PSYCHOPHARMACOLOGY NEWSLETTER

Bay Area

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THE IMPACT OF ATYPICAL ANTIPSYCHOTICS

Douglas DelPaggio, PharmD., MPA, Director of Pharmacy Services, Alameda County Behavioral Health Care Services

Recent literature indicates that the use of the newer antipsychotics may result in reductions in overall health care expenditures, increases in ambulatory services and improved clients' health care outcomes. Both Viale et al. and Carter et al. measured inpatient and outpatient costs, as well as medication costs, both before and after risperidone initiation. Using a comparable mean, the studies both documented a reduction of inpatient services and a shift towards lower costing outpatient care after initiation. Viale documented a monthly net cost increase of $31 after risperidone initiation, whereas Carter's study group had an overall monthly cost saving of $61. Blieden et al. examined the effects of clozapine treatment in a state hospital facility on costs, health status of clients, and discharge rate. For the clients who continued on clozapine for 6 months, there was a monthly savings of $1,911per client, and improvements on outcome measures such as the BPRS, the Negative Symptom Assessment, Hamilton D, and Quality of Life Scales. In addition, the discharge rate from the facility was higher for the clozapine group, as compared to those who discontinued the medication.

Unfortunately, these newer agents are costly. The average olanzapine prescription cost for Alameda County BHCS is $310, as opposed to haloperidol at $4. These four newer agents will cost ~$350,000 in 1998, nearly 50% of our total medication budget. To document improved efficacy and evaluate costs for our Alameda County clients, the Office of the Medical Director initiated a prospective study in November of 1996 to study client symptom change, service utilization and health care expenditures in patients started on atypical antipsychotics.

Douglas DelPaggio, PharmD., MPA, Director of Pharmacy Services

The BHCS study used the mirror image design to contrast costs and efficacy before and after initiation of the newer antipsychotics. The six-month period pre-index (prior to the start of the newer antipsychotic) and six-month period post-index (after the initiation) were studied using the pharmacy system data for pharmacy costs, and Insyst data system to track service cost. In addition, each client's psychiatrist prior to medication initiation and quarterly there after scored two symptom outcome measures, the Positive and Negative Syndrome Scale (PANSS) and the Abnormal Involuntary Movement Scale (AIMS).

The PANSS consists of three sub-scales to measure the severity of schizophrenia: the Positive Symptom, Negative Symptom and General Psychopathology scales. Both the total Negative Symptom scale scores were used to measure antipsychotic efficacy during the post-index period. The AIMS measures symptoms of tardive dyskinesia, a debilitating movement disorder caused by conventional antipsychotics. Each client had their movements assessed by their psychiatrist using this scale throughout the post-index period.

Due to limited prescribing of the other new agents, only risperidone and olanzapine were included in this study. Because all MediCal clients' prescriptions are processed by the state, only non-MediCal clients receiving these agents through the BHCS Pharmacy System were enrolled with prescription information available through our Pharmacy System. The main questions posed were: would these agents 1) improve symptoms, 2) reduce high cost services, and 3) reduce overall expenses even though they cost more than older, cheaper medications? The following data pertains to the 28 clients in the risperidone arm of the study, and 46 olanzapine clients.

Although both risperidone and olanzapine were more expensive in the post-index phase as medications (Table #1), when all services were included, risperidone was associated with a slight cost increase of ~$275 monthly per client. Olanzapine was associated with a reduction of overall costs by ~$300 monthly per client.

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INSIDE THIS ISSUE

From the Editor...

As we enter our second year of publishing Bay Area Psychopharmacology Newsletter I would like to express my appreciation for the hard work of the editorial board which has lead to the successful launch of a regional update on psychopharmacology for community psychiatrists. I am particularly grateful to Sue Contreras for all her hard-work editing and doing the layout on the newsletter.

This edition we introduce a new regular feature: "Drug Information Consultation". If you have a specific psychopharmacology question you can now get a thoroughly researched answer from a team of clinical pharmacists and psychiatrists. The staff for this feature have access to several databases, including material that is not available from Medline. Each quarter the most interesting question or questions will be published in the newsletter.

Finally, I would like to encourage you to send me your comments or questions about the newsletter, at forster@itsa.ucsf.edu".

Peter Forster, MD
Medical Director, Community Mental Health Services, San Francisco County

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The olanzapine clients had a higher pre-index cost of all services due to a greater rate of client hospitalization (3.5 days per client) as opposed to risperidone (< 1 day per client) This difference may be attributed to the transition to treatment teams and the BHCS focus on high utilizing clients which coincided with FDA approval of olanzapine in late 1996.

Although risperidone clients had a slight increase in inpatient hospitalization days in the post-index period,(Table #2) there was a tendency to use less acute outpatient services such as outpatient visits, day treatment, vocational training and medication visits. Most striking are the dramatic increases in outpatient services, vocational training and medication visits, which increased significantly in the post-index period.

With olanzapine initiation, there was a large drop in inpatient hospitalizations by 74%, (Table #3) correlating with a significant cost reduction per client, as well as a decrease in crisis visits. The data also showed increased utilization of outpatient services and client stabilization with an increase in outpatient services. Both agents demonstrated higher use of lower costing, ambulatory services in our system, and an increase in visits to higher functioning training programs.

Table1 **COST PER CLIENT PER MONTH**

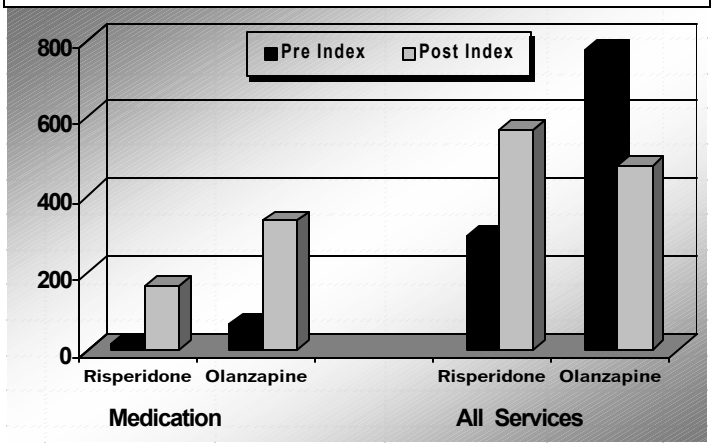


Table 2 **RISPERIDONE: # VISITS vs SERVICES**

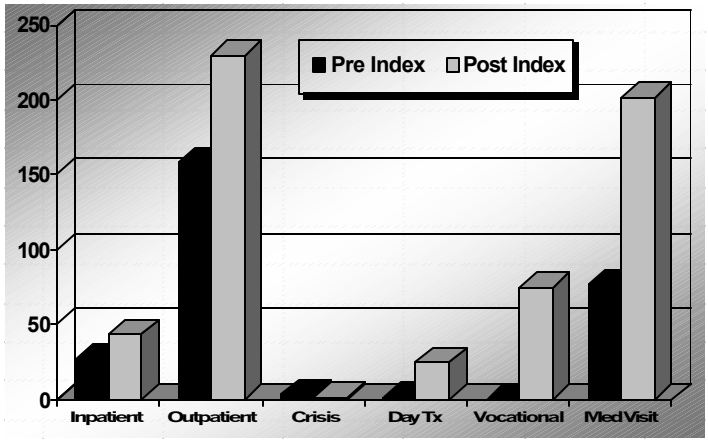
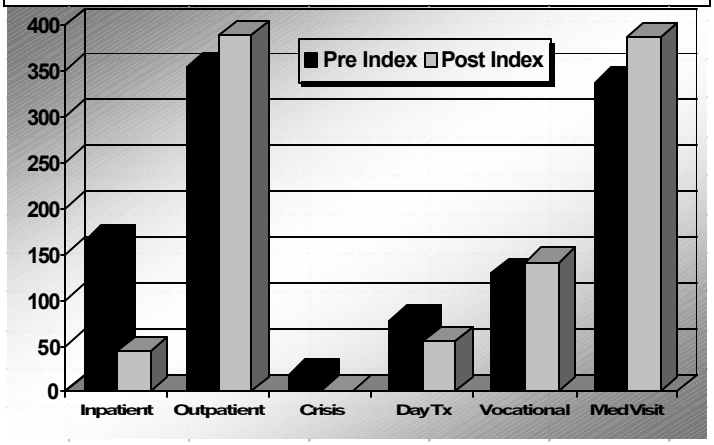


Table 3 **OLANZAPINE: # VISITS vs SERVICES**



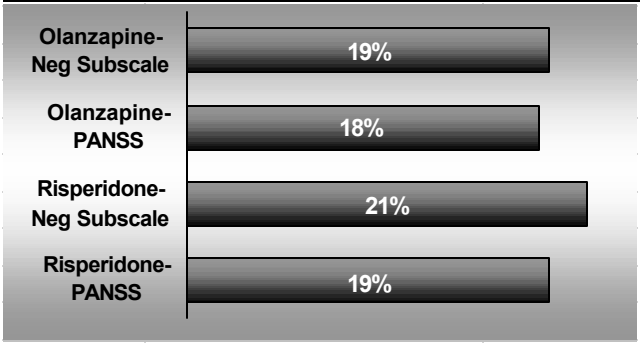
Both atypical antipsychotics had a major impact on the symptoms of schizophrenia. Almost 85% of the clients in each arm of the study had scale scoring (PANSS, Negative Subscale, AIMS) completed by their respective psychiatrist. Listed in the table are the mean scores both prior to and post initiation of each antipsychotic.

Risperidone Mean	PANSS	Neg Subscale	AIMS
Prior to Initiation	86.09	24.57	6.57
After Initiation	69.74	19.43	5.86
Olanzapine Mean	**PANSS**	**Neg Subscale**	**AIMS**
Prior to Initiation	80.77	22.18	9.21
After Initiation	65.92	17.87	2.64

As measured by the PANSS, there was an average decrease (improvement) in scores of almost 20% (Table #4) with both agents. This documents improvement in client symptoms with both of these agents. In addition, the symptoms measured by the negative subscale were also decreased by an average of about 20%. The impact on these formerly treatment resistant symptoms is a major benefit of the newer antipsychotics compared with conventional agents. Although few clients had symptoms of tardive dyskinesia, both agents showed an average reduction in the AIMS scores, pointing to symptom reduction.

In conclusion, our study supports the use of the higher costing newer antipsychotics due to their impact on resistant symptoms, client services, and overall costs. Both agents reduced symptoms of schizophrenia, and associated negative symptoms. Currently, olanzapine demonstrates an overall cost savings of ~$300 monthly, and risperidone, a cost increase of $275 monthly. The reduction of costly services and client stabilization offset the price of these medications. Risperidone's cost increase may be due to the smaller sample size in the group, and lower pre-index cost for these clients. The study will be continued over the next 12 months for additional clients and data.

% REDUCTION PANSS/NEG SUBSCALE
Table 4 **PRE-INDEX AND POST-INDEX**



ALAMEDA COUNTY
BEHAVIORAL HEALTH CARE

BHCS MIA MEDICATION PROGRAM

Richard P. Singer, MD, Medical Director
Douglas DelPaggio, PharmD., MPA, Director of Pharmacy Services

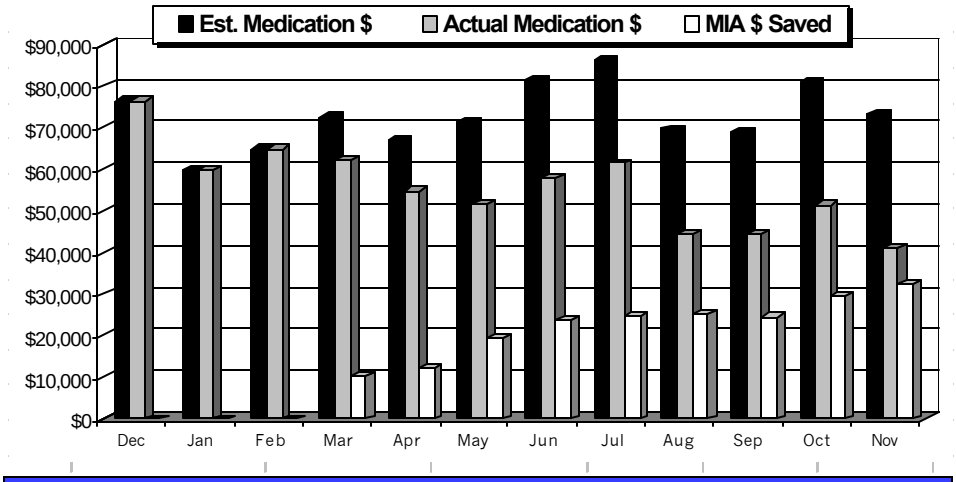
Implemented in February 1998, the BHCS MIA Medication Program coordinates the drug companies indigent medication (MIA) programs with our clients, clinics and pharmacy network. There are two components to our MIA Program. For the short term, medication vouchers offer a 7-30 day supply of drug, whereas bulk medications offer a renewable 3-month supply of drug. Initially, medication vouchers are used with our non-insured clients, until the application is processed by the drug company, and bulk medications are shipped.

On a county wide basis, this program has deferred the costs of prescribing expensive newer medications for non-insured clients to the drug companies' indigent patient programs. The application process is both time and labor intensive, requiring complete financial information, documentation, and signatures. In addition, each drug company has a different program to provide medication to the indigent population. We are currently coordinating five different MIA programs and, as of December 1998, have processed over 125 MIA applications.

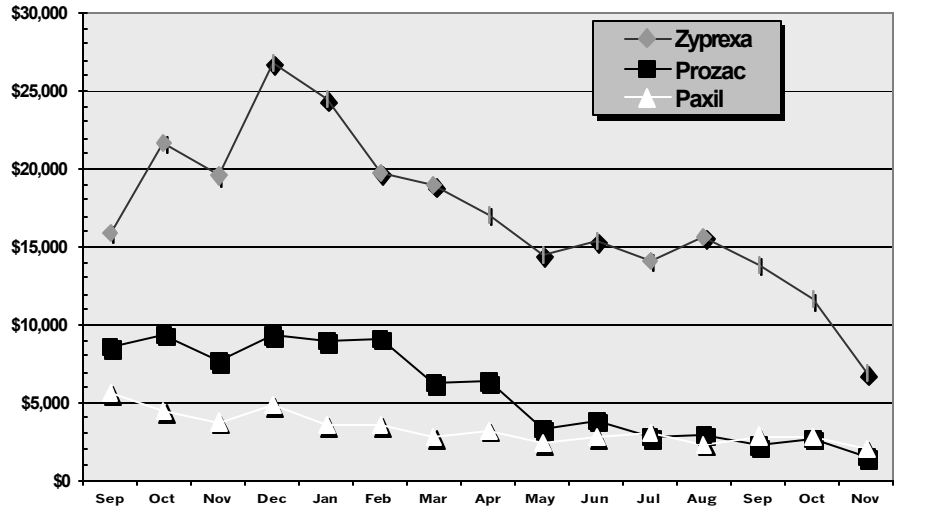
Each BHCS Mental Health Program has a corresponding network MIA Pharmacy in which to directly work. Our BHCS Psychiatrists must attach a medication voucher to each client prescription, until the bulk medication application is completed, and the drug is shipped. United Parcel Service (UPS) plays an integral role in both delivering the bulk medication from the drug company to the program, and then from the program to the assigned MIA Pharmacy. In addition, UPS will deliver the labeled medication to the client after pharmacy dispensing. The BHCS MIA Medication Program is coordinated through our pharmacy system, run by our Director of Pharmacy Services.

The medications included in this program are the top costing psychoactive medications for BHCS: the newer antipsychotics (Zyprexa, Risperdal, Clozaril) and antidepressants (Prozac, Paxil). In 1997, these five agents accounted for almost 65% of the total medication budget, approximately $460,000. For 1998, we have deferred over $225,000 to the drug manufacturers through the BHCS MIA Program, at an average rate of $25,000 monthly (Budgeted Cost Comparison Chart). The dollars spent on antipsychotic Zyprexa have dramatically decreased from a monthly high of $27,000 to $7,500 a decrease of over 70% (Medication Cost Comparison Chart). Furthermore, the monthly medication costs for both Paxil and Prozac have dropped almost 75% through this program.

BUDGETED COST COMPARISON 1997-1998

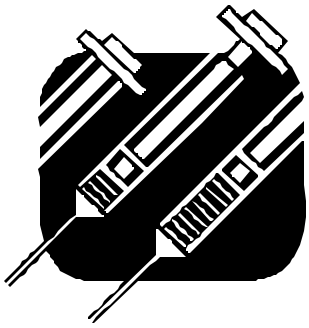


MEDICATION COST COMPARISON 1997-1998



BODY FLUIDS IN ACTION

Working with the Psychiatric Practices Committee since October 1995, this Office has established various guidelines, protocols and standards related to our medical practice in Behavioral Health Care Services. Just when you think you've pretty much covered it all, something else invariably pops up (no pun intended), this time involving the management of needle sticks and other body fluid exposures.



The Alameda County Medical Center does have a procedure for responding to the accidental exposure to blood and other body fluids which has been available to BHCS outpatient sites as well. We are in the process of modifying it, however, for more specific application to our own structure. In addition, as we have introduced on site testing for alcohol and other drugs, we now need guidelines for the appropriate handling of specimens and specimen containers at our Community Support Centers. Development of this is occurring and after review by Human Resources, the guidelines and procedures for all of the above will be distributed.

BHCS PHARMACY SYSTEM: EFFICIENCY, EFFECTIVENESS AND COST AVOIDANCE

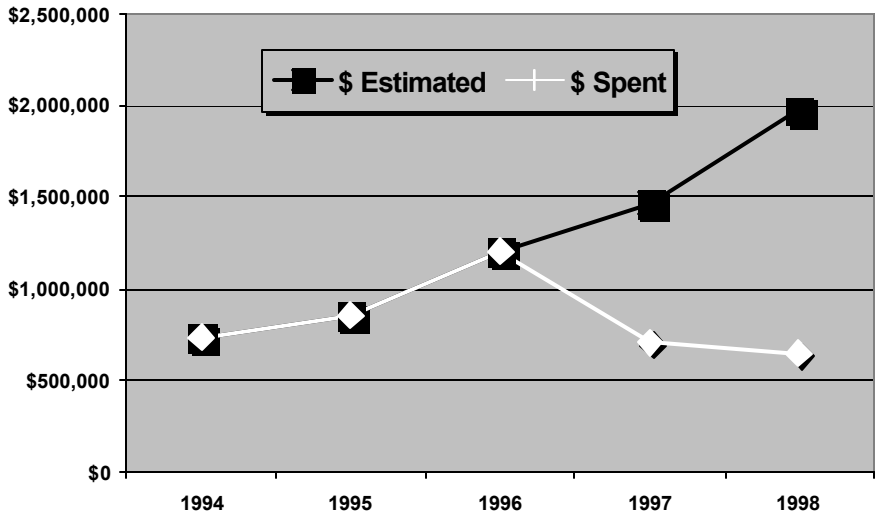
Prior to the implementation of the BHCS Pharmacy System, medication costs were rapidly escalating at an average rate of 130% times of the previous year's costs. BHCS medications costs rose to over $1.2 million in 1996 (see chart below). Furthermore, Zyprexa, the newest, most expensive antipsychotic agent was approved by the FDA in October 1996, and forecasted to increase drug costs by an additional 30-50%. To reduce these expenditures, and to facilitate medication services, a Pharmacy Benefit Management (PBM) company was contracted in late 1996, coordinated by our BHCS Pharmacy Director. Other challenges included increasing client access to medications, number of network pharmacies, and programs covered.

Over the past two years, the BHCS Pharmacy System has effectively addressed these challenges, as well as resulted in a large cost avoidance. This system provides access to psychiatric medication and pharmacy services for the chronically mentally ill people of Alameda County that are indigent. From the limited coverage previously offered, the Pharmacy System has expanded medication services to all 18 mental health clinics and to all 16,000 clients receiving services through BHCS. To improve pharmacy access and support medication compliance, an expanded network of 46 strategically located pharmacies, medication delivery, language specialty sites and extended hours were implemented.

Delivery services have been arranged to transport medications from the pharmacy to the client's home, living shelter or clinic where services are coordinated. In an effort improve the quality care to all clients, medication dosing ranges, a medication formulary system, and medication Practice Standards of Care were established. By designing and maintaining a Medication and Pharmacy User Guide, the dissemination of information is facilitated to all practitioners.

Financially, the pharmacy system has provided uniform reimbursement and correct payer source billing. By correcting the billing alone, the pharmacy budget has reflected a cost avoidance of over $500,000 in just the first year of the program. In addition, through the BHCS MIA Medication Program, over $225,000 additional dollars have been saved. Overall, since the system's inception, almost $2,100,000 has been avoided (Table #1). Results of these savings include treating more clients, open access for the use of newer, higher costing medications, and continuing open services for the chronically mentally ill in Alameda County with limited funds.

BHCS MEDICATION COSTS



San Francisco County
Community Mental Health Services
The San Francisco Mental Health Plan

1998 CMHS FORMULARY CHANGES

Herb Leung, Pharm.D.
Co-Chair of the CMHS Formulary/Utilization Review Subcommittee

The Formulary/Utilization Review Subcommittee of the CMHS P&T Committee had a very busy and productive year for 1998. In addition to the on-going work on atypical antipsychotic access, the Subcommittee reviewed and recommended to the CMHS P&T Committee and the Medical Director the addition of a number of drugs to the CMHS formulary. The following agents were added to the CMHS formulary for indigent patients in 1998:

Formulary (available without restriction)

- Eskalith CR (slow release lithium carbonate) 450mg tablet
- Effexor IR (immediate release venlafaxine) 37.5, 50, 75, 100mg tablets
- Lithobid (slow release lithium carbonate) 300mg tablet
- Tenormin (atenolol) 50mg tablet
- Nardil (phenelzine) 15mg tablet
- Remeron (mirtazapine) 15mg, 30mg tablet

Formulary (requires registration through Pharmacy Services)

- Clozaril (clozapine) 25mg, 100mg tablet as second line antipsychotic
- Risperdal (risperidone) 1mg, 2mg, 3mg, 4mg tablet as first line antipsychotic

Agents Reviewed in 1998 (although remaining on TAR status)

- Alprazolam
- Amoxapine
- Bethanechol
- Trimipramine
- Wellbutrin SR (slow release bupropion)
- Pimozide
- Protriptyline
- Tranylcypromine (Parnate)
- Effexor XR (slow release venlafaxine)

The decision of the P&T Committee and CMHS Medical Director were to keep these agents on "prior treatment authorization or TAR required but available" status. Some of the justifications were, for example: insufficient evidence to support efficacy that is equal or superior to existing formulary agents; potentially significant and/or difficult to manage adverse effects; unacceptable cost-benefit ratios; the need to maintain formulary consistency with other formulary systems, such as Medi-Cal and CHN; significant abuse potential; and lack of a necessary work-up, assessment; monitoring or concurrent treatment with other treatment modality(ies) necessary for the agent to be effectively used.

The following agenda items are on the Subcommittee's 1999 schedule:

- Clinical guidelines for Dextroamphetamine and Methylphenidate for the treatment of ADHD in child services
- Neurontin (gabapentin)
- Lamictal (lamotrigine)
- Celexa (citalopram)
- SSRI antidepressants

If you would like to receive a copy of the CMHS Formulary, please contact Pharmacy Services at (415) 255-3659.

TAR PROCESS BEING CHANGED TO PAR PROCESS

Chris Woodside, CMHS Pharmacy Services

CMHS Pharmacy Services is currently revising the treatment authorization request (TAR) process for physicians who are requesting non-formulary, but available medications, such as the atypical antipsychotics olanzapine and seroquel, for indigent SFMHP patients. The goal is to clarify a process that has become unsystemitized. Because the existing policy (requiring, for instance, filling out several forms to get atypical antipsychotic approval) is complicated it hasn't always been followed. Also, spot surveys show that some patients who do have Medi-Cal are getting charged to our limited indigent funds.

The new PAR process begins in February and will include eligibility verification prior to approval. Through the PAR process, Pharmacy Services' staff will verify that the client and prescriber are enrolled in the SFMHP and verify that the client is indigent (rather than Medi-Cal eligible). Then a clinical pharmacist will call the physician back and conduct a standardized clinical review. The clinical pharmacist will then approve or deny the request. The goal is for this process to occur in 20 to 30 minutes.

If there is a problem, such as the client and/or prescriber are not enrolled in the SFMHP, or the client is Medi-Cal eligible, the physician will be notified and other options will be discussed.

The PAR process is intended to ensure that: eligibility verification is included in the process and a standard process for clinical review occurs. Prior to implementing the PAR process, all SFMHP Prescribers and Program Directors will receive information packets and forms about the process, as well as a copy of the current CMHS Atypical Antipsychotic Guidelines.

A simpler Atypical Antipsychotic Registration process is currently in effect for risperidone

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TAR PROCESS CHANGED TO PAR PROCESS

Continued from page 3

and clozapine. Both of these agents are available on the SFMHP Formulary by registering with Pharmacy Services through the telephone, mail, or fax. This process takes ~10 minutes and the same eligibility verification steps occur *after* registration is completed.

CMHS is collecting eligibility information through the PAR and Registration process in order to identify indigent patients who appear to be eligible to receive Medi-Cal benefits. CMHS and a third party provided by Janssen Pharmaceutica are then helping to enroll these clients in Medi-Cal in order to ensure that they receive all the medical services that they qualify for .

LABORATORY TESTS AVAILABLE WITHOUT A TAR

Psychotropic Medication Monitoring: haloperidol, valproate, carbamazepine, clozapine, amitryptiline, nortryptiline, desipramine, imipramine, lithium

CBC, platelet and absolute neutrophil count

EKG with interpretation

HCG Qualitative - Urine

Liver Function Panel: GGT, AST, ALT, Total Bili, Total Protein, Albumin

Hepatitis Panel

Electrolytes, glucose

Ca, Po4

BUN, Cr

B12, Folate

Treponemal Antibody

Amylase

Urinalysis

Thyroid Functions: Hypothyroid Panel: TSH, T3 Uptake, Total T 4, Free T 4 Index (or Free T 4 instead of Free T4 Index and T3 Resin Uptake)

Total T3

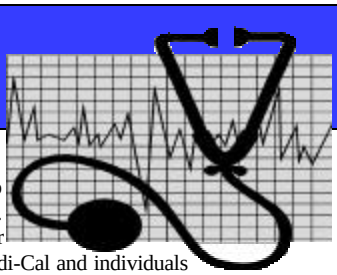
Medical drug panel: Urine

ESR

Ammonia

Testosterone, FSH, LH

From the Medical Director...



Peter Forster, M.D.

In this column I hope to update you with some issues that relate to psychiatric practice within the San Francisco Mental Health Plan. As you know, the plan is an ambitious attempt to provide a better quality of mental health care to patients in San Francisco with Medi-Cal and individuals who are poor and without mental health insurance. San Francisco is the only county in California that has tried to extend mental health coverage to both Medi-Cal and indigent individuals. I am proud to be a part of this effort.

These last few months we have been attending to laboratory services, clozapine use, setting up a community mental health Grand Rounds series, establishing a California-wide committee of medical directors to improve the quality of community psychiatry throughout the state, and strengthening the relationship between psychiatry and primary care.

Several months ago, a small workgroup was setup to improve the quality of laboratory services. A laboratory formulary has been developed and approved (see below) and extensive discussions took place with our existing laboratory service provider for indigent patients (SmithKline Beecham) and other potential providers. Unfortunately, these discussions did not lead to an agreement. At this point we have a pricing agreement, but no service agreement with SKB. Over the next two months Dr. Eun Joo Lee Justice will be devoting some time to trying to resolve this impasse. If any of you have suggestions for how to improve services, please contact me at (415)255-3430 or email me at "forster@itsa.ucsf.edu".

It appears from the information that we have (primarily information from our clinics and from indigent clients) that clozapine usage is too low in San Francisco. There are approximately 4000 schizophrenic patients in treatment in the SFMHP, but less than 50 are being treated with clozapine. A reasonable minimum for use, based on studies of the number of patients who meet criteria for treatment resistance, would be closer to 400 patients (or 10%). A workgroup of psychiatrists and pharmacists has been working together to identify and remove barriers to treatment. We currently have four clinics that are providing clozapine using clinical pharmacists to support the prescribing and monitoring of medications and laboratories. We hope to expand this number.

One critical quality issue that has been identified is the need to monitor for laboratory results that are not received in the physician's offices. In a recent incident, missing information led to a patient receiving clozapine despite a falling white count. The patient subsequently developed agranulocytosis and was hospitalized. In the near future, we will be distributing a set of guidelines to make sure that, as we expand use of this powerful and effective medication, we do so safely.

If you have any questions about clozapine, or if you have a patient who you think might benefit from the medication, please contact me.

Our Grand Rounds in Community Psychiatry program is well under way, with Craig Risch speaking in January and Steve Batki in February. Our goal is to put on 6-8 programs this year that focus on issues of direct relevance to you and your practice. These events are extremely popular, so please call as soon as you can in order to reserve a space. My thanks to Chris Woodside for her extraordinary support of the Continuing Medical Education committee and to all the CME committee members for their hard work.

Almost a year ago, Rod Shaner (Medical Director of LA County Mental Health) and several other medical directors in California initiated monthly conference calls and meetings in order to raise the standards of community mental health in the state. We have recently been joined by the new Medical Director for the California Department of Mental Health, Penny Knapp (from UC Davis). These meetings have led to development of standards of care for children with Attention Deficit Disorder with Hyperactivity. Now Marshall Lewis (Medical Director in Stanislaus) is leading a group that is seeking to define the role of the psychiatrist in the multi-disciplinary teams that often deliver psychiatric care. Steve Mayburg, Director of DMH, has been very supportive of this and other efforts designed to enhance the quality of medical services in mental health.

Primary care providers in the United States provide mental health care to about half of patients with psychiatric problems. In San Francisco, there are several initiatives to improve the relationship between primary care and mental health providers. We implemented a primary care consultation service that provides access to a psychiatric consultation for every primary care provider taking care of an SFMHP patient. The service has been very well received and we hope to expand it this year.

I am asking each of you to pay particular attention to ensuring that you: (1) know who your patient's primary care provider is and (2) communicate in some way with that provider. Obtain your patient's permission, and then drop that person a note that summarizes the diagnoses you are treating and the medications you are using. It is good quality medical care and it minimizes the chance that you will find yourself at cross-purposes with the primary care doc.

Finally, I want to express my appreciation for the hard work that our Pharmacy Service has put into delivering quality care to a large and expanding population of patients. I have heard from many of you how much you value their efforts and I have certainly been impressed with the dedication and thoughtfulness they bring to their work.

San Mateo County
Mental Health Services

LABORATORY SERVICES FOR SAN MATEO MEDI-CAL CLIENTS

The San Mateo Mental Health Plan now has fiscal responsibility for laboratory services related to the treatment of psychiatric conditions ordered by psychiatrist for San Mateo Medi-Cal clients. San Mateo Mental Health Services now contracts with Bio-Cypher Laboratories to provide such laboratory services. Psychiatrists ordering lab work for San Mateo Medi-Cal Clients are urged to use Bio-Cypher Laboratories for any of the laboratory work needed for the treatment of such clients.

Bio-Cypher Laboratories will be providing phlebotomy services through our Mental Health Clinics. Clients are welcome to come at these times with the psychiatrist's lab orders for any blood or urine tests related to the care of their psychiatric condition.

CLINIC SCHEDULE

North County Mental Health Center
375 89th St., Daly City, CA 94105 Phone: 650-301-8650

Mondays	10:00 a.m. to 12:00 noon (switches to Tuesdays on Monday Holidays)
Wednesdays	9:00 to 10:30 a.m.
Fridays	9:00 to 10:30 a.m.

Central County Mental Health Center
3080 La Selva, San Mateo, CA 94403 Phone: 650-573-3571

Tuesdays	9:00 to 10:30 a.m.
Wednesdays	9:00 to 10:30 a.m.
Thursdays	9:00 to 10:30 a.m.

South County Mental Health Center
802 Brewster Ave., Redwood City, CA 94603 Phone: 650-363-4111

Tuesdays	9:00 to 10:30 a.m.
Wednesdays	9:00 to 10:30 a.m.

Wednesday or Thursday afternoons as needed: call for schedule

Community Counseling Center
2415 University Ave., East Palo Alto, Ca 94303 Phone: 650-363-4030

Tuesdays	12:30 to 3:30 p.m.

Coastside Mental Health Center
225 South Cabrillo Hwy, Suite 200A, Half Moon Bay, CA 94019 Phone: 650-726-6369

Tuesdays	9:00 to 10:30 a.m.

Bio-Cypher Laboratories has a draw station at 1833 Fillmore (between Bush and Sutter) in San Francisco; they are planning to open two more independent stations in or near San Mateo County.

If these sites or this schedule is not convenient for the clients, clients can continue to use their current lab. San Mateo Mental Health Services would to know which labs would be used and we will negotiate with that lab for reimbursement in the future. Clients should not have any interruption of services. Please feel free to call Robert P. Cabaj, M.D., Medical Director of Mental Health Services, with any questions, concerns, or names of other labs that might be used as 650-573-2043.

SAN MATEO COUNTY MENTAL HEALTH PLAN (SMCMHP) VS HEALTH PLAN OF SAN MATEO (HPSM)

The carve-out of Medi-Cal Mental Health clients began on January 1, 1999. The following is a highlight of major differences between the San Mateo County Mental Health Plan and the Health Plan of San Mateo. For detailed information, please refer to the Pharmacy Benefits Manager User Manual. If you need a copy of the manual or have additional questions, please call 650-573-2541.

COVERAGE	SMCMHP	HPSM
CLIENT	Medi-cal mental health clients	Medi-cal non-mental health clients
PHYSICIAN	Psychiatrists only	All others
PHARMACY NETWORK	Most pharmacies in SF & SM County except Lucy/Savon (see pg. 20)	All pharmacies
FORMULARY	Psychiatric medications (see pg. 13)	All except atypical antipsychotics
SSRIs	Covered	Covered
ATYPICAL ANTIPSYCHOTICS	Covered	TAR required
BENZODIAZEPINES	35 day limit for formulary agents	3 fills per 75 days restriction
OTC MEDICATIONS	Some covered (see pg. 13)	Not covered
NONFORMULARY MEDICATIONS	Prior authorization required (PAR) (see pg. 18)	Treatment authorization required (TAR)
MAXIMUM DAY SUPPLY	100	100
REFILL TOO SOON	85%	3 fills in 75 day limit on some drugs
BILLING	Online adjudication via MedImpact	Electronic submission

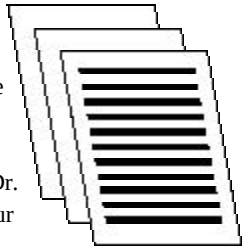
Attention Community Psychiatrists!

We are continually expanding our psychiatrists network. If you are currently seeing a Medi-Cal client, or a Medicare/Medi-Cal client, we would need to add you to the provider network in order for your clients to access his/her Medi-Cal prescription benefits. Please call 650-573-2541 to be added to the psychiatrists panel.

Santa Clara County
Mental Health Services

MEDICAL CONSENT FORMS

All of the medication consent forms for outpatient were updated by Dr. Mark Rothrock at FairOaks Mental Health. They are now written in the same format and are at the printer for printing on NCR paper. Thank you Dr. Rothrock for all your hard work!



The following is a list of medication consent forms:

- Anti-Psychotic Medications (neuroleptics)
- Clozaril (clozapine)
- Risperdal (risperidone)
- Zyprexa (olanzapine)
- Seroquel (quetiapine)
- Lithium
- Tegretol (carbamazepine)
- Depakote (divalproex) and Depakene (valproic acid)
- Anti-Depressant Medications (SSRI's)
- Anti-Depressant Medications (tricyclic & heterocyclics)
- Serzone (nefazodone) and Desyrel (trazodone)
- Wellbutrin (bupropion)
- Effexor (venlafaxine)
- Remeron (mirtazapine)
- Anti-Depressant Medications (MAOI's)
- Anti-Anxiety Medications (benzo's)
- Buspar (buspirone)
- Anti-Parkinsonism Medications (anti-cholinergic and anti-histamines)
- CNS Stimulants
- Beta-blockers
- General consent form

INDIGENT PHARMACEUTICAL COMPANY MEDICATION REBATE PROGRAM

Thanks to all who have filled out and sent in the forms for the indigent program from the various participating companies. We realize this takes time on your part but the reward is very big! If you haven't filled out the forms, please do. We will be following up on each and every form filled out so do us a favor and fill out the forms! A reward will be awarded to the physician with the largest rebate total. So far it's Dr. Rothrock and Dr. Ayupan fighting it out for first place!

ADDENDUM TO MEDICATION MONITORING GUIDELINES

Various changes to the Medication Monitoring Guidelines have been made and approved by the Psychiatric Medication Management Committee (PMMC). These changes will be presented to the full Psychiatric Practices Committee in January for that body to approve. Everyone will then get updated pages for their binders. If clinicians would like to make a change or an addition to the Medication Monitoring Guidelines, please contact Gary L. Viale, Pharm.D at 408-885-4103 or Fax to 408-885-4109 so that it can be carried forth to the proper committee.

CLOZARIL VS CLOZAPINE

The Psychiatric Practices Committee has decided that we will start 20 patients (with their verbal approval) on Clozapine generic starting the first of the year. Four MD's agreed to have five patients each on the generic. Baseline clozapine levels will be drawn before the patients are started on the generic with follow-up blood levels. Patients will be followed to see about efficacy and a report will follow. Pharmacy will be adding software in order to communicate with the registry at Zenith/Goldine. (We already communicate with the Novartis Registry.)

PATIENT VIGNETTES

The newsletter is seeking patient vignettes for inclusion in the next few newsletters. If you know of a patient who did really well on certain medications, please write a short vignette (with patient's approval) so we can share this with our readers.

Which anti-depressant can a psychiatrist not write for in our system of care?

The only anti-depressant that a psychiatrist has hurdles to clear is Celexa (citalopram). All of the other anti-depressants including Remeron (recently added to the formulary) can be prescribed without barriers. If you wish to write for Celexa, a non-formulary request must be filled out and accompany the prescription. Please include diagnosis, list of previous medications tried and why they failed.Upon approval from Dr. Lubell, the Medication Director of VMC, Enborg or Downtown Center Pharmacy can fill the prescription. If you have any questions, please call Enborg Lane Pharmacy at 408-558-4100.

Benzodiazepines Comparison Chart

Physicians are asked to note the difference in price between Lorazepam at $35.95 per 100 tabs and Oxazepam at $3.59 per 100 tabs. Psychiatric Practices will address restricting use of lorazepam due to the vast increase in price (Mylan Pharmaceuticals bought the rights to all lorazepam and raised the price). Please voice your opinion to members of the committee. We must make a decision soon!

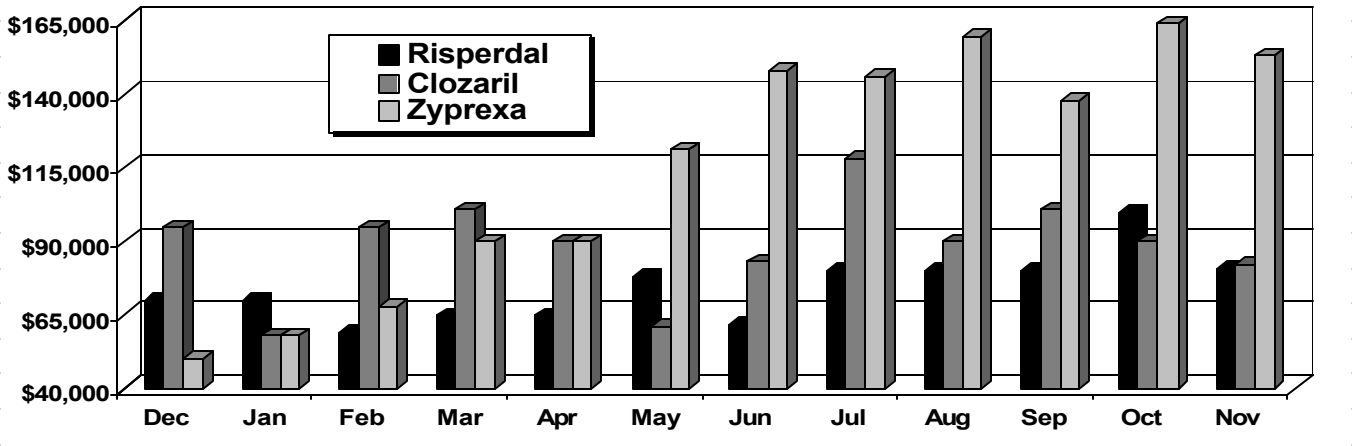
Benzodiazepines Comparison Chart

Prepared by: HuyQuang Le, Pharm.D. Candidate, UCSF

Drugs	Equivalent Dose mg/d	Cost ($ per equivalent dose)	Cost ($ per 100 tabs)	T 1/2 (Parent drug) (hours)	Dose Range for Adult (mg/d)	Active/Inactive Metabolites (T1/2)	Comments
alprazolam (Xanax)	.05	0.240	2.41	6.3-26.9	0.75-4.0	Inactive (IA)	
chlordiazepoxide (Librium)	10	0.0242	2.42	24-48	15-100	Active (A) (3-95)	
clonazepam (Klonopin)	0.25	0.0743	14.85 (0.5mg tab)	18-50	1.5-20	Inactive (IA)	Smallest dosage form =0.5mg
clorazepate (Tranxene)	7.5	0.0398	3.98	Prodrug	15-60	Active (A) (3-200)	Non-formulary
diazepam (Valium)	5	0.0132	1.32	20-80	4-40	Active (A) (3-200)	
halazepam (Paxipam)	20	0.472	47.15	14	20-160	Active (A) (30-200)	Non-formulary Brand Only
lorazepam (Ativan)	1	0.360	35.95	12	1-10	Inactive (IA)	
oxazepam (Serax)	15	0.0357	3.58	5.7-10.9	30-120	Inactive (IA)	
prazepam (Centrax)	10	0.237	23.65	Prodrug	20-60	N/A	Non-formulary
temazepam (Restoril)	15	0.0285	2.85 (15 mg tab)	3.5-18.4	7.5-30	Inactive (IA)	Hypnotic agent
flurazepam (Dalmane)	15	0.0303	3.03 (15 mg tab)	2.3	15-30	Active(A) (40-114)	Hypnotic agent

Medi-Cal Coverage: (Others should need a TAR)
Clonazepam: restricted to therapy lasting up to 90 days from the dispensing date of the first prescription
Diazepam: restricted to use in Cerebral Palsy, Athetoid States, or Spinal Cord Degeneration
Flurazepam: restricted use in the treatment of insomnia.
Temazepam: restricted to use in the treatment of insomnia
Zolpidem (Ambien): restricted to use in treatment of insomnia.

Cost of Atypicals by month for 1997 - 1998



Bay Area Psycho-pharmacology Launches Mental Health Drug Information Column

The Bay Area Psychopharmacology Newsletter is now offering clinicians a forum to ask drug information questions regarding mental health drug therapy and related problems. Questions can be mailed to the newsletter and selected questions and responses will be published quarterly as space allows. Clinicians who submit questions will also receive a personal response to each question that they submit. It is hoped that the quarterly column will serve as a valuable forum for the dissemination of drug information that is of use to many readers.

Psychopharmacology questions might include:

- dosing and designing drug regimens
- evaluation of drug interactions
- assessment of adverse drug effects
- information on drug stability
- drug use in pregnancy and lactation
- practice guidelines and treatment algorithms

Drug information consultations will be based on primary literature evaluation when required. Research and literature analysis will be performed by a clinical pharmacist with consultation from a community psychiatrist.

Please submit questions to the address below. If you would like a personal response, please be sure to include your name and contact information.

Bay Area Psychopharmacology Newsletter
2532 Santa Clara Avenue, Suite 219
Alameda, CA 94501

CLINICAL TRIALS

Barbara Liang, Pharm.D

Bupropion for Depression
52 week, multicenter, randomized, double-blinded, placebo-controlled study evaluating relapse and recurrence of depressive symptoms after 8 weeks of open label dosing. Investigator: Alan J. Cohen, M.D, Berkeley/Walnut Creek. (510) 649-8444.

Depakote in Children of Bipolar Parents
A 12 week open label study for children 6-18 with a mood or behavioral disorder. Children must have at least one biological parent with Bipolar I or II disorder. Investigator: Kiki Chang, MD, (650) 725-0956; Dept. of Psychiatry and Behavioral Sciences, Stanford University School of Medicine.

DHEA Effects on Mood, Memory, and Well Being in Healthy Males
Study to investigate the cognitive affective and personality effects of DHEA in psychiatrically and medically healthy men between the ages of 56-85. Investigator: Louann Brizendine, MD, (415) 476-7840, ext.2, UCSF Department of Medicine.

Ginkgo Combination Formula for treatment of Sexual Dysfunction secondary to antidepressant therapy
Double-blinded, placebo-controlled study to evaluate the safety and efficacy of a new Ginkgo combination formula in patients experiencing sexual dysfunction related to antidepressant therapy. Investigator: Alan J. Cohen, MD, Berkeley/Walnut Creek. (510)649-8444

Olanzapine vs Haloperidol in First Break Psychosis
Double-blind, 2 years study of olanzapine vs haloperidol in schizophrenic or schizoaffective patients experiencing a first psychotic break. Investigator: Ira Glick, MD, (650) 723-6678; Dept. of Psychiatry and Behavioral Sciences, Stanford University School of Medicine.

Olanzapine "Rescue" Study
A 10 week open add-on of olanzapine in acute exacerbations of bipolar depression, mania, hypomania or mixed episodes. Open to patients with Bipolar, Bipolar II or Bipolar NOS disorders on any or no medications. Investigator: Terrence Ketter, MD, (650) 498-4968; Dept. of Psychiatry and Behavioral Sciences, Stanford University School of Medicine.

Topiramate in Acute Mania
A 3 week, double-blind, placebo-controlled study for Bipolar I patients experiencing manic symptoms. Investigator: Terrence Ketter, MD, (650) 498-4968; Dept of Psychiatry and Behavioral Sciences, Stanford University School of Medicine.

DRUG INFORMATION CONSULTATION

Is there a drug-drug interaction between lithium and gabapentin?

Edited by Renee Williard, Ph.D.

Both lithium and gabapentin are eliminated by renal excretion exclusively. Theoretically, a competitive drug-drug interaction could alter lithium excretion and be of clinical significance given lithium's narrow therapeutic window. A recently published placebo-controlled study (Frye M, Journal of Clinical Psychopharmacology, 1998; 18(6):461-464) examined the effects of gabapentin on single dose (600 mg) lithium pharmacokinetics in thirteen patients. Data indicated that gabapentin does not cause clinically significant changes in single-dose lithium pharmacokinetics in patients with normal renal function. Although additional controlled multiple-dose studies in larger, more heterogenous samples are needed, the study suggests that gabapentin and lithium may be administered in combination in the treatment of bipolar disorder.

CONTINUING MEDICAL EDUCATION

Douglas DelPaggio, PharmD., MPA, Director of Pharmacy Services

March, 1999	
3/9/99 12:15 - 1:45 p.m	**Forbidden Fruit: Perspectives in Adolescent Sexuality,** *Lynn Ponton, M.D.* San Mateo County Mental Health Services, 225 W. 37th Ave., Multi-Purpose Room, San Mateo (650) 573-2530
3/16/99 12:15 - 1:45 p.m.	**Seeking an Analytic Identity,** *Alan Skolnikoff, M.D.* Mills Peninsula Health Services. 1783 El Camino Real, Sierra Rooms, Burlingame (650) 696-5313
3/23/99 12:15 - 1:45 p.m.	**Agitation and Paranoia in the Demented Elderly,** *Robert B. Portney, M.D.* San Mateo County Mental Health Services, 225 W. 37th Ave., Multi-Purpose Room, San Mateo (650) 573-2530
3/24/99 10:00 - 11:30 a.m	**Motivating Patients with Negative Symptoms,** *John Strauss, M.D., Yale University School of Medicine* *Alan S. Bellack, Ph.D., University of Maryland School of Medicine* Teleconference: Ala. Co Behavioral Health Care Srvs., 2000 Embarcadero Cove, Ste. 400 Alameda Rm., Oakland (510) 567-8106
3/26/99 11:45 a.m. - 1 p.m.	**Dementia and Psychosis,** *Prakash Masand, M.D., SUNY Health Science Center* San Francisco General Hospital, 1001 Potrero Ave., Room 7M30 San Francisco (415) 206-4938
April, 1999	
4/6/99 12:15 - 1:45 p.m.	**The Mentally Ill Behind Bars,** ***Terry Kupers, M.D.*** Mills Peninsula Health Services, 1783 El Camino Real, Sierra Rooms, Burlingame (650) 696-5313
4/20/99 12:15 - 1:45 p.m.	**Life in Russia,** *Theodore Myers, M.D.* Mills Peninsula Health Services, 1783 El Camino Real, Sierra Rooms, Burlingame (650) 696-5313
4/28/99 10:00 - 11:30 a.m.	**Innovations in Cognitive-Behavioral Therapy: What It Can & Cannot Do for the Seriously Mentally Ill ,** *Jeffrey Young, Ph.D, Columbia University* Teleconference: Ala. Co Behavioral Health Care Srvs., 2000 Embarcadero Cove, Ste. 400 Alameda Rm., Oak.land (510) 567-8106
4/30/99 11:45 a.m. - 1 p.m.	**Antipsychotics: Past and Future Endeavors,** ***Samuel Keith, M.D.*** San Francisco General Hospital, 1001 Potrero Ave., Room 7M30, San Francisco (415) 206-4938
May, 1999	
5/4/99 12:15 - 1:45 p.m	**Spoiling Childhood: The Crisis for American Parents and Their Children,** ***Diane Ehrensaft, Ph.D.*** Mills Peninsula Health Services, 1783 El Camino Real, Sierra Rooms, Burlingame (650) 696-5313

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