstream" CMSP enrollees to the "high end" cost enrollees in order to determine if there are any significant differences between the two sub-populations and to identify ways in which both groups might be better served.

The investigative study entailed three parts:

1. Conducting focus group interviews with "frontline" providers – including eligibility workers, community clinic staff, and hospital providers.
2. Conducting individual interviews with "mainstream" CMSP enrollees randomly selected by the County Eligibility Office.
3. Carrying out a more focused and extensive examination of the 129 CMSP enrollees who collectively utilized 50% of total Solano CMSP resources in 1999.

2. Focus Groups with front-line providers

A. County Eligibility Workers

Two groups of Eligibility Workers were interviewed: 1) Hospital/Outstation Staff and 2) Intake Staff. The two groups were qualitatively similar in their feedback. Following are major highlights from their comments.

Characteristics of CMSP Population:

- Many middle aged men and women divorced and/or without family support.
- Elderly people, not yet 65, on fixed incomes with mounting health problems, but can't afford to see a doctor regularly.
- People who have lost their jobs and health insurance and have been turned down for other insurance because of "pre-existing conditions".
- People with fairly serious chronic health problems (diabetes, hypertension, heart conditions, etc.) who have no other way to pay for health services.
- People referred to CMSP who show up with emergency medical and dental problems and have no means to pay for services.

Major Problems:

- The "maintenance of need" level for CMSP eligibility is too burdensome for the working poor, especially since they are not allowed deductions for basic expenses like rent and utilities. The net results are extraordinary high "share of cost" levels for folks who are basically

poor. This becomes a serious deterrent for people to apply for CMSP or to seek appropriate medical services even after they are CMSP eligible.

- Enrollees are not given a thorough and detailed enough explanation about how to use CMSP, resulting in confusion and frustration.
- Too few doctors and dentists accept CMSP – this is largely because the time and effort to bill, along with the resulting small amount of compensation, does not make it cost effective.
- A comprehensive list of providers who accept CMSP (in County and out of County) is not provided to enrollees, which increases their frustration and confusion about the Program – and ultimately discourages use of preventative, primary care services.
- The County needs to develop a bilingual (English / Spanish) "notice of action" letter. Failure to do so results in many Latino clients being dropped from eligibility needlessly.

Possible Solutions:

- Simplify the whole process – strengthen explanations to clients, provide list of providers who accept CMSP, etc.
- Lower "share of cost" formula
- Provide free annual comprehensive health check up, annual mammo-grams, etc.
- Establish an assertive case management system for the most difficult patients.
- Develop a managed care plan, like HPC, for CMSP clients.

B. Community Clinic Staff

In addition to the focus groups with Eligibility workers, five key informant interviews were conducted with staff from Redwood Clinic, Solano County Clinic – Vallejo, Dixon Family Practice, Vallejo Planned Parenthood, and Sutter Solano Hospital. Many of their comments echo those of the Eligibility workers and will not be repeated. What follows are the additional highlights from the points of view of both primary care and hospital providers with regards to CMSP. (Complete summary transcripts can be found in Appendix 1.)

1. Redwood Community Clinic -- Vallejo

Characteristics of CMSP Population:

- About 50% of the CMSP people we see are working some type of job.
- Possible 70% use Redwood as their primary care provider, anyway – so we wind up managing their care. The other 30% tend to "jump around".
- There are a small percentage of CMSP clients whose lives seem to be in total disarray and they are non-compliant – but the percentage is not qualitatively larger than the general population.

Major Problems:

- The list of what CMSP covers is inadequate and often irrational in terms of fostering preventative care and health improvement. For example, CMSP diabetics cannot get a glucometer to monitor their blood sugar. Or, we encourage people to "suit up" and look for a job, but when they find one, CMSP won't pay for the required "health clearance physical".
- If CMSP clients require specialty care – it's extremely difficult to get them a referral. Most specialists refuse to take CMSP.
- Billing CMSP is difficult. CMSP claims are routinely rejected. When you factor in rejections, additional documentation, and the cost of appeals, clinics only average 10 to 20 cents payment on each dollar billed.

Possible Solutions:

- The majority of our CMSP clients would probably respond very well to a managed care plan as they are already compliant and trying to handle some chronic aliment.

2. Solano County Clinic – Vallejo

Characteristics of CMSP Population:

- Lots of them seem socially isolated. They live alone; have not spoken to relatives in a long time; they are loners.
- Folks with part time jobs that don't pay very well and don't offer any medical insurance.

Major Problems:

- For the male drug users, there seems to be little, if any, local drug programs that we can access realistically from the Clinic. The situation is a little better for women with those problems.
- Lack of transportation seems to be a big problem for many of the CMSP clients.
- We find that we have to refer most of the specialty care for orthopedics, EMT's, oncology, etc. – out of County, usually to U.C. Davis.

Possible Solutions:

- To encourage better primary care compliance, often we schedule pap smears, etc. or we limit the prescriptions to monthly "no refills", etc.

3. Dixon Family Practice Clinic – Dixon

Characteristics of CMSP Population:

- 70% of our clients are undocumented, or someone in their immediate family is, so even if they may have papers they are often afraid to apply. They wait until they are really sick.

Major Problems:

- For monolingual Spanish clients, especially, there is inadequate translation service, so appointments keep getting canceled and rescheduled at the last minute.
- Many of our patients forget to turn in their "reported income" every three months, so they keep getting kicked off CMSP and have to reapply again and again.

Possible Solutions:

- The majority of our working patients would probably be able to pay around $30 per month for a medical plan, so long as there was a low co-pay structure.

4. Planned Parenthood – Vallejo

Relevant History:

- A couple of years ago, Planned Parenthood faced some serious financial problems, we had to cut back a lot of our primary care services. As a result, today, we don't see as many CMSP clients as before. (The reimbursement rate is too low to allow us to do so.)

Characteristics of CMSP Population:

- There seems to be a difference in patient profile between Fairfield office and Vallejo office. In Fairfield, mostly folks in their forty's with no conspicuous substance abuse issues, whereas in Vallejo maybe half have substance issues.
- Overall, CMSP client base has a disproportionate number of "train wrecks" – people with multiple disorders and very thick medical charts.

Major Problems:

- CMSP does not cover abortions – even when the overall social family context makes it a very reasonable decision.

Possible Solutions:

- We need to provide these folks with all the medical care that they actually need. That's the only way to develop a genuine patient/primary care doctor relationship. That includes being able to make strong referrals to specialty care when required and collaborate with the specialty doctors in an ongoing fashion. Otherwise, CMSP clients will continue showing up at ER's whenever they feel we cannot handle their problem.
- In order to get tertiary specialists on board, CMSP will have to begin offering better reimbursement rates.

C. Hospital Staff

1. Sutter Solano Hospital

Characteristics of CMSP Population:

- Usually CMSP patients seem to be middle aged people, often with a history of switching doctors.
- The most common perception is that CMSP patients do not participate in their care – they do not have the lifestyles or resources to care for their health. They come to the hospital when things are already critical.
- The most difficult CMSP patients usually have untreated substance abuse and mental health issues in addition to their presenting medical illness. On top of that, many have severe social problems, i.e., homelessness, social isolation, etc.

Major Problems:

- The single biggest problem with CMSP patients is discharge dispositions. It is very difficult to provide referrals for follow up care.
- It also seems CMSP patients are "on again, off again" in terms of enrollment. This makes billing difficult; often the hospital does not discover that the patient has been dropped from CMSP until after they've been discharged.

Possible Solutions:

- Look to the County's Medi-Cal reform and the creation of PHC – possibly a portion of the CMSP patients could be incorporated into the Partnership Health Plan on a pilot basis for a year or two – then we could examine the outcomes and costs compared to CMSP.

D. Commentary

In the main, the providers interviewed had similar opinions about both the problems of the current CMSP program and ways to improve it. The contradictory comments and opinions were within normal range, since the participants in the focus groups and interviews were not asked to reach a consensus among them. Their comments were just accepted as given.

The major noteworthy difference seems to be between the general perception of the CMSP population held by the hospital providers compared to that held by the community based clinics and Eligibility workers. Hospital/ER staff tended to see (or at least remember) the more difficult, non-compliant CMSP patients – those who seem to disdain the use of preventative and/or primary care services. On the other hand, the Eligibility and clinic staff seem to stress more the difficulties/barriers encountered by CMSP clients -- whom they see as attempting to access primary care services with a very weak plan.

2. Interviews with "Mainstream" CMSP Clients

With assistance from the County Eligibility Office in Vallejo, 29 CMSP clients were interviewed – inquiring broadly into the state of their health, their experience with the CMSP program and their overall opinions and suggestions about it.

The sample was selected randomly. No consideration was made, in the selection, with regards to estimates as to whether people's experiences with CMSP might be positive or negative, whether their opinions might be supportive or critical, etc. They were assured that the interview would be confidential and that the interviewers were not County or CMSP employees. A $25 stipend was provided to each client participant.

However, a number of biases in the sample are noteworthy:

1. The interviews were conducted for the most part in Vallejo. Consequently, the sample may not fully reflect the characteristics and experiences of more rurally-based, "north county" CMSP enrollees.
2. The interviews were conducted between 9:00 am and noon on weekdays. Consequently, the sample may not fully reflect the characteristics and experiences of the portion of CMSP clients who work full or part time or might have major childcare issues.
3. The interviews were conducted at the County Eligibility Office. Consequently, people's access to transportation was a factor in their agreeing to be interviewed – those with no convenient means of transportation would be more likely to decline the offer.

However, interviews were able to be conducted in Spanish and Tagalog, as well as English. Consequently, culture and language bias – at least for Latinos and Filipinos – was not a major issue.

Characteristics of the Sample:

- Total number = 29
- 59% female, 41% male
- Average age: 47 – but the median age was 51 (i.e., the outliers were the younger people)
- 68% are living on their own without nuclear family support
- 45% Caucasian, 21% Latino, 17% African American and 14% Asian/Pacific Islander
- 45% reported "no income", 31% had full or part time employment, 17% claim some type of disability

Summary Highlights:

- The interviewers were asked to globally assess each CMSP enrollee interviewed in terms of their orientation and potential to utilize primary care services or participate in some type of health management plan. Significantly 80% of those

interviewed were ranked as being average or above average in terms of primary care compliance and the active desire to maintain their health.

- Among the sample, the average time on CMSP was only 2.6 years – the median time was even less, closer to one year. Although there is probably sample bias, nonetheless the finding reinforces the notion that CMSP is widely viewed as short-term, emergency coverage and not as a long term plan.
- 51% of the sample were dissatisfied with current CMSP structure and benefits.
- However, equally significant, 38% were, more or less, "satisfied" and felt that the program managed to cover their most pressing medical needs.
- In terms of hospital admissions, fully 79% report no hospital admits in the past year.
- On the other hand, almost 55% of the same sample report having had at least one ER visit within the past year. This finding suggests CMSP's overall weakness in terms of encouraging primary care oriented health maintenance, although a detailed chart review would be needed to determine what portion of the ER visits might have been adequately treated in a non-acute setting.
- Half of the CMSP clients interviewed reported having neither a primary care doctor nor a community clinic membership
- In general, the CMSP clients interviewed display little, if any, knowledge about County mental health services available to them. Ninety percent report no use of County Mental Health Services in the past year.
- The situation is even starker in terms of County substance abuse services. None of the sample reported any use of Substance Abuse Services in the past year.
- Although there is the obvious bias of "self report" – the CMSP sample interviewed displays levels of tobacco, alcohol and drug use that are no higher than might be anticipated among the general population or the MediCal population.
- However, when we factor in admitted "recent history" of alcohol and drug use (i.e., less than two years) – then the picture shifts dramatically. Among the CMSP clients interviewed, those with "current and/or recent history" of alcohol and drug use – the percentage stands at 38% and 31% respectively. That, of course, is significantly higher than the general population.
- Fully 52% of the sample reports that it was an ER visit or hospitalization that triggered their enrollment in CMSP.
- For 21% of the sample, their "triggering" hospital visit was a completely unanticipated illness, accident or injury.
- However, for 31% of those interviewed, they knew beforehand they had been neglecting a serious chronic illness – therefore their "triggering" hospital visit was anticipated and did not come as a complete surprise.

- Fully 75% of the 29 CMSP clients interviewed reported that they currently have concerns about some "serious chronic illness".

3. Chart Abstractions for Chronic High-Cost Clients

A. Introduction

Over a period of two months (November / December 2000) forty-two (42) charts were reviewed at Sutter Solano Hospital in Vallejo. The list was drawn from the 129 patients whose CMSP medical charges (in 1999) constituted a total of 50% of Solano County's CMSP expenses in the same year.

Sutter Solano Medical Records could locate only a portion of the "high cost 129" – approximately one third. Among these, a few were disqualified from the study for the following reasons:

1. The Sutter charts only showed services prior to 1999 – indicating that the patient's "high cost" status in 1999 was established at some other hospital.
2. The Sutter service records for 1998-2000 were too incidental to account for the patient's "high cost" status, suggesting that the bulk of service costs were incurred at some other hospital. (However, charts that could account for the high service expenses – even if they were not conducted at Sutter – were kept in the sample. For example, references in the Sutter chart that the patient was diagnosed at Sutter, but referred to UCSF Hospital in San Francisco for leg amputation were kept in the sample)

B. Methodology

A team of six RDA staff conducted the chart review. All reviewers underwent the same orientation and utilized the same template of screening questions in order to conduct the summaries and analyses.

The primary focus of the chart review was not medical (i.e., diagnoses, lab results, medications, etc.), but rather psychosocial, case management data. In the main, the review focused on admitting and discharge notes, as well as, social worker notes.

In conducting the summary analyses, all specific client identifiers were removed from the reviews and arbitrary numbers assigned to them.

Of course, the demographic profile of the sample could be calculated in a straightforward manner. However, because the *raison d'etre* of the whole chart review was to inform the basis for a number of proposed CMSP reform projects, the reviewers were called upon to make some judgement assessments based upon their global reading of each chart. The approach taken was relatively conservative – only a few "judgement assessments" were asked of the reviewers and the range of response options were kept limited. This is due to the fact that a chart review (without the benefit of an accompanying patient interview) can be extremely incomplete and composed of second and third hand information – especially in terms of estimating patients' potential attitudes and behaviors.

C. Findings

Demographic Statistics

- 40% female, 60% male
- One out of every three was currently married, living with spouse.
- Two out of every three were single – we utilized "single" as an all-encompassing category -- meaning no "significant other" identified. For the purpose of this analysis we dropped out whether the person was widowed or divorced, etc.
- Only two (2) of the sample were listed as "homeless", however currently the data collected regarding shelter is relatively vacuous and does not accurately measure people who may be marginally housed.
- 38% were listed as living without any family support to speak of – either "alone" (21%) or with roommates or in institutional settings.
- 62% listed living with some combination of "family". However 23% of those were living alone with only their wives or husbands. Significantly, 17% of those "living with family" were adults living with one of their parents – with the suggestion being that the parent was still in the care-taking role, not visa versa.
- Only 14% of the sample was listed as being employed at the time of the high cost illness in 1999.
- Another 17% reported being "recently" unemployed (within the past year or so, directly related to the illness in the majority of cases).
- 12% of the sample were in their 60s and could be considered "retired" (whether intentionally or not).
- Most significantly however, 55% were "chronically unemployed" – where little, if any, employment history can be detected in the charts … supporting the perception that the bulk of CMSP clients are at best marginally employed.
- The mean age for women was 45 years old, and for men, 47. In terms of outliers, the pattern in the sample (for both men and women) was similar – with a few "young" outliers (in their 20s) balanced by a few seniors (over 60). As a result, the median and mean statistics are very close: for women a median of 46 and men 47 years of age.
- Ethnically, the sample was 31% African-American, 26% Asian Pacific Islander, 29% Caucasian and 14% Latino. In terms of the ethnic profile of the County, the sample is over-represented in terms of African-Americans and less so for Asian Pacific Islanders. The lower percentage of Latinos in the sample is probably not a reflection of better health outcomes in that community, but rather a reticence to seek services due to possible residency issues.

Degree of Social Support

The relative degree of social support is an important indicator in estimating the potential case management burden. Not surprisingly, the sample overall suggests a

relatively heavy case management burden – approximately two thirds of the clients reviewed were judged as being either socially isolated or with very limited social support.

- 38% of the sample was judged, by reviewers, as having "broad social support". This was based upon considering family and living situations, as well as, chart notes indicating the degree of family consultations, visits from friends and relatives, etc.
- 40% were judged as being "somewhat isolated" or having a limited social support network. This was based upon chart indications that the client had only one other human being closely involved in their lives – usually a long-term mate or a parent.
- 21% of the sample was considered "socially isolated". This was based upon no identifiable social support or evidence of any reliable, supportive relationships.
- Together, the clients judge by the reviewers as being socially isolated or having limited social support constituted 61% of the sample.

Primary Diagnoses

Identifying the primary diagnosis was a global judgement by the reviewer after completing a survey of the patient's complete medical chart – in some instances spanning treatment services over a number of years. "Primary" was assigned to the illness that, either at initial presentation or eventually over time, emerges as the primary acute disorder that was treated (and billed).

The diagnoses were then grouped into four (4) categories. The categories themselves were determined based upon the investigating motive of the chart review – to examine the medical treatment profiles of the 129 CMSP "high cost" clients in order to test the viability of two possible CMSP reform proposals: 1) establishing a substance abuse assessment and treatment benefit and 2) establishing an aggressive case management model to intervene with high cost clients.

- Category 1: "Drug/Alcohol Disorder" – This usually was not the formal diagnosis, but was the overwhelming condition noted in the medical chart as framing all the other medical illnesses … implying that the patient repeatedly came into the hospital in such a degree of intoxication or acute withdrawal, that it had to be highlighted in the charting.
- Category 2: "Chronic Physical Disorder, Manageable in Non-acute Settings" – i.e., diabetes, asthma, angina, etc. For this sample, many of the hospital episodes were quite serious (in some instances, end stage), yet a large portion of the care and maintenance still could be accomplished as well, if not better, in a non-acute setting.
- Category 3: "Catastrophic, Acute Medical Problem, Unanticipated" – i.e., head trauma secondary to an accident, stabbing secondary to a fight, bone cancer detected in an otherwise young, healthy male, etc. The significance of this category is that, even in an improved CMSP program, one would anticipate incidents that could not have been prevented and a general course of treatment events that would probably remain the same, qualitatively.

- *Category 4: "End Stage Medical Condition, Irreversible at Time of Presentation"* – i.e., usually metastasized and/or highly resistant cancer. The significance of this category is that, even with aggressive case management intervention, the course of treatment events and medical outcomes would have also remained essentially unaltered.

Only 11% of the sample was identified with a primary diagnosis of alcohol and/or drug addiction. However, it is widely agreed that many patients with alcohol or drug problems do not get assessed and/or diagnosed in acute care settings – this certainly was the case for this sample. Consequently, the 11% is more representative of late stage alcoholics and addicts – where the problem is obvious even without an assessment. Therefore, the portion of clients warranting referral to substance abuse treatment would probably be larger if routine assessments were to be conducted.

Fifty-two percent of the charts reviewed were categorized as having primary diagnoses that could be managed (at least partially) in non-acute settings.

Seventeen percent were catastrophic illnesses that could not have been anticipated. Therefore the bulk of the initial acute care medical costs could not have been avoided, even though subsequent follow up care might be better managed.

Slightly under 20% of the sample were at a terminal, end stage of their disease when they presented at the hospital. While it is possible to speculate that better primary care and earlier intervention might have prevented or slowed the course of medical events – it would have little practical effect on the situation at hand.

However, the sample considered as a whole, approximately two out of three (63%) of the patients could have been treated (to some degree) in a non-acute setting – resulting in possibly better medical outcomes and lower costs.

Primary Care Provider

The chart review attempted to determine whether or not the patient had a primary care provider (PCP). However, this too required some judgment on the part of the reviewers – do to the fact that often referrals to PCPs are based solely on patient's self report (with no collateral contact, especially in the ER), as well as, "risk management" discharge charting practices to insure that some aftercare, follow up referrals are noted.

Therefore, the reviewers attempted to categorize the answer in five (5) groups:

1. Primary Care Provider – with evidence in the chart that an actual ongoing treatment relationship existed, i.e., notes of collateral consultations, etc.
2. Primary Care Provider – Perfunctory, i.e., no supporting evidence in the chart suggesting that the patient's relationship was anything other than incidental and sporadic.
3. Clinic PCP – same criteria # 1.
4. Clinic PCP – Perfunctory, same criteria as #2
5. No PCP – the patient could not identify a PCP.

- Two out of three (69%) of the sample have either no PCP or their relationship to their stated PCP appears to be perfunctory.
- 45% of the charts surveyed state that the patient has no PCP whatsoever.
- 31%, however, did appear to have a PCP at the time the bulk of their acute care services were delivered.

Evolution of Coverage

We attempted to measure the migration of coverage from CMSP to MediCal/SSI. Generally speaking, charting information regarding insurance coverage tends to be incomplete and often inconsistent. Nonetheless, the reviewers attempted to categorize "coverage evolution" into three groups:

1. SSI completed – i.e., in the review period (1998 to fall 2000) the patient's application for SSI had been approved and coverage shifted to MediCal / HPC.
2. SSI pending – i.e., in the review period there are references to the fact that an SSI application has been filed, but is under appeal and/or has not yet been approved by the time of the review.
3. CMSP only – i.e., no mention of any attempts to transition the patient to SSI / MediCal coverage. These patients' billing status often alternates between CMSP and "self-pay".
    - 57% of the sample charts indicate no migration in the direction of SSI/MediCal.
    - 43% of the charts indicate efforts to shift treatment coverage to SSI/MediCal.
    - 17% of the sample succeed (over the course of the review period) in getting permanent disability status.
    - 26% of the charts indicate that the SSI process is still pending.

Reform Potential

We attempted to estimate whether the medical treatment profiles of the sample of charts reviewed generally matched and supported the proposed CMSP project reforms or not. This judgement was primarily a function of the nature of the Primary Diagnosis, although it included a global consideration of the information in the chart, as well.

The categorization fell into three (3) groupings:

1. Yes, definitely a match with the proposed CMSP reforms
2. Yes, somewhat of a match
3. No, CMSP proposed reforms would have little, if any, impact on the case.
    - 48% of the charts reviewed indicated a medical treatment profile that would "definitely" be improved with a stronger CMSP substance abuse screening and treatment benefit and/or an intensive case management program.
    - 35% have a medical treatment profile that might "somewhat" be improved by the project reforms mentioned above. In general, these are cases where the primary illness is in relatively advanced stages. Therefore, even with CMSP reform, it

would be unlikely that acute care costs could be totally eliminated or even significantly reduced.

- 17% of the sample were judged as being either terminal and/or catastrophic (unanticipated). Therefore, CMSP reform would have little qualitative impact on either the course of medical events or the costs.

Compliance with Medical Regimens

Lastly, we attempted to estimate the likelihood that the patients whose charts we reviewed would be co-operative with the proposed reforms or not. Obviously, this was a difficult judgment. There was no single factor that helped determine the assessment. Rather it depended on the "total picture" that emerged about the health-seeking concerns of the client and their immediate support network, the past history of compliance or non-compliance, etc.

The charts were grouped into the following categories:

1. Yes, the patient would definitely cooperate
2. Yes, it was probable the patient would cooperate, at least somewhat
3. No, it was unlikely the patient would cooperate
4. No, the patient would definitely not cooperate

- Roughly half of the sample (55%) was ranked as being cooperative. 17% "definitely" and 38% "somewhat"
- On the other hand, about a quarter of the sample was ranked as likely to be non-cooperative and resistant – even when substance abuse and case management services were offered and easily accessible.
- For almost 20% of the sample, the question was moot – since the patient had either expired or was near death.

SECTION THREE

Initial Ideas for Programmatic Reform of CMSP

1. Assertive Case Management of Clients with High Cost CMSP Diagnoses:

A. Background

As shown above, most of CMSP expenditures are concentrated on acute care services, and these acute care services tend to be concentrated on a small number of clients every year. Moreover, many CMSP clients may not be compliant with disease management regimens, and the fiscal structure of CMSP itself discourages outpatient follow-up care. An essential element of any CMSP reform initiative must include gaining control over these high-end outpatient costs.

B. Recommendation

We are proposing a pilot initiative to provide Assertive Case Management for a targeted population of CMSP clients with high-cost high-risk diagnoses. Elements of this pilot would include:

1) Determine from the highest cost CMSP diagnoses a subset proven to respond positively to non-acute, primary care maintenance.
2) Develop a surveillance system in which those CMSP clients who present with these illnesses can be identified and enrolled in a comprehensive case management system.
3) Implement an assertive treatment model in which case managers work in the field for relapse prevention. Case managers must be provided with resources to address issues that can impact re-hospitalization, including health and dental care, housing, transportation, mental health services, and alcohol and drug treatment.
4) Financial incentives for compliance with medical regimens.

Clients would be assigned to an assertive case management caseload at the beginning of the first hospitalization or emergency room visit with a targeted diagnosis. If the client agreed to participate, discharge planning and utilization review would begin immediately with a view to shortening the initial period of stay (by good discharge planning and effective advocacy) as well as preventing rehospitalizations. The overriding purpose would be to avoid or minimize repeat hospitalizations. A rigorous evaluation would document the cost-benefit of this intervention.

2. Substance Abuse / Mental Health Focused Proposals

A. Background:

It has been recognized for a long time that people with severe, late stage, substance abuse problems also have relatively poorer health outcomes and relatively higher utilization of emergency/acute care services (compared to the general population). This co-relation becomes more pronounced as these individuals age (i.e., over 40). In particular over the past twenty years, skyrocketing medical costs have served to gradually force the issue of "health costs secondary to substance abuse" to the top of the policy agenda.

As a direct result, there has been the establishment of an increasing number of health maintenance/case management models for chronic substance users (especially with the onset of the HIV epidemic), as well as, hospital / clinic based substance abuse assessment and intervention models.

Our data analyses—both quantitative and qualitative—indicate that many of the high-cost CMSP conditions are consequences of substance abuse. However, by the time substance abuse problems begin to present themselves as serious physical health problems, they are usually at an advanced stage. Consequently, in addition to compulsive alcohol and/or drug use, the person is frequently socially isolated and possibly socially unstable (homeless, no income, etc.) as well. Furthermore, the person often presents with a host of co-morbid, mental health issues that are difficult to unraveled from the substance abuse disorder without a substantial period of abstinence. Each of these factors has implications for the individual's ability to comply with medical regimens.

B. Recommendations

We are recommending two interventions that are very different in ambition and methodology:

1) The first recommendation adopts a harm reduction approach for a very targeted group of clients. Needle use appeared to be clearly implicated among the most costly diagnoses. However, currently, although CMSP does pay for methadone treatment in some counties, there is no methadone program in Solano County and CMSP will not pay for methadone treatment in neighboring counties. We are proposing one of two options:

   (a) Establish a methadone program in Solano County;

   (b) Seek CMSP waivers to pay for transportation and treatment for Solano County clients at a methadone program in a neighboring county. This would include van-based transportation to and from the program for identified users. It might also include compliance incentives for participants and tied to the assertive case management program discussed in Recommendation 1.

3) The second recommendation involves a systemic reform to develop more effective referral and treatment systems for CMSP beneficiaries who are alcohol or other drug abusers. This would include a more carefully crafted CMSP Mental Health/Substance Abuse benefit for those clients (self- identified and/or provider assessed) as having an early or moderate level substance abuse problem. This project would entail:

   (a) Incorporating screening, assessment, referral, and follow-up into the practice of hospital emergency rooms, acute care institutions, and front-line primary care providers;

   (b) Reexamining the current menu of County substance abuse programs with an eye towards expanding outpatient/day treatment options (with adjunct dual diagnosis services available). This expansion could/should be funded on a pilot basis through cost savings from reductions in inappropriate emergency room use.

   (c) Rigorous evaluation of cost-benefit.

3. Systematizing Public Health Nursing Follow-up

A. Background:

There is a great deal of inappropriate emergency room use in the CMSP system. Partially, this is a result of the fiscal irrationalities of the system that reduce primary care access and thereby promote use of emergency rooms for episodic outpatient care. However, our interviews revealed lack of understanding of chronic disease management, healthy lifestyles, and methods for accessing primary care or finding primary care providers.

B. Recommendations

We are proposing that a system that will provide at least one targeted Public Health Nursing Visit to each CMSP beneficiary who visits an emergency room for a condition that would be better treated in a primary care setting, and for each beneficiary who is diagnosed with a condition that would benefit from education and referral related to chronic disease management. We feel that this position could be funded by blended a variety of payment sources, with supplemental revenue from CMSP cost-savings. Also included in this would be maintenance and distribution (in English and Spanish) of regularly-updated lists of CMSP primary care providers who are accepting new patients.