

Section 6: Medical and other Patient Care Issues

Overview

The team had intended to limit its scope to administrative issues but broadened the review to direct patient care in search of factors contributing to the budget deficit. The team interviewed senior medical staff in six of the seven institutions, eventually identifying several areas of cost consideration as well as possible systems and organizational issues. Note that the team's comments in this section do not represent a comprehensive review of medical issues in the department. In addition, the team did not attempt a review of the department's implementation of the CRIPA Enhancement Plan, although much of the input from the medical staff does relate to that plan.

Although the team was not charged with reviewing violence in the hospitals, any discussion of clinical care at state hospitals must begin by acknowledging the intertwined issues of clinical case complexity and the dangerousness of the patient population. As the medical director of Patton SH put it, "A large majority of patients in state hospitals are ordered into treatment either because they have been found to be too complex or dangerous to be managed by their counties (LPS patients) or are deemed by courts and clinicians to be too unstable and/or dangerous to be discharged into community placements (mentally disordered offenders and patients found not guilty by reason of insanity). These are not the type of patients that researchers include in clinical trials and the literature guiding their treatment is very thin.¹" Thus, the caveat underlying this section is that any changes in the administration of clinical care must consider the potential impact on patient and staff safety.

Hospitals organize patient care into medical and clinical services but differ in what they include in each branch. See Appendix 6.A for medical organization charts. For all hospitals, medical services include the psychiatrists and physician-surgeons, and clinical services include the nurses and psychiatric technicians. However, there are other mental health professionals on staff, and in some hospitals these report through the medical director even though they are not physicians. In other hospitals, these staff members may report through the clinical director or, in the case of pharmacists, through the administrative division.

Medical services can be categorized as mental health treatment (psychiatrists and at some hospitals other mental health professionals) or as physical medicine (physician-surgeons and nurse practitioners). Mental health treatment has been directly shaped by the CRIPA judgment and court monitor requirements over the past six years. The judgment resulted in the adoption of a wellness and recovery treatment model and the requirement for interdisciplinary

¹ The Patton SH medical director also notes, "A high percentage have been given most of the treatments found on published algorithms and remain unstable and/or dangerous, leading to the use of higher doses and medication combinations."

assessment and treatment of patients, with a higher ratio of mental health professionals per patient. Staffing ratios for interdisciplinary assessment teams have been incorporated into DMH's annual population budget change proposal (BCP).²

The judgment also resulted in intense data collection, partly to bring the hospital system up to standard medical documentation practice (per hospital input the requirements actually exceed community standards) and partly to establish an audit trail to prove compliance with the court order.³ This audit trail was a specific requirement of the Enhancement Plan and grew over time in complexity and detail. To help manage data collection the department created an automated program which unfortunately fell short of expectations, making an already difficult job of documentation even more challenging.⁴

The observations and conclusions addressed in this section relate primarily to medical services (including pharmacy). The team was not able to spend much time in the clinical program area, although it had a limited opportunity to observe nursing services and did conduct interviews with most of the central staffing directors whose task is to ensure that minimum and acuity staffing needs are met for every unit, every shift.⁵ According to central staffing directors and hospital administrative staff, the primary issues that affect clinical services are 1) patient aggression management with the related concern of a safe working environment, and 2) the logistics of making sure minimum staffing standards are met, given workforce management constraints.⁶

This section is organized as follows:

- ✓ Background information (demographics, staffing mandates, organization of medical staff; recruitment difficulties);
- ✓ Hospital input on general medical issues;
- ✓ The pharmacy program (background, costs, issues reported by hospitals);
- ✓ Physical medicine (background information, on-site services, outside medical care);
- ✓ Medical cost recovery; and
- ✓ Team observations, conclusions and recommendations.

² Physical medicine was not addressed by CRIPA. There are no staffing standards for DMH physician-surgeons or their nursing staff.

³ Clinicians know of no other public institution where this level of documentation exists.

⁴ The Wellness and Recovery Model Support System (WaRMSS) reportedly was designed with insufficient input from the medical and clinical staff. The IT team review (see Section 5) concludes that the system is poorly designed and labor intensive for the end user. One hospital described the system as designed "piecemeal and backwards."

⁵ The central staffing unit also ensures that staffing requirements are met for enhanced observations and medical or court transport.

⁶ Workforce management constraints for clinical staff include high overtime requirements driving an increased use of time off under the Family Medical Leave Act, time off associated with furloughs and the personal leave program, and collective bargaining requirements related to the scheduling of overtime. For one hospital, religious accommodation is also an issue. See Appendix 6.B for a 7A comparison showing the costs for filling behind positions.

Background information

1. Demographics:

Distribution of patients by level of care. Most of the department’s patient population is in intermediate care facilities (ICF). However, acute care is provided for the first 60 days for new patients who when admitted usually need stabilization for mental health and physical problems. Some patients may require extended acute care. See table 6.1 below for a breakdown of patients by level of care.

- ✓ Over 90 percent of patients are in the acute psychiatric or the ICF – subacute levels of care.
- ✓ Children are no longer treated at state hospitals.
- ✓ Residential level of care has seen the sharpest increase in number of patients at a 598 percent increase from 2005-06 through 2010-11.

Table 6.1: Patients by Level of Care for All Hospitals and Psychiatric Programs⁷

Level of Care	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11
ACUTE PSY	1273.9	1266.4	1346.3	1536.7	1704.2	1739.8
SNF	80.4	86.1	84.9	80.1	73.3	73.6
ICF - SUBACUTE	3581.5	3616.7	3543.4	3465.8	3468.7	3557.1
ACUTE CHILD	31.3	24.2	5.7	0.0	0.0	0.0
RESIDENTIAL ⁸	73.0	276.9	449.3	442.2	443.1	436.6
System-wide Total	5040.8	5271.3	5430.5	5525.6	5690.2	5808.1

Aging of the population. Table 6.2 below shows that patient age ranges from under 20 to over 70, with a median age of 45.9 and a standard deviation of 12.8 years, meaning two-thirds of the patient population is between about 33 and 58 years of age.

- ✓ The average patient age has increased over the last ten years by 10 percent, from 41.5 to 45.9.
- ✓ The census rose during that time period by over 1,061 patients. At the same time, the number of patients 50 years and older increased by an even greater amount—1,190 patients—meaning patient growth is largely within the older age categories.
- ✓ Over the ten-year time span, the number of patients over 60 grew about 250 percent, versus 80 percent for the system as a whole.

⁷ Source: Admission, Discharge, and Transfer System Data. For breakdown of patients by level of care, by hospital, see Appendix 6.C.

⁸ Residential level of care: Residential Recovery Units generally provide housing for higher functioning sexually violent predators at Coalinga SH who do not require the higher level of nursing care provided in an ICF unit.

Table 6.2: Patient Age Summary

Age Group	6/30/2001 Census	6/30/2011 Census	
		Excluding CSH	Including CSH
Under 20	126	27	27
20-29	611	722	738
30-39	1368	1105	1186
40-49	1467	1339	1572
50-59	732	1143	1504
60-69	187	472	653
70+	87	98	139
Total	4578	4906	5819

Chronic conditions among the mentally ill. DMH patients have a higher incidence of chronic health conditions than the general population due in part to the side effects of some of the more effective drugs used to treat psychotic illnesses such as schizophrenia.⁹

- ✓ System-wide 49 percent of the current population as of September 2011 has obesity, hypertension, hyperlipidemia, diabetes, hypothyroidism, or hepatitis C.¹⁰
- ✓ Metabolic syndrome is a major side effect of psychotropic drugs. This syndrome includes obesity, high blood cholesterol levels, hypertension, and glucose intolerance or type II diabetes mellitus. Other side effects can include fatal reductions in certain white blood cells, seizures, and severe constipation to the point of fatal bowel obstruction.

Treatment duration. The closest proxy for treatment duration is the average length of stay for patients. As shown in table 6.3 below, the average length of stay system-wide has increased significantly by about 60 percent over the past decade.¹¹ The largest increase in length of stay is for mentally disordered offenders.

⁹Some medication terms and background: “Psychotropic medication” refers to the entire category of medications used to treat any psychiatric symptom or condition. “Antipsychotic medication” refers to medications used to treat psychiatric illnesses that include psychotic symptoms such as hallucinations and delusions (e.g., schizophrenia). “First generation antipsychotic medications” refers to antipsychotic medications introduced in the US between 1952 and 1988. Their serious side effects are mainly neurologic symptoms. “Second generation antipsychotic medications” (also called “atypical antipsychotics”) are the antipsychotics released (in the US) since 1988. These produce fewer neurologic side effects, but some produce metabolic side effects such as weight gain and diabetes. Unlike first generation antipsychotics, many second generation antipsychotics are also effective in mood disorders (e.g., bipolar disorder). The two most effective antipsychotic medications, clozapine and olanzapine (Zyprexa), are also the two most likely to produce metabolic side effects.

¹⁰ Data source: 9-7-2011 weekly census Diagnostic and Statistical Manual (DSM) Axis III.

¹¹ These figures only include days where patients were physically present in the state hospitals/psychiatric programs, not days where patients were out on leave. Data Source: HCO/ODS "Patient History" table (October 2011). See Appendix 6.D for average length of stay by hospital.

Table 6.3: Average Length of Stay

Commitment Type	System-wide ALOS FY 2001	System-wide ALOS FY 2011	Percent Change
Corrections	157.6	173.0	9.8%
Juvenile Justice	n/a	180.8	
Incompetent to Stand Trial	204.9	199.5	-2.6%
LPS	860.0	1023.9	19.1%
Mentally Disordered Offenders	392.1	1180.2	201.0%
Not Guilty by Reason of Insanity	914.6	1689.9	84.8%
Other PC	487.1	349.6	-28.2%
Sexually Violent Predators	695.1	1096.7	57.8%
Total	3711.4	5893.6	58.8%

2. External staffing mandates: Patient care is governed by external licensing, accreditation, and court-ordered requirements. Licensing standards are mandatory under state law. Federal standards also may apply where Medicare and Medi-Cal payments are made. Accreditation is optional but desirable in that it represents recognition within the hospital community as meeting generally accepted standards of quality care.¹² Compliance with patient care requirements in the CRIPA federal court judgment is necessary to discharge court-ordered oversight of the four hospitals named in the judgment (Atascadero SH, Metropolitan SH, Napa SH, and Patton SH).¹³ Failure to comply could result in additional court intervention such as seen with the federal receivership for prison medical services. The following discussion addresses only staffing expectations, as opposed to the full spectrum of externally imposed standards and mandates for patient care.

- ✓ **Licensed standards.** The Department of Public Health (DPH), through Title 22 of the California Code of Government Regulations, oversees state staffing requirements for hospital nursing services.¹⁴ For DMH, the term *nursing* includes both nurses and

¹² Of the five stand-alone hospitals, only Coalinga SH is not currently accredited. The team understands this is related primarily to the limited number of psychiatrists on staff.

¹³ There are other court judgments that affect departmental operations. These are not reviewed here.

¹⁴ “Health care facilities in California are licensed, regulated, inspected, and/or certified by a number of public and private agencies at the state and federal levels, including the DPH Licensing and Certification Program (L&C) and the U.S. Department of Health and Human Services’ Centers for Medicare and Medicaid Services (CMS). These agencies have separate -- yet sometimes overlapping -- jurisdictions. L&C is responsible for ensuring health care facilities comply with state laws and regulations. In addition, L&C cooperates with CMS to ensure that facilities accepting Medicare and Medi-Cal (in California, Medicaid is referred to as Medi-Cal) payments meet federal requirements. L&C also oversees the certification of nurse assistants, home health aides, hemodialysis technicians,

psychiatric technicians. In community hospitals, this staffing standard is 1:5, or one nursing staff member to five patients for intermediate care. However, by court agreement, the state hospitals are exempted from the community standard and instead must meet a ratio of 1:8 for intermediate care facilities and 1:6 for acute care facilities.¹⁵ These standards are minimums and must be met in order for the hospital to remain licensed.¹⁶ Night-time ratios are generally twice day-time ratios. For example, the nursing pattern for the three daily shifts for an intermediate facility is 1:8, 1:8, and 1:16.

- ✓ **Joint Commission standards.**¹⁷ For hospital accreditation, the Joint Commission defines services but generally not staffing ratios. However, the team is advised that both federal standards and commission standards specify a ratio of 1:1 for supervision of any patient in seclusion or restraints.¹⁸
- ✓ **CRIPA court judgment standards.** The consent decree states that “therapeutic and rehabilitation service planning is based on a comprehensive case formulation for each individual that emanates from interdisciplinary assessments of the individual consistent with generally accepted professional standards of care.”¹⁹ In 2006 when implementing this mandate, the court monitor specified that interdisciplinary teams include “the treating psychiatrist, treating psychologist, treating rehabilitation

and the licensing of nursing home administrators.” <http://www.cdph.ca.gov/programs/LnC/Pages/LnC.aspx>, October 21, 2011.

¹⁵ Per Title 22, Section 72329.1(g), the skilled nursing staffing standard is as follows: “Only direct caregivers as defined in Section 72038 shall be included in the staff-to-patient ratios. The ratios shall be based on the anticipated individual patient needs for the activities of each shift and shall be distributed throughout the day to achieve a minimum of 3.2 nursing hours per patient day.” Only Metropolitan SH and Napa SH have skilled nursing facilities.

¹⁶ Typically, minimum standards will be exceeded based on an assessment of patient medical needs and/or danger to self or others, as well as for transport of patients to and from court, medical appointments, or outside hospitalization. For example, Patton SH staffs a unit for the deaf at 1:4. All hospitals temporarily exceed minimum staffing standards to address potential aggression scenarios. Hospitals assess the need for “acuity” staffing on a constant basis.

¹⁷ “The Joint Commission on Accreditation of Healthcare Organizations (JCAHO), an independent, nonprofit organization, conducts a quality assessment of about 80 percent of all hospitals in the United States every three years. The Joint Commission accredits more than 5,000 hospitals and over 6,000 other health care facilities, including outpatient surgery, home care, long term care and mental health care organizations. Hospitals do not have to be accredited by JCAHO to operate—the accreditation process is entirely voluntary. Accreditation by the Joint Commission means that a hospital meets at least minimum standards of quality. JCAHO rates hospitals in 28 different performance areas, including assessment of patients, medication use, operative procedures, patient rights, staff, laboratory and emergency services, infection control and social services” (AmericanHospitals.com: <http://www.americanhospitals.com/hospitals/hospitalsequal.htm>, retrieved October 19, 2011).

¹⁸ Seclusion means isolation, usually for a relatively short time period until the patient has sufficient self-control to no longer represent a danger to self or others. Restraints are physical tie-downs for patients who are acutely dangerous to self or others. Again, duration is usually short. An exception to the 1:1 requirement was recently granted for seclusion in units staffed at a 1:4 ratio, according to Atascadero SH, which proposes to test a 1:4 treatment unit for chronically behaviorally challenged patients. 1:1 staffing is also used for medical observation.

¹⁹ United States District Court for the Central District of California Western Division (2006). *United States of America vs. State of California, Civil Rights of Institutionalized Persons Act Consent Judgment*, p. 10.

therapist, the treating social worker; registered nurse and psychiatric technician who know the individual best; and one of the individual's teachers (for school-age individuals)."²⁰ The monitor also required that the team "not include any core treatment team members with a caseload exceeding 1:15 in admission teams (new admissions of 90 days or less) and, on average, 1:25 in all other teams at any point in time."²¹ This is the origin of the 1:15 and 1:25 staffing standards used in the annual population adjustment in the budget. However, nursing staffing is at the higher ratios previously discussed.

- 3. Organization of medical staff:** The medical staff operates under two governance structures—the state bureaucratic structure which is headed by the medical director who is selected by the hospital executive director, and a peer structure headed by an elected chief of staff. The peer structure is a feature of Joint Commission accreditation, and this internal professional governance group has the right to grant or withhold physician "privileges" (right to practice) within a hospital. Review of treatment decisions and other issues affecting quality of care is handled by both structures. The administrative structure under the medical directors uses senior clinicians to supervise care and adherence to policies and procedures, while the medical staff's peer structure uses committees specified by the Joint Commission and led by medical staff appointed by the chief of staff.²²
- 4. Recruitment difficulties:** Rurally located hospitals (Atascadero SH, Coalinga SH) experience difficulty recruiting permanent medical staff. The only option currently available is to use contracted (aka external registry) employees who for some classifications are considerably more expensive (see Appendix 6.B). Coalinga SH uses registries so extensively that the lack of staff medical practitioners is reportedly one reason it has had difficulty meeting accreditation standards. There are salary disparities of about 5 percent between CDCR and DMH medical staff, despite parity adjustments made pursuant to court order around 2008.²³ As a result, competition with CDCR continues to affect DMH's recruitment pool. The department is exploring telemedicine and, in one location, telepsychiatry as an alternative to the use of contract registries (see the discussion under physical medicine below).²⁴

²⁰ Other treatment teams required by the judgment or Enhancement Plan are listed in Appendix 6.E.

²¹ Court monitor (2006). *State Hospitals' Enhancement Plan, Monitoring System*, pp. 3-4.

²² Committee recommendations are forwarded to the governing body whose membership includes the chief of staff, the executive director, the department director, and the senior headquarters medical representative. The governing body is a hospital oversight team required for accreditation.

²³ Mental health professionals fared better than physical health professionals in this adjustment. Two of the classifications that did not receive a parity adjustment were physician-surgeons and X-ray technicians. According to Atascadero SH, salary parity is also an issue for lab technicians.

²⁴ Napa SH has a research contract with UC Davis. Coalinga SH may partner with a nearby prison to share telemedicine facilities.

Hospital input on general medical issues

Perceived lack of leadership: With the focus on the Enhancement Plan, many other issues requiring leadership from headquarters reportedly have not received attention. Medical staff members were asked what headquarters' role should be for direct patient care.

Answers included (no priority order):

- ✓ Oversee clinical development (where “clinical” means overall patient care), provide direction, oversight, arrange for mentoring and training, and ensure clinical data analysis.
- ✓ Streamline the Enhancement Plan.
- ✓ Modernize the data environment for the practice of medicine in the department, beginning with electronic health records and fixing or replacing WaRMSS.
- ✓ Provide practice guidelines.
- ✓ Create a communication environment that fosters a cohesive medical/clinical community and ensures good discussion of medical/clinical issues.
- ✓ Solicit input from this community and provide a steady flow of information back.²⁵
- ✓ Make the tough system decisions:
 - Assess whether in-house peer review is working and provide alternatives where it is not,²⁶
 - Assess the need and strategies for utilization review; and
 - Develop solutions to inappropriate vendor influence on physicians' pharmaceutical choices.
- ✓ Develop solutions to rising pharmacy costs (see the section on pharmacy below).
- ✓ Hire permanent medical directors (many are acting).
- ✓ Address medical/clinical recruitment in general as well as pay disparities.

Unintended mission impacts of the Enhancement Plan: Of the mental health professionals that the team spoke with, virtually all expressed concern about unintended consequences of the Enhancement Plan. While most expressed support for the wellness and recovery model and for an interdisciplinary approach to treatment, they also noted that the focus of the department over the past six years shifted from interaction with patients to a preoccupation with a paper exercise to prove compliance with the monitoring plan.²⁷

²⁵ Part of the challenge here is recognizing the legitimate differences in the organizational and communication models for medicine versus administration in the department. The cultural disconnect varied by hospital but could be observed often enough to be reported. The medical directors represent doctors who have chosen to bridge this cultural gap and are therefore a very important group asset for the department.

²⁶ A literature search on peer review suggests that time constraints and relationship complications can weigh down peer review. Many (not all) doctors that the team interviewed agreed with this perspective. Some noted that the data sources for solid peer review need improvement.

²⁷ As one hospital described the situation, “The Enhancement Plan brought a focus on quality of care and on outcome measures. Because of the increased demands on performance, the plan weeded out lower performing staff and allowed medical directors to bring in some very good people. And, the quality of care has improved. The staff has paid more attention to more parameters of patient health. But, this all could have been done in a more simple, less complicated way. Moreover, as the department went through the process, the standards and paperwork targets kept moving. It ended up as an octopus with its arms wrapped around us.” Another hospital observed that “What reduces violence at a micro level [can be] even brief patient encounters with nurses or

Loss of focus on the forensic mission: Several psychiatrists noted that the Enhancement Plan was not designed with the department’s forensic mission in mind. In many cases patients are not going to return to a community setting from the hospitals. Their admission and release from the hospitals are tied to specific penal code criteria, and treatment needs to be aimed at meeting release standards. For example, treatment services such as malls, which are intended as proxies for real life situations, may not be relevant for many patients.²⁸

Exclusion from decision making: Virtually all mental health staff interviewed expressed a sense of exclusion from decision making associated with the Enhancement Plan describing input as either not solicited or routinely dismissed by headquarters.²⁹ More generally, they expressed a sense that headquarters was disinterested in an open relationship with its medical community.³⁰

Other hospital input:

- ✓ **Safety of medical staff.** A serious concern expressed at all facilities is the need to enforce consequences for assaulting medical staff, similar to consequences of a civilly committed individual assaulting a hospital police officer. Threats from patients make it difficult for medical staff to provide effective care.³¹
- ✓ **Lack of electronic health records.** Every medical group interviewed was adamant about the need for electronic health records by which they meant true automation rather than a scanned document.

doctors, even in the hallway, where that interaction can de-escalate [behavioral problems] or if not, get the patient the necessary attention. But, you cannot do that if involved with paperwork. [Hence], the Enhancement Plan made safety worse.” The same hospital reported “The treatment plan document is [a] meaningless plan...overly elaborate, mechanical, not connected to clinical realities, very hard to keep up to date, and embedded in WaRMSS, [which] is very user unfriendly.”

²⁸ A treatment mall, as interpreted within the Enhancement Plan, refers to multiple periods during the weekday when patients are escorted off their unit to various sites in the facility to participate in group therapies based on classroom learning models, including mandatory lesson plans. The senior clinicians in the hospitals report that there is minimal research data to support effectiveness of such approaches in inpatient forensic populations.

²⁹ The team does not know the exact dynamics of the consultant relationship between the department and the monitor but is advised that the consultant required that he be the sole point of contact for both sides. This constricted principle of communication appears to have been replicated within the department.

³⁰ An example of this issue is managing via use of Special Orders developed by headquarters with reportedly sparse clinical input. Hospitals report that these are not always implemented with resources in mind, and not all feedback is taken into consideration.

³¹ The Patton SH medical director notes, “The concern about assaults is just one element of many facets that need to be addressed regarding improving safety for staff and patients at the hospitals. The compassion of the staff and the quality of care delivered in spite of a daily environment that includes threats and assaults from patients is impressive.” Although the team’s review of the daily provision of care was limited, it too was impressed with the sense of the caring treatment environment.

- ✓ **Pressures created by the courts:**
 - Legislation requires medical records to accompany new patients. However the packet is often incomplete and the courts do not support the department's attempts to refuse patients on these grounds.
 - Patient treatment may be complete far in advance of court scheduling to rule on release from the hospital.
- ✓ **Legal support.** The medical director of one hospital voiced strong concern for the lack of legal support in assisting with that hospital's strongly litigious patient population. The concern stems in part from legal harassment by patients (i.e., threats to submit complaints to licensing authorities).³²
- ✓ **Misalignment of work with classifications.** Several hospitals commented that activities could be performed less expensively if assigned to more appropriate classifications. The most commonly voiced concern related to paperwork duties of the medical and clinical staff as a result of the Enhancement Plan. Another area was the assignment of psychiatrists to mall groups. A third was lab technicians drawing blood, a task reportedly more suited to (and less costly for) a phlebotomist.

Pharmacy

Each hospital provides its own pharmacy services, with the exception of the psychiatric programs at Vacaville and Salinas Valley where pharmacy services are provided by the host prison.³³

This section is organized as follows:

- ✓ Background information (roles, contract information, partnership information);
- ✓ Cost information (cost history, who influences medication expenses, factors in pharmacy cost); and
- ✓ Concerns reported by hospitals.

Background pharmacy information

- ✓ **Roles**
 - **Department of General Services (DGS):** DGS administers the State's prescription drug purchasing program. The two key strategies are group purchasing which lowers drug costs and a common formulary which supports group purchasing.³⁴ The average savings according to DGS is about 18 percent on proprietary pharmaceuticals and 55 percent on generics.³⁵ By statute, DMH is a mandatory participant in this program which means it must purchase its drugs through the

³² This observation pertains to the sexually violent predator patients at Coalinga SH.

³³ However, per CALSTARS the psychiatric programs have relatively minor drug costs they pay for.

³⁴ A prescription drug is either on formulary, which means a physician can prescribe them without additional approvals, or off formulary (nonformulary), which requires an approval process.

³⁵ A generic drug is sold or prescribed under the nonproprietary name of its active ingredients or under a generally descriptive name rather than under a brand or trade name. A brand name drug is still under patent or the control of a private organization or manufacturer. Generic drugs are less expensive than their brand name counterparts.

- master contract. DGS sets the formulary for departments, although channels for input are provided (see below). The primary psychopharmacology medication contract is currently with AmerisourceBergen Drug Company (ABDC). See “contract information” below for further discussion of this contract.
- **Pharmacy Advisory Board (PAB):** The PAB is a high-level group of state agencies working together to identify and implement cost savings and quality improvement strategies for DGS’ statewide pharmaceutical program.³⁶
 - **Common Drug Formulary (CDF) Committee:** The CDF committee is a subcommittee of PAB which reviews and makes recommendations on the statewide common drug formulary system. Different formulary medications may be subject to different contract restrictions. See the discussion below under “Cost Control.”³⁷
 - **Psychopharmacology Advisory Committee (PAC):** The PAC was established by DMH to advise on issues and oversee the department’s psychotropic medication policy, an extensive set of guidelines for the use of pharmaceuticals in the hospitals. The PAC has representatives from all the institutions, including the medical directors’ council, as well as external partners (e.g. CDCR and Veterans Affairs).³⁸
 - **The Pharmacy and Therapeutics (P&T) Committee:** Each hospital has an internal P&T committee which reviews and approves the use of formulary and nonformulary medications. The chair of the committee is appointed by the chief of staff.³⁹
- ✓ **Commonly used drugs:** Table 6.4 below shows the formulary and nonformulary drugs that are most commonly used by the department, along with the associated costs. The table includes the top fifteen types of drugs by quantity ordered. Note: this data is for one quarter only.

³⁶ See Appendix 6.F for the PAB charter.

³⁷ The committee also develops clinical guidelines, helps with procurement documentation, and assists with cost containment and promoting continuity of care. See Appendix 6.G for the CDF committee charter.

³⁸ See Appendix 6.H for the policy directive defining the PAC.

³⁹ One hospital described the review process as infrequently overturning a physician’s request for a nonformulary medication. Other hospitals noted that the effectiveness of the committee in assessing medication use and influencing treatment choices could vary with the selection of the chair. Some viewed the election process for the appointing power (chief of staff) as potentially influencing the rigor of the process. Other hospitals felt the process usually worked satisfactorily. The P&T committee may also review use of supplements ordered by patients.

**Table 6.4: Top 15 Drugs by Quantity Prescribed at State Hospitals
Third Quarter, 2011⁴⁰**

Therapeutic Category	Quantity	Cost
Grand Total	85,433	\$11,810,896
ANTIPSYCHOTIC AGENTS	16,134	\$10,185,562
CATHARTICS AND LAXATIVES	5,035	\$37,885
ANTICONVULSANTS, MISCELLANEOUS	4,785	\$165,464
LIPOTROPIC AGENTS	2,667	\$9,416
ANTIFUNGALS (SKIN & MUCOUS MEMBRANE)	2,627	\$13,600
NONSTEROIDAL ANTI-INFLAMMATORY AGENTS	2,484	\$41,576
ANTIDEPRESSANTS	2,374	\$113,095
AMMONIA DETOXICANTS	2,319	\$12,078
ANTI-INFLAMMATORY AGENTS (SKIN & MUCOUS)	1,964	\$11,624
VITAMIN D	1,940	\$5,595
OPIATE AGONISTS	1,805	\$54,873
INSULINS	1,469	\$101,861
ANTACIDS AND ADSORBENTS	1,412	\$4,146
REPLACEMENT PREPARATIONS	1,196	\$4,902
BETA-ADRENERGIC AGONISTS	1,133	\$91,831

The table shows that the vast majority of medications prescribed by hospitals are antipsychotic agents.

✓ **Contract information:**

- **Pricing structures.** The ABDC contract covers multiple medications with various pricing agreements and contract restrictions (e.g. discounts may be available for some drugs only if a department does not restrict prescriber access).
- **Pay requirements.** In order to obtain ABDC discounts, payment must be made within 20 days, requiring special handling by most departments. DMH does not always meet these timeframes and has incurred approximately \$330 thousand this calendar year in late fees and other adjustments.⁴¹
- **Tiers and algorithms.** Contract language for each drug governs whether and how a department can restrict physician access. For example, tiered access may be prohibited although algorithms generally are not.⁴²

⁴⁰Department of General Services (2011). Department of Mental Health purchasing history, *Ad Hoc Report for third quarter of 2011*.

⁴¹Source: DGS' chart *Total Late Fees and Cost of Goods Adjustments for 2011*.

⁴²A tiered formulary groups medications generally by price. Approvals may be required to move to a higher tier. "Tiering" can also refer to different pricing tiers for subsets of patient population. A formulary algorithm, on the other hand, is a decision-tree approach to the selection of drugs for a specified condition or set of conditions. This decision tree is based primarily on clinical considerations, although it may in some cases result in the use of generics before proprietary drugs.

- **Contract cost increases.** The contract also allows for mid-term price increases.
- ✓ **Pharmacy staffing:** Table 6.5 below shows pharmacy staffing for all of the hospitals, as well as the ratio of patients to pharmacists.

**Table 6.6: 2011-12 Staffing Ratios, Selected Classes
Hospitals, Excluding Psychiatric Programs**

Pharmacist	
Established per 7A	78.1
Average Caseload*	72
Nurse Practitioner	
Established per 7A	39
Average Caseload*	143
Physician-Surgeon	
Established per 7A	90.2
Average Caseload*	62
Psychiatrist	
Average Caseload	Acute: 15
	ICF: 25
Psychologist	
Average Caseload	Acute: 15
	ICF: 25
Hospital average annual census =	5,586
*Average caseload based on average annual census for 2012-13/7A positions. Includes all commitment types.	

The table shows that ratios for pharmacists and the primary care staff (physician surgeons and nurse practitioners) are significantly leaner than for the psychiatrists and psychologists.

- ✓ **Partnership with the prison system:** Patients transfer between DMH, CDCR, and the California Correctional Health Care Services (CCHCS), but the departments do not use the same formularies and have different treatment guidelines. This can result in patients being transferred with medications that cannot be used after transfer. The drug categories in common are atypical antipsychotics, HIV medications, and Hepatitis C drugs.

Pharmacy costs

- ✓ **Cost history:** Table 6.6 below shows CALSTARS summary pharmacy costs by hospital for 2005-06 through 2010-11.⁴³
 - Pharmacy costs for 2010-11 were about \$47.5 million, or nearly one-fourth of the hospital's operating expense and equipment budget.
 - From 2005-06 through 2010-11, costs increased about \$11.9 million or by an average annual rate of 8 percent. The department reports that there have been no budget adjustments for pharmaceutical costs in the last five years.
 - According to DGS records, about 80 percent of the department's drug expenses are for atypical antipsychotics.

Table 6.6: Statewide Pharmaceutical Costs

Fiscal Year	Expenditure
2005-06	\$ 35,615,376
2006-07	37,554,028
2007-08	46,748,635
2008-09	42,756,079
2009-10	44,365,569
2010-11	47,554,688

- ✓ **Who influences pharmacy costs?**
 - The Wholesale Acquisition Cost is set solely by the company selling the medication. However, it is influenced by negotiations with major buyers, e.g. Medicaid and U.S. Department of Veterans Affairs.
 - Unlike many countries, the U.S. does not set a cap on brand drugs or a floor price on generic drugs. This means that many brand drugs cost substantially more in the U.S. with often the majority of the profit for a given drug coming primarily from the U.S. market despite being sold globally. Conversely, lack of a floor for generic drug pricing sometimes leads to shortages of some generic drugs.
 - The one price rule that does apply in the U.S. is Medicaid best price. Congress has made it law that Medicaid will receive the best price for any drug and no one else can have that same price. Also, by federal law the price is confidential. If a drug company gives a better price to someone else via discounting off the Wholesale Acquisition Cost, then that becomes the new Medicare best price, setting a new floor.
 - DGS is the key player in formulary construction and contract prices but receives guidance from the Pharmacy Advisory Board and the Common Drug Formulary

⁴³ See Appendix 6.I for CALSTARS detail on pharmaceutical costs by hospital.

Committee. The department has representatives on both, so it has input on decisions that influence cost.

- Physicians have the largest direct impact on the department's pharmacy costs through their choices of type of medication, method of medication delivery, etc.
- Drug manufacturers influence doctors' medication choices through advertising and direct vendor contact. See the discussion of vendor influence below.
- The pharmacists advise the physicians on issues relating to drug choice. They also collect data on usage and costs and therefore provide the information that can help physicians make cost-conscious choices.

✓ **What influences medication expenses:**

- **Cost consciousness.** If the working environment does not value and provide decision support for cost containment, medication decisions are less likely to be made considering cost as a factor.
- **Peer review.** Peer review can improve physician performance, and where cost/benefit is accepted as a review criterion, it can assist with cost containment.
- **Patient complexity and dangerousness.** Patients who remain assaultive and dangerous despite being treated with traditional doses and/or single medications, are tried on higher doses and medication combinations. The hospitals report that in many cases this produces improved results.⁴⁴
- **Physician education.** Some hospitals currently provide lectures and educational activities for their physicians. However, one hospital reports that "the potential of this for helping sharpen prescribing, both for cost consciousness and for maximal efficiency, has not yet been fulfilled."
- **Utilization review.** Pharmacy utilization review can be concurrent or focused. After Patton SH began concurrently reviewing non-formulary requests, those requests were reduced by about 50 percent. At Napa SH, the current utilization review practice is to pick a topic, perform a focused review, summarize findings, and take action. However, the hospital acknowledged that in order to take action on those findings, a stronger nonformulary request process is needed.
- **Use of generics versus proprietary drugs.** While most cost data for pharmaceutical contracts are confidential (a vendor contract provision), generics are a fraction of

⁴⁴ Medication recommendations for assault reduction made by psychopharmacology experts who have both academic affiliations and experience with this population include both high dose and combination strategies.

proprietary drugs.⁴⁵ Table 6.7 below is an example of the cost savings expected for five major drugs going generic in the coming months.⁴⁶

Table 6.7: Key Drugs Going Generic

Drug	Patent Expiration	FY 2010-11 Cost	Estimated Cost Savings			
			FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15
LEVAQUIN	Jun-11	\$ 76,967	\$ 23,090	\$ 69,270	\$ 69,270	\$ 69,270
ZYPREXA	Oct-11	\$ 18,612,188	\$ 2,481,625	\$ 14,269,344	\$ 16,750,970	\$ 16,750,970
LIPITOR	Nov-11	\$ 247,634	\$ 22,700	\$ 181,598	\$ 222,871	\$ 222,871
SEROQUEL	Mar-12	\$ 5,617,368	\$ 140,434	\$ 2,808,684	\$ 5,055,631	\$ 5,055,631
GEODON	Sep-12	\$ 1,806,209	\$ -	\$ 316,087	\$ 1,444,967	\$ 1,625,588
GRAND TOTAL		\$ 26,360,367	\$ 2,667,849	\$ 17,644,984	\$ 23,543,709	\$ 23,724,330
Target savings @75% ⁴⁷			\$ 1,966,544	\$ 13,045,586	\$ 17,438,676	\$ 17,574,142

- **Contract constraints.** As noted earlier, while tiering is permissible with some drugs, it is forbidden by contract language for others. The department cannot purchase off-contract unless it can demonstrate a lower per-unit purchase price elsewhere for the same drug (even if it can show savings by restricting access to a generic). Therefore, the only strategy under current law is to negotiate a future contract change.
- **Vendor pressure.** Vendors market aggressively. One hospital reported immediate spikes in new drug prescriptions right after vendors had sponsored dinners for the

⁴⁵ Per the Patton SH medical director, “In the first 10-15 years after their introduction, second generation antipsychotics were thought to be clinically superior. Studies and meta-analyses in the last five years have shown that, of all antipsychotics (both first and second generation), only two—clozapine and olanzapine (Zyprexa)—have demonstrably superior efficacy in schizophrenia (Komossa et al, Cochrane Database Syst Rev, 2010 Mar 17; (3):CD006654). The most effective, clozapine, is limited by side effects. The proprietary drug Zyprexa alone accounted for \$18.6 million statewide in FY 2010-11, 40% of the total statewide pharmacy costs of \$46.9 million that year. It will go generic this month (Nov 2011).”

⁴⁶ Savings based on initial savings of 10 percent at the time drug goes generic (during the first six months, one company has exclusive rights to sell the generic version of the drug); 50 percent savings after six months (when competitors enter the generic market for the drug); and 90 percent savings after 12 months (as market competition continues to drive generic cost down). Estimates based on typical savings seen by DGS when drugs go generic.

⁴⁷ State hospital medical directors felt this was a realistic estimate of expected pharmacy savings, factoring in likely increased drug costs in areas other than antipsychotic use (e.g., due to an aging population and developments such as very expensive recently released drugs to treat Hepatitis C) and given the fact that some patients will only respond to the brand name versions of a drug.

physicians.⁴⁸ Headquarters requires that access be equal for all vendors; most hospitals go beyond this to restrict onsite access. However, there were reports of extensive offsite access, including dinners and paid speaking engagements.

- **Prescription practices**

- **Polypharmacy:** refers to the administration of multiple drugs simultaneously. Although polypharmacy can have negative impacts associated with cost, interactions, and side-effects, it is often necessary for DMH's patient population.⁴⁹ Its use is tracked with the intent to limit application to clinically required situations. Specific polypharmacy practices are mandated to peer-reviewed at each facility under the oversight of the Medication Review Committee or Therapeutic Review Committee at each hospital which can provide oversight by either consultation or review. However, hospitals report that these peer reviews rarely result in recommendations to change the medications being ordered.
- **Method of medication delivery:** Hospitals reported that the method of taking medication (oral versus injection, quick-dissolve versus normal tablet) is a cost factor. Per hospital input, use of long-acting injectable antipsychotic drugs is often needed in patients who refuse to consistently take these medications in pill form. Some of these long-acting injectable antipsychotics are significantly more expensive than their oral counterparts. Quick dissolve tablets (which are more expensive than regular pills) are used in patients likely to cheek and then spit out antipsychotic medications. Hospitals report that there is concern that these are continued even after the patients' psychosis subsides and they would be willing to take regular pills.

- **New drugs set new cost standards.** For example, when clozapine came out, use of this drug set the stage for a per-day patient cost of \$20 being viewed as acceptable at state hospitals.

- ✓ **Pharmacy issues reported by hospitals**

- **Napa SH pharmacy meeting.** Napa SH pharmacists, medical staff, administrative staff, and headquarters' consulting psychiatrist met to review the department's pharmacy program in August of 2011. The following summarizes the issues they raised:
 - All participants expressed concerns about the value of the pricing discount available through DGS, particularly given the disparity with Medicaid pricing, as

⁴⁸ Napa SH also noted a physician who was paid for a speaking engagement by a pharmaceutical company, which appeared to the team to be a conflict of interest. It is the team understanding that the only headquarters policy in place regarding vendor contact is one which requires that any access provided must be equal for all vendors.

⁴⁹ Per the Patton SH medical director, "[Polypharmacy] is often needed and recommended by the best psychopharmacologists in our system for the treatment of assaultive and/or treatment refractory patients with severe psychiatric conditions. Statistics on rates of polypharmacy are tracked and reported by HQ to facilities monthly, monitored for the Enhancement Plan, and presented to the Court Monitor. Nonetheless, hospitals remain concerned about inappropriate use of polypharmacy."

well as language restricting departmental discretion in controlling prescriber access.

- All participants favored a headquarters pharmacy unit that develops a DMH-specific formulary.
- All supported the goal of better formulary cost control, although there was not consensus (at that meeting) on how to improve cost containment.
- All favored a utilization unit, although the problem with follow-through (when problems are found) was noted. Some thought that unit should be at headquarters and be part of the formulary unit.
- All agreed that the medical director should be in charge of the pharmacy budget because that position is the direct report for the doctors who make the medication decisions.
- Some felt more staffing would be needed to implement better cost oversight.
- All agreed that headquarters should find ways to reduce vendor pressure on the medical staff, perhaps through a revision to ethics policies or training.
- **Issues reported by other hospitals**
 - **Staffing:** Several pharmacists reported that they were operating at patient-to-pharmacist ratios higher than most institutions (see table 6.5). Napa SH reported, for example, that its pharmacy has extremely low staffing levels: four pharmacists on duty Monday, Wednesday and Friday for 1,200 patients. Several hospitals also reported pay parity problems for pharmacy supervisors, resulting in disincentives for promotion.⁵⁰
 - **Medications as mediums of exchange:** Coalinga SH reports that its patients (primarily sexually violent predators who as a group are litigious) request narcotics for pain. Some cheek the medication and then use it to exchange for contraband. If the physician refuses to prescribe narcotics, the patient typically complains to licensing and makes threats. Medical staff report that the departmental narcotics policy is not strong enough.
 - **Patient transfers from CDCR and CCHCS:** CCHCS patients are sent to DMH with a 30-day supply of drugs which in some cases have to be thrown out.
 - **Automated systems differ by hospital:**
 - **Pharmacy billing.** Patton SH's MedSelect system permits billing by individual dose. Napa SH, on the other hand, has only has gross billing capabilities.
 - **Inventory control.** Some of the hospitals have automated inventory control and others do not. For example, inventory control is done manually at Napa SH, which can lead to ineffective use of refused and restocked drugs.
 - **Costs by physician; total costs.** All hospitals have access to the centralized Pharmacy Hospital Operations system for tracking hospital operations. They are able to identify each prescriber's average medication costs per patient. However, this system does not tie to CALSTARS to accumulate total

⁵⁰ When Pharmacist I salary rates were brought to parity with CCHCS's, the salaries for the Pharmacists IIs were not increased. Also, the I level receives safety retirement, whereas the II level does not.

- pharmacy costs, so each hospital has its own cost system, and they are not all equally good.
- **Lab access.** Some hospitals report poor access to automated lab programs. Napa SH, for example, has lab work access on one pharmacist computer only because the hospital currently does not have funding for the extra licenses. This is reportedly an issue with the Joint Commission, since lab data are required inputs for medication management.
 - **Redundant system development.** Coalinga SH implemented a computerized dispensing system while Patton SH did the same thing with the same contractor, and hospitals report that the efforts were not coordinated.
 - **Supplements:** Civilly committed patients have the right to order supplements. Department policy requires that physicians write prescriptions for these supplements. Hospitals appear to approach the issue differently which may stem from different patient populations.
 - For Coalinga SH, this is both a major workload issue and sometimes a source of harassment from the patients. The hospital also voiced concerns about potential interactions with medications.
 - Napa SH limits external supplements to a list of items approved to enter campus. All packages are opened by hospital police officers. It is the P&T committee's decision what items patients may order. If approved, it is catalogued and administered by the pharmacy.

Physical medicine

Background information: Patients are often admitted to the hospital with chronic conditions that have not been managed properly and require medical stabilization prior to mental health treatment. Most hospitals reported that the department cannot currently refuse medically unstable patients.⁵¹ Mentally disordered offenders must come to the department on the first day of their parole, even if they have an acute medical condition requiring care.

As with the mental health staff, the physical health staff are having difficulty with recruitment, exacerbated by the failure to be brought to salary parity with the CDCR medical staff. In addition, the Enhancement Plan did not establish staffing standards for physical medicine as it did for mental health treatment. Funding for additional medical staff has not been provided for several years through the budget process, other than for new facility activation.⁵² Table 6.5 above shows the staffing levels for physician-surgeons and nurse practitioners for state hospitals, as well as average caseload.

⁵¹ Napa SH relates the story of a patient arrested for an assault who, while in jail, lit himself on fire. The jail dropped the charges in order to force the patient's return to DMH's jurisdiction for burn treatment. On the other hand, Atascadero SH states it has had some success in refusing patients with a medical condition requiring immediate care before mental health issues can be addressed. Patients placed by counties are cited as being among the most medically unstable upon arrival.

⁵² As a result, some hospitals have reclassified other medical personnel to address medical care needs.

The department is exploring solutions to the recruitment problem. Some facilities propose expanding internship and residency programs to create a recruitment source for those DMH facilities that have difficulty recruiting in selected areas and disciplines. One facility is exploring telepsychiatry.⁵³

On-site medical services:

Basic medical care is provided at the state hospitals. Department physician-surgeons are either internists or family practitioners. Many also have secondary specialties such as infectious diseases or neurology, and they run in-house clinics for these specialties in addition to their primary patient care duties.⁵⁴ The hospitals currently offer the following in-house clinics:

- Napa SH provides in-house clinics for surgery, nephrology, hepatitis C, neurology, ECT, and gynecology/preventative care.
- Metropolitan SH has in-house clinics for cardiology, ophthalmology, neurology, nephrology, optometry, and occupational medicine for employees.
- Patton SH offers in-house clinics for neurology, infectious disease/HIV/tuberculosis, EMG/NCS/pain, and physical/occupational/speech therapy.
- Coalinga SH, which uses primarily contracted physicians, does not offer staff-run clinics but brings in outside physicians one to four times a month to offer clinics in surgery, neurology, optometry, endocrinology, nephrology, infectious disease, audiology, and pain management.

As noted above, only Napa SH and Metropolitan SH have SNFs for acutely ill patients, and they have community restrictions on the kinds of patients they can accept.⁵⁵ Depending on the hospital, medical care can cover a wide range of preventative, acute medical care and general primary care needs. Atascadero SH has an infirmary unit for medically-intensive needs, and Patton SH has a unit for individuals with significant chronic medical problems (e.g. serious congestive heart failure, emphysema, renal disease). All hospitals have the capability for performing EKGs, labs, x-rays, and IV antibiotics.⁵⁶

⁵³ The department's medical leadership reports that in general the role for telepsychiatry in the state hospital system is limited because it does not provide timely enough assessment and intervention for an in-patient population. Telepsychiatry also cannot be used for leadership of a clinical team or nursing staff. However, for sexually violent predators at Coalinga SH who have psychiatric diagnoses that are of a low severity, telepsychiatry might be a viable option in some situations.

⁵⁴ On-site clinics may also use outside physicians.

⁵⁵ Patton SH's medical director advises, "Both PSH and ASH are high-security hospitals (which refers to escape risk, not to dangerousness). Napa SH, which has SNF beds, is a medium security hospital, meaning they cannot accept individuals who have historical actions that categorize them at 'high escape risk.' Metropolitan SH, also medium-security, which also has SNF beds, has an agreement with the city of Norwalk to not take individuals that are deemed a high-escape risk or who have a history of sex crimes or charges of murder. Thus Patton SH [and Atascadero SH] has SNF individuals that cannot be sent to the open SNF beds at Napa SH and Metropolitan SH because of these rules. So, [Patton SH has] to pay outside SNFs to care for them. With some rule changes and a new agreement between MSH and Norwalk, this could be changed."

⁵⁶ A SNF provides care for patients without ability to take care of their own basic needs or ambulate. An infirmary provides care for patients who can perform their own basic self-care, but need constant medical attention. And

In general, hospitals report that the more services provided in-house, the better patient outcomes. Robust on-site services improve the management of chronic conditions, potentially preventing acute problems and reducing the need for outside medical care including costly transport.

Physician-surgeons reported that staffing for on-site medical services is thin both in terms of numbers and specialties on staff. Compared with mental health treatment, physical medicine has lower doctor-to-patient ratios. See table 6.5 above.

Other on-site medical services:

- **Employee occupational health clinics.** Some facilities such as Atascadero SH and Metropolitan SH run occupational health clinics for employees. At Napa SH, employee physical exams are now required annually instead of just a screening. This change is required per federal SNF regulations and enforced by DPH.
- **Utilization review of on-site medical.** Currently all facilities employ one or two nursing staff for utilization review. Under the oversight of the chief physician, the nurse supervisor and a utilization review committee work with the medical staff on utilization issues. Whether existing utilization review results in cost containment is unclear, and there has not been strong headquarters leadership for this activity. However, the team was advised the hospitals are jointly planning to develop an issue paper to develop a proposal for statewide utilization review of on-site ordering of medical services by hospital medical staff.

Outside medical care: Outside medical care refers to off-site treatment for a physical health problem and can also include placement in a community hospital or SNF. Outside medical treatment is necessary when a hospital lacks the medical staff, specialties, equipment, or facilities to care for patients. Specific examples include:

- Emergency room evaluations involving trauma, seizure, acute loss of consciousness, fever of unknown origin, abdominal pain, chest pain, or cardiac arrhythmia; and
- Non-emergency room medical services including work-up of a mass, dialysis, evaluation for possible orthopedic surgery, cancer treatment, preventative tests such as colonoscopy or mammogram, or urology evaluations for prostate issues including cancer.

Table 6.8 below shows the number of outside medical contracts per state hospital.⁵⁷

acute medical care is provided to those patients that are in need of immediate medical care with the expectation that they will recover from their medical condition in a reasonable amount of time.

⁵⁷ This data likely includes duplication among hospitals; multiple hospitals may contract with the same outside medical provider.

Table 6.8: Outside Medical Contracts by Hospital

State Hospital	Number of Contracted Outside Medical Providers
Atascadero SH	51
Coalinga SH	57
Metropolitan SH	30
Napa SH	38
Patton SH	68

- ✓ **Provider issues:** Hospitals reported the following problems associated with outside medical services:
- **Proximity.** The hospitals in rural locations have difficulty finding providers within a reasonable driving distance. Some transport distances exceed 70 miles.
 - **Transport staff.** Movement of patients to outside care is expensive, involving the assignment of transport staff (nurse and hospital police, a 2:1 pattern).
 - **Reluctance to treat forensic mental health patients.** Some providers do not want to treat DMH patients or deal with the department for reasons described below:
 - **Statutorily capped pay rates reduce the number of willing providers:** Outside medical care pay rates are set by statute. Welfare and Institutions Code (W&I) Section 4101.5 capped payments to outside medical providers at between 110 to 130 percent of Medicare reimbursements rates, depending on the service.⁵⁸ All hospitals except Metropolitan SH report that the rate reductions imposed by the W&I Code have made finding willing providers more difficult.⁵⁹ In some cases, the problem relates primarily to unusual medical conditions that require the services of a leading medical institution such as Stanford or one of the UC hospitals. These institutions are reluctant to enter into contracts at the W&I rates. In other cases, the difficulty is finding providers in rural locations willing to travel to hospitals for low reimbursement rates, particularly (as with Coalinga SH) when scheduled appointments are cancelled because patients refuse treatment. In general, it appears that W&I rates are reducing the supply of willing providers, although the severity of impact varies from hospital to hospital. The consequence is longer wait times for medical treatment, which in turn can degrade medical conditions and result in higher patient care costs.

⁵⁸ The code states, “The department shall not reimburse a contract provider of hospital services at a rate that exceeds 130 percent of the amount payable under the Medicare Fee Schedule, a contract provider of physician services at a rate that exceeds 110 percent of the amount payable under the Medicare Fee Schedule, or a contract provider of ambulance services at a rate that exceeds 120 percent of the amount payable under the Medicare Fee Schedule.”

⁵⁹ Metropolitan SH has an arrangement with the Los Angeles County and the University of Southern California for no-charge medical services, although the Metropolitan SH medical staff notes that the county hospital periodically voices concerns about the type and volume of patients, as well as costs.

- **Long payment timeframes:** DMH has had deficits each of the last two fiscal years, resulting in delayed payments to vendors. In 2009-10, a number of vendors were forced to go through the Board of Control process which took many months. Some vendors are now unwilling to provide care for state hospital patients.
- **Difficult patients:** Mentally ill patients may exhibit behavior or have special requirements (e.g. security) that make them unacceptable to outside practitioners. Also, the high incidence of cancelled appointments acts as a disincentive (see the discussion below).
- **Long wait times for appointments.** A small pool of outside medical practitioners can result in long wait times for patient treatment. Table 6.9 below shows specialties with wait times generally over three months, by hospital.
- **Patient refusal of outside medical treatment.** At least one hospital, Coalinga SH, has a very high rate of treatment refusal which increases workload for primary care staff. By departmental policy, medical personnel are required to reschedule refused appointments three times a month before beginning the process again the next month. Part of Coalinga SH patients' reluctance to be treated is related to the issue below.
- **Patients object to CDCR or hospital police transport to medical appointments.** At all hospitals patients are placed in walking restraints and accompanied by a guard when taken to outside medical appointments. At Coalinga SH, CDCR provides transport security. Patients are often placed for hours in a restricted waiting room at those facilities. These transport requirements result in a high rate of treatment refusal, raising costs to both the state and providers.
- **Hospitals cannot always choose which medical facilities they deal with.** Napa SH has contracts with two local hospitals for emergency services. If acute trauma services are required, the emergency room doctor at the local hospital decides where to send the patient, which may be a hospital with which Napa SH does not have an agreement. Billing tangles can result.
- **Some medical facilities impose special requirements.** UC San Francisco requires two armed escorts when treating DMH patients.

Table 6.9: Wait Time Summary

Specialties With 3+ Months Wait Time to Schedule an Appointment ⁶⁰	Wait Time				
	Atascadero SH	Coalinga SH	Patton SH	Metropolitan SH	Napa SH ⁶¹
Cardiology			2-3 months		
Colonoscopies	12+ months		3-4 months		
Dermatology		12 months		6-12 months	
Diagnostics				6-12 months	
EGD	12+ months		3-4 months		
Endocrinology		18 months	2-3 months	6-12 months	
ENT				6-12 months	
General Surgery				12+ months	
GI		12 months	3-6 months		
GI Lab			3-4 months	6-12 months	
Hematology				6-12 months	
Hepatitis/Liver				6-12 months	
Liver Biopsy			3-4 months		
Mammogram			2-3 months	1-3 months	
Neurosurgery		3 months		6-12 months	
Oncology				1-3 months	
Ophthalmology				6-12 months	
Orthopedics	3 months		2-3 months	1-3 months	
Renal	4-5 months		2-3 months		
Rheumatology		9 months			
Thyroid				6-12 months	
Urology	3 months	10 months	2-3 months	1-3 months	
Dialysis	6 months				
Podiatry	4 months				

✓ **Utilization review for outside care**

- There is no utilization review body at headquarters.
- The team did not hear of any centrally promulgated review standards, including cost thresholds for cases that would require discussion with headquarters.
- There is no policy or method for identifying cases or practices that may set precedents for types of services the department will pay for.
- The hospitals differ in their utilization review practices.

⁶⁰ Hospitals note that for some specialties, they cannot find any providers available to treat their population.

⁶¹ According to data submitted by hospitals, Napa SH does not have any wait times over 3 months.

- Napa SH limits its review to primarily to two issues: 1) were all services on the bill actually provided (review performed by the medical director and staff), and 2) are all of the charges calculated appropriately (the accounting office). Napa SH does not have a designated utilization review nurse. For one of the community hospitals Napa SH contracts with, utilization review is included in contract services.
- Coalinga SH's medical director is chair of the utilization review committee and reviews outside medical costs. However, there are no standard criteria. Coalinga SH has a utilization review nurse who refers issues to medical staff committees.

✓ **Fiscal issues for outside medical care**

- **Outside medical cost trends:** There is an upward trend in outside medical costs. Table 6.10 below shows costs for outside hospitalization (including SNFs) and outside office visit costs for 2007-08 through 2010-11.
 - Based on data provided by the hospitals, outside medical costs totaled \$41.4 million in 2010-11, with expenses increasing an average of 10 percent a year between 2007-08 and 2010-11 (see below). Over the four years, costs increased by \$9.5 million.
 - Data from CALSTARS on outside medical costs paint a more dramatic rise in costs. Over six years, costs increased by \$34 million, or an average rise of about 60 percent a year. However, these data appear skewed in the final year, perhaps by system coding changes, and the team therefore considers the data collected from hospitals as more reliable. The full CALSTARS data and a summary of state hospital reported outside medical expenditures are included in Appendix 6.I and a full summary of state hospital reported outside medical costs is included in Appendix 6.J.

Table 6.10: Outside Medical Costs

Hospital	2007/2008		2008/2009		2009/2010		2010/2011	
	Hospitalization	Office visits	Hospitalization	Office visits	Hospitalization	Office visits	Hospitalization	Office visits
ASH	\$1,926,238	\$2,553,705	\$828,818	\$2,018,788	\$1,584,898	\$1,488,980	\$2,171,250	\$2,186,244
CSH	1,468,653	3,705,494	4,981,094	4,272,630	8,063,276	2,541,074	5,279,787	3,438,158
MSH	7,598	22,479	71,767	36,739	341,878	50,149	152,878	76,284
NSH	1,444,722	1,375,811	4,336,302	2,230,331	6,577,134	2,821,505	7,576,257	2,661,722
PSH	15,346,446	4,015,217	11,377,413	5,270,767	10,401,909	3,150,591	11,194,421	6,653,790
Totals by category	\$20,193,657	\$11,672,706	\$21,595,394	\$13,829,256	\$26,969,095	\$10,052,300	\$26,374,592	\$15,016,198
Totals by fiscal year	\$31,866,363		\$35,424,650		\$37,021,395		\$41,390,790	

- **Outside lab costs vary widely among hospitals.** A sample of the costs of six common lab tests shows that hospitals pay significantly different fees. For example, Atascadero SH pays \$285 for an olanzapine level test while Patton SH pays approximately \$15 for the same test (see table 6.11 below).

Table 6.11: Sample of Per Test Lab Costs

Facility/Laboratory Service	Atascadero SH/Quest	Coalinga SH/Biodata	Napa SH/Quest	Metropolitan SH/UC Irvine	Patton SH/San Bernardino Community Hospital
Test					
Prolactin	\$6	\$20	\$10	In-house	\$2.55
Abilify level	150	90	154	\$82	159
HIV anti-body	6	8	14	19.30	21
Rubella	5	5	9	20.25	15.36
Clozaril level	23	20	19.32	19.21	15.14
Olanzapine level	285	16	74	98.8	15.14

- **Issues related to the annual population adjustment:**
 - **Outside patients not counted for funding purposes.** Patients in outside medical facilities, whether hospitals or skilled nursing, are not currently counted in the population estimate even though DMH pays for this care. These are the most expensive patients DMH is responsible for. Hence, this exclusion leads to underfunding, given that the hospitals have not been receiving budget adjustments for outside medical care.
 - **Staffing for physical medicine not population-driven.** The physical medicine staff is not included in the population BCP because staffing ratios have not been mandated externally or negotiated between the department and control agencies. However, failure to adjust staffing based on trends in the number of chronic conditions in the patient population can lead to higher costs for outside medical treatment.
- **Outside hospitalization costs can be unpredictable:** Hospitalization costs can vary significantly from year to year. Some cases can cost over one million dollars. Several hospitals suggested that an insurance pool concept for high-cost cases managed at headquarters might help with hospital budget management.
- **W&I rate changes are cutting costs:**
 - The full fiscal impact of the W&I rate changes is not yet known, although providers' billings are unquestionably lower. \$10 million was estimated as the savings and removed from the department's budget in 2010-11. However, contract changes took several months, so billings were not affected until the spring of 2011. 2011-12 will be the first full year of savings impact.⁶²
 - Other W&I code 4101.5 features:

⁶² On the other hand, the department has not had a base adjustment for outside medical costs (excluding registry services) for at least five years, and over that time costs increased over \$10 million. The team estimates outside medical costs (hospitalization and other services, in total) would need to drop to less than \$30 million to return to base, and therefore to less than \$20 million for the \$10 million budget reduction to be represented fairly as base savings.

- Allows for use of preferred provider organizations and other network managers;
 - Sets rates for noncontract providers at the Medicare fee schedule or less;
 - Does not apply to services contracted before 9/1/09;
 - Does not apply to contracts through a designated health care network provider, although these should be negotiated at the lowest possible rates under the circumstances; and
 - Requires medical costs of inmate-patients still the prison system’s jurisdiction to be reimbursed by CDCR (also in Penal Code Section 5023.5).
- ✓ **Other issues reported by hospitals for outside medical care**
- Cases of self-injurious behavior have resulted in major medical procedures and long-term hospitalization. These costs are unpredictable and reportedly increasing as the hospitals receive more individuals with pre-existing medical problems. Some of the hospitals regarded Lanterman-Petris-Short (LPS) patients as the most self-injurious.
 - The largest portion of the problem of high medical costs at admission reportedly comes from forensic commitments with a court order.
 - Outside medical costs are driven by an aging and increasing medically fragile population.
 - Patients who need hospice often end up moved to and from the state hospital system and outside medical facilities. The medical staffs regard this as inappropriate end-of-life care.
 - The increase in aggression related to the increasingly forensic population reportedly has resulted in more injuries requiring outside medical care, further driving up costs (see table 6.12 below).

Table 6.12: Cost of Hospitalizations Due to Violence (Harm to Self/Others)

Hospital	2009-10		2010-11	
	Number of Hospitalizations due to Violence (Harm to Self/Others)	Associated Cost	Number of Hospitalizations due to Violence (Harm to Self/Others)	Associated Cost
Atascadero SH	N/A	\$ 2,995	N/A	\$ 63,747
Coalinga SH	3	\$ 18,197	7	\$ 41,587
Metropolitan SH	5	\$ 3,410	11	\$ 12,610
Napa SH	10	\$ 251,948	16	\$ 804,742
Patton SH	N/A	\$ 356,412	N/A	\$ 366,966

- ✓ **Access to more data would improve analytical and decision-making processes.** Data that would be helpful but are not available include:
- Patient medical costs by age, commitment type, and level of care;
 - Chronic conditions per patient, by age, commitment category, and level of care; and
 - Pre-existing conditions per patient, by age, commitment category, and level of care.

Medical Cost Recovery

Some of DMH's patients have private party insurance cover and others are eligible for Medicare. DMH may not bill for Medicaid/Medi-Cal costs for patients unless they are under 22 or over 65. For the balance DMH is expected to recover costs on behalf of the state and those costs are submitted as revenue to the General Fund. The expected revenue generation, per the department, is \$10.3 million.

When DMH and the Department of Developmental Services (DDS) split in 1978, by agreement DDS kept staff related to medical billing, agreeing to bill on behalf of DMH.⁶³ DDS no longer serves as billing agent, and DMH has neither the billing IT systems nor the staff to recover costs on its own behalf.

According to hospital input, cost recovery has been plagued by a high incidence of error related to physician coding.⁶⁴ Incorrect reports previously were corrected through collaboration between DMH and DDS. As budget pressures reduced DDS billing staff, the ability to correct incorrect reporting also declined. Moreover, physician incentive to complete paperwork correctly has not been high because the hospitals' budgets are not at risk in the event of under-collection.⁶⁵

Team observations, conclusions and recommendations

Observations

- ✓ **Medical staff welcomed interest in their programs.** Medical staff appeared to appreciate the opportunity to share their program concerns and hear about the budget crisis affecting the department.
- ✓ **Leadership, communication, and teamwork.** Every medical team interviewed felt headquarters could do a better job of leading medical services and supporting the exchange of best practices between hospitals.
- ✓ **Enhancement Plan.** Input was unanimous: the plan needs to be refocused and simplified.
- ✓ **Workforce safety.** Medical staff are concerned about assaultive and harassing patient behavior and feel that headquarters' policies in some areas need revision to better address their concerns.
- ✓ **Recruitment.** Recruitment is more of a problem in the rural hospitals than in urban settings, but almost every hospital cited instances among some of the medical classifications where recruitment created obstacles to delivery of patient services.

⁶³ DDS also committed to additional workload on DMH's behalf: developing cost information and billing rates, compliance monitoring, and providing trust services for DMH's patients.

⁶⁴ One staff member who has been involved with the billing program for several years reported an error incidence of 35 percent.

⁶⁵ At some point in the past, receipts from billing were treated as reimbursements and greater emphasis was placed on billing accuracy.

- ✓ **Staffing support.** Staffing for the pharmacy and physical medicine programs may be inadequate and should be tied to the census if at all possible.
- ✓ **Data support.** There was a hunger for modernization of tools to support patient care, beginning with electronic medical records and revamping or replacing WaRMSS.
- ✓ **Pharmacy**
 - **Pharmacy costs are a significant budget pressure.** Costs have risen steadily, and while prices are expected to drop as second generation antipsychotics go generic, mechanisms are not in place to preserve savings over the long term.⁶⁶
 - **Cost consciousness is uneven in the hospitals.** Hospital pharmacists interviewed by the team were all very cost conscious and used their membership on the P&T committee to share information on drug efficacy and cost trends. However, the medical staff's interest in cost data varied by hospital, although some worked closely with the pharmacist to monitor costs.
 - **Overall, the team did not observe a system-wide approach in DMH to drug cost control.**
 - **Open drug selection.** A physician is at liberty to prescribe anything on the formulary without cost consideration, and access to non-formulary drugs is reportedly not difficult.⁶⁷ Moreover, the physicians value the freedom to make unrestricted medication choices. There is no use of tiers or treatment algorithms that would result selecting generics as a first alternative.
 - **Weak leadership on pharmaceutical cost issues.** Headquarters' involvement in pharmaceutical program development and management appears to have been limited largely to the consulting psychiatrist's participation on the PAC, the internal medication review body. The consulting psychiatrist reported that she had not heard cost discussed as a factor in the meetings for a long time. There is no organizational unit at headquarters vested with pharmaceutical oversight responsibilities, either for assessment of efficacy or for cost control.
 - **External leadership opportunities not used well.** Externally, the PAB and CDF Committee are the forums where DMH cost considerations should surface. In particular, this is where overall cost containment strategies and contract considerations are reviewed. DMH has not used its membership in the past as a platform for improving its cost control of the pharmaceutical program.
 - **The strength of peer review for pharmaceutical use appears to vary between hospitals.** No hospital cited the cost/benefit of a drug as a peer review criterion. A couple of hospitals cited a lack of time as preventing a robust peer review program. One hospital cited a lack of permanent staff as a problem in

⁶⁶ The team was advised that there are not drugs currently in the pharmaceutical pipeline that look to be clinically superior to current drugs.

⁶⁷ To gain non-formulary access at Napa SH, all prescribers are required to do is fax a form to the chief of staff who forwards it to the chair of Pharmacy and Therapeutics Committee, who then makes the determination. The result is usually in favor of prescriber. In interviews, however, medical leadership supported the goal of greater cost consciousness. Many felt that the sharing of physician cost performance data (e.g., average antipsychotic prescription cost per patient) would be sufficient to induce voluntary behavioral changes. Others felt a more directive approach was needed.

conducting peer reviews. Other factors included problems with relevant data and collegial pressures. Weak review processes can affect both efficacy and cost of treatment programs.

- **Policies to prevent inappropriate vendor influence.** Current policies appear too weak to address potential conflict of interest in the interaction between physicians and vendors, at least at some hospitals.
 - **No pharmacy community.** Pharmacists do not appear to have the opportunity to network regularly (between the hospitals). Thus, there is insufficient opportunity to share best practices.
 - **Fragmented systems.** Pharmacy systems—both manual and automated—have little direction or standardization. Each hospital has met its systems needs based on local priorities and funding.
 - **Medical support for pharmacy program changes.** While not necessarily cheering fiscal and formulary constraints, most medical staff expressed support for changes that might provide a better footing for cost-benefit considerations, provided patient care did not degrade. In fact, the medical leadership of the hospitals, in light of current budget realities, has recently taken a much firmer position on pharmacy cost containment. In a September 2011 meeting of the medical leadership from all facilities, the following plans were endorsed:
 - Stronger nonformulary review with data collection regarding denial rates;
 - Initiation of a new process, The Special Clinical Review, that targets formulary medications and will require pre-authorization prior to prescribing medications targeted for high cost or abuse potential; and
 - Physician education regarding medication costs including the publication of physician prescribing cost profiles at the hospitals.
- ✓ **Physical medicine:**
- **Lack of focus on physical health services.** The team noticed a lack of focus at headquarters—but not at the hospitals—on the provision of physical health services for patients.⁶⁸ For a department working with a wellness and recovery model that stresses interdisciplinary attention to the patient, the relative lack of prominence of physical medicine is curious.
 - **Patients arrive with conditions that are costly to treat.** Patients are older and more medically fragile. They are self-injurious and prone to violence. Moreover, conditions are exacerbated by psychotropics, so maintaining stable patient physical health while treating mental health is a challenge. Most chief physician-surgeons felt more specialties on staff and more in-house clinics would help prevent chronic conditions from becoming acute enough to require outside medical care.
 - **Hospitals are concerned about physical medicine and pharmacy staffing:** Most hospitals felt that staffing for non-mental health areas had not kept pace with mental health staffing, both in salaries and in patient load. Some have redirected

⁶⁸ The team was advised, however, that the Hospital Oversight and Monitoring unit was looking at ways to strengthen group leadership among the physician-surgeons.

resources to help meet the needs. It would be helpful if staffing standards could be developed for physical medicine and pharmacy and tied to the population BCP.

✓ **Outside medical**

- **Accepting patients with acute medical needs.** Hospitals expressed fiscal concerns about having to accept patients whose most primary requirement was stabilization for physical health problems. Only one hospital (Atascadero SH) reported it had any success at refusing patients until they were medically stabilized.
- **The supply of willing outside providers is dwindling.** Pay rate decreases, slow payment timeframes, proximity issues, and concerns about patient management all contribute to difficulty in finding providers. The result is longer wait for treatment and, in some cases, an escalation in treatment requirements and costs. Hospitals want greater ability to treat patients on grounds and a more reliable provider network.
- **Hospitals are beginning to address lab/imaging costs.** Medical leadership has identified a need to reduce unnecessary ordering of laboratory and imaging studies. This particularly applies to laboratory studies that are done “automatically” as part of a mandated protocol that results in more frequent monitoring than is the community standard.
- **Headquarters does not play a strong role in supporting utilization review.** The approach within the department is fragmented and reportedly lacks data and analytic support in some hospitals. Goals and standards are not clearly articulated.
- **The rate of increase in outside medical costs should flatten due to W&I Code rate reductions.** Costs may actually decrease in 2011-12, although it is too early to be certain. However, as noted above the rates have also reduced the supply of willing vendors.
- **Patients in outside hospitals and SNFs are not currently included as patient caseload in the population BCP.** This results in underfunding, since the department must pay for the patients’ medical care while they are out of the hospital. An alternative to counting them as caseload is to tie outside medical funding to population growth.
- **Cost recovery is incomplete.** Medicare-eligible costs are under-billed, in part because DMH no longer has billing services available through the Department of Developmental Services, and in part there is no system in place in most hospitals to make sure the paperwork is done correctly.
- ✓ **Data limitations.** Lacking electronic health records and other critical IT systems, key data to link with CALSTARS in order to evaluate patient care costs are not available.

Conclusions

- ✓ Over the past 20 years the hospital system has moved away from its community origins. The percentage of forensic patients has increased, bringing an increasing involvement with the penal system, sometimes different treatment objectives, and an aging, more medically fragile patient population. The hospitals' management tools have not all kept pace with those of the broader medical community. Some of these concerns have been addressed in part through the Enhancement Plan. Others have been exacerbated by the Enhancement Plan. Still other concerns are outside the scope of the Enhancement Plan but are not getting attention because the plan has consumed management attention.
- ✓ The policy and procedural framework for addressing workplace safety (in terms of assaultive or harassing patient behavior) needs to be continuously reviewed and updated working directly with patient care staff.
- ✓ There is no culture of cost containment in the department as a whole, much less for patient care. Individual hospitals make efforts, but the efforts are without system-wide goals, leadership, or coordination. The health care industry has been very focused on cost containment for many years so best practices are readily available and almost every one of DMH's hospitals has one or more areas in which it shines. But, there is no environment for sharing of best practices between hospitals or systematic review and adoption of industry standards for cost-effective operations. This does not mean there has been complete disregard for costs, but clearly the focus has been on compliance with the Enhancement Plan.
- ✓ The staff involved with patient care for the most part are not aware of the outside funding constraints on the department. They do not have a clear idea of the roles that the Health and Human Services Agency, the Department of Finance, and the Legislature play. They do not understand how the perspectives of these entities affect availability of funds for programs. The staff the team spoke with wanted more information about larger context.
- ✓ The cost pressures in the medical area are the Enhancement Plan, the use of contracted professionals, the use of proprietary drugs over generics, patient demographics which drive a need for more physical medicine services, and the use of outside medical care over on-site medical care.
- ✓ The performance pressures in the medical area are compliance with the Enhancement Plan, lack of central medical leadership and program planning, lack of decisional teamwork with headquarters, difficulty of recruitment in some areas, lack of system-wide automated tools (particularly electronic health records), lack of networking between hospitals, possible staffing issues for pharmacy and primary care, and especially serious concern over the rate of assaults on patients and staff.
- ✓ Staffing for the pharmacy and physical health programs should be assessed and tied to the population BCP if feasible.
- ✓ The department needs a replacement billing unit if it is to continue to recover costs for patient care.
- ✓ To address high error rates, physicians need training and hospitals need incentive to monitor billing quality. One option to provide the necessary incentive is to tie some portion of the cost recovery to the department's budget.

- ✓ The state is losing General Fund revenue because there is no billing function at this time for DMH's Medicare or Medi-Cal eligible patients.
- ✓ Billing claims reportedly have a high error rate.
- ✓ Evaluation of patient care costs is hampered by the inability to identify medical costs by type of patient (commitment category, level of care, age, or chronic condition).

Recommendations

- Establish a clinical deputy director at headquarters who is a forensic psychiatrist. Provide the program direction, oversight, and teamwork environment that the medical staff has reported it needs.
- Promote the management position that cost-consciousness is necessary for the medical community. State hospitals, just as private hospitals, have a bottom line for the budget.
- Reassess the Enhancement Plan with the intent of refocusing on 1) more physician interaction with patients in lieu of paperwork involvement and 2) the forensic mission.
- Recognize that the patient population is increasingly at risk medically, and evaluate the physical health and pharmacy programs for robustness. Consider more staffing in general, more on-staff specialties, and more on-site clinics to improve patient care and reduce outside medical costs.
- Assess the policy and procedural framework not only for workforce safety (as it relates to assaults and harassment from patients), but also for how that framework is created. Broadly-based, continuous input is the goal, with channels for confidential input.
- Establish pharmacy cost containment objectives.
 - One of those objectives should be to preserve the savings that will materialize as proprietary drugs go generic.
 - Another goal should be to ensure the use of generics whenever clinically appropriate.
 - Improve review processes:
 - For non-formulary drugs ensure that the review process is robust, performed by qualified clinicians, and data is collected on rates of denial/approval. The non-formulary review process should be uniform across facilities.
 - For formulary drugs, consider implementing the preauthorization review process under development by senior medical staff for selected expensive formulary medications or high liability formulary medications.
 - Use committee platforms effectively for the statewide pharmacy program. The current contract language makes it difficult for departments to choose to use generics over proprietary drugs. Strong committee participation is needed to change this situation.
- Consider a contracted health care provider network for outside medical services (like Health Net provides for CDCR) to enhance access to services, reduce contracting workload, and potentially have access to utilization management for outside medical services.
- Use statewide contracting more often to reduce workload and improve contract rates. This could be done as a stand-alone contract or be bundled with a larger healthcare network provider contract. Laboratory services, x-ray imaging and contract registries are reasonable places to start, but hospitals should be included in the planning process.

- Ensure that vendor contact with physicians has neither the substance nor the appearance of conflict of interest. The team recommends an overall review of the conflict of interest policies for the medical staff.
- Develop electronic health records to help medical staff manage patient care and to serve as input to a cost management system. Electronic health records should also save medical staff time.
- Explore the option of an automated manual in place of multiple special orders; some special orders are outdated and need review.
- Request resources for a replacement billing unit, offsetting that cost either through revenue collection or through the scheduling of reimbursements.
- To create the incentive needed to curb physician errors in billing claims, schedule some portion of the recovery either against the current hospital budget, or set up an incentive-based fund (such as for medical equipment) that can be accessed only when cost recovery exceeds anticipated General Fund revenue from billings.
- Identify the key data needed to evaluate and control cost trends in patient care. Develop methods and IT tools to identify medical costs by patient commitment type, level of care, age, and chronic condition. Plan for IT system and accounting system changes to meet at least that minimum information threshold.