

Digest of A Performance Audit of the Utah State Hospital

Chapter I: Introduction

The Utah State Hospital is a 359-bed facility that provides psychiatric care 24 hours a day. The State Hospital is accredited by the Joint Commission and certified by Medicare and Medicaid. Each of the 11 local mental health authorities are allocated adult and pediatric beds based primarily on population. Mental health authorities can place patients in their State Hospital beds as long as statutory requirements are met. Further, when individuals are found not competent to stand trial, they are sent to the State Hospital's forensic unit for competency restoration.

We were asked to review the types and quality of care provided by the State Hospital, as well as the need for additional bed space at the facility. To provide an independent, expert opinion on the quality of care issue, we contracted with Dr. Joel Dvoskin, a clinical psychologist with significant experience in the mental health field.

Chapter II: The State Hospital's Quality of Care is Good Overall

The State Hospital Compares Reasonably Well Along Common Quality-of-Care Measures. Using eight common quality-of-care measures, the State Hospital's performance appears comparable to other psychiatric hospitals. The State Hospital compares reasonably well in measures of 30-day readmittance to the facility, hours of patient seclusion and restraint coupled with percent of patients secluded and restrained, medication error rate, and patient injury rate. However, the State Hospital's elopement rate is high and our consultant believes it merits further examination. An elopement is defined as a patient being absent from their privilege areas.

Consultant Believes Current Quality of Care Is Good. Our consultant concluded that the quality of care at the State Hospital was as good, and in some ways, significantly better than at other state hospitals. The therapeutic environment is good, the patients' medication levels appear appropriate, a patient Treatment Mall is available, the treatment plans are clear and useful, and management is responsive to suggestions for improvement. In addition, our consultant was very impressed with the State Hospital's collaboration with academia, the quality of group therapy, and the quality of the children's unit. He based his conclusions primarily on observations made during unit visits and interviews of staff and patients. He also suggested some improvements that would help the State Hospital approach standards of care that he would consider excellent.

**Chapter III:
Bed Space
Availability Varies
By Unit**

Demand for Forensic Beds Exceeds Availability. The forensic unit in the State Hospital does not have enough beds to satisfy current demand. Currently, patients who need treatment in the forensic unit will wait approximately two to three months for a bed to become available.

In fiscal year 2007, patients identified as competent to proceed to trial by the State Hospital spent an additional 52 days in the forensic unit. The State Hospital may be able to reduce this excess time by enforcing a section of the *Utah Code* and by working more closely with the courts. If this excess time were reduced, as many as eight additional forensic patients could have been treated in fiscal year 2007.

The Division of Substance Abuse and Mental Health (the division) should also consider treating nonviolent forensic patients in a less costly setting. For example, one patient spent 530 days in the forensic unit while being brought to competency to stand trial for a class B misdemeanor. The State Hospital administrators believe this patient did not need the high level of security that the forensic unit provides.

The State Hospital Appears to Have Sufficient Adult Beds. On average, the adult units operated at 90 percent capacity in fiscal year 2007. Additionally, the State Hospital has more adult beds per capita than the average of seven western states. Some mental health authorities appear to have greater demand for adult beds than others. The division should consider using historical demand when allocating adult beds. Some patients may also be better served in a long-term care facility. State Hospital administrators claim that 25-30 current patients would be better suited in a long-term care facility. Additionally, administrators estimate that the cost per bed-day of a long-term care facility would be \$200-250, compared to \$361 per bed-day in the adult units.

Pediatric Units Have Excess Capacity. Of the western states surveyed, Utah is one of two that treats children under age 12 at a state hospital. Additionally, the State Hospital has more adolescent beds per capita than any of the other states that were surveyed. The adolescent units operated at 66 percent capacity in fiscal year 2007, while the children's unit operated at 90 percent capacity. The State Hospital has made a fiscal year 2009 funding request for the demolition of the old Medical Services Building and the construction of two new buildings: a new Medical Services Building, and a Pediatric Treatment Facility. Regarding the Pediatric Treatment facility, we believe the division should consider the following questions: Should children be treated at the State Hospital? Should the adolescent bed capacity be reduced?

REPORT TO THE
UTAH LEGISLATURE

Number 2008-04

**A Performance Audit
of the
Utah State Hospital**

January 2008

Audit Performed By:

Audit Manager	Darin Underwood
Audit Supervisor	Janice Coleman
Audit Staff	David Pulsipher Aaron Eliason
Consultant	Dr. Joel A. Dvoskin, Ph.D.

Table of Contents

	Page
Digest	i
Chapter I	
Introduction	1
Audit Scope and Objectives	4
Chapter II	
State Hospital's Quality of Care Is Good Overall	5
State Hospital Compares Reasonably Well Along Common Quality-of-Care Measures	5
Consultant Believes Current Quality of Care Is Good	18
Recommendations	24
Chapter III	
Bed Space Availability Varies by Unit	25
Demand for Forensic Beds Exceeds Availability	25
The State Hospital Appears to Have Sufficient Adult Beds	32
Pediatric Units Have Excess Capacity	36
Recommendations	39
Agency Response	41

This Page Left Blank Intentionally

Chapter I

Introduction

The Utah State Hospital's (State Hospital's) quality of care is good overall. The State Hospital compared reasonably well within common performance measures, and our consultant believes the State Hospital's quality of care is as good as, and in some cases, superior to that offered in other state hospitals. While quality of care is good, the availability of bed space varies by unit at the State Hospital. Demand for forensic beds exceeds availability, while pediatric beds appear to have excess capacity. The current number of adult beds appears sufficient.

State Hospital Offers Several Services

The State Hospital, established in 1885, is a 24-hour, in-patient, 359-bed psychiatric facility that is accredited by the Joint Commission, the largest accreditor of health care organizations in the United States, and certified by Medicare and Medicaid. For those patients who are severely and persistently mentally ill or who require intensive inpatient treatment, the State Hospital offers both pediatric and adult services.

- Pediatric services are segregated into children's services, for patients ages 6 and 12, and adolescent services, for patients ages 13 and 17. The children's unit has 22 beds, while the adolescent unit has 50 beds.
- Adult services are for patients who are 18 years of age or older. The total number of adult beds available is 182.

In addition to these services, the State Hospital also has an Adult Recovery Treatment Center (ARTC), a five-bed acute-care facility for rural areas lacking such a facility. The center focuses on quickly stabilizing patients for return to the community.

The State Hospital also offers forensic services. The forensic unit has 100 beds and serves these types of patients:

- Persons found incompetent to proceed to trial who need competency restoration

**The State Hospital
has been accredited
by the Joint
Commission since
1975.**

- Persons who require guilty and mentally ill or diminished-capacity evaluations
- Persons adjudicated and found guilty and mentally ill
- Persons adjudicated and found not guilty and insane
- Persons with mental-health disorders who are in the custody of the Utah Department of Corrections

State Hospital Interfaces with Mental Health and Court Systems

The State Hospital is an important part of the continuum of care in the mental health system. As stated in *Utah Code* 62A-15-603(1):

The administration of the state hospital . . . shall function and be administered as a part of the state’s comprehensive mental health program and, to the fullest extent possible, shall be coordinated with local mental health authority programs.

As part of this coordination, each of the 11 local mental health authorities are allocated a share of both adult and pediatric (children and adolescent) beds based on population. Mental health authorities are free to place patients in their State Hospital beds as long as the patient has been civilly committed to the local mental health authority and has severe mental disorders for which no appropriate, less-restrictive treatment is available. That said, the State Hospital is not a long-term care facility for patients of the community mental health authorities. The State Hospital is an intermediate-care facility, and the goal is for patients to ultimately return to the community for treatment.

The State Hospital also has a critical role in the justice system. When individuals are found not competent to stand trial, the individual is sent to the State Hospital’s forensic unit where treatment teams will try to restore the individual’s competency through medication and other means. Once competency is restored, the individual is generally transferred back to the county jail to await trial. When the State Hospital’s forensic unit is full, individuals are held in the jail awaiting an opening; there are no other adult forensic facilities in the state. While the State Hospital’s forensic unit also provides services for individuals who have been judged “guilty and mentally ill” or “not guilty by reason of insanity,” the bulk of its services are competency restoration.

The State Hospital’s goal is for mental health patients to return to the community for treatment.

The bulk of the State Hospital’s forensic service is competency restoration.

State Hospital Costs Are Mid-Range

To provide adult, forensic, and pediatric services, the State Hospital's cost per bed-day appears similar to costs in surrounding western states. Fiscal year 2005 per bed-day costs, the latest available from the National Association of State Mental Health Program Directors Research Institute (NRI), for Utah and six surrounding western states are shown in Figure 1.1.

Figure 1.1 Comparative Costs per Bed-Day for Utah and Six Surrounding Western States. Utah's costs per bed-day, assuming 100 percent occupancy, are in the middle of the other western states.

State	UT	AZ	CO	ID*	MT	NV	WY
Cost per Adult Bed	\$346	\$496	\$406	n/a	\$304	\$225	\$438
Cost per Forensic Bed	387	371	376	n/a	431	213	448
Cost per Pediatric Bed	392	514	581	377	n/a	n/a	n/a

** Idaho's adult and forensic bed costs were not computed because Idaho can not easily separate adult and forensic beds.*

The State Hospital's costs per bed-day are mid-range among other western states.

As seen in Figure 1.1, the State Hospital's costs per bed-day are neither the lowest nor the highest within any of the three comparisons. While we have no comparative data for fiscal year 2007, the State Hospital's current costs per bed-day are:

- \$361 per adult bed
- \$414 per forensic bed
- \$439 per pediatric bed

Personnel costs are the largest contributor to overall costs. In fact, direct-patient-personnel costs make up slightly less than 70 percent of the per bed-day costs.

Audit Scope and Objectives

This audit was requested by Senator Curtis Bramble and Representative Rebecca Lockhart. Specifically, they requested an audit of the quality and type of care provided by the State Hospital and the need for additional bed space at that facility.

Consequently, this audit had these three objectives:

- Identify the types of care provided by the State Hospital.
- Identify the quality of care provided by the State Hospital.
- Identify the current utilization of bed space and the need for any additional bed space.

To provide an independent, expert opinion on the quality of care offered by the State Hospital, our office contracted with Dr. Joel Dvoskin, a clinical psychologist with significant experience in the mental health field. Dr. Dvoskin was on site with the State Hospital audit team the week of October 1, and his opinions are based on what he observed and interviews he conducted during that time. His complete report is available upon request.

Chapter II

State Hospital's Quality of Care Is Good Overall

The overall quality of care offered by the State Hospital is good. Two approaches were used to reach this conclusion, benchmark comparisons and expert opinion. The State Hospital's performance compares reasonably well for the most part along selected quality-of-care benchmarks. Further, our consultant believes that the care at the State Hospital is as good as, and, in some ways, significantly better than most state hospitals he has observed.

We assessed quality of care using common performance measures and expert opinion.

One common quality-of-care measurement methodology is to compare performance along various measures, which is what we did. However, because of data comparability issues that often occur, we were uncomfortable relying exclusively on this type of analysis to draw quality-of-care conclusions. To further validate the quality of care, we also relied on the opinion of a recognized expert, Dr. Joel Dvoskin.

Dr. Dvoskin is a clinical psychologist who has had experience overseeing state psychiatric hospitals, has had a number of articles published dealing with the treatment of persons with serious mental illness and co-occurring substance abuse, and has consulted with many state and local governments on the provision of mental health services in public settings. Dr. Dvoskin was on site with the State Hospital audit team the week of October 1 and his opinions are based on his interviews with staff and patients, plus his observations made during that time.

State Hospital Compares Reasonably Well Along Common Quality-of-Care Measures

Using eight common quality-of-care measures, the State Hospital's performance appears reasonable when compared with other psychiatric hospitals. However, these comparative measures should be viewed somewhat cautiously because of potential definition interpretation and reporting differences among the various hospitals.

The State Hospital, like most state, private, county, and not-for-profit hospitals in the United States, voluntarily participates in the accreditation process of the Joint Commission. The Joint Commission is the largest accreditor of health-care organizations in the United States, and its mission is to continuously improve the safety and quality of care offered by health-care organizations. This accreditation process has historically rested on site visits conducted by Joint Commission surveyors. Now, however, the Joint Commission additionally provides a statistical report, entitled the *ORYX Performance Measure Report*, that attempts to compare psychiatric hospitals to one another along selected quality-of-care measures. It is hoped that this benchmarking process will motivate hospitals to improve their performance in key areas.

Our consultant notes that the data, which are self-reported by each hospital, are intended to identify a hospital's statistical outliers. Statistical outliers can exist for many reasons. For example, a hospital that reports incidents in an especially diligent manner would have a higher number of reported incidents, while a hospital that was particularly lax in its reporting might appear to have fewer incidents. It is never easy to ascertain whether a statistic reflects the phenomenon it purports to represent, or the reporting of that phenomenon.

Rather than directly report their performance measure data to the Joint Commission, hospitals contract with an impartial third party for raw data compilation and ultimate reporting. This third party is charged with ensuring common reporting definitions for all performance measures used, monitoring the raw data for obvious reporting problems, auditing the raw performance data to ensure that hospitals are reporting fully (i.e., using the outlined performance measure definitions properly), and, finally, reporting hospital performance measure results to the Joint Commission. The third party used by the State Hospital and many other state hospitals is the National Association of State Mental Health Program Directors Research Institute (NRI), which focuses exclusively on state-operated psychiatric facilities and psychiatric facilities that serve publicly funded individuals. Other third-party contractors are available for private psychiatric hospitals.

In presenting the State Hospital's performance, we use two comparisons. The first comparison uses the Joint Commission's calendar year 2006 *ORYX Performance Measure Report*. In the ORYX report, depending on the measure, the State Hospital is compared to between

The State Hospital contracts with the National Research Institute (NRI) for raw data compilation and ultimate performance reporting to the Joint Commission.

131 and 219 Joint Commission accredited psychiatric hospitals. The second comparison uses the Western State Psychiatric Hospital Administrators (WPSHA) June 2006 to May 2007 comparative statistics report. In this report, the State Hospital is compared to between 10 and 20 state psychiatric hospitals. Again, the number of comparative hospitals depends on the performance measure. The WPSHA performance measures and their definitions are the same as those used in the Joint Commission's *ORYX Performance Measure Report*.

The benchmarks selected are commonly used and are reported by both the Joint Commission and the Western Psychiatric State Hospital Administrators (WPSHA).

For this report, we chose these eight performance measure benchmarks:

- readmittance within 30 days
- hours of seclusion
- hours of restraint
- percent of patients secluded
- percent of patients restrained
- medication error rate
- client injury rate
- client elopement rate

These benchmarks were chosen because they are commonly used by many hospitals and all eight performance benchmarks are reported by both the Joint Commission and WPSHA.

30-Day Readmittance Rate Compares Very Well When Interpretation Error Corrected

The first quality-of-care measure used is patient readmittance within 30 days of hospital discharge. Our consultant notes that the 30-day readmittance rates reported in Figure 2.1 are within the national average range. However, the reported State Hospital rates incorrectly count transfers from the acute Adult Recovery Treatment Center (ARTC) unit to the longer-term adult civil unit as a 30-day readmittance. When ARTC transfers are excluded, our analysis of fiscal year 2007 data supports a State Hospital 30-day readmittance rate of 3.35 percent. Consequently, our analysis indicates the State Hospital's rate is very good and well below the averages reported in Figure 2.1.

Our analysis supports a 30-day readmittance rate of 3.35 percent, a very low rate.

According to the *Sixteen State Study on Mental Health Performance Measures* that was published in 2003 by the United States Department of

Health and Human Services, “A major outcome of the development of a community-based system of care is expected to be reduced utilization of state . . . operated psychiatric inpatient beds. The goal is to decrease the number of [patients] being readmitted to state psychiatric inpatient care within 30 . . . days of being discharged.”

Figure 2.1 compares the State Hospital’s 30-day readmittance rate with the participant averages found in the Joint Commission and WPSHA reports. This measure is calculated as the total number of 30-day readmittances during the reporting period divided by the total number of discharges for the reporting period.

Figure 2.1 30-Day Readmittance Rate. The State Hospital’s rate compares reasonably well even without the interpretation error corrected.

Measure	Joint Commission (Jan-06 to Dec-06)	State Hospital (Jan-06 to Dec-06)	WPSHA (Jun-06 to May-07)	State Hospital (Jun-06 to May-07)
30-Day Readmittance Rate	9%	7%	5.87%	6.70%

As shown in Figure 2.1, the State Hospital’s readmittance percentage is somewhat lower than that of the Joint Commission participants and somewhat higher than the WPSHA participants. As presented, neither comparison is concerning to us. Nonetheless, State Hospital management stated that their reported percentages in Figure 2.1 are too high because within-hospital transfers from acute to adult beds were incorrectly counted as 30-day readmittances.

The five acute beds at the State Hospital are not part of the normal adult beds allocated among the community mental health centers. These acute beds are short-term in nature, and they are used by centers that do not have access to acute-care facilities in their area. If a patient is in an acute bed and the stay appears to be longer than an acute stay, the center is asked to move the patient into one of the center’s allocated adult beds. State Hospital management stated these transfers were counted as a 30-day readmittance.

The State Hospital’s 30-day readmittance rate, reported by the Joint Commission and WPSHA, incorrectly include hospital transfers which artificially increased the rate.

Our analysis of State Hospital discharges supports the contention of hospital management. Of the 388 discharges occurring in fiscal year 2007, only 13 (3.35 percent) were readmitted within 30 days, a percentage that compares very well to both the Joint Commission and the WPSHA averages. A percentage close to the two reported for the State Hospital in Figure 2.1 can only be achieved if acute bed to adult bed transfers are counted as a 30-day readmittance.

Seclusion and Restraint Hours and Patient Percentages Are Not Concerning

These four seclusion and restraint measures are similar in their intent and are, therefore, discussed together. While the percent of patients secluded and restrained is higher than average, the hours of seclusion and restraint are lower. Taken as a whole, our consultant is not concerned with these results.

Seclusion is the involuntary confinement of a patient alone in a room from which the patient is prevented from leaving. Restraint is any involuntary method of physically restricting a patient's freedom of movement, physical activity, or normal access to his or her body. These four seclusion and restraint measures are potential indicators of quality of care for reasons stated in the 2003 *Sixteen State Study on Mental Health Performance Measures*.

Overutilization of highly restrictive treatments may represent the unavailability of more appropriate, less restrictive therapies or the presence of treatment providers who lack respect for [patient] autonomy and dignity.

Figure 2.2 compares the State Hospital's seclusion and restraint hours with the participant averages found in the Joint Commission and WPSHA reports. Both seclusion and restraint hours are expressed per 1,000 patient hours and are calculated as the total number of hours patients spent in seclusion or restraint divided by the total number of patient hours during the reporting period.

Literature indicates that excessive use of highly restrictive treatments may indicate problems with available treatments or with the providers themselves.

Figure 2.2 Hours of Seclusion and Restraint. State Hospital patients spend significantly less time in seclusion and restraint.

Measure	Joint Commission (Jan-06 to Dec-06)	State Hospital (Jan-06 to Dec-06)	WPSHA (Jun-06 to May-07)	State Hospital (Jun-06 to May-07)
Seclusion Hours (per 1000 patient hours)	.44	.43*	.66	.42
Restraint Hours (per 1000 patient hours)	.68	.25	1.18	.39

* This figure is the State Hospital's result for the fourth quarter of 2006. The State Hospital's figure for 2006 as a whole contains an error that went uncorrected for several months. This error added 720 hours a month to the State Hospital's seclusion hours when, in fact, there was no seclusion event.

An alternative way to present the proportions identified in Figure 2.2 is through the following:

- For the fourth quarter of 2006, the Joint Commission participants averaged 1 hour of seclusion for every 2,273 patient hours, while the State Hospital averaged 1 hour for every 2,326 patient hours.
- For 2006, the Joint Commission participants averaged 1 hour of restraint for every 1,471 patient hours, while the State Hospital averaged 1 hour for every 4,000 patient hours.
- For fiscal year 2007 (June to May), WPSHA participants averaged 1 hour of seclusion for every 1,515 patient hours, while the State Hospital averaged 1 seclusion hour for every 2,381 patient hours.
- For fiscal year 2007 (June to May), WPSHA participants averaged 2 restraint hours for every 1,695 patient hours, while the State Hospital averaged 1 hour for every 2,564 patient hours.

Based on these comparisons, it would appear that, overall, the time a State Hospital patient spends in either seclusion or restraint is significantly less than time spent, on average, at other hospitals.

In addition to measuring seclusion and restraint hours, the percentage of patients who were secluded or restrained during the reporting period is also measured. The percentage is calculated as the total number of

unduplicated patients who were secluded or restrained during the reporting period divided by the total number of unduplicated patients who were inpatients during the reporting period. These percentages are shown in Figure 2.3.

Figure 2.3 Percent of Patients Secluded and Restrained. The State Hospital secludes and restrains significantly more of its patients.

Measure	Joint Commission (Jan-06 to Dec-06)	State Hospital (Jan-06 to Dec-06)	WPSHA (Jun-06 to May-07)	State Hospital (Jun-06 to May-07)
Percent of patients secluded	2%	6.0%	3.04%	6.35%
Percent of patients restrained	4	6.5	3.65	7.07

While seclusion and restraint incidents are high, hours of seclusion and restraint are low which is the expected result given the State Hospital’s philosophy of intervening at the onset of trouble.

As can be seen, the State Hospital secludes and restrains a higher percentage of its patient population than do either of the comparative groups. In fact, the Joint Commission alerted the State Hospital that its seclusion and restraint percentages were outside expected ranges for at least three quarters in 2006 and recommended a detailed internal-measure review.

As our consultant notes, the State Hospital’s philosophy toward patient violence can best be described as a “nip it in the bud” approach to preventing violence. The State Hospital hopes that by intervening at the onset of trouble, far less involuntary treatment will be used, even if the number of seclusion and restraint incidents appears high. Under this philosophy, the number of incidents would be high, but the total hours of seclusion and restraint would be low; this overall result is what is reflected when looking at both sets of comparative data. Consequently, our consultant is not concerned with the data.

Medication Error Rate Compares Reasonably Well Now With Future Improvement Expected

A sixth quality-of-care measure is medication errors. Our consultant notes that the State Hospital is at or near the averages for medication error rates. All hospitals seek to reduce these errors as much as possible, and the State Hospital is no exception. With the change in the medication packaging system, the State Hospital’s medication error rate should decline further.

If medications are inappropriately prescribed, distributed, or administered then significant patient harm is a possibility.

Psychiatric medications are a critical component of the treatment of severely and persistently mentally ill patients. If these medications are appropriately provided, a significant improvement in symptoms often results. However, if these medications are inappropriately prescribed, distributed, or administered then significant harm or death to the patient is a possibility.

Figure 2.4 compares the State Hospital’s medication errors with the participant averages found in the Joint Commission and WPSHA reports. This measure is calculated as the total number of medication errors during the reporting period divided by the number of current and discharged patients during the reporting period.

Figure 2.4 Medication Error Rates. The State Hospital’s medication error rates compare reasonably well and should improve when the unit dose medication packaging system is fully operational.

Measure	Joint Commission (Jan-06 to Dec-06)	State Hospital (Jan-06 to Dec-06)	WPSHA (Jun-06 to May-07)	State Hospital (Jun-06 to May-07)
Medication Error Rate (per 100 patients)	2%	2.5%	3.78%	2.74%

As before, an alternative way to consider the proportions identified in Figure 2.4 is through the following:

- For 2006, the Joint Commission participants averaged 2 errors for every 100 patients, while the State Hospital averaged 3 errors for every 120 patients.
- For fiscal year 2007 (June to May), WPSHA participants averaged 4 errors for every 106 patients, while the State Hospital averaged 3 errors for every 109 patients.

The comparisons in Figure 2.4 are not concerning to our consultant for these reasons:

- The State Hospital’s error rate does not lie significantly above the Joint Commission average and compares favorably with the WPSHA average.
- The State Hospital has made a strong effort to ensure the validity and integrity of this data by creating an environment in which nursing personnel do not fear reprisal if they report medication errors. Other facilities may not have such an environment.

The medication error rate should decline further with the implementation of a new medication packaging system.

Also, as we noted earlier, the State Hospital is on the verge of implementing a medication packaging system to administer unit dose medications. When this medication packaging system is fully operational, administrations errors, which account for approximately 70 percent of all medication errors at the State Hospital, are expected to decline significantly. Consequently, we believe this error rate is going to show improvement in the near future.

Reported Patient Injury Rate Is High but Should Improve with Reporting Error Correction

A seventh quality-of-care measure is patient injury rate. While the State Hospital’s patient injury rate is comparatively high, the State Hospital has been reporting minor injuries. When this reporting error is corrected, the comparative patient injury rate data should decline. If it does not, then a reassessment of this indicator should be made.

Literature indicates high patient injury rates may be indicative of ineffective or inappropriate care or unsafe structures.

Patients need to feel that they are in a safe environment if treatment is to be as effective as possible. High patient injury rates may be indicative of physically unsafe structures and also of care that is either ineffective or inappropriate.

Figure 2.5 compares the State Hospital’s patient injury rate with the participant averages found in the Joint Commission and WPSHA reports. This measure is calculated as the total number of patient injury incidents divided by the number of patient days for the reporting period.

Figure 2.5 Patient Injury Rate. The State Hospital’s patient injury rate is high but should improve when a data definition problem is corrected.

Measure	Joint Commission (Jan-06 to Dec-06)	State Hospital (Jan-06 to Dec-06)	WPSHA (Jun-06 to May-07)	State Hospital (Jun-06 to May-07)
Patient injury Rate (per 1,000 patient days)	.42	.99	.38	.97

Again, an alternative way to consider the proportions identified in Figure 2.5 is through the following:

- For 2006, the Joint Commission participants averaged 1 injury for every 2,381 patient days, while the State Hospital averaged 1 injury for every 1,010 patient days.
- For fiscal year 2007 (June to May), WPSHA participants averaged 1 injury for every 2,632 patient days, while the State Hospital averaged 1 injury for every 1,031 patient days.

The State Hospital’s injury rates are higher in both comparisons. Further, the Joint Commission reported that the State Hospital’s injury rates were outside expected ranges for all four quarters in 2006 and recommended the State Hospital perform a detailed, internal-measure review.

Ultimately, the State Hospital found a potential reporting discrepancy between the injury definitions accepted by the Joint Commission (i.e., those developed by the NRI) and the State Hospital’s injury definitions. The definitions accepted by the Joint Commission define five injury levels as follows:

One critical State Hospital injury definition was broader than those accepted by the Joint Commission.

- Level 1 – No treatment
- Level 2 – Minor first aid
- Level 3 – Medical intervention required
- Level 4 – Hospitalization required
- Level 5 – Death occurred

Only injury levels three through five are reported in the patient injury rate. While the level-three definition accepted by the Joint Commission is “medical intervention required,” the State Hospital’s level-three definition added “injury with potential for complications.” Since injuries often have a potential for complications, injuries that did not require medical intervention were still coded as level-three injuries.

A State Hospital nurse practitioner reviewed all level-three injuries occurring between May 2006 and May 2007. Of the 118 level-three injuries originally reported, 42 (36 percent) were reclassified as level-two injuries. We reviewed the 58 level-three injuries occurring between May 2006 and October 2006. Of these 58 level-three injuries, 28 were downgraded to a level-two injury by the nurse practitioner. We were satisfied with the injury downgrades in 26 of the 28 cases (93 percent agreement).

Once the State Hospital’s level-three definition is made consistent with the Joint Commission’s accepted definition, the State Hospital’s patient injury rates should fall to comparable levels. If rates do not fall appreciably, then State Hospital personnel should conduct further investigation.

**Elopement Rate Is High
And Merits Further Examination**

The eighth quality-of-care measure is the elopement rate. In our consultant’s opinion, this indicator merits further examination, as not all elopements are equal. What is important is whether an elopement suggests unreasonable risk taking by the treatment team or placement of a patient in obvious and preventable danger.

An elopement is defined as a patient being absent from their privilege areas. This definition is very strict and attempts to capture more than simply a patient escaping from the hospital’s grounds.

When the State Hospital’s injury definition is brought in line with the definition accepted by the Joint Commission, the State Hospital’s patient injury rate should fall to comparable levels.

An elopement is defined as a patient being absent from their privilege areas. High rates of elopement may represent insufficient efforts to insure patient and public safety.

Because mental illness can render an individual's thinking unclear or irrational, actions based on such distorted thinking can result in harm to self or others. Consequently, it is desirable for patients to be closely cared for in a safe environment. High rates of elopement may represent insufficient efforts to ensure patient and public safety.

Figure 2.6 compares the State Hospital's elopement rate with the participant averages found in the Joint Commission and WPSHA reports. This measure is calculated as the total number of elopements divided by the number of patient days for the reporting period.

Figure 2.6 Patient Elopement Rate. The State Hospital's elopement rate is high and merits further examination.

Measure	Joint Commission (Jan-06 to Dec-06)	State Hospital (Jan-06 to Dec-06)	WPSHA (Jun-06 to May-07)	State Hospital (Jun-06 to May-07)
Elopement Rate (per 1,000 patient days)	.22	.38	.19	.39

Again, an alternative way to think about the proportions identified in Figure 2.6 is through the following:

- For 2006, the Joint Commission participants averaged 1 elopement for every 4,545 patient days, while the State Hospital averaged 1 elopement for every 2,632 patient days.
- For fiscal year 2007 (June to May), WPSHA participants averaged 1 elopement for every 5,263 patient days, while the State Hospital averaged 1 elopement for every 2,564 patient days.

For both comparisons, the State Hospital's elopement rate appears high. It should be noted that the figures primarily apply to adolescents and civilly committed adults. According to State Hospital management, the forensic and children populations have had virtually no elopements over the past seven years. Hospital management believe their rates are high because they have been interpreting the definition more strictly than either the Joint Commission required or other facilities reported.

In an April, 2005 audit, the NRI indicated that the State Hospital was under-reporting rather than over-reporting elopements.

While we have no documented information as to how other facilities report elopements, we are not convinced that the State Hospital's high elopement rate is because of over-reporting. In fact, the NRI indicated in an April 2005 audit that the State Hospital was under-reporting rather than over-reporting elopements. The NRI audit stated that

The [State Hospital] is not utilizing the definition of elopement appropriately. Elopement is when a [patient] is no longer in their privilege status. Example: chasing a [patient] across the grounds does indicate that the [patient] did not have permission to be elsewhere on the grounds.

In other words, elopements are to be defined as more than just those patients who escape from the hospital's grounds.

While the NRI told the State Hospital what should be counted as an elopement, information in fiscal year 2007 risk management reports does not support the adoption of the NRI's definition by the State Hospital. Instead, we saw events that appeared to us to meet the NRI's elopement definition but the State Hospital had classified them as "attempted elopements." Consequently these events were not reported as an elopement. For example, the following were defined as attempted elopements:

"Pt [patient] walked out of time-out room, bolted toward front door and proceeded to [run] away. Staff caught up to pt and stopped him."

"Pt left unit without signing out or telling anyone. Locked self in stall in public restroom. Security opened stall and escorted pt back to unit."

Our consultant believes the critical issue with the elopement rate is whether these elopements suggest unreasonable risk taking by the treatment team or the placement of a patient in preventable danger.

As a result, we are not convinced that the State Hospital's comparatively high elopement rates are the result of applying definitions that are stricter than required. Regardless, State Hospital management believe they have a good record with higher risk populations; the recovery model argues that giving adult civil patients passes and freedoms is a part of transitioning them into the community.

In looking at the comparative data, our consultant believes this information merits further investigation by the State Hospital's executive

team. In his opinion, not all elopements are equal, and allowing patients to make harmless mistakes is a part of recovery. However, at issue is whether these elopements suggest unreasonable risk taking by the treatment team or suggest the placement of a patient in preventable danger. The State Hospital's management acknowledges the need to assess the level of risk in allowing patients privileges as well as safety protocols to minimize the opportunity for elopements.

In addition to assessing quality of care using common performance measures, our consultant came to his own conclusions regarding the State Hospital's quality of care.

Consultant Believes Current Quality of Care Is Good

The care at the State Hospital was judged by our consultant as good, and in some ways, significantly better than at other state hospitals. He also suggested some improvements in his report that would help the State Hospital approach standards of care that he would consider excellent.

In reaching his conclusions about the State Hospital's quality of care, our consultant relied primarily on interviews of staff and patients during unit visits and observations made during those visits. In addition, he and the audit team reviewed a random sample of 25 patient records, as well as the latest Joint Commission and Center for Medicaid and Medicare Services (CMMS) audit results.

Some Quality of Care Equals That Of Other State Hospitals

In some areas, our consultant believes the State Hospital's quality of care is as good as that offered in other state hospitals he has observed. The therapeutic environment is good, the patients' medication levels appear appropriate, a patient Treatment Mall is available, the treatment plans are clear and useful, and management is responsive to suggestions for improvement.

Overall Therapeutic Environment Is Good. Direct observations revealed that the unit common rooms, patient rooms, and bathrooms were all clean and well maintained. This fact is noteworthy for the Legacy

The care at the State Hospital is as good, and in some ways, significantly better than other state hospitals.

Our consultant was impressed that each unit has one person who makes it their business to attend to the safety and therapeutic environment on the unit.

unit, whose older patients often lack self-care skills. Further, the environment in the units, generally, was observed to be appropriately therapeutic and reasonably calm. Our consultant was impressed that each unit has one psychiatric technician position assigned as the unit environmentalist. This person makes it their business to attend to the safety and the therapeutic environment on each ward. Perhaps as a result of this assignment, the patients and staff on the units generally appeared to feel safe and comfortable.

An exception was the Life Habilitation Unit, a large, 45-bed unit. Because the unit is so large, its environment is more chaotic and less therapeutic than other units at the State Hospital. Further, the staff in this unit reported feeling safe only some of the time. Our consultant observed that when staff feel unsafe, patients will typically feel even more unsafe, which interferes with therapy. Consequently, our consultant believes the Life Habilitation Unit should be divided into two smaller units.

Patient Medication Levels Appear Appropriate. Direct observations also revealed no patient who appeared either under- or overmedicated. Given the number of medications most patients are taking, it is very difficult to find an appropriate balance of medications. That the psychiatrists at the State Hospital have achieved this balance with apparent frequency is noteworthy in our consultant's opinion.

A Treatment Mall Is Available. The State Hospital's Treatment Mall was also observed. The Treatment Mall is an area in which patients can choose from a variety of therapeutic activities (e.g., vocational education, life skills, art). Our consultant noted that the Treatment Mall is an excellent and a cutting-edge program. He encouraged the State Hospital to expand the mall both in size and service capability.

Treatment Plans Are Useful. The treatment plans identify the patient's problems and how these problems are going to be addressed by the treatment team. A review of 25 randomly selected patient records identified the State Hospital's treatment plans to be clear, logical, coherent, and useful in general. The only negative observation in this random review was the absence of discrete patient-discharge plans in the State Hospital's electronic record. While discharge planning information was scattered in many records, the information was not brought together in one record, making the plan hard to find and difficult to assess.

The Treatment Mall, which offers classes and workshops as treatment options, is an excellent and cutting-edge program.

Our consultant found hospital management to be receptive to suggestions for improvement, an opinion echoed by the Utah Law Disability Center.

Management Is Responsive to Improvement Suggestions. Finally, the State Hospital's responsiveness to other outside evaluators was assessed. Periodically, evaluators from the Joint Commission, CMMS, and the Utah Department of Health review aspects of the State Hospital's provision of care. Generally, these evaluations result in one or more findings requiring correction. Of importance to our consultant was management's attitude toward correcting any identified problems.

In reviewing the most recent audit findings, our consultant questioned the State Hospital's executive staff as to action taken to correct each audit finding. In all cases, our consultant found the State Hospital's responses and supporting documentation to be adequate. Further, it was his general impression that management was receptive to suggestions for hospital improvement. This opinion was also echoed by the Utah Disability Law Center, which occasionally audits the State Hospital.

While our consultant's findings in these areas are fairly standard as compared to other state hospitals, in other areas, he believes the State Hospital's quality of care is better than that found in other state hospitals.

Some Care Significantly Better Than at Other State Hospitals

Our consultant was very impressed with the following aspects of care at the State Hospital: the collaboration with academia, the quality of group therapy, and the quality of the children's unit. In his opinion, these elements are all significantly better than what he has seen at other state hospitals.

Collaboration with Academia. Dr. Gary Burlingame is a professor of psychology at Brigham Young University and a nationally recognized expert in the assessment and treatment of people with serious mental illness. In collaboration with the State Hospital, Dr. Burlingame has embarked on an ambitious research agenda primarily focused on measuring and assessing patient treatment outcomes.

Dr. Burlingame believes that the current collaborations between the State Hospital and the Brigham Young University Clinical Psychology Program are innovative and will come to add significantly to the progress of treatment programs for patients with severe and persistent mental illness. Among the current projects is a study that ultimately could

Dr. Burlingame, a noted professor from BYU, believes the current collaborations are innovative and will add significantly to the progress of patient treatment programs.

improve the effectiveness of group therapy, one of the primary treatment methods at the State Hospital. A past project focused on using specific outcome measures to identify significant patient improvement. The State Hospital currently uses the results of this work as one indicator of patient progress. The project's results were also presented nationally at the 17th Annual State Mental Health Services Research, Program Evaluation and Policy Conference.

According to our consultant, Dr. Burlingame's affiliation with the State Hospital is a national model of collaboration between the academic and practice communities.

Our consultant notes the following:

It is difficult to exaggerate the importance of this collaboration. Despite a great deal of recent rhetoric about "evidence-based practice," it remains sadly true that far too much of what goes on in psychiatric hospitals (public and private) is "business as usual." Services are often provided because they have always been provided, with little self-critical examination of their efficacy. One excellent example is group therapy. Most hospitals are content to provide group therapy with no critical examination of how it is helping patients achieve their goals.

Dr. Burlingame's affiliation with the State Hospital is a national model of collaboration between the academic and practice communities and is identified by our consultant as a best-practice finding. Further, our consultant believes the leadership of the State Hospital deserves enormous credit for fostering this endeavor.

While it is more the norm that patients are unwilling to attend treatment groups, this is not the case at the State Hospital.

Quality of Group Therapy. Group therapy is an integral part of patient treatment. Our consultant observed some group therapies and found them to be interesting and enjoyable for the patients. While it is more the norm that patients are unwilling to attend groups, that is not the case at the State Hospital. In fact, the only complaints received about the groups tended to be from patients who wanted to attend but were not allowed for some reason—a fact that speaks well of the quality of the State Hospital's group therapies. In particular, the patients liked the group that deals with medications. This is significant because these types of groups are an important way to increase the willingness of patients to take their medication and encourage patients to be an active member of their own treatment team.

Our consultant believes the State Hospital should be commended for the following:

If a state is going to hospitalize children for mental illness, then the State Hospital's methods are a model to follow.

- The apparent quality of its group treatments
- The evidence-based training provided to all nurses on how to run therapy groups
- The offer of three therapy groups per shift, including the evening shift, a shift that is frequently under programmed

Quality of the Children's Unit. Our consultant notes there are many downsides to the psychiatric hospitalization of children, and, in general, he is biased against it except where absolutely necessary. That said, if a state is going to hospitalize children, the State Hospital's methods are a model to follow. In our consultant's opinion, the assessment and treatment planning are comprehensive, respectful, evidence based, and practical. The leadership provided on this service is as effective as any psychiatric unit he has observed, and the staff appear to be well informed and fully invested in the approach to treatment.

Particularly impressive was that each clinical staff member, including psychiatric technicians, is trained in neurocognitive remediation (i.e., the correction of faulty thinking). This is especially important since 21 percent of the patients have a diagnosed autism spectrum disorder, 31 percent have some identified neuropathology (i.e., brain damage), and 37 percent of the children have been identified as experiencing severe abuse or neglect.

Suggestions for Approaching Quality-of-Care Excellence

Our consultant also suggested some improvements to help the hospital approach standards of care that he would consider excellent. His suggestions in the areas of treatment quantity, treatment effectiveness, treatment plans, and discharge plans are ones he commonly makes to other hospitals. The following list provides a synopsis of his suggestions. His complete remarks can be found in his State Hospital report that is available on request.

- **Treatment Quantity Should Increase for Some Patients.** Often, patients who are most in need of high-quality treatment are less likely to get it because they are restricted to their units. This is the opposite of what should happen. The people most in need of treatment should get more and better treatment, and if this means bringing treatment to the units, then that should be done.

Our consultant notes the patients most in need of treatment should get more and better treatment. If this means bringing treatment to the units, then that should be done.

- **Treatment Effectiveness Could Be Enhanced.** Treatment could be enhanced by expanding efforts in three areas: behavioral support plans, co-occurring mental illness and substance use disorders, and trauma-informed treatment.

Behavioral support plans should be utilized more often. These plans are the most effective and valuable way to change behavior. Behavioral support plans involve a functional analysis of a patient’s positive and negative behaviors conducted by a psychologist in concert with the patient’s treatment team. The most critical aspect of these plans is consistent and systematic praise for pro-social and positive behaviors.

Co-occurring mental illness and substance use disorder treatments need to be integrated. The State Hospital offers a six-week program of substance abuse treatment called the Sunrise Program. Patients are referred to this treatment service in either a serial (before or after) or parallel (at the same time) fashion to their mental health treatment. However, research has clearly demonstrated that parallel and serial treatment of these co-occurring disorders does not work very well. Instead, the treatment of both these disorders need to be integrated at the treatment team level.

Trauma-informed treatment should be expanded. The most difficult patients are frequently those who are unable to manage their emotions, often due to the after effects of severe trauma. Ironically, such patients may be unable to attend the Treatment Mall precisely because of their behaviors. Thus, trauma-informed treatment must be systematically provided to them, independent of their ability to gain access to the Treatment Mall.

Our consultant believes the State Hospital and its patients could benefit from a more sophisticated assessment of risk.

- **Treatment Planning Could Benefit from Additional Risk Assessment Detail.** Without a sophisticated assessment of risk, it is less likely that the treatment plan will adequately address the symptoms, skill deficits, and community supports needed to mitigate the risk and allow the person’s safe discharge.
- **Discharge Plans Should Be More Easily Accessible.** Without an easily accessible, discrete discharge plan, it is difficult to identify

barriers to discharge and to ensure that overcoming these barriers was a major goal of the treatment plan.

Our consultant's report on his State Hospital observations contain additional praise and suggestions, and is available upon request. We have highlighted what we believe are the most salient quality-of-care comments.

Recommendations

1. We recommend that State Hospital management review fiscal year 2007 elopements for unreasonable risk-taking by the treatment team or placement of a patient in preventable danger and take appropriate action.
2. We recommend that State Hospital management review our consultant's report, identify those recommendations that will be adopted, and report accordingly during the 2009 General Session.

Chapter III Bed Space Availability Varies by Unit

We reviewed bed space and the demand for beds at the Utah State Hospital (State Hospital) and found that demand for forensic beds in Utah is greater than current availability, a problem shared with other states. For the present, we believe that availability of forensic beds could increase by improving the efficiency of the current operation. In the future, a new building proposed by the State Hospital may also alleviate some pressure by making more beds available for forensics. Unlike forensic beds, there appears to be a sufficient number of adult and pediatric beds in the State Hospital. In fact, pediatric beds appear to have excess capacity.

Demand for Forensic Beds Exceeds Availability

The forensic unit in the State Hospital does not have enough beds to satisfy current demand. Forensic bed availability could increase by doing the following:

- Discharging patients immediately after they have been ruled competent to proceed
- Working with the courts to decrease the amount of time between State Hospital competency restoration and judicial competency ruling
- Studying the feasibility of restoring the competency of less risky patients in an alternative setting

In addition, future forensic bed capacity may be increased with the construction of a new pediatric treatment facility, which would house all pediatric patients. If this fiscal year 2009 request is approved and funded, beds currently used by adolescent boys would become available for designation as forensic beds.

The State Hospital does not have enough forensic beds to accommodate demand, but could increase bed availability by increasing efficiency.

The State Hospital has 5.7 forensic beds per 100,000 adults in Utah. When compared with the surrounding western states, this proportion appears very comparable, as seen in Figure 3.1.

Figure 3.1 Forensic Beds per Capita. The State Hospital has fractionally fewer beds per 100,000 adults than the average of the western states.

Utah's number of forensic beds per capita is similar to numbers of surrounding states.

State	Adult Population*	Forensic Beds in the State Hospital	Forensic Beds Per 100,000 Adults
Arizona	4,539,463	173	3.8
Nevada	1,861,082	72	3.9
Montana	726,534	32	4.4
Utah	1,757,891	100	5.7
New Mexico	1,444,249	112	7.8
Colorado	3,583,734	298	8.3
Wyoming	394,074	40	10.2
Total	14,307,027	827	
Average Beds Per 100,000 Adults **			5.8

* 2006 U.S. Census Estimate

** Average includes Utah.

Idaho was not included because forensic beds could not easily be separated from adult beds.

As can be seen, Utah's number of forensic beds per 100,000 adults is virtually the same as the average, 5.8 beds per 100,000 adults for the surrounding western states.

Forensic Unit Operates at Full Capacity And Has a Waiting List

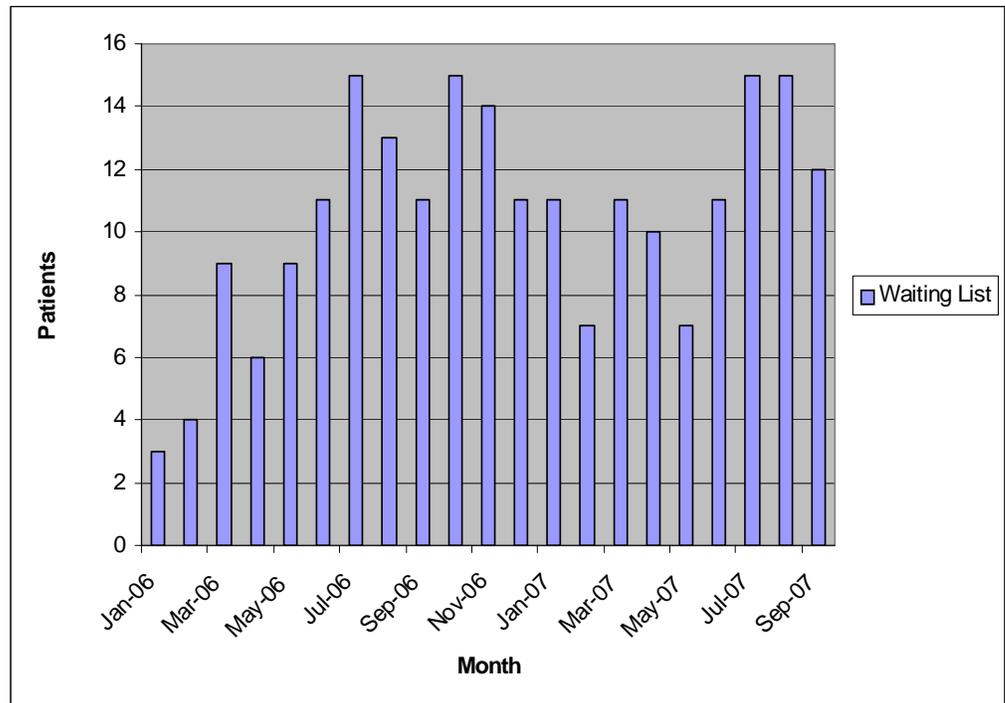
In fiscal year 2007, the State Hospital's forensic beds were occupied an average of 97 percent of the time. The State Hospital reports that every bed would be occupied every day if patients waiting for a bed could be transferred the day the bed became available. Sometimes, however, it may take up to a week for a correctional facility to transfer a forensic patient to the State Hospital. Also, when forensic patients are transferred to jail to await the court's competency determination, the State Hospital bed must

be held open in the event the judge decides that the patient is not yet competent.

While the forensic unit operates essentially at full capacity, a waiting list for forensic beds also exists. For the time period between January 2006 and September 2007, an average of 10 patients waited for beds to become available each month. Figure 3.2 shows the average number of patients on the waiting list per month since January 2006.

The forensic unit has averaged almost 10 patients on the waiting list since January 2006.

Figure 3.2 The Forensic Unit Waiting List. The forensic unit had an average of 10 patients on the waiting list per month since January 2006.



Potential forensic patients may wait two to three months before receiving care in the State Hospital.

Figure 3.2 shows that there is consistently more demand for the forensic beds than the State Hospital can provide. Further, according to State Hospital officials, individuals may wait approximately two to three months for a forensic bed.

Waiting lists for forensic beds are problematic for other states as well.

Waiting lists for forensic beds appear to be a common problem nationwide. For example, some patients in California have waited up to six months for a forensic bed, while Nevada claims to have had threats of lawsuits due to patients being incarcerated for extended time periods while they await treatment in its state hospital. We believe, given the potential for lawsuits and the possibility that delaying treatment may

cause the incarcerated patient to become a risk to themselves or others, it is important that individuals who need a forensic bed receive one as quickly as possible. Reducing bottlenecks in the discharge of forensic patients could help open forensic beds faster.

Bottlenecks Prevent Timely Discharge of Forensic Patients

On average, the State Hospital brought forensic patients to competency in 124 days (four months) in fiscal year 2007. However, patients, on average, occupied their beds an additional 52 days. A reduction of these additional days would allow the State Hospital to treat more patients.

When individuals are found incompetent to stand trial, they are sent to the State Hospital for competency restoration. Currently, the State Hospital is the only facility in the state to perform competency restoration. In fact, approximately 80 percent of the State Hospital’s forensic patients, at any given time, are there for competency restoration. Of these, 85 percent will likely be restored to competency, a reasonable restoration rate based on published studies. Once the State Hospital believes competency has been restored, the court will be notified to hold a competency hearing. If the judge rules the individual is competent, then the person is transferred to a county jail to await trial.

Figure 3.3 shows the breakdown of the average time a forensic patient who was found competent to proceed and discharged in fiscal year 2007 spent in the state hospital.

Figure 3.3 Forensic Patients’ Competency Timeline. The State Hospital should work with the courts to lower the amount of time spent in the hospital after patients are found to be competent.

Days to Bring to Competency	Days Between Competency and Hearing	Days Between Hearing and Discharge	Total Time in the State Hospital
124	29	23	176

On average, the State Hospital takes 124 days (four months) to restore competency. Based on competency restoration time frames reported in

The State Hospital is the only facility in the state that performs competency restoration.

In fiscal year 2007, forensic patients remained in the State Hospital an average of 52 days after being found competent by the State Hospital.

The State Hospital has not charged treatment costs to the counties after patients have been found competent to proceed by the courts, as required by statute.

psychiatric journals (two to six months), the State Hospital's competency restoration average of four months seems reasonable. However, after the State Hospital believed competency was restored, patients remained in the State Hospital's custody an average of 52 additional days—29 days waiting for the court hearing and 23 days waiting for discharge. If the State Hospital can reduce this additional time, then the number of individuals and the time spent on the forensic bed waiting list would likely be reduced.

Some Patients in the Forensic Unit Are the Counties' Responsibilities. Once the court rules that the forensic patient is competent to proceed, that patient becomes the prosecuting county's responsibility. According to *Utah Code* 77-15-9(4):

If the defendant, after examination, is found to be competent by the court, all subsequent costs are charged to the county commencing prosecution.

This statute seems to require that the prosecuting county take responsibility for all expenses incurred by patients remaining at the State Hospital after they have been ruled competent to proceed. However, the State Hospital has not enforced this statutory requirement.

With forensic beds costing \$414 per day, the State Hospital could have charged counties \$340,000 in fiscal year 2007 alone. More importantly, however, we believe that if counties were billed bed-day costs as required by statute, the counties would likely do one of two things:

- Notify the State Hospital immediately that the patient has been found competent and will not be returning to the State Hospital.
- Move the patient more quickly to a county correctional facility in the event the patient was returned to the State Hospital after being found competent.

Either action should have the effect of freeing up forensic beds in the State Hospital more quickly. Because *Utah Code* 77-15-9(4) has not been enforced by the State Hospital, counties have no incentive to take either action. If these forensic beds were made available as soon as the patients were found competent to proceed, the State Hospital would have been able to treat five additional forensic patients in fiscal year 2007, reducing the current waiting time for forensic beds.

The State Hospital and the courts should reduce the time between the hospital's finding of competency and the court hearing.

The Time Between the Hospital's Finding of Competency and the Court Hearing Could Be Shortened. Patients waited for a competency hearing an average of 29 days after the hospital staff concluded competency had been restored during fiscal year 2007. According to *Utah Code 77-15-5(9)*:

When the report is received the court shall set a date for a mental hearing which shall be held in not less than five and not more than 15 days, unless the court enlarges the time for good cause.

Thus, on average, the courts generally take twice as long to hold a competency hearing than is outlined in statute. Administrators at the State Hospital believe they can lower the amount of time a patient waits between possible competency restoration and the court hearing by training and actively working with the courts. If the State Hospital were able to reduce this waiting period to 15 days, the average time a forensic patient stayed in the state hospital would have decreased 8.2 percent; assuming no other complicating factors, the State Hospital would have been able to treat three additional patients in fiscal year 2007, reducing the current waiting time for forensic beds.

Some Competency Restoration Patients May Not Need Treatment in a High Security Facility

The State Hospital's forensic unit is a highly secure unit. Currently, there are no alternatives to this facility. Consequently, all incompetent defendants, regardless of the apparent risk of the individual or the seriousness of their charges, will go to the State Hospital's forensic facility for competency restoration. A bed at the forensic facility costs approximately \$151,000 a year. We believe the Department of Human Services should investigate whether less restrictive, less costly settings for competency restoration could be developed. The Forensic Mental Health Coordinating Council could also be asked to assist in this review. Administrators at the State Hospital claim that 10 to 20 current forensic patients could be treated in a less restrictive setting.

It does not appear that all patients require such a high security level. For example:

- One patient stayed at the State Hospital for 154 days after being found incompetent to face four charges—one forgery charge, two

An estimated 10 to 20 current forensic patients may not need the security that the forensic unit provides.

One forensic patient was held in the State Hospital for 1.5 years for allegedly committing a class B misdemeanor for theft of services.

The State Hospital officials believe that some patients who have allegedly committed non-violent crimes could be treated in the communities.

theft charges, and one theft-of-services charge. It was alleged that the patient took and cashed two \$2,000 checks after signing the name of his boss to each check and that he ran up a company cell phone bill to approximately \$5,000. State Hospital officials believe he could have been treated and restored on an outpatient basis.

- One patient stayed at the State Hospital around 530 days after being found incompetent to face a class B misdemeanor charge for theft of services. The patient had suffered head trauma from a motorcycle accident and had a taxi take him home. He went inside to get cash and then forgot why he went inside. When the driver came to get his money, the patient told him he did not have any money but offered the driver his microwave instead. State Hospital officials believe this patient could have been managed easily in the community with a structured program of restoration.
- One patient stayed in the forensic unit for approximately 300 days after being found incompetent to stand trial for allegedly striking another person with a bag. State Hospital officials believe she could have been managed in a community setting by a community mental health center.
- One patient has been in the forensic unit for 96 days and is still there after being found incompetent to face a class B misdemeanor charge of trespassing. The patient went to an emergency room because he thought his mother was there and refused to leave when asked to do so. State Hospital officials believe he could have been managed very easily with medication on an outpatient basis.
- One patient stayed at the State Hospital for 218 days after being found incompetent to stand trial for failure to pay child support and driving under the influence. State Hospital officials stated this patient was difficult to manage but probably could have been managed in the community with close supervision.

We are not questioning whether each patient needed psychiatric services, but we are concerned whether patients in the above examples needed to receive the services in a such a secure facility. However, no alternative to the State Hospital currently exists.

The Department of Human Services should consider whether some forensic patients could be treated in a less restrictive and less costly setting.

We believe it would be worthwhile to consider whether the state could benefit from competency restoration alternatives to the State Hospital's forensic unit and, if reasonable alternatives are identified, how those alternatives would function within the existing system. The Department of Human Services has indicated its willingness to do this. Further, we believe they can consult with the Forensic Mental Health Coordinating Council, who would be a logical group to consider this issue. If some patients could safely have their competency restored in a less restrictive, less costly setting, then additional forensic beds would be made available for patients who require the treatment and security that the State Hospital provides.

Additional State Hospital Beds May Become Available in the Future

The State Hospital plans to convert 24 pediatric beds to forensic beds, if a new pediatrics facility is constructed.

The State Hospital has made a fiscal year 2009 funding request for the demolition of the old Medical Services Building. This building is one of the oldest buildings on campus and houses Medical Services and the children's unit. If this building is demolished, two new buildings would be built—a new Medical Services Building and a new Pediatric Treatment Facility. The State Hospital plans to consolidate pediatrics (children and adolescent boys and girls) into the new Pediatric Treatment Facility. Currently, the 24 adolescent boys' beds are located in the Rampton Complex, which houses the adult patients. With the consolidation of pediatrics into the new building, these 24 Rampton beds would become available. The State Hospital's present plan is to convert these 24 beds into forensic beds.

The State Hospital Appears to Have Sufficient Adult Beds

While the demand for adult beds is high, beds were always available in the State Hospital during fiscal year 2007. Even though there appear to be sufficient beds overall, the Division of Substance Abuse and Mental Health (Division of Mental Health) should study the possibility of enhancing efficient bed use by using historical demand as a factor in allocating adult beds among centers. Further, some State Hospital beds are now occupied by patients who would be better served in long-term care facilities.

The State Hospital has 10.4 adult beds per 100,000 adults in the state. When compared with the surrounding western states, this proportion appears moderate, as shown in Figure 3.4.

Figure 3.4 Adult Beds per Capita. While higher than the western state average, the State Hospital's proportion of beds to adults ranks in the middle of the group.

State	Adult Population*	Adult Beds in the State Hospital	Adult Beds Per 100,000 Adults
Arizona	4,539,463	149	3.3
Colorado	3,583,734	263	7.3
New Mexico	1,444,249	121	8.4
Utah	1,757,891	182	10.4
Wyoming	394,074	50	12.7
Nevada	1,861,082	256	13.8
Montana	<u>726,534</u>	<u>144</u>	19.8
Total	14,307,027	1,165	
Average Beds per 100,000 Adults**			8.1

* 2006 U.S. Census Estimate

** Average includes Utah

Idaho was not included because forensic beds could not easily be separated from adult beds.

The State Hospital has two more adult beds per capita than the average of western states.

The State Hospital provides approximately 2.3 more beds per 100,000 adults than the average of the western states. However, the State Hospital's proportion of beds to adults ranks in the middle of the group.

It is important to remember that this adult-bed comparison does not include private or community beds designated to treat mental illness. The scope of this audit focused on the State Hospital and is not intended to cover the entire spectrum of mental health care within the state.

On average, the adult unit operated at 90 percent capacity during fiscal year 2007.

Adult beds are allocated to 11 mental health centers based primarily on population.

Some mental health centers appear to have greater demand for services than others.

The Division of Mental Health should consider using historical demand when allocating adult beds in the State Hospital.

Demand for Adult Beds Is High, But Some Beds Are Always Available

Currently, the State Hospital appears to have an adequate supply of adult beds. On average, 164 of the 182 beds (90 percent) were occupied during fiscal year 2007. The maximum occupancy at the State Hospital was 175 patients, while the minimum occupancy was 144 patients during fiscal year 2007.

Division Might Consider Historical Demand When Allocating Beds

While the supply of adult beds appears adequate overall, a few centers consistently needed more beds than their allocated number, while some centers consistently needed fewer beds than their allocated number. The Division of Mental Health might be able to increase the efficiency of adult-bed use by using historical usage data to affect the number of beds specifically allocated to centers.

Each mental health center is allocated a certain number of adult beds in the State Hospital. These beds are allocated primarily on the population within the center's catchment area as laid out in *Utah Code* 62A-15-611. There is an allocation differential for urban centers to account for increased numbers of transients residing in urban areas who suffer from mental illness. Additionally, the State Hospital has one floating bed to accommodate the needs of rural centers.

In reviewing fiscal year 2007 daily occupancy data by center, we noticed that some centers did not appear to need their full allocation much of the time. For example, Bear River is allocated 11 adult beds. In fiscal year 2007, 11 beds were never required at any one time, 10 beds were required for 5 days (1 percent of the year), while at least 9 beds were required for 8 days (2 percent of the year). On the other hand, other centers needed more than their full allocation. For example, Four Corners is allocated 2 beds. In fiscal year 2007, Four Corners required 3 or more beds for 228 days (62 percent of the year).

While the *Utah Code* allows centers to share beds, some centers are wary of doing so because a shared bed must be returned quickly if the sharing center needs it. We believe the Division of Mental Health should consider the effect of allocating beds based not just on population, but on

historical usage as well. It might also be worth considering allocating a portion of the 182 adult beds and designating the remainder as rural and urban floating beds. If the Division of Mental Health determines that allocation changes using historical usage data allow for a more efficient use of adult beds, then statutory changes should be requested.

Some Patients May Be Better Served In a Long-Term Care Facility

Some decertified patients, those who have received maximum benefit from the State Hospital, and some long length-of-stay patients may be better served in a long-term care facility. However, long-term care facilities are sometimes unwilling to take patients who are volatile and/or assaultive. If such a long-term facility could be developed at the State Hospital, adult beds at the State Hospital would become more available to mental health centers.

In addition to freeing up more adult beds, State Hospital administrators maintain that a long-term care facility would be a less costly way to treat certain patients. State Hospital administrators claim that a long-term care facility could operate at \$200-250 per day, compared to the current cost of \$361 per day for an adult bed.

At the end of fiscal year 2007, 8 of the 172 resident adult patients (5 percent) had a decertified status. The process of patient decertification is a Medicaid requirement. When a hospital decertifies a patient, the hospital is declaring that the patient has received the maximum benefit possible from the hospital. This does not mean that the patient is no longer mentally ill; it means the hospital has done all that it can to relieve the patient's mental illness.

Most of these patients were decertified in calendar years 2006 and 2007, but one was decertified in October 2005 and another in December 2004. Regardless of when they were decertified, all were still at the State Hospital as of June 30, 2007. In the majority of these decertified cases, the responsible centers maintain that they are unable to locate facilities with a nursing home level of care that will work with patients who are volatile and/or assaultive. Consequently, these patients remain at the State Hospital even though the State Hospital has indicated the patient has received maximum benefit.

A long-term care facility could provide better suited treatment at a lower cost for many current patients at the State Hospital.

Six percent of the current adult patients have been in the State Hospital for more than eight years.

Mental health authorities claim that finding housing is the biggest barrier to timely discharge.

The pediatric units treat patients ages 6-17.

In addition, at the end of fiscal year 2007, 11 of the 172 resident adult patients (6 percent) had been at the State Hospital 8 years or longer. The longest length of stay in the adult unit is 23 years. Two of these 11 patients have also been decertified by the State Hospital. As with the decertified patients, the primary reason these patients are still at the State Hospital is the unavailability of long-term care facilities that are willing to handle patients who are often volatile and assaultive.

All together, there are at least 8 and as many as 17 adult patients (8 decertified plus 9 long length-of-stay) currently residing at the State Hospital who might be better served in a long-term care facility. State Hospital administration believes our estimate is probably low. The State Hospital director believes that 25-30 current patients would benefit from a long-term care facility.

Many centers agree with State Hospital administrators that the lack of a long-term care facility in Utah is a problem that needs to be addressed. In fact, one center stated “We need more of a long-term facility for these [patients] with high, but chronic needs, rather than more [State Hospital] beds.” Given this fairly strong consensus of opinion, we believe the Division of Mental Health should begin to identify potential solutions to this problem.

Pediatric Units Have Excess Capacity

The availability of pediatric beds at the State Hospital easily meets current demand. The children’s unit is sometimes occupied near capacity, while the adolescent unit is often occupied well below capacity. With the State Hospital’s proposal to construct a new building that would house all pediatric beds, it would seem to be a good time to consider how many pediatric beds should be built.

The state hospital has 72 pediatric beds to treat patients ages 6 through 17 that are divided as follows:

- A children’s unit having 22 beds for children ages 6 through 12
- An adolescent unit having 26 beds for girls ages 13 through 17
- An adolescent unit having 24 beds for boys ages 13 though 17

Having a children’s unit at a state hospital, as Utah does, is unusual. Of the seven western states surveyed, only one, Colorado, reported designated children’s beds (16) at a state facility.

Further, the State Hospital has 6.3 adolescent beds per 100,000 youth (i.e., persons under the age of 18) in the state. When compared with the surrounding western states, this proportion appears high, as shown in Figure 3.5.

Figure 3.5 Adolescent Beds per Capita. The State Hospital has the most beds per 100,000 youth than the other western states.

State	Population Under 18 Years*	Children’s Beds	Adolescent Beds	Adolescent Beds per 100,000 Youth
Wyoming	120,930	0	0	0
Montana	218,108	0	0	0
Nevada	634,447	0	0	0
Arizona	1,626,855	0	16	1.0
Colorado	1,169,643	16	34	2.9
New Mexico	510,350	0	16	3.1
Idaho	394,315	0	16	4.1
Utah	792,172	22	50	6.3
Total**	4,493,335	38	132	
Average Beds per 100,000 Youth**				2.9

* 2006 U.S. Census Estimate

** Average only includes Utah and other states treating adolescents in state hospitals.

As can be seen in Figure 3.5, Utah is unusual for treating children at its state hospital, but less unusual for treating adolescents. Nonetheless, the State Hospital has substantially more adolescent beds per 100,000 youth than the surrounding western states.

Again, it is important to remember that this pediatric bed comparison does not include private or community beds designated to treat mental illness. The scope of this audit focused on the State Hospital and is not

In addition to Utah, four of the states surveyed treat adolescents ages 13-17 in a state hospital.

On average, the adolescent units operated at 66 percent capacity in fiscal year 2007.

intended to cover the entire spectrum of mental health care within the state.

That said, the number of adolescent beds appears high given the demand. The state hospital has 50 beds designated for adolescents ages 13-17: 26 beds for adolescent girls and 24 for adolescent boys. During fiscal year 2007, the adolescent units treated an average of 33 adolescents per day, or 66 percent of the units' capacity. On the other hand, the number of beds in the children's unit appears to be sufficient. The children's unit currently has 22 beds designated for children ages 6-12. During fiscal year 2007, the children's unit treated an average of 19 patients per day.

In our opinion, the Division of Mental Health should address two questions regarding the pediatric unit:

- Should children be treated at the State Hospital?
- Should the adolescent bed capacity be reduced?

Questions Impacting New Pediatric Facility Should Be Addressed

As noted earlier, the State Hospital has made a fiscal year 2009 funding request for the demolition of the old Medical Services Building. The Medical Services Building, which houses the children's unit, the hospital pharmacy and other medical services, is 53 years old, and, according to State Hospital management, has safety issues. In its place, two new buildings are proposed: a new Medical Services Building, and a Pediatric Treatment Facility. The State Hospital plans to consolidate pediatrics (children and adolescent boys and girls) into the new Pediatric Treatment Facility. With the proposed construction of this facility, we believe the policy question of treating children at the State Hospital needs to be finalized. Further, the operational question of adolescent-bed numbers needs to be addressed.

The Division of Mental Health should finalize policy discussion concerning whether children should be treated at the State Hospital.

Concerning the children's unit, it appears to be unusual that young children are treated at a state hospital. Utah is one of two western states in our sample that has a children's unit at a state hospital. Further, our consultant believes children should be treated in the community as much as possible. While he praised the children's unit very highly, he also noted that there are downsides to the psychiatric hospitalization of children

**The Division of
Mental Health
should consider
reducing the
capacity in the
adolescent units.**

(e.g., stigmatization of the child) and, in general, he is biased against the practice except where absolutely necessary. With the proposed construction of a new pediatric treatment facility, we believe this is a very good time for policy finalization by the Division of Mental Health regarding the appropriate placement of treatment for severely emotionally disturbed young children.

Regarding the number of adolescent beds, currently, there does not appear to be sufficient demand to justify maintaining 50 adolescent beds at the State Hospital. On average, the unit operates at approximately 66 percent capacity, and an analysis of daily bed occupancy reveals that seven adolescent beds were never used in fiscal year 2007 (three adolescent boys and four adolescent girls). Further, of the four other western states serving adolescents at state hospitals, the State Hospital's proportion of beds to youth is the highest at 6.3 adolescent beds to 100,000 youth. The next highest is Idaho at 4.1 adolescent beds to 100,000 youth. We believe the State Hospital should consider the prudence of maintaining, what appears to be, an excess number of adolescent beds.

Recommendations

1. We recommend that the State Hospital enforce *Utah Code* 77-15-9(4), which requires counties to reimburse all expenses for patients who are retained in the State Hospital after being found competent to proceed.
2. We recommend that the State Hospital work with the courts through training or other means to reduce the waiting period between the hospital's finding of competency and the competency hearing.
3. We recommend that the Department of Human Services consult with the Forensic Mental Health Coordinating Council to study whether competency alternatives to the State Hospital's forensic unit can be developed for certain types of individuals found incompetent to stand trial.
4. We recommend that the Division of Substance Abuse and Mental Health consider using historical demand and usage for each center as a factor when allocating adult beds in the State Hospital.

5. We recommend the Division of Substance Abuse and Mental Health study the feasibility of providing a long-term care facility for the State of Utah.
6. We recommend that the Division of Substance Abuse and Mental Health finalize its policy concerning the appropriate placement of treatment for severely emotionally disturbed children.
7. We recommend that the State Hospital consider the demand for adolescent beds when finalizing the number of adolescent beds in the proposed new Pediatric Treatment facility.

Agency Response

This Page Left Blank Intentionally



State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

Department of Human Services

LISA-MICHELE CHURCH
Executive Director

Division of Substance Abuse and Mental Health

MARK I. PAYNE
Director

Utah State Hospital

DALLAS L. EARNSHAW
Superintendent

January 11, 2008

John M. Schaff, CIA
Auditor General
Office of the Legislative Auditor General
W315 Utah State Capital Complex
Salt Lake City Utah 84114-5315

Dear Mr. Schaff,

Thank you for the manner in which you and your staff conducted the Legislative Audit of the Utah State Hospital. We appreciate the opportunity to respond to the Audit Recommendations and submit these comments on behalf of the Hospital, the Division of Substance Abuse and Mental Health and the Department of Human Services.

QUALITY OF CARE

Recommendation #1: We recommend that State Hospital Management review fiscal year 2007 elopements for unreasonable risk-taking by the treatment team or placement of a patient in preventable danger and take appropriate action.

Response #1: The Utah State Hospital regularly reviews elopement data and this spring organized a Continuous Quality Improvement Team specifically to review our Safety Protocols and Elopements. We take seriously our responsibility to provide safety to our patients, staff and the community. Though the report indicates that we have a high number of elopements, these pertain to the Adult Civilly-Committed population for whom we have a responsibility to provide treatment that will prepare them to transition back into the community. Therefore, the risk of elopement is present when the treatment includes vocational and educational opportunities, home visits, therapeutic trial leave into the community as well as campus privileges for higher functioning patients. These efforts have a different purpose than to confine individuals, but are structured to support recovery and successfully integrate people into independent living. The Continuous Quality Improvement Team will continue to insure that elopement risks are addressed.

Recommendation #2: We recommend that State Hospital management review our consultant's report, identify those recommendations that will be adopted, and report accordingly during the 2009 General Session.

Response #2: The Hospital management has developed a plan to address the consultant's recommendations and will be prepared to report to you for your 2009 Legislative Audit Report. We appreciated very much the feedback from the consultant in his visit and report. He had many positive comments about the hospital and acknowledged our Best Practices. He highlighted some of our major initiatives where we have received national attention and praise. His suggestions will assist in our ongoing Quality Improvement Efforts. We are involved in a comprehensive review of his recommendations as a Leadership staff.

BED SPACE AVAILABILITY

Recommendation #1: We recommend that the State Hospital enforce *Utah Code 77-15-9(4)* which requires counties to reimburse all expenses for patients who are retained in the State Hospital after being found competent to proceed.

Response #1: The hospital agrees the statute requires county reimbursement and we will pursue that item with the counties. The auditor should be aware that there will be a countervailing argument that the counties have unbilled charges to the hospital under U.C.A. 77-15-6(1) when the Department is ordered to take custody of defendants for whom no bed is immediately available.

Recommendation #2: We recommend that the State Hospital work with the courts through training or other means to reduce the waiting period between the hospital's finding of competency and the competency hearing.

Response #2: We will work closely with the courts on scheduling hearings to improve efficiency. The Utah State Hospital recognizes the importance of our relationship with the Courts in addressing this matter. In the past we have worked closely with the administrator of the courts, judges, defense attorneys and prosecutors to coordinate calendars and scheduling. We also participate in judicial training conferences to find a way to improve our coordinating efforts.

Recommendation #3: We recommend that the Department of Human Services consult with the Forensic Mental Health Coordinating Council to study whether competency alternatives to the State Hospital's forensic unit can be developed for certain types of individuals found incompetent to stand trial and make appropriate recommendations to the Division of Substance Abuse and Mental Health.

Response #3: We will explore options for other treatment settings and identify resources needed, in consultation with the Forensic Mental Health Coordinating Council and other partners. Specifically, the misdemeanor population seems to be a logical group about which to have further discussions but as noted, the community resources don't currently exist for competency alternatives.

Recommendation #4: We recommend that the Division of Substance Abuse and Mental Health consider using historical demand and usage for each center as a factor when allocating adult beds in the State Hospital.

Response #4: We concur.

Recommendation #5: We recommend the Division of Substance Abuse and Mental Health study the feasibility of providing a long-term care facility for the State of Utah.

Response #5: We concur with the need for long-term care in the State and will pursue the feasibility of providing it within the integrated community mental health system.

Recommendation #6: We recommend that the Division of Substance Abuse and Mental Health finalize its policy concerning the appropriate placement of treatment for severely emotionally disturbed children.

Response #6: The current Department policy is a "community based" system of care and less than eight tenths of 1% of children within the public mental health system are served at the Utah State Hospital. The remaining 99.2% of children are served in the community at different levels of services. The Division has several initiatives underway that enhance community infrastructure and we will pursue community options where possible.

Recommendation #7: We recommend that the State Hospital consider the demand for adolescent beds when finalizing the number of adolescent beds in the proposed new Pediatric Treatment Facility.

Response #7: The proposed consolidation and replacement facility was driven by life safety concerns and will be designed with flexibility for future use if the bed priority changes (i.e., Forensic Youth, Long Term Care, etc.). Although the audit finds the Pediatric Bed Utilization is down, it is important to note that there has been a decrease in private inpatient pediatric beds to fewer than 54 pediatric beds available in the community. The Hospital will continue to consider the demand for adolescent beds as part of our ongoing discussion with the community and the State Board of Substance Abuse and Mental Health regarding children's mental health treatment.

Thank you again for the fair and professional manner in which this audit was conducted. We were impressed with the quality of the auditors assigned to this project. They demonstrated a remarkable knowledge about the issues addressed and we value their input. We are also grateful for the careful manner in which a national expert, Dr. Joel Dvoskin, was identified to assist with the evaluation of the Hospital's quality of care.

Our mission is focused on providing excellent psychiatric care through a Best Practice Model. Our values reinforce the need for respect and safety for the individuals we treat as well as the staff and community. Dr. Dvoskin's concluding statements validate our mission and values in providing services to the mentally ill at the Utah State Hospital as he states:

"Overall, I was very impressed with the dedication, skill, and innovative spirit of the staff and leadership of the Utah State Hospital. While it is my hope that these recommendations will help to make a very good Hospital even better, my overall assessment of the Utah State Hospital is very, very positive."

~ Dr. Joel A. Dvoskin, Ph.D. ~

Sincerely,



Dallas L. Earnshaw, Superintendent
Utah State Hospital