# **California Correctional Institution (CCI)**

# **Health Care Evaluation**

May 31, 2013

Prepared by the Court Medical Experts

Joe Goldenson MD Madie LaMarre MN, FNP-BC Mike Puisis DO

# Contents

Introduction	3
Overall Finding	5
Executive Summary	5
Findings	8
Facility Description	8
Organizational Structure and Health Care Leadership	8
Human Resources, Staffing and Budget	9
Health Care Operations, Clinic Space and Sanitation	
Policies and Procedures	13
Intrasystem Transfer	13
Access to Care	
Chronic Disease Management	
Pharmacy and Medication Administration	24
Laboratory/Radiology	26
Health Records	
Urgent/Emergent Care	27
Specialty Services/Consultations	28
Outpatient Housing Unit Care (OHU)	
Mortality Review	33
Internal Monitoring and Quality Improvement Activities	35
Recommendations	37

# Introduction

In September 2012, the Federal Court, in <u>Order Re: Receivership Transition Plan and Expert</u> <u>Evaluations</u> requested that the Court medical experts conduct evaluations at each CDCR prison to determine whether an institution is in substantial compliance. The Order contemplates that an institution "shall be deemed to be in substantial compliance, and therefore constitutionally adequate, if it receives an overall OIG score of at least 75% and an evaluation from at least two of the three court experts that the institution is providing adequate care."

To prepare for the prison health evaluations, in December 2012 the medical experts participated in a series of meetings with Clark Kelso, Receiver, California Correctional Health Care Services (CCHCS) and CDCR leadership to familiarize ourselves with structural changes that have occurred in the health care system since the beginning of the Receivership. Information gained from these meetings was invaluable to us in planning and performing the evaluations, and we express our appreciation to Mr. Kelso, CCHCS and CDCR.

In conducting the reviews, the medical experts evaluated essential components to an adequate health care system. These include organizational structure, health care infrastructure (e.g., clinical space, equipment, etc.), health care processes and the quality of care.

Methods of assessment included:

- Interviews with health care leadership and staff and custody staff;
- Tours and inspection of medical clinics, medical bed space (e.g. Outpatient Housing Units, Correctional Treatment Centers, etc.) and administrative segregation units;
- Review of the functionality of business processes essential to administer a health care system (e.g., budget, purchasing, human resources, etc.);
- Reviews of tracking logs and health records;
- Observation of health care processes (e.g. medication administration);
- Review of policies and procedures and disease treatment guidelines;
- Review of staffing patterns and professional licensure; and
- Interviews with inmates.

With respect to the assessment of compliance, the medical experts seek to determine whether any pattern or practice exists at an institution or system wide that presents a serious risk of harm to inmates that is not being adequately addressed.<sup>1</sup>

To evaluate whether there is any pattern or practice that presents a serious risk of harm to CDCR patients, our methodology includes review of health records of patients with serious medical conditions using a "tracer" methodology. Tracer methodology is a systems approach to

<sup>&</sup>lt;sup>1</sup> Order re: Receivership Transition Plan and Expert Evaluations No. C01-1351 TEH, 9/5/12.

evaluation that is used by the Joint Commission for Accreditation of Health Care Organizations. The reviewer traces the patient through the organization's entire health care process to identify whether there are performance issues in one or more steps of the process, or in the interfaces between processes.

The experts reviewed records using this methodology to assess whether patients were receiving timely and appropriate care, and if not, what factors contributed to deficiencies in care. Review of any given record may show performance issues with several health care processes (e.g., medical reception, chronic disease program, medication issues, etc.). Conversely, review of a particular record may demonstrate a well-coordinated and functioning health care system; as more records are reviewed, patterns of care emerge.

We selected records of patients with chronic diseases and other serious medical conditions because these are the patients at risk of harm and who use the health care system most regularly. The care documented in these records will demonstrate whether there is an adequate health care system.

The tracer methodology may also reflect whether any system wide issues exist. Our methodology includes a reassessment of the systemic issues that were described in the medical experts report to Judge Henderson in April 2006 at the time the system was found to be unconstitutional and whether those systemic issues have been adequately addressed.<sup>2</sup>

We are available to discuss any questions regarding our audit methodology.

<sup>&</sup>lt;sup>2</sup> The Status of Health Care Delivery Services in CDCR Facilities. Court-Appointed Medical Experts Report. April 15, 2006.

# **Overall Finding**

We find that California Correctional Institution (CCI) will be providing adequate medical care once health care physical plant deficiencies, including sanitation and disinfection practices, are corrected.

# **Executive Summary**

On March 19-22, 2013, the Plata Court Medical Experts visited CCI to evaluate health care services. Our visit was in response to the OIG Medical Inspection Results Cycle 3 report showing that CCI scored 85.3% in August 2012. This report describes our findings and recommendations. We thank Warden Kim Holland, Chief Executive Officer Christopher Podratz, and their staff for their assistance and cooperation in conducting the review.

This is our first visit to CCI, and we found that many elements of the health care delivery system are working well. These include:

- an appropriate medical organizational structure with competent leadership
- adequate health care staffing
- competent medical providers
- timely initial access to health care
- adequate chronic disease management program
- timely access to specialty services
- timely radiology and laboratory services
- a functioning health records management system

We found that systems are generally working well but some require focused improvement. For example, with respect to the intrasystem transfer process, although nurses medically screen newly arriving inmates in a timely manner, they do not consistently document the need for referral to a medical provider. Furthermore, when referrals are made, they are not performed in a timely manner. Although the number of medically high-risk inmates at CCI is relatively low, the facility still receives patients with complex medical histories. Delays in provider review of the patient's medical record poses a risk of delayed awareness of clinically important information needed to appropriately manage the patient. We have reviewed the CCHCS policy regarding intrasystem transfer and find that it is unclear and does not provide sufficient safeguards to ensure that medical providers see complex medical patients in a timely manner.<sup>3</sup> In addition, when patients are transferred to the Outpatient Housing Unit (OHU) from other facilities, CCI providers do not consistently receive timely information needed to appropriately manage the lack of adequate coordination between an outside medical facility and two correctional institutions were factors contributing to the patient's death.<sup>5</sup>

<sup>&</sup>lt;sup>3</sup> Health Care Transfer Process. CCHCS Inmate Medical Services Policies & Procedures (IMSP&P). Volume 4. Chapter 3.

<sup>&</sup>lt;sup>4</sup> This is consistent with findings at other institutions. See R.J. Donovan Report, March 18, 2013.

<sup>&</sup>lt;sup>5</sup> See Mortality Review Section.

With respect to access to care, while nurses collect, triage and evaluate patients in a timely manner, the quality of nursing evaluations is in need of improvement. Moreover, access to medical providers is delayed in the Specialized Housing Unit and Administrative Segregation Unit. In addition, health care is not delivered in a manner that provides auditory or visual privacy. Correctional officers routinely place themselves in examining rooms and listen to patient-provider interviews.

Pharmacy services are working well. However, observation of nurses administering medications revealed that nurses do not utilize aseptic technique or sign out narcotics at the time they are withdrawn from secure storage. We also note that the Cycle 3 Report score for chronic disease medications dropped from 70% to 60%. However, the Medication Administration Process Improvement Plan (MAPIP) studies for November 2012 to February 2013 show that chronic care medication continuity scored 100% for three of four months (November, December and February) and 95% for one month (January). The magnitude of improvement from August 2012 to November 2012 raises questions about the methodology of the more recent reviews. We recommend that CCI perform a validation study to ensure that the sample of records and findings were appropriate.

CCI is included in the Health Care Facility Improvement Plan (HCFIP) for construction and renovation of health care facilities. A concern is that the Facility B health care unit is built directly over a natural spring that floods the ground floor regularly during heavy rains. Sump pumps have been ineffective in solving the problem, resulting in predictable disruption of clinical activities and a reoccurring safety hazard. Given this long-standing uncorrected problem, we inquired whether engineers were consulted prior to the decision to renovate, rather than relocate the medical facility. We were advised that that a resolution to the problem has not yet been determined, but that an engineer will be consulted prior to renovation. We recommend that the current plan for Facility B be reevaluated as soon as possible to determine whether it is even feasible to correct the problem, and whether the facility should be relocated rather than renovated. The HCFIP also does not address Outpatient Housing Unit (OHU) physical plant deficiencies but they should be corrected.

Consistent with other facilities, CCI sanitation and disinfection activities are inadequate. There are no schedules of sanitation and disinfection activities that have been developed and reliably implemented. The room used to perform an invasive procedure (e.g. colonoscopy) was filthy. Moreover, infection control meeting minutes do not reflect that infections and other communicable diseases are reported, tracked, and investigated. This is a systemic issue that has not yet been resolved. We encourage the Receivership and CDCR to reevaluate the model of using inmate porters for sanitation and disinfection activities.

Specialty services are available and are performed within appropriate time frames. We did, however, identify concerns with the timely receipt of specialty services reports and primary care provider follow-up of specialty visits.

We found that CCI health care leadership routinely conducts meetings related to internal monitoring and quality improvement processes. However the quality of content of the meetings varies. Positively, recent Pharmacy and Therapeutics Meeting minutes address medication errors, with breakdowns of the type of errors. Future meetings might further explore root cause analyses to identify and address the causes of medication errors.

However, Infection Control Meetings are not substantive and lack surveillance data regarding prevalence or incidence of communicable diseases, including skin infections and reportable diseases. The infection control program requires further development.

We note that institutions do not perform mortality reviews, and this function is deferred to CCHCS. We strongly recommend that all institutions perform internal mortality reviews, in order to identify both systemic and clinical issues.

In conclusion, it is our opinion that the CCI health care facilities and sanitation/disinfection activities are inadequate. With the completion of the CCI HCFIP, correction of OHU physical plant issues, and demonstration of adequate sanitation and disinfection activities, we anticipate that this facility would meet the requirements of an adequate health care delivery system.

# Findings

# Facility Description

The overall mission of the California Correctional Institution (CCI) is to incarcerate and control felons, while providing the opportunity for meaningful work, training and other programs.<sup>6</sup> CCI is the third oldest institution in California. The original institution was completed in 1933. From 1933 until 1952, CCI housed women. In July 1952, the institution suffered extreme damage from an earthquake. In 1955, after being repaired, the institution was converted to a men's facility.

CCI houses security level I to level IV inmates, including an administrative segregation unit (ASU) and a specialized housing unit (SHU) in five separate facilities (A-E). Facilities A and B house ASU and SHU inmates, and Facilities C, D, and E house Special Needs Yard (SNY) inmates of differing security levels.

In September 2011, the population reached almost 5,700 inmates, but as a result of AB109 population realignment, the population has decreased to 4,559, a loss of over 1,100 inmates. The design capacity of CCI is 2,783 and it is currently 164% over design capacity.

# Organizational Structure and Health Care Leadership

**Methodology:** We interviewed facility health care leadership and reviewed tables of organization, health care and custody meeting reports, and quality improvement reports.

**Findings**: CCI has had very stable health care leadership. Mr. Chris Podratz is the Chief Executive Officer (CEO) and has held his position for almost three years. The Chief Medical Executive (CME) Dr. Arnel Joaquin, the Chief Nursing Executive (CNO) Mariana Teel, the Chief Support Executive Debbie Longcrier, the Chief Quality Officer Celia Bell, and the Pharmacist-in-Charge Michka Atarod have all been in place for at least four years.

The CCI administrative table of organization is organized along functional lines of authority. The CEO reports to Clark Kelso for medical issues and to Diana Toche DDS, Undersecretary, Administration and Offender Services (Acting), for mental health and dental services. As with other facilities, the CEO operates independently with minimal interactions with Central Office. There are quarterly Chief Executive Officer meetings in Sacramento and periodic meetings with Chief Medical and Nursing Executives. There are also weekly conference calls for Chief Executive Officers. However, Central Office does not make regularly scheduled visits to the facility.

The facility CEO has focused on leadership and team building. He has structured the medical program on the basis of continuous quality improvement. He has made a point of engaging all staff members by way of regular meetings in order to promote communication regarding

<sup>&</sup>lt;sup>6</sup> CDCR Website CCI. March 18, 2013.

program goals and ongoing developments in the health program. It is apparent that he has fostered a team concept. Employees appear engaged and focused.

The CEO participates in regular meetings with the Warden, Kim Holland. Either Jim Lundy, Associate Warden for Health Care Access, or Brad Sanders, Captain of Health Care Access, attends Quality Management meetings. Relations between the medical program and custody appear to be very good. There do not appear to be any impediments to medical autonomy, and the Warden and her staff work well with the medical program in addressing problems as they arise.

# Human Resources, Staffing and Budget

**Methodology:** We interviewed facility health care leadership and human resources staff. We reviewed current and planned Acuity Based Staffing Realignment plans, vacancy and fill rates, and job descriptions. We also reviewed the process for credentialing, peer review and annual performance evaluations.

**Findings:** Based on information given to us, budget position authority for medical positions (excluding psychiatric technicians and senior psychiatric technicians) consists of 20.5 positions. Of these, 33 (16%) are vacant. Many of the vacant positions will be deleted under the Acuity Based Staffing Realignment. Under the Acuity Based Staffing Realignment, CCI will have 198 positions, which is a net loss of approximately three positions. However, the Acuity Based Staffing Realignment will result in a shift from clinical staff to pharmacy staff. There will be an addition of 7 pharmacy staff and 2.4 support staff, but a reduction of 9.7 clinical staff. The clinical staff reductions include 3.4 Licensed Vocational Nurses, 4.3 Registered Nurses, 1 physician, and 1 Supervising Registered Nurse II. The CEO does not believe that the program would be adversely affected by these changes.

Every employee has an annual performance review. New employees have three evaluations within the first year of employment.

Staff receives training on policies and procedures during the quarterly town hall meetings with all health care staff. Additionally, health care staff receives annual training from custody staff. CCI providers also take part in Central Office webinars. The Chief Physician and Surgeon and Chief Medical Executive also incorporate training updates in their regular meetings with staff.

#### **Credentialing and Peer Review**

CCI does not have a local operating procedure for credentialing. Clinical staff is credentialed through CCHCS. As with other facilities, the credential file at CCI does not contain the National Practitioner Data Bank profile, litigation history and details of any sanctions by the Medical Board. This is information that is obtained by the CCHCS credentials office but is not routinely shared with local facilities. The CCHCS credentials office needs to share the complete credential file with each Chief Medical Executive for all physicians under their supervision. This needs to be done in a manner to ensure integrity and privacy of the credential file.

#### **Disciplinary Process**

As with other facilities, CCI has difficulty in disciplining staff. Over the past 12 months, April 2012-April 2013, there have been 18 disciplinary actions that have required investigation. Except for one office technician, all actions involved clinical staff. Two actions ended in resignation. There were eight completed disciplinary actions that took, on average, eight months to complete. There are eight pending disciplinary actions for which investigations have not yet been completed. These have been outstanding for slightly over eight months. There is an LVN working out of job classification for approximately four months due to inappropriate behavior and comments to patients. Instead of administering medications he is assigned to paperwork. We continue to recommend that the CDCR progressive discipline process is amended so that performance expectations are consistent with professional practice standards and not with performance expectations of custody staff. We also recommend that CCHCS central office and institutional leadership is responsible for progressive discipline of health care employees.

#### Health Care Budget

In fiscal year 2010-11, CCI had an initial budget allotment of approximately \$17.89 million, a final budget allotment of approximately \$32.96 million and expenditures of \$35.5 million. In fiscal year 2011-12, CCI had an initial budget allotment of approximately \$29.35 million, a final allotment of approximately \$35.09 million and expenditures of \$36,735,265. This is a difference between initial allotment and expenditures of approximately \$17.63 million for 2010-2011 and \$7.39 in 2011-2012. As with other facilities, the budget allotment does not match needed expenditures. The expenditures in excess of allotment were provided through the Receivership. A budget process that is not based upon real operating costs does not assure that future budgets will be sufficient to provide adequate health care. We have the same concerns regarding the budget allotment as expressed in prior reports.

As with other facilities, the business software is underutilized because it does not satisfy the business needs of health care management. Management does not have the tools necessary to manage their budget.

#### Health Care Operations, Clinic Space and Sanitation

**Methodology:** We toured central and housing medical clinics, the Outpatient Housing Unit (OHU) and administrative and ancillary support areas. In addition, we interviewed staff involved in health care operations.

**Findings:** CCI central and housing unit medical clinics are inadequate. Sanitation and disinfection activities are also inadequate and are a serious patient safety issue. Our findings are not consistent with the OIG Cycle 3 Report score of 95.5% for clinic operations.

Health care is not delivered in a manner that provides auditory or visual privacy. Correctional officers routinely station themselves in examining rooms and listen to patient-provider

interviews. This is not consistent with the OIG Cycle 3 Report score of 100% for audio/visual privacy.<sup>7</sup>

CCI is the third oldest institution in the California prison system, with original structures dating to 1933. The OHU in Facility B was built in 1986. The CCI medical program serves five facilities (A-E). Each of these facilities has an associated clinic. In addition to a primary care clinic, the B facility also houses the specialty clinics and the OHU. The medical facilities are inadequate.

The B facility has had the most recent renovations, which occurred in 1986, approximately 27 years ago. It was built on a natural spring and the floors in most of the clinic and specialty area are intermittently covered with water. Sheets or other cloth is laid out to absorb the water. This is both a safety hazard and can result in mold. Because of the seepage of water, efflorescence occurs in multiple areas of the floor. The floor tiles repeatedly need replacement. Equipment left on the floor can become damaged.

None of the existing space in the B facility was designed for its current purpose. As a result, furnishings and design features are jerry-rigged. In the triage area, the triage nurse and officer sit side-by-side, preventing privacy. Primary care clinics did not have adequate privacy or space. Several clinics had examination tables that were placed in a corner so that a patient could not lie fully on the table. In examination rooms, physicians used oversized office desks which occupied excessive amounts of space. Computer screens and printers were not ergonomically set up. Clinic examination rooms were not standardized. Every examination room had a different arrangement of equipment, supplies and furnishings, and every room was cluttered. In general, examination areas were not designed for efficiently moving patients through the clinic.

A room for colonoscopy did not have a sink sufficient to clean the equipment after the procedure. Equipment is taken out of the room into a janitor's closet in the hall where a makeshift cleaning arrangement is set up on a temporary basis each time the gastroenterology team comes to the facility. This area was dirty and unfit for medical use, especially invasive procedures such as colonoscopy.

The E clinic is a trailer with five rooms. Two of them are provider examination rooms, two are nurse examination rooms, and one room is a nurse supervisor room. All rooms open directly to an exterior deck that is covered by an overhang. This means that in cold air can blow into the room when staff or inmates opens the door to the examination room. Patient weights are obtained from a scale which is outside on the deck. This clinic also has an outdoor waiting space with a small canopy. Inmates must sit in temperatures which can reach as low as 30 degrees Fahrenheit and be subject to rain and snow. This is unacceptable.

The OHU has a functioning call system. Other than that, it does not have an adequate design or furnishings. The nurse's station is cluttered and poorly designed. Every inch of counter space

<sup>&</sup>lt;sup>7</sup> OIG Reference Number 14.164.

was filled with equipment or supplies, leaving no room for staff to work. Phones were on the very edge of the counter. Computer terminals were placed in a manner in which the keyboards were on the ledge of the counter and could not be easily used because there was no room left on the counter to rest one's wrist. There were two computer terminals on counters but no room to place a chair in front of the computer and the terminals had to be used standing up. This discourages use of the eUHR.

The counter encircled the entire room and because there was no space on the counter on which to work, nurses placed a table in the center of the room on which to work. This was not a design feature of the room and therefore reduced useable space in the room. Supplies and equipment were stored in any available space in the area. Because there was insufficient space to write, a desk was placed in the hall of the OHU. This desk had forms on it. This is inappropriate for use because patients are allowed in the area to walk and exercise. Because the nursing station had no available space, the hall was also used to store equipment and supplies.

The physician in the OHU types his notes, which are generally of good quality. However, there is no space in this area for the physician to type his notes. As a result, he types his notes in a separate office off the unit. During our review, for four of the nine charts reviewed, it appeared that the physician was not writing notes at 2-week intervals. When we discussed this with the CME, he indicated that the physician types the notes on his computer and sometimes forgets to print the note so that it can be filed in the medical record. The following day, the CME delivered to me nine such notes dating from February that had been in the physician's computer but had not yet been placed in the medical record. This is a patient safety and legal issue that can be corrected by an electronic medical record. Until this is done, there should be a place in the OHU for the physician to type and print his notes. This area should be re-designed and the proposed facility construction project should include renovation of the furnishings on this unit.

The Health Care Facility Improvement Program (HCFIP) will address most of the deficiencies regarding clinic space. The HCFIP will not address issues on the OHU and does not appear to address space for colonoscopies.

Periodic Automatic Replenishment (PAR) supply levels are not standardized with respect to clinic operations. Every clinic develops its own PAR levels. Clinic equipment and furnishings are also not standardized. Equipment is inventoried and undergoes preventive maintenance. This is tracked on a spreadsheet.

We find that cleaning of the clinical areas is a major deficiency. Inmate porters provide all sanitation except for the pharmacy. The pharmacy is cleaned by the staff. The inmate porters use a cleaning task list, which is not consistent with health care industry standards. Cleaning is supposed to happen daily but when inmates are locked down, no cleaning is performed. Inmates clean walls and empty trash but the expectation is that the staff otherwise clean the clinical areas they use.

# Policies and Procedures

**Methodology:** We interviewed health care leadership and staff and reviewed selected statewide and local policies and procedures to determine whether they were periodically reviewed and whether updated local policy was consistent with statewide policies.

**Findings:** Local operating procedures are available for most major clinical areas of service. We were provided with 26 local operating procedures. These have been reviewed and signed within the past year. These were all of good quality. They were well written and applied to actual practices. There is no local operating procedure for mortality review.

We provided comments on a couple of local operating procedures. For TB isolation policy, if a TB suspect is identified, the facility calls the Health Care Placement Oversight Program (HCPOP) to have the patient transferred to a facility with negative pressure isolation, but the patient should wear a mask until transferred. This is not described in the Local Operating Procedure.

The policy on preventive care states that a nurse will "periodically" check the registry for a list of patients who require preventive service. Persons requiring preventive care should not be identified "periodically." Instead, this should be a scheduled function at regular intervals (e.g., daily, weekly, etc.) so that every individual is checked annually with respect to their need for services.

# Intrasystem Transfer

**Methodology:** We toured the receiving and release (R&R) area, interviewed facility health care leadership and staff involved in intrasystem transfer and reviewed tracking logs, staffing and 18 health records.

**Findings:** We found that overall the intrasystem transfer process is working well; however, opportunities for improvement are noted. Our findings are consistent with the OIG Cycle 3 Report score of 79%.

Our record review showed that sending facility nurses complete a 7371 transfer form prior to the patient's transfer, noting significant medical and mental health conditions, pending and/or recently completed consultations or chronic disease appointments. Upon arrival, CCI nurses complete a 7277 health screening form noting whether chronic disease and/or mental health medications transferred with the patient. Providers typically renewed medication orders within one business day of arrival.

Although the initial transfer medical screening process is working well, we found problems related to follow-up. Nurses did not consistently document the need for provider referral or time frames for referral on the 7277 form in accordance with CCHCS policy.<sup>8</sup> This finding is

<sup>&</sup>lt;sup>8</sup> Health Care Transfer Process. CCHCS Inmate Medical Services Policies & Procedures (IMSP&P). Volume 4. Chapter 3. Page 4-3-5.

consistent with the OIG Cycle 3 Report score of 33.3%.<sup>9</sup> When timeframes for referral were documented to occur within a week or two of arrival, they did not occur as planned.

CCHCS policy regarding the health care transfer process is confusing. It requires that providers see newly diagnosed chronic disease or high-risk patients within 30 days. The policy also provides wide latitude for providers to see patients already enrolled in the chronic disease program. For example, if a sending facility provider saw a patient 10 days prior to transfer with planned 90-day follow-up, the policy allows for the receiving provider to not see the patient for up 80 days after arrival. However, using chronic disease parameters as the primary determinant for when providers perform initial patient evaluations results in providers not reviewing the eUHR in a timely manner and not being aware of clinically important information (e.g., previous specialty services recommendations, non-CDCR medical records, abnormal laboratory tests, etc.) necessary to appropriately manage the patient. Moreover, we found that even when providers do see patients timely, they did not thoroughly review the patient's medical history or previous consultant recommendations, nor did they update the Problem List.

We recommend that CCHCS revise the policy to limit the wide variation in which providers see newly arriving inmates. We recommend that providers see patients with any serious medical conditions within 14 days of arrival. Providers should review the record to become familiar with the patient's medical history, including review of previous hospitizations, outside medical records, recently completed consultations, abnormal laboratory tests that require follow-up, and to update the problem list.

Examples of records demonstrating issues are noted below.

#### Patient #2

This 39-year-old patient arrived in CDCR on 6/28/12 and transferred from WSP to CCI on 2/22/13. His medical history included diabetes, hypertension, hyperlipidemia, asthma, low back pain and chronic right knee swelling. His problem list contains only diabetes and asthma. His medications are glipizide, simvastatin and levalbuterol. This patient is housed in Facility A, in the SHU.

A WSP staff member completed a 7371, noting that the patient was due for chronic disease management on 3/11/13. Upon his arrival, a nurse medically screened the patient, noting that except for Xopenex, medications did not transfer with the patient. He had a valid order for all medications upon arrival, but he was not seen on 3/11/13 as recommended by the provider at the previous facility. His medications were not renewed and his medication order for amlodipine expired on 3/17/13.<sup>10</sup>

On 3/14/13, laboratory tests showed that his diabetes was well controlled (HbA1C=5.7%), but his lipids were not at goal (7/26/12 LDL-C=131, goal=<100; triglycerides=183, goal=<150).

<sup>&</sup>lt;sup>9</sup> OIG Cycle 3 Reference Number 02.017.

<sup>&</sup>lt;sup>10</sup> Date of review 3/19/13.

On 3/19/13, a provider saw the patient for chronic disease management and changed his diabetes medication from glyburide to metformin due to patient request. The provider reordered the patient's medication order for amlodipine.

On 3/26/13, the patient's lipids were repeated and had worsened since July 2012 (LDL-C=157, goal=<100, triglycerides 203, goal=<150). As of 4/24/13, these abnormal labs have not been addressed.

<u>Assessment</u>: There was a delay in seeing the patient for chronic disease management that led to discontinuity of his hypertension medication order. The patient's abnormal lipids have not been addressed.

### Patient #6

This 46-year-old patient transferred from RJD to CCI on 2/26/13. His medical history included schizophrenia, seizure disorder, hypertension, deep vein thrombosis (DVT) on 5/14/12, urethral stricture, benign prostatic hypertrophy (BPH) and latent TB infection (LTBI). His medications were phenytoin, warfarin, olanzapine, carbamazepine, flomax and tamulosin.

On 8/8/12 at RJD, a hematologist saw the patient for a history of deep vein thrombosis of the left leg in May 2012. A provoking factor was spending two days in shackles while being transported on a bus. He was tested for a hypercoaguable state, which was negative. The hematologist found a palpable venous cord in the patient's thigh and recommended a repeat left leg ultrasound and increasing the patient's warfarin up to 30-40 mg per day due to difficulty achieving therapeutic INRs<sup>11</sup> from interactions of warfarin with his other medications. He recommended continuing anticoagulation for at least another six months and follow-up in three weeks. On 9/12/12, an ultrasound showed a persistent thrombus in his greater saphenous vein from his groin to his knee. This report is not in the record. The hematologist recommended treatment through 5/14/13 and then reevaluation for continued anticoagulation.

On 2/19/13, the patient's medication reconciliation report showed that he was prescribed Coumadin 16 mg per day and was still not achieving therapeutic anticoagulation. On 2/26/13, the RJD NP inexplicably wrote an order decreasing his warfarin from 16 mg to 4 mg per day. The NP did not document a clinical note explaining the clinical rationale for this change. Labs collected prior to the decrease in warfarin dose showed that his INR was still subtherapeutic (INR=1.7, goal=2-3), and a form of white blood cell (neutrophils) was very low (ANC=<750, normal >1,500-7,800).<sup>12</sup> A RJD physician reviewed this report on 2/27/13, after the patient's transfer to CCI, but the report was not reviewed by a CCI provider following transfer.

<sup>&</sup>lt;sup>11</sup> INR or International Normalized Ratio is a blood test that indicates the level at which the blood is anticoagulated, or "thinned". The goal for most patients is an INR between 2-3, or 2.5 to 3.5.

<sup>&</sup>lt;sup>12</sup> The patient was taking olanzapine and carbamazepine, both of which can cause hematologic abnormalities. The FDA approved packet insert for olanzapine states that the drug should be discontinued when the absolute neutrophil count falls below 750 cells/mL.

RJD staff completed a 7371, noting his chronic diseases and most recent known INR (1.5).<sup>13</sup> On 2/26/13, a CCI nurse medically screened the patient, noting that medications transferred with the patient. The nurse did not document a provider referral on the 7277 but wrote a progress note documenting referral to a medical provider in 10-14 days.

On 3/1/13, a CCI pharmacy technician noted the abrupt drop in warfarin dosing and notified a provider, who saw the patient the same day and ordered labs. The provider did not document review of the hematologist's consultation recommendations, note the presence or absence of a palpable venous cord, or document the duration of anticoagulation in accordance with the hematologist's recommendations. The provider also did not note the patient's abnormally low white blood cell count from labs drawn at RJD. The provider counseled the patient, planned to check his labs, and see the patient in 3-7 days. The provider did not use the CCHCS anticoagulation flow sheet to monitor the patient.

Over the next six weeks the provider monitored the patient's labs and increased his warfarin dosage; however, he did not examine the patient's left leg for presence of a palpable cord; reference the hematologist's recommendations; or document the duration of therapy. On 4/3/13, a repeat blood count showed that a specific type of white blood cell was dangerously low (ANC=599, normal=1,500-7,800) and the provider discontinued the medication (carbamazapine) believed to be responsible for the low WBC. On 4/8/13 his INR was therapeutic (INR= 2.6, goal=2-3).

On 4/11/13, the patient transferred to CSP-LAC, and a provider saw the patient on the day of arrival, noting the hematologist's recommendations and that that he needed to have a follow-up ultrasound of his left leg.

<u>Assessment</u>: Just prior to transfer, an RJD nurse practitioner decreased the patient's warfarin without clinical justification. This dosage error was alertly noted by CCI pharmacy staff shortly after the patient's transfer. Although the provider saw the patient timely, it does not appear that the CCI physician ever reviewed the hematologist's consultation reports noting the need for higher warfarin dosing to achieve therapeutic INRs and the requested hematology follow-up or recently completed labs that showed the patient's white blood cell count was dangerously low. This case illustrates the importance of providers seeing patients in a timely manner following arrival at the facility, and thoroughly reviewing the patient's health record.

Upon transfer of the patient to CSP-LAC the provider noted the hematologists' recommendations. However, since the provider has discontinued the drug (carbamazepine) known to decrease serum warfarin levels, the patient's INR should be carefully monitored, as INR levels are likely to significantly increase, warranting dosage adjustment. We discussed this

<sup>&</sup>lt;sup>13</sup> The 2/22/13 lab report showing an INR of 1.7 was not reviewed by a RJD provider until 2/27/13, after the patient transferred to CCI.

case with the Chief Medical Executive (CME). We recommend that all CCHCS providers use the warfarin flow sheet to monitor patients being anticoagulated.

#### Patient #7

This 59-year-old patient transferred from NKSP to CCI on 3/7/13. His medical history included hypertension, hyperlipidemia, myocardial infarction x 7, coronary artery disease, a history of coronary bypass surgery and mitral valve repair in March 2010, cardiomyopathy, heart failure with an ejection fraction<sup>14</sup> of 30% in May 2010, left atrial thrombus, requiring ablation and anticoagulation with subsequent stroke due to intracranial bleeding, COPD, and dyspepsia. His medications are lisinopril, furosemide, potassium chloride, indomethacin, amitriptyline, mirtazapine, levalbuterol, spiriva, omeprazole, and doxazosin.

This patient arrived at CDCR through NKSP on 11/2/12. NKSP staff obtained non-CDCR medical records that showed the patient has the complicated medical history noted above; however, the patient's Problem List does not reflect the extent of his cardiovascular history.

NKSP staff completed a 7371, noting that the patient was due for chronic disease follow-up from 3/7/13 to 3/14/13. On 3/7/13, a CCI nurse medically screened the patient, noting that medications transferred with the patient. The patient had right-sided weakness due to a CVA in December 2011. The nurse documented that a provider referral was not required.

On 3/8/13, his medications were renewed and dispensed by the pharmacy; however, March MARs show that the patient did not receive medications until 3/18/13.

On 3/29/13, a provider saw the patient for chronic disease management, noting that he had daily chest pain. He planned to refer the patient to a cardiologist.

<u>Assessment</u>: This patient is a very high-acuity patient with a history of seven myocardial infarctions, coronary artery bypass and mitral valve surgery, sick sinus syndrome, heart failure with an ejection fraction of 30%, atrial thrombus and cerebral vascular accident (i.e., stroke). This patient was not seen by a provider in accordance with the recommendations of the previous facility and his high-risk status. According to his MARs, he had discontinuity of his chronic disease medications.

#### Patient #8

This 25-year-old patient transferred from NKSP to CCI on 2/15/13. His medical history included depression, cyclical vomiting syndrome, weight loss, and erosive esophageal gastritis. His medications are mirtazapine, sertraline, omeprazole and ranitidine.

Upon arrival at CDCR through NKSP on 11/7/12, the patient weighed 180 lbs. Prior to transfer to CCI, on 1/18/13 the patient presented with nausea and vomiting, and his white blood cell

<sup>&</sup>lt;sup>14</sup> Ejection fraction is a measurement of the percentage of blood leaving your heart each time it contracts. An ejection fraction of less than 50% is considered low.

count was abnormally high (WBC=20,000, normal=4-10,000). The provider sent him to the local emergency department (ED), where an abdominal ultrasound was negative; he was treated for dehydration and discharged back to the facility.

On 2/14/13, an NKSP nurse completed a 7371 noting that the patient has a history of frequent emesis. On 2/15/13, the patient transferred to CCI, but the 7277 was not dated as being completed until 2/25/13.<sup>15</sup> However, on 2/15/13 a nurse did complete a progress note, noting that the patient had a request for services (RFS) for an esophageal endoscopy (EGD) and referred the patient to a provider for 2/21/13. This referral did not take place.

On 3/5/13 at 1355, the patient presented urgently to the TTA with complaints of abdominal pain and vomiting brown emesis.<sup>16</sup> The nurse performed a good assessment. The physician saw the patient and sent him to the local emergency department (ED) where he was diagnosed with chronic active gastritis/erosive esophagitis. A nurse and primary care provider saw the patient upon return from the hospital. The provider ordered labs that were obtained timely. On 3/16/13, the patient's weight was 156 lbs, a loss of 25 lbs. since his arrival at CDCR.

<u>Assessment</u>: Upon arrival at CCI, the patient was not seen by a provider in accordance with the nursing referral timeframes. The nurse did not complete a 7277 in a timely manner. This patient has documented 25 lb. weight loss, chronic nausea and vomiting warranting further monitoring and evaluation.

### Patient #16

This 56-year-old patient transferred from WSP to CCI on 2/13/13. His medical history included seizures, schizophrenia, asymmetric septal hypertrophy<sup>17</sup>, diabetes and hypertension. His medications are simvastatin, propranolol, aspirin, interferon, ribavirin, divalproex and amantadine.

On 2/26/13, a physician saw the patient, who complained of shortness of breath, and the physician documented a plan for his current problems; however, the physician did not note the patient's history of asymmetric septal hypertrophy per echocardiogram in 1999. A chest x-ray was normal.

<u>Assessment</u>: The provider did not document awareness of the patient's history of asymmetrical septal hypertrophy and its relationship, if any, to his shortness of breath.

<sup>&</sup>lt;sup>15</sup> It is unclear whether the form was misdated or not completed timely.

<sup>&</sup>lt;sup>16</sup> Although the nurse documented hematuria, or blood in the urine, the patient's clinical presentation suggested the nurse meant to document hemataemesis, or blood in emesis.

<sup>&</sup>lt;sup>17</sup> Abnormal thickening of the wall between the lower chambers of the heart

# Access to Care

**Methodology:** To evaluate access to care, we interviewed health care leadership and reviewed patient tracking and scheduling systems. We also reviewed 23 health services requests (CDCR Form 7362) in 13 records of patients with chronic diseases, including high-risk patients.

#### Health Care Appointment Scheduling

**Findings:** There were not any backlogs in scheduling of nursing sick call encounters. The next available provider appointments in facilities B-E were all within two weeks (3/27/13 to 4/2/13), providing timely access to care. However, for facility A, which houses inmates in SHU and administrative segregation, the next available provider appointment was 4/10/13, in approximately three weeks.<sup>18</sup> Thus, there is a delay in routine access to care in restricted housing units.

#### Nursing Sick Call

**Findings:** CCI health care staff collects, triages and sees patients in a timely manner following submission of health service requests. Review of records showed that patients had timely initial access to care. In some cases, nursing evaluations were not adequate and referrals did not take place in a timely manner. These findings are consistent with the OIG Cycle 3 report score of 76.7% and 78.6%, respectively.<sup>19</sup> For patients seen urgently in TTA, we found cases in which the physician did not document an adequate assessment. This finding is consistent with the OIG Cycle 3 Report finding that in only 56.3% of cases did the TTA provider render and document adequate and timely care.<sup>20</sup>

Our review suggests there are problems with the quality of nursing evaluations of patients in restricted housing units and delays in access to provider evaluations, and we recommend that health care leadership, in collaboration with custody staff, reevaluate the process for ensuring that these patients are seen in an appropriate clinical setting with adequate privacy.

#### Patient #2

This 39-year-old patient arrived in CDCR on 6/28/12 and transferred to CCI from WSP on 2/22/13. His medical history included diabetes, hypertension, hyperlipidemia and asthma. He has a history of allergies to peanuts and milk. This patient is housed in Facility A, in the SHU.

On 3/2/13, the patient submitted a 7362 complaining of a rash. On 3/4/13, the nurse saw the patient and noted a history of wool allergy and placed a wool patch on the patient. The nurse did not perform any assessment of the history of the patient's complaint. A nurse read the patch test the following day as negative. Record review shows that on 8/14/12 when the patient was at WSP, he had a generalized, pruritic rash that was attributed to food allergies.

<sup>&</sup>lt;sup>18</sup> The date we measured timeliness of provider appointments was 3/21/13.

<sup>&</sup>lt;sup>19</sup> OIG reference numbers 01.159 and 01.027, respectively.

<sup>&</sup>lt;sup>20</sup> OIG Cycle 3 Report indicator 21.276.

<u>Assessment</u>: The nursing assessment was inadequate due to a lack of history of the presenting complaint or physical assessment.

#### Patient #6

This 46-year-old patient transferred from RJD to CCI on 2/26/13 and transferred to CSP-LAC on 4/11/13. His medical history included schizophrenia, seizure disorder, hypertension, deep vein thrombosis (DVT) and latent TB infection (LTBI).

On 3/2/13, the patient submitted a 7362 complaining of 15 lbs. weight loss and foul smelling stool for several months. On 3/4/13, the nurse saw the patient and measured vital signs and weighed the patient (180 lbs.). The nurse documented that the patient was in no distress and denied N/V (nausea/vomiting) or BM (bowel movement) or *illegible*. The nurse did not examine the patient. The nurse documented that the patient had seen the physician on 3/1/13 and told the patient to put in a request to discuss his symptoms with the doctor in one week.

On 3/5/13, the physician saw the patient for follow-up of a DVT, but did not address the patient's complaints of weight loss or abdominal symptoms.

<u>Assessment</u>: Neither the nurse nor provider assessed the patient's complaints. Our review of the record does not show documented weight loss; however, his symptoms should have been evaluated.

#### Patient #11

This 47-year-old patient transferred to CCI on 6/6/12. His medical history included chronic hepatitis C infection, coccidioidomycosis, cirrhosis, positive fecal occult blood in March 2011. His medication is indomethacin.

On 6/23/12, the patient submitted a 7362 complaining of back and knee pain, and wanting laboratory tests for hepatitis C and Valley Fever. It was undated as to when it was received and triaged. On 6/25/12, the nurse saw the patient. The nurse used the musculoskeletal encounter form, performed a good assessment and referred the patient routinely to a provider. The visit did not take place. On 6/27/12, without a clinical encounter, a provider ordered chest and spine x-rays that were normal. The patient has had no follow-up for his complaints.

<u>Assessment</u>: The patient has had no follow-up for back and knee pain, or concerns about hepatitis C or coccidioidomycosis.

#### Patient #12

This 27-year-old patient transferred to CCI on 3/29/12. His medical history included a gunshot wound (GSW) to the abdomen, s/p laparotomy in 2008. His medication is ibuprofen.

On 5/3/12, the patient submitted a 7362 complaining of severe, recurring abdominal pain in a region where he had a gunshot wound. He requested laboratory or diagnostic testing. On 5/4/12, the nurse evaluated the patient using the musculoskeletal encounter rather than an

abdominal or GI complaint encounter form. The nurse obtained a history but did not examine the patient's abdomen. The patient reported feeling better and the nurse advised the patient to submit another 7362 if his symptoms worsened.

On 5/16/12, the provider saw the patient, who complained of right intermittent abdominal pain lasting 1-2 days since 2010 and diagnosed him with right periumbilical pain. The provider stopped his ibuprofen and ordered fiber, zantac, calcium carbonate and acetaminophen. This order was not received and/or filled by the pharmacy. The provider planned to see the patient in 90 days.

On 7/12/12, the patient submitted a 7362 stating that he was told his medication for his stomach pain was going to be changed to Tylenol #3 but he was never given the new medication. On 7/13/12, a nurse evaluated the patient using a constipation/diarrhea encounter form. The nurse did not examine the patient's abdomen but documented that he denied tenderness at this time. The nurse noted that the 5/16/12 physician's orders for medication were not received by the pharmacy and re-faxed the order.

On 10/22/12 at 0125, the patient presented to the TTA with abdominal pain, nausea and vomiting. His vital signs were normal. The patient had right abdominal tenderness and guarding. The nurse notified the provider and he was sent to the emergency department via ambulance. The patient was diagnosed with acute appendicitis and underwent appendectomy. On 10/24/12, the physician saw the patient for follow-up.

<u>Assessment</u>: In several encounters, the nurse either did not use the appropriate nursing encounter form or perform an abdominal examination for a patient reporting abdominal pain. When a provider ordered medication for his abdominal complaints, the medication was significantly delayed due to an error, either failure to fax/scan the order to the pharmacy, or failure of the pharmacy to fill the order. Once the patient presented with acute appendicitis symptoms, he was provided timely care.

# Patient #14

This 57-year-old patient transferred to CCI on 9/18/12 and later transferred to CIM on 2/22/13. His medical history included hypertension, hyperlipidemia, coronary artery disease, s/p CABG in 2004, latent TB infection, pancreatitis and GERD.

On 10/6/12, the patient was admitted to the local hospital with chest pain and underwent coronary angiogram. A dictated angiogram report is not in the record; however, hospital records indicate that his condition warranted no surgical intervention and the cardiologist recommended aggressive medical management of his coronary artery disease.

On 11/5/12, the patient submitted a 7362 complaining of dizziness requiring him to sit down, high blood pressure and left shoulder pain such that he was unable to raise his arm. On 11/7/12, the nurse assessed the patient using a musculoskeletal assessment form. His blood pressure was 175/97 mm/hg and a repeat blood pressure was 176/102 mm/hg. The nurse did

not perform a cardiovascular review of systems (ROS) or assess the patient's back or shoulder. The nurse verbally consulted with a provider regarding the patient's blood pressure who ordered that the patient should be scheduled for provider follow-up in one week.

On 11/14/12, a nurse saw the patient for headache, dizziness and pressure behind his eyes for four days that interfered with sleep and activity. The nurse assessed the patient using the headache encounter form, noting a history of three myocardial infarctions and a CABG x 4 in 2004. The nurse did not conduct a cardiac review of systems (ROS). His blood pressure was mildly elevated (BP=149/89 mm/hg). The nurse performed an assessment according to the form, but did not treat the patient's headache, and instead checked the preprinted box indicating that the patient should return in <u>72 days</u> if no improvement.<sup>21</sup>

On 11/15/12, the provider saw the patient for chronic disease follow-up from 9/27/12. His blood pressure was 181/89 mm/hg and 162/95 mm/hg. The patient stated his blood pressure was elevated because of arthritis pain and that he sometimes takes 2-3 Lisinopril 20 mg tablets if he thinks his blood pressure is elevated, based on whether he is dizzy or not. The provider did not perform a musculoskeletal examination. The provider increased his lisinopril and ordered Indocin three times daily. She planned to see the patient in 3-4 weeks regarding his blood pressure.

On 12/6/12, the provider saw the patient for follow-up. His blood pressure was very elevated (BP=177/99 mm/hg and 179/105 mm/hg) and continued to be poorly controlled throughout December; however, by January 2013, his hypertension was at goal.

<u>Assessment</u>: This patient has a known cardiovascular history. When the nurse evaluated the patient on 11/5/12 and 11/14/12, the nurse should have performed a cardiovascular review of systems. Given the cardiologist's recommendation for aggressive medical management, he should have been seen by a provider when he presented with severely elevated blood pressure.

# Patient #15

This 62-year-old patient transferred to CCI on 10/16/12. His medical history included hypertension, coronary artery disease (CAD) with history of myocardial infarction in 2006 and stent placement, COPD, chronic hepatitis C infection, GERD and thrombocytopenia. His medications include atenolol, hydrochlorothiazide, lisinopril, levalbuterol, dulera, spiriva, terazosin, mirtazapine, NTG tablets and aspirin.

On 11/13/12, the patient submitted a 7362 complaining of chest pain. On 11/13/12, the nurse assessed the patient but did not reference the patient's history of previous MI and stents, document a description of the quality of the pain or pertinent negatives. The nurse's description of the heart was that it was a regular rhythm. The patient had chest wall

<sup>&</sup>lt;sup>21</sup> We believe that the preprinted form indicating a 72 day follow-up is a typographical error, and was intended to state 72 hours, rather than days. We confirmed this with Karen Rea RN Statewide Chief Nurse Executive.

tenderness. An EKG was normal. The nurse treated the patient for chest wall tenderness and referred him to a provider, but this did not take place.

On 12/7/12, a provider (who noted that he was not the patient's PCP) saw the patient for shortness of breath and cough. He treated the patient for a COPD exacerbation with PCP follow-up in 3-4 weeks. He did not reference the patient's cardiac history, perform a cardiac review of systems, or note his recent episode of chest pain.

On 1/24/13 at 12:07 pm, the patient presented to the TTA with chest pain for which he had taken two nitroglycerin tablets, five minutes apart. The patient was confused about his age. The nurse documented that a physician examined the patient, but there is no physician note in the record. The nurse documented that the patient had blisters in his groin and the physician treated him for shingles. There is no medical evaluation or disposition regarding his chest pain. The patient was released to his housing unit at 1:00 pm. On 1/28/13, the same provider saw the patient again for chest pain. His blood pressure was poorly controlled (BP=172/92 mm/hg). Although the provider did not document a medication compliance history, he assessed his hypertension as being poorly controlled, likely due to non-adherence.

<u>Assessment</u>: This patient's care is fragmented. On 11/13/12, the nurse did not perform an adequate assessment of his chest pain and the provider referral did not take place. On 1/24/13, the TTA provider did not document a medical evaluation of the patient with respect to his chest pain. Given the patient's cardiac history, the failure to document an evaluation of the patient increases liability to the provider and institution. This finding is consistent with the OIG Cycle 3 Report finding that in only 56.3% of cases did the TTA provider render and document adequate and timely care.<sup>22</sup>

# Chronic Disease Management

**Methodology:** We interviewed facility health care leadership and staff involved in management of chronic disease patients. In addition, we reviewed the records of 31 patients with chronic diseases, including diabetes, hypertension and clotting disorders, as well as other chronic illnesses. We assessed whether patients were seen in a timely manner in accordance with their disease control. At each visit, we evaluated the quality of provider evaluations and whether they were complete and appropriate. We also evaluated whether the Problem List was updated and the continuity of medications provided.

**Findings:** In most cases, patients are being evaluated in a timely manner following arrival at the facility. When patients are seen by the primary care providers for chronic care, the quality of provider evaluations is mostly very good, and appropriate patient education is being provided. Provider orders and medication administration records show continuity of chronic disease medications. One concern is that the blood sugar logs for patients who are receiving insulin are not consistently available in the eUHR. Furthermore, in a number of cases, there was no documentation that the provider was reviewing the log when it was present. Another concern

<sup>&</sup>lt;sup>22</sup> OIG Cycle 3 Report Reference Number 21.276.

is that many diabetic patients are being managed with long acting insulin and a sliding scale. This is not optimal management. Clinicians should attempt to have these patients on fixed doses of regular insulin in addition to the long acting insulin. We also found a number of charts without a problem list and others where the problem list was present but not up to date.

Our findings are somewhat better than the OIG Cycle 3 Report in which chronic care scored 82% overall and 76% for timeliness of care. They are consistent with the CCHCS February 2013 Dashboard where PCP chronic care scored 94% overall and are somewhat better than the results for diabetes care (82%), care, asthma care (80%) and care for patients requiring anticoagulation (67%).

Despite generally adequate care, there were problems related to the care of two of the patients we reviewed.

- A 59-year-old man with diabetes arrived at CCI on 10/31/12. He had had a chest x-ray at his prior facility on 12/7/11. The radiologist had noted a possible mass and recommended a lateral view. He added that a CT scan may be necessary. However, neither a repeat x-ray nor a CT scan was done prior to the patient's transfer almost a year later. On 1/9/13, a provider saw the patient at CCI for chronic care and noted that he would order a chest x-ray due to a history of a questionable lung mass. The x-ray was not done until 3/13/13. It was normal.<sup>23</sup>
- A 31-year-old man with diabetes and hyperlipidemia arrived at CCI on 2/29/12. His LDL cholesterol was elevated (LDL-C=124, goal=<100) on 1/25/13. A provider saw the patient for chronic care on 2/5/13 and noted that his hyperlipidemia was stable. The provider did not address the elevated LDL.<sup>24</sup>

# Pharmacy and Medication Administration

**Methodology:** We interviewed Mr. Michka Atarod, Pharmacist-in-Charge (PIC), nurses who administer nurse-administered medications and keep-on-person (KOP) medications, toured the pharmacy, clinic and KOP medication rooms and reviewed medication administration records in clinics and in health records.

#### Pharmacy Services

Findings: Although pharmacy space is not optimal, pharmacy services appear to be working well.

The pharmacy physical plant is small and cramped with poor sanitation. Pharmacy services are available 6:30 am to 4:30 pm Monday through Saturday. Pharmacy staffing consists of five full-time pharmacists; four positions are full-time and two are part-time. There are also 12 pharmacy technicians: 6 state positions and 6 registry positions. Beginning in April 2013, there

<sup>&</sup>lt;sup>23</sup> Chronic Care Patient #1.

<sup>&</sup>lt;sup>24</sup> Chronic Care Patient #3.

will be 10 state pharmacy technicians. The pharmacist in charge believes that this staffing pattern will be adequate to meet the demand for pharmacy services.

On average, pharmacy services fills approximately 600 prescriptions each day. According to Mr. Atarod, the CCI pharmacy fills about 2/3 of prescriptions and Central Fill fills about 1/3 of all prescriptions.<sup>25</sup> Central Fill issues keep-on-person (KOP) medications for B, C, D, and E facilities using blister pack cards, and the CCI pharmacy refills KOP medications for the Special Housing Unit (SHU) and administrative segregation housing units, typically placing loose pills in plastic baggies.

To process a medication order, nurses scan medication orders that are electronically routed to the pharmacy. Pharmacy staff prints the order, stages (i.e., prioritizes) it and enters the order into the pharmacy system. The pharmacist reviews and authorizes the order and it is forwarded into a batch label queue. Pharmacy technicians fill the order and a pharmacist verifies that it is correct. Then medication is placed into a bin for the inmate's respective housing unit. Staff scans the medications to create a manifest of medications to be delivered to patients.

To renew chronic disease medications, every Monday, the pharmacy prints medication reconciliation reports of medications that will expire within 14 days. These reports are given to supervising nurses who deliver them to providers for review and renewal. However, as noted above, the OIG Cycle 3 report showed that in only 60% of cases did chronic disease patients receive all medications within the past 3 months.

Pharmacy staff performs routine inspections of medication rooms to ensure that medications are stored under proper conditions relative to humidity, temperature and lighting; that there are no expired medications in the medications rooms; and those narcotics and stock medication accountability systems are being maintained.

#### Medication Administration

**Findings:** With respect to medication management, we note that OIG Cycle 3 report scores for access to medications for sick call, intrasystem transfer and return from a higher level of care were 89%, 100% and 100% respectively, although we note that the sample size for return from a higher level of care (n=8) was significantly lower than for the two previous OIG reports (n=24 and 13, respectively).

We also note that the Cycle 3 Report score for chronic disease medications dropped from 70% to 60% based upon a similar sample size. However, the Medication Administration Process Improvement Plan (MAPIP) studies for November 2012 to February 2013 show that chronic care medication continuity scored 100% for three of four months (November, December and February) and 95% for one month (January). The magnitude of improvement from August 2012 to November 2012 raises questions about the methodology of the more recent reviews. We

<sup>&</sup>lt;sup>25</sup> The CCHCS February 2013 Dashboard shows that 50% of KOP medications are filled by Central Fill.

recommend that CCI perform a validation study to ensure that the sample of records was appropriate and that the findings were accurate.

We observed two nurses administer medication in Facility D. Inmates presented their identification badges to the nurses when they approached the window. Nurses used the medication administration records and documented the administration of medications at the time they were given. However, we did identify concerns. Both nurses wore gloves to administer medications, but did not observe aseptic technique in administering medications. They touched various items (e.g., MARs, counter surfaces, etc.) and then touched medication tablets directly to place them in cups. In addition, one nurse worked so quickly that when she reviewed the MAR and then retrieved the patient's medication, the nurse did not compare the label on the medication package to the MAR. This increases the risk of medication errors. In addition, the other nurse removed narcotics from secure storage without signing them out to the respective patient. The nurse reported that she did this because the narcotics were packaged in unit dose containers and, if the patient did not come to the window to receive the medication that she wanted to be able to return the medication to the stock supply instead of wasting the medication. This practice does not ensure real-time accountability for narcotics. We recommend that this practice be reevaluated.

# Laboratory/Radiology

**Methodology:** We interviewed laboratory and radiology staff, tracking systems and health care records.

**Findings:** In general, CCI laboratory and radiology services are working well. Our findings are consistent with the OIG Cycle 3 report score of 90.4%.

Laboratory services are provided by Quest Laboratories. A phlebotomist is assigned to each facility, and laboratory specimens are processed at the clinics and then transported to the Facility B main laboratory, where they are logged and tracked. Record review showed that labs were drawn, reviewed and scanned into the eUHR in a timely manner.

Radiology services are performed on-site. There are x-ray machines on Facilities A, B, C and D, but not on Facility E. There is no replacement schedule for radiology equipment and machines on A and C facilities are at the end of their predicted life span. Staffing consists of one senior radiology technician and two radiology technicians that are state positions. Staff uses a log to track radiology tests, including receipt of the report.

With respect to volume, for the period of January through February 2013, a total of 463 radiology tests were performed, averaging 11 tests per business day, which is a low volume of procedures given staffing patterns.

# Health Records

**Methodology:** We toured the health records unit, interviewed health records staff, reviewed health records staffing and the health records (eUHR) for organization, ease of navigation, legibility and timeliness of scanning health documents into the health record.

**Findings:** We did not find significant issues with health records management. We note, however, that the OIG Cycle 3 report unweighted score for Access to Health Information was 60.9%; however, the weighted score was 82.4%. It is unclear as to how the two scores are so widely divergent. We also note that the sample sizes for items that scored 100% ranged from 1 to 2.

CDCR has migrated statewide from a paper record to an electronic Unit Health Record (eUHR). This has been described in previous reports and will not be duplicated in this report.<sup>26</sup> However, we continue to support the Receiver procuring a true electronic health record, which will dramatically improve communication between health care staff, reduce opportunity for medical errors and improve the efficiency of health care service delivery.

#### Health Records Space and Operations

We toured the health records space in D facility. The room was well organized and clean. Staff reported that health care staff picks up health documents twice daily and transports them to health records for sorting and scanning into the eUHR. There is currently no backlog of scanning. Staff report that they receive 2-5 inches of documents daily, and an additional 5 inches at the end of the month when medication administration records are brought to medical records.

#### **Timeliness of Scanning Health Documents**

According to a CCHCS Health Records report for the period of September 2011 to February 2013, CCI averaged 11.24 inches of health documents each day and scanned an average of 11.50 inches of health documents each day. One finding is that one of the physicians that works in the OHU types progress notes on a computer but does not consistently print and forward the progress notes to Health Records (See OHU). We also found that delayed receipt and scanning of consultant reports into the eUHR (See Specialty Services).

With respect to accuracy, the same report showed that of 27,315 CCI records reviewed, there were 661 health record errors -- a 2.42% error rate, which is acceptable.

#### **Urgent/Emergent Care**

**Methodology:** We interviewed health care leadership and staff involved in emergency response and toured the Triage and Treatment Area (TTA). We reviewed nine charts of patients who had been hospitalized for urgent problems.

<sup>&</sup>lt;sup>26</sup> See Court Experts San Quentin report. March 2013.

#### Emergency Department/Hospitalizations

**Findings:** Urgent evaluations were timely and adequate. There were no delays in evaluations, and patients requiring hospitalization were evaluated and transferred timely. Evaluations in the TTA were adequate and appropriate. There was one exception. One patient had a history of feigning illness. When he had inappropriately used a beta-agonist inhaler, he developed an accelerated heart rate. A provider did not examine the patient when he had an abnormal heart rate of 138 with an arrhythmia. All patients with abnormalities and/or symptoms should be evaluated. A history of feigned illness is not a guarantee that the patient does not have an existing problem.

There were no identified problems with patients returning from the hospital. Hospital records were present in the record, and physicians documented knowledge of hospital diagnoses and treatment plans. No chart reviews had serious problems.

### **Specialty Services/Consultations**

**Methodology:** We reviewed the cases of 20 patients who had been referred for offsite specialty care. Most of these patients had been referred to and evaluated by multiple specialists.

**Findings:** Our review revealed that specialty services are available and are performed within appropriate time frames. However, in a number of cases (see below), follow-up with the primary care provider was not occurring in a timely manner. We found that specialty care follow-up is not consistent with the CCHCS policy that a provider will see the patient and review the consultant's recommendations within two weeks of a routine specialty care visit. Our findings are consistent with the OIG Cycle 3 report that found only 66.7% of patients were seen timely following completion of the specialty services.<sup>27</sup> We found one case where referral to a specialist was delayed for seven months.<sup>28</sup> While in most cases the patients received adequate care, lack of timeliness can present a serious risk of adverse outcomes and harm.

Our findings demonstrate improvement from the OIG Cycle 3 report in which overall specialty care scored 72.1%, and are somewhat worse than the March 2013 Dashboard in which specialty consultation scored 94% and follow-up of specialty visits scored 98%.

Nancy Segovia-Rutledge SRN II supervises specialty services and the OHU. Review of the aging report shows that most specialty services are being performed in a timely manner.

Most specialty services are provided under the umbrella of the Health Net contract. The staff calls physician groups that provide centralized scheduling services (CMG, PPA). Services are provided within the Bakersfield, Tehachapi and Lancaster. In unusual cases, patients are sent to UC Davis, UCLA or San Diego.

<sup>&</sup>lt;sup>27</sup> OIG Reference Number 07.043

<sup>&</sup>lt;sup>28</sup> Specialty Services Patient #7.

Telemedicine services include cardiology, orthopedics, nephrology, general surgery, transgender, urology, pulmonology, and ENT; but not psychiatry. Currently ophthalmology and psychiatry are the most difficult services to obtain. This is especially problematic as CCI has lost psychiatrist positions. Staff reported that a new hospital is being built in Tehachapi and may help to resolve some of the problems.

#### Patient #1

This is a 50-year-old man who was referred to a cardiologist on 10/25/12 for evaluation of an abnormal EKG. His initial assessment was that the arrhythmia was benign. He ordered 24hour Holter monitoring (ambulatory cardiac monitoring) and follow-up in 4-6 weeks after the Holter study. The primary care provider saw the patient for follow-up of the cardiology visit on 10/29/12. He noted that the consultation report was not yet available and that the patient told him that he would need some type of monitoring. The provider ordered follow-up in 4-6 weeks when the consultation report was available. The provider next saw the patient on 12/5/12 and noted that the report was still not available. The provider requested that specialty services staff obtain the report and ordered follow-up in one week. The provider saw the patient again on 12/10/12 with the consultation report and ordered the Holter monitoring. The Holter monitoring was finally done on 2/28/13 (four months after it had been recommended by the cardiologist) and did not reveal any significant abnormalities.<sup>29</sup>

#### <u>Assessment</u>

There was a problem related to timeliness of care. The consultation report was not available for review until six weeks after the cardiologist saw the patient. This delay did not adversely affect the patient, but it did result in a delay in implementation of the consultant's recommendation. While in this case the delay did not have any adverse effects, such a delay could have been significant if the patient had had a more serious problem.

#### Patient #2

This is a 43-year-old man with a history of surgery and radiation therapy for a benign brain tumor. He had seen the neurosurgeon for follow-up on 2/15/13 via telemedicine. The telemedicine nurse documented that the neurosurgeon noted that the tumor had not shrunk noticeably and that he would send his recommendations in his report. On 2/22/13, the primary care physician saw the patient for follow-up of the specialty visit and noted that the consultation report was not available. The provider requested that specialty services staff obtain the report. The patient saw an oncologist for follow-up of his tumor on 3/26/13. The provider saw the patient for follow-up of that visit on 3/27/13 and reviewed the oncologist's report at that time. As of 3/29/13, the report with the neurosurgeon's recommendation was still not in the medical record. The provider had not addressed this when he saw the patient two days earlier.<sup>30</sup>

<sup>&</sup>lt;sup>29</sup> Specialty Services Patient #3.

<sup>&</sup>lt;sup>30</sup> Specialty Services Patient #4.

#### Assessment

There was a problem related to timeliness of care. The consultation report was not available six weeks after the neurosurgeon had seen the patient. In addition, the primary provider had not seen the patient for follow-up.

#### Patient #3

This is a 42-year-old man who had knee surgery on 2/27/13. The surgeon had ordered follow-up up and suture removal in two weeks. A provider ordered the recommended follow-up upon the patient's return to the facility. The patient submitted a health services request on 3/12/13, as a "reminder" that he needed to see a surgeon for follow-up. On 3/18/13, a provider ordered an urgent follow-up visit with the surgeon after the patient submitted another health services request stating that he had not yet seen the surgeon for follow-up. The provider also wrote an order to have the patient brought to the clinic that day for evaluation of his sutures. That did not occur and, as of 3/29/13, the patient had not seen a provider or the surgeon for follow-up.<sup>31</sup>

#### Assessment

There was a problem related to the timeliness of care. The patient did not see the surgeon for follow-up of his knee surgery in a timely matter.

#### Patient #4

This is a 61-year-old man with diabetes and hypertension who had a stress test and an echocardiogram on 12/12/12. The primary care provider saw the patient for follow-up of these studies on 12/13/12 and 1/16/13. On both occasions, he noted that the consultation report was not available. The provider saw the patient again on 2/25/13. The report was available at the time and did not reveal any problems.<sup>32</sup>

#### Assessment

There was a problem related to timeliness of care. The results of the consultant's report were not available until approximately 11 weeks after the patient had seen the cardiologist.

#### Patient #5

This is a 41-year-old man who had a liver biopsy on 1/3/13. The primary care provider saw the patient for follow-up on 1/15/13, 2/5/13, and 3/8/13. On each of these occasions, the provider noted that the results of the biopsy were not yet back. On 3/8/13, the provider contacted specialty services and they sent the results to the clinic. The biopsy revealed a low level of inflammation that indicated treatment was not necessary at that time.<sup>33</sup>

<sup>&</sup>lt;sup>31</sup> Specialty Services Patient #6.

<sup>&</sup>lt;sup>32</sup> Specialty Services Patient #9.

<sup>&</sup>lt;sup>33</sup> Specialty Services Patient #14.

#### Assessment

There was a problem related to timeliness of care. The results of the patient's liver biopsy were not available for over two months after he had had the biopsy. Normally, biopsy results are available within one week.

#### Patient #6

This is a 29-year-old man with a history of chronic diarrhea. He had a colonoscopy on 1/25/13 that revealed a carcinoid tumor<sup>34</sup> in his rectum. On 1/31/13, a provider referred him to a surgeon on an urgent basis for further evaluation and care. A surgeon saw the patient via telemedicine on 2/5/13. The surgeon noted that he could not evaluate the patient via telemedicine. He ordered a CT scan and follow-up in his office. The primary provider ordered an urgent CT scan, which was done on 2/19/13. The primary provider saw the patient that day, following the CT scan, and noted that he was unsure whether the surgeon had seen the study and results. He contacted specialty services staff and requested that they find out what should be done next. On 3/13/13, the patient submitted a health services request stating that he would like to see a doctor as soon as possible because his stomach was hurting "so bad." He further stated, "...you guys know I have cancer in my stomach please." A nurse saw the patient on 3/14/13 and wrote, "See sample pain"<sup>35</sup> on the request form. There was no further documentation from the nurse in the eUHR. A provider saw the patient on 3/15/13 and noted that he continued to have pain and wanted to know what the plan of care was for his cancer. The provider addressed the patient's pain and noted that he had follow-up with the surgeon on 3/26/13. The surgeon saw the patient for follow-up on 3/26/13.<sup>36</sup>

#### Assessment

There was a problem related to timeliness of care. The patient did not see the surgeon for follow-up of a serious medical problem until almost two months after it had been ordered.

#### Patient #7

This is a 67-year-old man who had a positive test for fecal occult blood  $(FOBT)^{37}$  on 5/7/12. A provider reviewed and signed the results on 5/10/12. The patient was subsequently seen on multiple occasions for chronic care, but did not have any follow-up for the positive FOBT until 12/7/12, when a provider noted that the patient had never had a colonoscopy and ordered one. The colonoscopy was performed on 2/22/13, and revealed colon cancer. The primary care provider ordered an urgent CT scan of the chest, abdomen and pelvis, and follow-up with the surgeon after the scans. The scans were done on 3/8/13, and did not reveal any metastases. The primary care provider saw the patient on 3/13/13 and the surgeon saw him on 3/19/13. Both provided appropriate care.<sup>38</sup>

<sup>&</sup>lt;sup>34</sup> Carcinoid tumors are a type of slow-growing cancer that can arise in several places throughout the body. They can produce and release hormones that can cause signs and symptoms such as diarrhea or skin flushing.

<sup>&</sup>lt;sup>35</sup> A nursing assessment tool.

<sup>&</sup>lt;sup>36</sup> Specialty Services Patient #16.

<sup>&</sup>lt;sup>37</sup> FOBT is a screening test for colon cancer. Positive results need to be followed-up with colonoscopy.

<sup>&</sup>lt;sup>38</sup> Specialty Services Patient #17.

### Assessment

There was a problem related to timeliness of care. There was a seven-month delay in following up on the positive FOBT test and referral for a colonoscopy.

# **Outpatient Housing Unit Care (OHU)**

**Methodology:** We toured the OHU, interviewed OHU health care and custody staff and reviewed OHU tracking logs and 9 patient health records.

**Findings:** Our findings are not consistent with the OIG Cycle 3 report score of 100%. While physician notes were of good quality, for 4 of 9 patients the physician did not write notes at appropriate intervals. The OIG audit requires a note every two weeks, which we did not find. Nursing care plans also did not always match the needs of the patient, and for 2 patients documentation was not present in the record indicating why the patient was on the unit. The OIG audit requires that the level of care be adequate for the needs of the patient.

The OHU is a 16-bed unit with eight beds dedicated to mental health and eight beds dedicated to medical patients. On the day of our visit, only nine beds were occupied. All were filled with medical patients. Five of the nine patients appear to be long-term boarders. Of these five long-term patients, two had dementia. Three patients were short-term stay patients. Based on chart documentation we could not determine why two of the patients were on the unit. All patients should have a clearly stated reason for admission in the medical record.

Nursing care plans on this unit do not match the needs of the patients, and more attention needs to be paid to nursing needs of complex patients. One of the demented patients had a preprinted care plan that did not specifically address what the patient needed help with. Another patient, who was 91 years old, arrived on the unit in a wheelchair, had transfer issues due to arthritis and appeared "high risk" for falls. He was cooperative but had difficulty understanding instructions due to the fact that he only spoke Spanish. There were formatted nursing care plans for hypertension, chronic obstructive lung disease and poor oral intake, although none of these care plans had specific care plan instructions based on the patient's needs. We could not determine why this patient was on the unit, although the nurse on the unit told us that she suspected that he was on the unit because of his age. The nursing care plans should derive from the reason for admission and should relate to specific care needs of the patient. Instead of managing patients, nurses spent excessive time on clerical duties.

There are no formal rounds or huddle on the unit between nursing and the physician assigned to this unit. This is a higher level of care, and the primary care model should extend to higher levels of care as well. Nurses and physicians should regularly engage in a huddle to discuss adherence to the patient's care plan, which should be based on physician direction based on the condition of the patient.

For patients who transferred into the OHU from other CDCR facilities, none had documentation in their chart that care at the sending facility was reviewed. When patients transferred from an OHU, CTC or GACH, the record was probably unavailable to review because paper records from OHU, CTC, or GACH units are not scanned until the patient is discharged. This can result in patient safety issues. The clinical care of patients involved in intrasystem transfers is not good and needs system-wide improvement. The only death at CCI during the past year involved a patient who was recently transferred. The chart did not have documentation that the chart from the sending facility was reviewed. Parallel record systems consisting of the eUHR and paper records on high level of care units are patient safety issues and can be resolved by an electronic record.

Nurses document vital signs on both the Graphic Record and on the Nursing Care Record. This is redundant and is wasted work; nurses should document useful information only once. Also, the care plan formatted sheets are inadequate and should be redesigned. The documentation of nurses adequately reflects what nurses do, but nurses are not performing the type of nursing care that patients require. This may be because nurses are focused on clerical duties. An assessment should be done to re-evaluate nursing care on the OHU so that nursing care on the unit is consistent with patient needs.

Nurses have good access to patients. On the day of our visit, there were four officers in the area. Nurse staffing consisted of one RN and a nursing aide. Based on a population of 10, this may be adequate. If the unit were filled with 16 patients, staffing may need re-adjustment.

# **Mortality Review**

**Methodology:** We reviewed CCHCS Death Review Summaries for deaths that occurred in calendar year 2012. In addition we reviewed one death record as well as the respective CCHCS Death Review Summary.

**Findings:** There were three deaths at CCI in calendar year 2012. One was a murder. One was a suicide. The third death did not have a clear cause of death. Despite having an uncertain cause of death, an autopsy was not done. We continue to recommend that autopsies be performed in all cases. As with most of the other sites, CCI does not perform its own comprehensive mortality review; instead, these are done by CCHCS central office staff.

We reviewed one death that occurred at CCI over the past 12 months, along with the CCHCS mortality review. This patient was a recent transfer from the Correctional Treatment Center at KVSP. His care at KVSP was problematic and he did not appear to be transferred in stable condition. He died several days after arrival at CCI.

This patient was at CCI when he developed acute abdominal pain for which he was hospitalized. He was discovered to have a perforated viscus and developed peritoneal abscesses. As a result, he had a sub-total colectomy and lost significant weight during an extended hospitalization. After surgery, he had serious complications including sepsis, respiratory arrest and an extended Intensive Care Unit stay. He was on total parenteral nutrition until shortly before discharge from the hospital. Instead of sending the patient back to CCI, he went to a Correctional Treatment Center at KVSP to recover. Upon arrival at KVSP from the hospital, he had a poor nutritional assessment. The nutritionist who performed this evaluation used laboratory results in her assessment from 4/9/12, which was several months prior to the patient's hospitalization. She used an albumin of 4.3. This was inappropriate because, several days later, blood work indicated that the patient had an albumin of 2.8. Also, the nutritionist used the patient's pre-hospital weight of 183 in her assessment. Based on descriptions of the patient, it did not appear that he weighed 183 pounds. We could find no documentation in the record that the patient had his weight taken at KVSP. This might be because nursing notes are not scanned into the eUHR or because no one weighed the patient.

The nutritionist's assessment was important because the patient had just had his colon removed and the colon re-absorbs fluid and electrolytes. Removal of the colon may cause fluid and electrolyte abnormalities. The patient was nauseous and had not been eating well. He should have had his weight evaluated as well as his ability to absorb sufficient fluid, electrolytes and nutrients. These should have been monitored by periodic serum metabolic panels.

The patient had a history of hypertension, but while at KVSP the patient developed hypotension.<sup>39</sup> Because of the hypotension, a physician discontinued two of his blood pressure medications, but the patient continued to have low blood pressures. This was not investigated in terms of his fluid status and possible dehydration.

When the patient transferred from KVSP to CCI, he continued to have low blood pressures and tachycardia that were not investigated but could have been related to dehydration. Upon arrival at CCI, his pulse was 122/bpm, his weight was documented as 128 pounds by a physician and as 140 pounds by a nurse. He was dizzy and required assistance in standing up. He did not appear stable for transfer. His abnormal vitals were not investigated by staff at CCI. Several days after transfer, he was found dead in his cell.

It is our opinion that this death portrays an intrasystem transfer problem that was not recognized by the mortality reviewer. Based on symptoms and vital signs, the patient did not appear to be stable when he was transferred. When the expectation is that only stable patients are transferred, unstable patients may not be immediately recognized. Even though CCI staff should have addressed his abnormal vital signs (low blood pressure and pulse of 122) such a patient should not have been transferred to the facility. The care at KVSP should have been reviewed more carefully. The nutritionist evaluation at KVSP was not of good quality. At KVSP the providers did not follow-up of the patients' abnormal laboratory tests or monitor his fluid and electrolyte status even though he was at risk for electrolyte abnormalities. The patient did not have evidence of monitoring of his weight and nutritional status at KVSP even though he had just had a major part of his colon removed. This absence of documented weights may have been related to nursing notes not being scanned into the eUHR. However, this should have

<sup>&</sup>lt;sup>39</sup> Hypotension is low blood pressure.

been identified as a problem. All of these problems should have been identified by the CCHCS mortality review.

The CCHCS mortality review found no problems except that a POLST form was not present in the chart. Because no autopsy was done, the cause of death remains unclear. Because laboratory results, which arrived the day of the inmate's death, indicated that the patient was dehydrated (BUN 49 and creatinine 1.67), it appears that the failure to recognize nutrition and fluid deficiencies may have played a role in this inmate's death.

### Internal Monitoring and Quality Improvement Activities

**Methodology:** We reviewed the CCI OIG report, facility Primary Care Assessment Tool, Performance Improvement Work Plan (PIWP), and internal monitoring and quality improvement meeting minutes, including Emergency Medical Response Review Committee, Infection Control, and Pharmacy and Therapeutics Meeting minutes.

**Findings:** We found that CCI health care leadership routinely conducts meetings related to internal monitoring and quality improvement processes. However the quality of content of the meetings varies. Positively, recent Pharmacy and Therapeutics Meeting minutes address medication errors, with breakdowns of the type of errors. Future meetings might further explore root cause analyses to identify and address the causes of medication errors.

However, Infection Control Meetings are not substantive and lack surveillance data regarding prevalence or incidence of communicable diseases, including skin infections and reportable diseases. The infection control program requires further development.

We note that institutions do not perform mortality reviews, and this function is deferred to CCHCS. We strongly recommend that all institutions perform internal mortality reviews, in order to identify both system and clinical issues.

Mortality review is a major component of quality improvement. Lessons learned from mistakes are a major component of improvement strategies. We note that CCI has no policy on mortality review and the CCHCS policy on mortality review includes no role for local facilities except to provide documents to the Death Review Unit and to ensure that medical documents are scanned timely into the eUHR. Additionally, under the CCHCS Death Reporting and Review Procedure, no one is required to follow up on recommendations of the Death Review Committee. In policy and in practice, the Death Review Committee does refer certain problems to additional committees or individuals which may be at the institutional level. However, the CCHCS policy does not state that corrective action is required.

The lack of involvement of the institutional facility leadership in identification of problems and in following up on recommendations is a lost opportunity for improvement. Participation in drafting a mortality report is a way for local leadership to develop skills in identification of problems. In addition, identification of problems can be a vehicle to reinforce training on procedures based on review of an actual case.

Whether identified problems involve institutions, CCHCS (e.g., systemic issues such as eUHR, intrasystem transfer, or utilization management) or CDCR, it is not clear that identified problems are monitored and resolved. The only action appears to be to refer the identified problem to another unit.

Follow up of problems identified in mortality review needs to be included as a major focus of Quality Improvement activity. All problems occurring at the institutional level need to be followed by the institutional Quality Improvement Committee. Facility health care leadership needs to monitor institutional corrective action plans to ensure that desired improvements are achieved. At the CCHCS system level, in addition to identifying and referring problems there needs to be a system of follow-up and accountability for implementation of corrective actions. As an example, in the mortality case reviewed at CCI, it is our opinion that an unstable patient was transferred from one facility to another. There does not appear to be a way to address this intrasystem transfer problem under the current process.

In summary, we recommend a review of the CCHCS mortality review process both to improve the process and to better integrate mortality review into the quality improvement process at both the institution and CCHCS levels. We recommend that facility leadership have qualitative input or participate in the mortality review conducted by the Death Review Unit. When the mortality review process identifies a systemic issue as contributing to a preventable death, a root cause analysis needs to be performed. Because of the expertise involved in performance of root cause analysis, central office may need to be involved in providing assistance.

When serious problems are identified a corrective action plan is required. At the institutions, the Quality Improvement Committee needs to monitor recommendations including those requiring corrective actions. CCHCS Central Office and CDCR identified problems should designate a responsible party to undertake corrective action.

# Recommendations

### Operations: Budget, Equipment, Space, Supplies, Scheduling, Sanitation, Health Records, Laboratory, Radiology

- 1. CCHCS should reevaluate the HCFIP to renovate versus relocate Facility B medical clinic space.
- 2. CCHCS should address OHU physical plant issues not addressed in the HCFIP.
- 3. In light of ongoing issues, CCHCS and CDCR should reevaluate the model of having inmate porter's assigned sanitation and disinfection duties in medical areas.
- 4. CCI health care and custody leadership should ensure that a schedule of sanitation and disinfection activities is developed, implemented and monitored.

### Intrasystem Transfer

- CCHCS should review and update the 2010 policy regarding the health care transfer process and clarify expectations regarding timeframes for provider referral following transfer. We recommend that patients identified as having a significant medical condition (e.g., high risk, chronic disease, recent hospitalization or specialty services consultation/procedure) be seen by a medical provider within 14 days of arrival to ensure that continuity of care is provided.
- 2. CCHCS should review all deaths that occur within a month of intrasystem transfer. The utilization management process that arranges for transfers from higher levels of care (hospitals, CTC, GACH) needs to have clinical oversight and be aware of mistakes that are made during the transfer process.

#### Access to Care

- 1. Health care leadership should assess and address provider access issues in restricted housing units.
- 2. Health care and correctional leadership should ensure that auditory and visual privacy is provided during clinical encounters.
- 3. Nursing leadership should continue to review nursing encounters and provide feedback to nursing staff regarding their performance.

# **Chronic Disease Management**

- 1. CCI should ensure that the blood glucose logs are in the eUHR and that the providers are reviewing them when they see patients for chronic care.
- 2. CCI should provide education to clinicians related to the appropriate management of diabetic patients with insulin.
- 3. CCI should ensure that the problem lists are updated.

# Pharmacy and Medication Administration

1. Nursing leadership should routinely observe the medication administration process and provide feedback to nurses regarding aseptic technique. Nurses should discontinue the use of gloves. Instead nurses should wash their hands or use hand sanitizer prior to

beginning medication administration and periodically use hand sanitizer during medication administration. Nurses should not directly touch medications; rather pour them into a medication cup using aseptic technique (not touching the medication). Nurses should sign out narcotics at the time they are removed from the secure supply.

2. CCI should perform validation studies of MAPIP audits to confirm results.

#### Specialty Consultations

1. CCI should perform a quality improvement study to address the issue of delays related to specialty care.

#### Specialized Medical Housing: OHU/CTC/GACH

- 1. CDCR/CCHCS should address physical plant issues in the OHU.
- 2. Providers should document rounds timely in the eUHR.

#### **Mortality Review**

- 1. Autopsies should be performed for every death.
- 2. CCHCS should undertake a review of the mortality review process. Court Experts would like to participate in an evaluation of the review process. Review of the process should result in:
  - a. Involvement of local institutional leadership in performing the initial mortality review or collaborating in a meaningful way on mortality review.
  - b. Integration of the corrective action plan into the Quality Improvement program at the institutional level.
  - c. Establishment of procedures for follow-up of corrective action plans.
  - d. Identification of responsible central office staff for ownership of CCHCS system wide identified problems and a mechanism to report on progress of corrective action.
  - e. Incorporation of professional practice issues into staff training and continuing education.