California Prison Health Care Receivership Corporation (CPR, Inc.)

Prison Medical Care System Reform

Plan of Action

May 2007

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A. General Introduction

The Plan of Action, set forth below, presents an initial roadmap for the change necessary to bring the delivery of medical care in California's prison up to Constitutional levels. This Plan of Action is not a plan for plan. To the contrary, it encompasses a number of remedial activities begun prior to the Receivership as well as remedial activities initiated by the Receiver to comply with the Court's order in *Plata v. Schwarzenegger*. In addition, the Plan of Action articulates high-level steps to be taken over the next two years.

The Plan of Action is a living, growing document providing overall direction as the Receiver's staff moves forward to tackle the enormous challenges of improving medical care for California's inmate-patients. The November 2007 revision of the Plan of Action will address additional system imperatives, timelines, and stakeholder concerns. It should be clear to the reader that the process of raising the delivery of medical care in California's prisons to constitutional levels, as described in this Plan of Action, will be a daunting challenge, requiring thoughtful planning, careful coordination, and a number of time-phased inter-related remedial programs. The Receiver emphasizes that his Plan of Action is a living document, subject to revision and additional detail as it is developed. At this point in time, it is not possible to set forth a proposed time line for all future remedial actions, nor is it possible to describe all future budgetary impacts of the Plan. This information, however, will be presented in future iterations of the Plan as various elements of the Plan are effectuated.

As explained below, the long-term transformation of California's prison medical care will rely on the combined efforts of the Receiver's staff, CDCR staff, and outside resources, encompassing both custody and health care, to create a system that meets constitutional standards of access and quality.

B. Purpose of the Plan of Action

- 1. To provide a comprehensive report to the Honorable Thelton E. Henderson, the California Department of Corrections and Rehabilitation ("CDCR"), State officials, key stakeholders, and the public about the Receiver's overall strategy for change and his specific plans for the next two years.
- 2. To outline a health care delivery system that encompasses a continuum of medical care, ancillary, and support services necessary for optimal outcomes, safety, and cost-effectiveness that will be achieved by the Receiver in collaboration with Court mandated remedial programs in *Coleman v. Schwarzenegger* (mental health care), *Perez v. Schwarzenegger* (dental care), and *Armstrong v. Schwarzenegger* (Americans with Disabilities Act).

- 3. To define strategies for achieving and sustaining timely, effective, and efficient clinical services as well as responsible overall medical management and operations.
- 4. To serve as a dynamic framework for prioritizing leadership activities and communicating ongoing progress, successes, and challenges.

C. Background of Stipulated Agreements and Orders

The October 3, 2005 "Findings of Fact and Conclusion of Law re Appointment of a Receiver" sets forth the facts and law which created the Receivership. This order has not been appealed.

Standards – Stipulated Agreements and Orders

Patient care standards under *Plata v. Schwarzenegger* are specified in the Stipulation For Injunctive Relief, June 13, 2002 ("Stipulated Injunction") and Stipulated Order Re Quality Of Patient Care And Staffing, September 13, 2004 ("Patient Care Order"). The specific direct patient care services ordered by the Federal Court are as follows:

1. <u>Health Screening:</u> a process for screening all patients for communicable disease, such as tuberculosis and sexually transmitted disease, and chronic disease, such as diabetes, renal disease, seizure disorders, cardiovascular disease, and pulmonary disease; screening for cancer; review of vital signs, blood pressure, pulse, and weight; review of current medications; and nurse review and referral for patients with urgent or acute conditions; history and physical examination for all patients within 14 days of arrival at Reception Center; and routine laboratory tests, such as serum pregnancy, cholesterol screening, and optional HIV testing.

Reference to Plan of Action: Initial health screening will be addressed as part of the San Quentin reception pilot intake process. Once the pilot is completed, a standard reception intake process including a comprehensive health screening will be replicated as appropriate at other prisons with reception centers. (Refer to Goal B, Objective B.2.1.)

2. <u>Health Transfer:</u> Process to ensure continuity of care when patients transfer to another institution, transfer between levels of care, or are paroled, including continuity of medications, specialty referrals, and other treatment.

Reference to Plan of Action: Health transfer will be addressed under Goal B, Objective B.3.1.6.

3. Access to Primary Care (Sick Call): System that allows patients to self-refer for medical treatment, including nurse review to identify the need for immediate referral to urgent or emergency treatment, an urgent walk-in procedure, and follow-up services; policies require face-to-face nurse triage for patients with symptoms within 24 hours, and an appointment with a primary care provider

within 5 days for patients classified as urgent and within 14 days for patients classified as routine.

Reference to Plan of Action: Access to primary care will be addressed under Goal B, Objective B.2 and B.3.

4. <u>Priority Ducat System:</u> System for ensuring that custody staff treat health care appointments as high-priority.

Reference to Plan of Action: A health care access team pilot is already underway at San Quentin. Once the pilot is completed, the health care access team model will be replicated as appropriate to other prisons statewide. (Refer to Goal E.)

5. <u>Patient Health Care Education:</u> Program to provide patients with instruction in wellness, lifestyle changes, disease prevention, newly diagnosed illness or disease, treatment plans or procedures, pre- and post-operative care, chronic care morbidity reduction.

Reference to Plan of Action: Patient health care education will be part of primary care and chronic care model implementation. The Plan of Action also includes plan to expand cultural and linguistically appropriate patient education resources by collaborating with community health education programs. (Refer to Goal B, Objective B.2.)

6. <u>Preventive Services:</u> Services to prevent disease and mitigate morbidity and mortality due to existing disease provided to select patient populations based upon risk factors, such as age and chronic conditions, that include cancer screening, immunizations, and health education (education regarding diet, exercise, smoking cessation, etc.).

Reference to Plan of Action: Preventive services will be part of primary care and chronic care model implementation. Currently a primary care process with a new staffing model pilot is underway at San Quentin. Once the pilot is completed, new processes and models will be replicated as appropriate at other prisons statewide. (Refer to Goal B, Objective B.2.)

7. Outpatient Specialty Services: Program for providing specialty services, including procedures for urgent and routine referrals and required follow-up; policies require that high-priority consultations or procedures occur within 14 calendar days and routine consultations or referrals within 90 calendar days, with follow-up by a primary care provider within 14 calendars days after the consultation or procedure

<u>Reference to Plan of Action</u>: Before program can be developed for providing specialty services, the infrastructure for provider contracting needs to be developed with trained staff. (Refer to Goal A, Objectives A.4. and A.6.) In the meantime, CPR has initiated interim efforts to establish individual contracts with specialists,

university providers, and telemedicine providers. (Refer to Goal B, Objective B.3.1.2.)

8. <u>Physical Therapy:</u> Program to ensure timely access to physical therapy services, including specifications for the follow-up by primary care providers and provisions for transferring to an institution with these services if the home institution does not provide them.

<u>Reference to Plan of Action</u>: Programs to ensure timely access to physical therapy will be addressed as part of the health care continuum infrastructure redesign and efforts to address the needs of aging and impaired inmates. (Refer to Goal B, Objective B.1.4.)

9. <u>Diagnostic Services</u>: Program for the appropriate processing of laboratory tests and other diagnostic testing, including procedures for prioritizing the urgency of laboratory orders (STAT, critical, urgent, routine) and required timeframes for review and follow-up of results (routine laboratory tests processed within 14 days of order, x-ray examinations completed within 30 days of order, primary care provider review of lab results within two business days of receipt, notification of patient of results within 14 days of receipt)

Reference to Plan of Action: Refer to Goal B, Objective B.12. and Goal D, Objective D.2.2.

10. <u>Medication Management:</u> Services to dispense, administer, and distribute pharmacotherapeutic treatments, including provisions for medication error reporting, medication follow-up counseling, medication renewals and refills, medication for parole, and continuity of medication upon transfer; policies require that prescriptions for formulary medications be filled by the following day and that "stat" medications are issued within 1 hour.

<u>Reference to Plan of Action</u>: Refer to Goal B, Objective B.8. and Maxor National Pharmacy Corporation's "Road Map to Excellence."

11. <u>Urgent / Emergent Response:</u> Program for the provision of urgent care services and 24-hour emergency medical treatment that includes basic life support, emergency response, and physician on-call services; policies require follow-up within five days for patients whose urgent encounter was due to chronic disease.

Reference to Plan of Action: Refer to Goal B, Objective B.1.

12. <u>Medical Emergency Response Documentation and Review:</u> Process for the review of deaths, suicide attempts, and calls for emergency assistance to determine compliance with existing policies and procedures, adequacy of response time, and appropriateness of custody and medical response and patient treatment, with follow-up actions to address identified deficiencies.

Reference to Plan of Action: Refer to Goal C.

13. Outpatient Housing Unit and Licensed Care: Specialized treatment services for varying levels of acuity, including outpatient services requiring specialized housing (Outpatient Housing Unit care), licensed Skilled Nursing Facility care, Correctional Treatment Center care, General Acute Care Hospital care, and palliative care; policies require physician evaluation within 24 hours of admission to a Correctional Treatment Center and an evaluation by a primary care provider within 5 days for all patients returning from an inpatient acute care facility.

Reference to Plan of Action: Appropriate levels of care will be addressed in Goal B, Objective B.5.2. Clinical space issues will be addressed under Goal F.

14. <u>Outpatient Therapeutic Diets:</u> Program for the provision of nourishments and supplements for patients who are pregnant, diabetic, immunocompromised, malnourished, or have oropharyngeal conditions causing difficulty eating regular diets and special diets for patients with renal failure or hepatic failure, or who require a Heart Healthy diet, gluten-free diet, or diet to preclude food allergies.

Reference to Plan of Action: Refer to Goal B, Objective B.9.

15. Medical Report of Injury or Unusual Occurrence: Process for documentation of patients' on-the-job injuries, physical contact with a staff member during an incident, and any self-reported injury due to self-injury or altercation, Administrative Segregation Unit placement, use of force, or other medical emergency situation.

Reference to Plan of Action: Refer to Goal C.

16. <u>Oleoresin Capsicum (OC) Contraindications:</u> Process for the evaluation and treatment of patients prior to or after the use OC.

Reference to Plan of Action: There is now a policy and procedure regarding oleoresin capsicum spray. Variation in implementation and performance will be addressed under Goals B and C.

17. Medical Evaluation of Patients Involved in Assaults: Process for the evaluation of patients who have been involved in the use of force, including review of the patient's mental health record.

<u>Reference to Plan of Action</u>: There is now a policy and procedure regarding medical evaluation of patients involved in use of force. Variation in implementation and performance will be addressed under Goals B and C.

18. <u>Hygiene Intervention:</u> Process for the identification, evaluation, and referral of patients who demonstrate poor hygiene or whose hygiene compromises the sanitation/hygiene of their personal and immediate housing area.

<u>Reference to Plan of Action</u>: There is now a policy and procedure regarding hygiene interventions. Variation in implementation and performance will be addressed under Goals B and C.

19. <u>Inmate Hunger Strike</u>: Process for the identification, evaluation, and treatment of inmates on hunger strike, including required coordination and reporting between custody and health care staff.

Reference to Plan of Action: This standard has been met.

20. <u>Comprehensive Accommodation Chrono:</u> Process for the authorization and review of special equipment, housing accommodations, or other accommodations that are medically necessary or are required under the Americans with Disabilities Act.

Reference to Plan of Action: There is now a policy and procedure regarding comprehensive accommodation chronos. Implementation has been difficult for multiple reasons, including gross inadequacies in information technology. The latter will be addressed in Goal D. The clinical and custody practices will be addressed in Goals B and C.

21. Pregnant Patient Care and the Birth of Children: Prenatal care and post-delivery services, including required screenings, frequency of prenatal treatment visits, vitamin and nutritional requirements, referrals for child placement services, and post-partum follow-up; policies require that patients be seen by an obstetrics provider within 7 calendar days of determination of pregnancy and that each patient be provided post-delivery follow-up care after six-weeks.

<u>Reference to Plan of Action</u>: Prenatal care and post delivery services will be addressed under Goal B.

22. <u>Nursing Services and Protocols:</u> Clinical protocols for nurses in the appropriate evaluation and treatment of patients presenting with specific systemic conditions or complaints.

Reference to Plan of Action: Will be addressed under Goal B, Objective B.2.

23. <u>Health Record Services:</u> Provisions for the management, content, and archiving of patient health records, including policies for disclosure of information.

<u>Reference to Plan of Action</u>: Current focus is on organizing the manual paper process and expediting filing of the medical records. Long term solution will be addressed through deployment of the electronic health records. (Refer to Goal D.)

24. <u>Chronic Care Program:</u> Diagnosis and management of chronic disease (diseases lasting longer than 6 months), including identification and treatment of high-risk patients; policies require an initial intake evaluation within 30 days for patients referred to the Chronic Care Program, and ongoing evaluations every 90 days.

Reference to Plan of Action: Refer to Goal B, Objective B.2.

25. <u>Pharmacy Services:</u> Provisions governing pharmacy operations, including pharmacy licensing, emergency drug supplies, drug storage, consultation with a pharmacist, prescription requirements, and the ordering, stocking, and receiving of medications.

<u>Reference to Plan of Action</u>: Refer to Goal B, Objective B.8. and Maxor National Pharmacy Corporation's "Road Map to Excellence."

26. <u>Public Health and Infection Control:</u> Program for infection control, communicable disease reporting, and blood borne pathogen control.

Reference to Plan of Action: Refer to Action Goal B, Objective B.6.

27. <u>Telemedicine Services:</u> Program for the provision of specialty services through videoconferencing.

Reference to Plan of Action: Refer to Goal D, Objective D.6.

28. <u>Utilization Management:</u> System to facilitate appropriate use of resources for patients requiring higher levels of care and select specialty services and medications, including reviews to determine placement at appropriate level of care and appropriate utilization of specialty care and pharmacy resources.

Reference to Plan of Action: Refer to Goal B, Objectives B.3. and B.5.

The Receiver supports all of the above patient care standards, and the Receiver's Plan of Action will address each. It is important to point out, however, that many of these standards cannot and will not be achieved until the necessary medical delivery infrastructure is established (for example, competent clinicians and a viable information technology system). The reader should also note that, within the Plan of Action, many of the standards are renamed and/or subsumed, e.g., "health transfer" (number 2 above) has become the care transitions program (Objective B.3.1.6.). Furthermore, the Receiver's implementation strategies are far different than the "phased roll-out" strategy of defendants, and therefore some standards are prioritized differently. For example, the issues of hygiene intervention, oleoresin capsicum spray,

and patient health care education are not as pressing as others and will be addressed once a new infrastructure is in place. Lastly, several standards will be addressed by external entities based on contracts with the Office of the Receiver, *e.g.*, the pharmacy services improvements currently being implemented by the Maxor National Pharmacy Corporation.

As mentioned above, although the care standards set forth in the June 2002 Stipulated Injunction and the September 2004 Patient Care Order exemplify the minimum level of medical care required under the Eighth Amendment of the Constitution, the standards cannot be met and sustained without the appropriate and necessary support provided by a well-functioning, administratively-sound health care organization. Attempts to implement these standards in isolation have proven to be ineffective indeed prior remedial efforts have wasted time and resources—because nearly every area within the CDCR, e.g., procurement, custody support, population, and personnel, affects and potentially hinders each process of health care delivery. Each function of the organization as a whole, as well as pertinent functions of other State agencies, must be analyzed and modified appropriately to support a redesigned, effective, constitutionally-adequate health care operation. As the Office of the Receiver learned at San Quentin, the inter-relatedness of the problems and processes within the institution, as well as between the institution, CDCR, State overhead and control agencies, the Legislature, and the Governor is an immense barrier. The Receiver's Plan of Action addresses the impact and inter-relatedness of all the pertinent processes within the CDCR and the State.

The June 2002 Stipulated Injunction and the September 2004 Patient Care Order specified a number of worthy patient care standards, but for multiple reasons the defendants had little chance of achieving them. For example, the stipulations stopped short of addressing the requisite custody and support staff, technology, space, and personnel processes. Furthermore, the State attempted to apply innovations in a predetermined, *en bloc* fashion rather than on a pilot basis, and the delivery system remained dominated by the solo physician model rather than team-based care. These errors will not be repeated. Instead, the Receiver will apply an entirely new method of transformation to the medical delivery system in California's prisons.

The fastest, most cost-efficient way to reach constitutionally-adequate levels of care is to implement a coherent set of intervention strategies that have proven to be successful in transforming other health care organizations. As explained below, these strategies include redesign of care processes, use of information technology, knowledge and skills management, development of effective teams, care coordination, and performance measurement.

Sustaining constitutionally-adequate levels of care after the Receivership ends will require significant infrastructure investments and commitment over a period of years. The Receiver must remove or mitigate external barriers to progress and develop internal drivers of quality, illuminated by reliable metrics, synergistic and strong

enough to withstand political and bureaucratic erosion. The challenges are daunting; however, as the Receiver has emphasized: failure is not an option.

D. Conceptual Basis for the Plan of Action

The overall goals of a constitutionally-adequate prison medical care system are to reduce unnecessary morbidity and mortality, improve inmates' health status and functioning, coordinate care with mental health and dental, and protect public health. The Receiver must create a sustainable, evidence-based, cost-effective system of care that is continually monitored and revised to meet those overall goals.

Institute of Medicine

The conceptual basis for the Receiver's Plan of Action draws heavily from the experience of free-world, mainstream initiatives launched to move American health care from fragmentation and error to safety and reliability. For example, work by the Institute of Medicine (IOM) over the past decade, in response to the quality crisis within mainstream American health care, has led to a widely-accepted conceptual framework that applies within corrections as well (*Crossing the Quality Chasm*, 2001). Just as in the free world, personal health care within California prisons should be safe, effective, patient-centered, timely, efficient, and equitable. To achieve these goals, the IOM recommends six essential organizational supports for change:

- 1. Redesign of care processes based on best practices.
- 2. Information technologies for clinical information and decision support.
- 3. Knowledge and skills management.
- 4. Development of effective teams.
- 5. Coordination of care across patient conditions, services and settings over time.
- 6. Incorporation of performance and outcome measurements for improvement and accountability.

The IOM has demonstrated that these strategies will transform medical care delivery systems. In the 1990s, for example, the Veterans Health Administration used integrated, system-level strategies to move from a culture of low expectations to performance far exceeding the national average. Isolated interventions, such as educating or even replacing groups of physicians or nurses, would not have yielded the same progress.

The IOM's formulation of goals and strategies is reflected in the Plan of Action. The opening sentence of the 2001 IOM report resonates with California's prison medical care crisis: "The American health care delivery system is in need of fundamental change." It is important to remember, however, that the systems described as "dysfunctional" by the IOM have been vastly superior to California's prison medical care system. It is one thing to lack an electronic health record; it is another to try running a patient scheduling system on hundreds of unconnected, unsupported desktop

computers by having staff hand-carry data drives from one computer to another in sequence. It is one thing to bemoan a lack of teamwork among clinicians; it is another to work in a system that has traditionally hired any physician with "a license, a pulse, and a pair of shoes," as described in the Court's February 14, 2006 "Order Appointing Receiver." Even worse, some clinicians of that caliber managed to migrate into positions of local leadership. Because of the abject levels of dysfunction and chaos in hiring, review, promotion, and discipline, for example, the Receiver's team has spent countless hours in its first year on personnel issues, working to establish the infrastructure required for the most basic of quality initiatives.

Baldrige Systems Framework

The seven categories of the Baldrige National Quality Program systems framework complement the IOM framework and also inform the Plan of Action:

- 1. Leadership
- 2. Strategic planning
- 3. Focus on patients and other customers
- 4. Measurement, analysis, and knowledge management
- 5. Human resource development
- 6. Process management
- 7. Results

The Baldrige framework highlights the leadership and personnel dimensions that have captured so much of the Receiver's attention. Because of the State's dysfunctional clinical oversight and personnel processes, the Receiver has filed a motion to waive state law regarding peer review and physician discipline. In addition, the Receiver has begun to identify, within existing staff and new recruits, the transformational leaders who can focus the system on new goals and strategies.

High Reliability

The right people and systems must be in place to ensure that inmates get the right care in the right place at the right time. Change must be both top-down and bottom-up, with a focus on staff engagement and empowerment and a relentless emphasis on training and communication. The infrastructure must support innovation among front-line clinicians, must facilitate innovations from the "outside" world, and must be able to disseminate evidence-based practices. Responses to error and bad outcomes must move from finger-pointing to an honest, comprehensive critique that includes analysis of individual human factors as well as team factors, communication, and organizational effectiveness.

The interdependence of medical care and custody presents opportunities as well as challenges. Reliability—ensuring that the right thing happens every time—is a goal of custody just as it is within medical care. Some organizations in the military, law enforcement, and emergency services have achieved remarkable improvements in

reliability by developing a strong safety culture, utilizing personnel and equipment back-up systems, promoting inter- and intra-group communication, cross-training personnel, and focusing attention on errors and near-misses without wrongfully blaming or absolving individuals. The CDCR already partners with one such organization, the California Department of Forestry and Fire Protection, in its successful inmate firefighting program. Achieving reliable prison medical care in California will depend upon new levels of collaboration and respect between medical care and custody. Developing shared language and practices for reliability and safety will hasten this collaboration.

E. Potential Barrier and Success Factors

This section lists potential barriers with heavy emphasis on critical success factors drawing upon several key lessons learned to date from the San Quentin pilots. Although the barriers are plenty, the Receiver team is confident that through thoughtful planning and steadfast implementation, barriers can be mitigated.

The programs described in the Plan of Action have been formulated to consider the serious dysfunction which presently exists in California's prisons and the wide range of barriers that have, for many years, worked to defeat all prior efforts to reform prison medical care. Nevertheless, a complete Plan of Action requires a summary of some of the more important barriers the Receivership must overcome to effectuate the Plan.

Barriers

- Continuation of CDCR political and management chaos impeding the Receivership's efforts.
- Oppressive impact of the dysfunctional prison culture on the custody and medical staff expectations, attitudes, and ethical decision-making.
- Poor working conditions and work environments impacting safe delivery of medical care.
- Space limitations due to overcrowding and poor design that continue to thwart efforts for appropriate bed placement, delivery of safe patient care, and ineffective support systems.
- Ineffective regional and local leadership structure to manage 33 prison sites.
- Lack of competent clinical and administrative staff at all levels exacerbated by limited CDCR training capacity.
- Bureaucratic constraints on contracting and hiring/firing.

- Active and passive resistance to the Receivership's efforts from entrenched stakeholders with an interest in maintaining the status quo.
- Prison overcrowding and Assembly Bill 900. The impact of these issues is the subject of separate report to be issued by the Receiver to the Court on May 15, 2007.

Critical Success Factors

- Leadership support at all levels. Based on the San Quentin pilot, the importance of Warden support and collaboration is critical. While relief in the trenches is critical, given the abject disrepair of the system, change must begin with the highest levels of management and proceed from the top to the bottom.
- System-wide synchronization of action plans and operations to support short-term pilots and long-term transformation efforts. The depth and scope of the interrelatedness of serious problems must be addressed.
- Headquarters, regional, and local senior management support, joint ownership between CPR and CDCR, and clear communication of transformation strategic vision, action plans, pilot progress, and accomplishments.
- Appropriate information system infrastructure, skills, and staffing level to carry out system redesign and implementation efforts.
- Recruitment of industry experts to support the pilot projects and to mentor future CDCR teams in innovation and diffusion of promising practices and processes.
- Meaningful metrics to measure and evaluate the effectiveness of clinical care and transformation initiatives.

F. Plan of Action Goals and Objectives

The Plan of Action is organized into seven domains. Goals A and B emphasize building critical administrative and clinical capacities required as the foundation to support timely, effective, and efficient patient-centered care; Goal C outlines activities required to build a quality and patient safety infrastructure; Goal D focuses on developing information technology (IT) from the ground up. A scalable IT network with adequate local technical support is the requisite foundation for our future electronic health record.

Goal E addresses the interdependency of custody and clinical functions required to transform the health care system and provide effective care. For example, one of the objectives under Goal F is to implement a Health Care Access Team to provide dedicated custody escort support to the health care team, thus ensuring inmate-patient access to health care services in a timely and safe manner.

Lastly, Goal G speaks to the need to envision the end from the beginning, pointing beyond development of a successful system to its transition from the Receiver back to the State.

Key Plan of Action Goals

- Goal A: Establish meaningful and effective financial and administrative infrastructure and processes that are precursors to clinical transformation.
- Goal B: Redesign, pilot, and implement an effective prison health care continuum of services utilizing evidence-based, standardized processes and including screening, medical management, care coordination, case management, patient movement, parole, discharge planning, ancillary services, and other clinical support.
- Goal C: Design, pilot, and implement a CDCR quality and patient safety infrastructure including measurement and evaluation components to guide system improvement, accountability, and effectiveness.
- Goal D: Design, pilot, and implement an integrated health information system(s) including network infrastructure, electronic health records, patient scheduling and tracking, disease registry, medical management including utilization management, decision support, performance measurement, and reporting to support safe, effective, timely, and cost-efficient, patient-centered care based on a thorough understanding of redesigned work and pilot results.
- Goal E: Develop, pilot, and implement institution-specific, on-site custody capacity to ensure safe and timely patient access to health care services.
- Goal F: Create new clinical and administrative space to provide a safe environment for staff and patients based on the new clinical process redesign and on projections of future bed capacity needs.
- Goal G: Develop a transition plan including timelines, knowledge management, and oversight monitoring to ensure successful transition of the new prison health care system from the Receiver back to the State, with continuing mandates which guarantee that medical services meet constitutional standards for access and quality.

Plan of Action Goals and Objectives

- Goal A: Establish meaningful and effective financial and administrative infrastructure and processes that are precursors to clinical transformation.
 - Objective A.1. Develop smaller regions (3-5 prisons each) including clearly delineated leadership roles, responsibilities, and accountabilities among headquarters, regions, and local prisons.
 - A.1.1. Define regional Chief Executive Officer, Chief Medical Officer, Director of Nursing, and Health Care Administrator roles, responsibilities, and accountabilities.
 - A.1.2. Define local institutional Chief Executive Officer, Chief Medical Officer, Director of Nursing, and Health Care Administrator roles, responsibilities, and accountabilities.
 - A.1.3. Define headquarters, regional administrative, and support functions.
 - A.1.4. Develop and implement a performance management system to align individual and team performance results with organizational mission, vision, goals, and objectives.
 - Objective A.2: Implement structure, business processes, and metrics for finance, accounting, budgeting, and reporting functions for CPR and CDCR to ensure accountability and transparency.
 - A.2.1. Define and implement financial structure and processes for CPR.
 - A.2.1.1. Determine Executive and Legislative protocol for the ongoing funding of Receivership initiatives.
 - A.2.1.2. Determine Department of Finance (DOF) and Controller protocol for identifying funding provided to the Receivership by the Executive and Legislative branches.
 - A.2.1.3. Agree to a process for the Receivership's access to and control of identified funds.
 - A.2.1.4. Determine extent of Receivership's access to and control of the Divison of Correctional Health Care Services (DCHCS) annual spending authority.
 - A.2.2. Define and implement accounting structure and processes for CPR.

- A.2.2.1. Identify authoritative literature to support accounting, reporting, and disclosure of transactions that are unique to the structure of CPR's court ordered authority and maintain CPR's accounting records accordingly.
- A.2.2.2. Develop and document a system of internal control to meet the court's requirements for transparency of CPR operations and that is also acceptable to other governmental and non-governmental stakeholders.
- A.2.2.3. Develop reports that include financial information and related disclosure that meets the court order's requirements for complete and periodic reporting of CPR's financial operations.
- A.2.2.4. Arrange for an annual independent financial audit by a regional Certified Public Accountant (CPA) firm recognized as having public sector expertise.
- A.2.3. Define and implement accounting structure and processes for CDCR.
 - A.2.3.1. Engage an independent consulting firm with recognized public sector financial expertise to review CDCR's current recording and reporting of financial information and produce the following deliverables:
 - A.2.3.1.1. Prepare flow charts and narratives that document the current state of the CDCR accounting system from transaction recording to reporting.
 - A.2.3.1.2. Identify bottle necks, weaknesses, and gaps in key processes that have the most significant impact on timeliness and accuracy.
 - A.2.3.1.3. Identify critical interventions to the management information process that can be immediately implemented through reasonable system enhancements and workarounds.
 - A.2.3.1.4. Assist CPR and DCHCS management in developing critical, high level financial and management reports that are timely, accurate and compliant with Generally Accepted Accounting Principles (GAAP) as appropriate.
 - A.2.3.2. Identify resources within CDCR, State Controller

- Office (SCO) and Department of Finance (DOF) to provide timely and accurate metrics that include paid hours and other workload indicators that reconcile to and are consistent with financial information.
- A.2.3.3. Develop processes to readily extract accurate financial information specific to the Receiver's initiatives, e.g. Registered Nurse (RN) salary enhancement, Licensed Vocational Nurse (LVN) salary and benefit costs, San Quentin planning, and construction costs.
- A.2.3.4. Identify key staff positions in the accounting, budgeting and financial reporting processes; assess workload and recommend appropriate staffing and/or skill level enhancement as necessary in light of recording and reporting objectives noted above.
- A.2.4. Define and implement budgeting structure and processes for CPR.
 - A.2.4.1. Identify and develop plans for hiring additional staff, engaging consultants, and initiating capital projects in the 2007-08 budget year in collaboration with CPR Executive Staff.
 - A.2.4.2. Identify those plans that should be appropriately recorded as an asset, liability and/or expense of CPR and not expected to be transferred to CDCR prior to the end of the 2007-08 budget year.
 - A.2.4.3 Estimate the cost of such plans and include in the budget proposal to be presented to the Receiver for approval.
 - A.2.4.4 Project current budget year commitments for salaries, benefits, and other operating expenses specific to operation of the Receivership for the 2007-08 budget years.
 - A.2.4.5 Prepare budgeted balance sheet, profit/loss, and cash flow statements for the 2007-08 budget year.
- A.2.5. Define and implement budgeting structure and processes for CDCR.
 - A.2.5.1. Continue coordination with Budget Management Branch staff to gain a complete understanding of the budget development, monitoring, and reporting processes.

- A.2.5.2. Focus CPR's involvement in preparation of the 2007-08 budget on reviewing the process, assumptions, and current budget year actual information used as the basis to develop the following:
 - Personnel Year (PY) and related salary costs, including overtime, vacancies (salary savings) and temporary help.
 - Consulting and professional services medical expenses.
- A.2.5.3. Determine that the final 2007-08 budget includes the cost of CPR sponsored initiatives, such as:
 - Full year effect of budget year 2006-07 initiatives such as salary increases, Medical Technical Assistant (MTA)/LVN conversion etc.
 - Budget year 2007-08 portions of ongoing capital related projects initiated in the 2006-07 budget year.
- A.2.5.4. Maintain a shadow budget to monitor the following:
 - A.2.5.4.1. Develop budgeted consulting and professional services medical expense on the basis of prior years' historical utilization, by prison facility.
 - A.2.5.4.2. Monitor actual to budgeted expense and compare to accuracy of current CDCR budgeting technique.
- Objective A.3. Establish mechanisms to ensure CPR financial and operating transparency.
 - A.3.1. Identify a nationally recognized standard of financial operating transparency and model CPR's operating and reporting systems as appropriate. For example, consider voluntary certification as Sarbanes-Oxley compliant.
 - A.3.2. Develop an internal control document that details CPR's reporting, recording, and management of the Receivership's assets, liabilities, and contractual commitments including input from State oversight agencies. Ensure this document is focused on operational transparency; facilitates knowledge transfer, particularly when responsibilities are reassigned; and includes input from State oversight agencies such as the OIG

Objective A.4. Improve provider contracts and contracting processes to

ensure accountability and transparency. (Refer to A.6.)

- A.4.1.Model contract processes on current health care industry practices.
- A.4.2. Develop new payment methodology based on Medicare payment system as documented and recommended by Navigant study.
- A.4.3. Appoint trained staff member(s) dedicated to the ongoing development and management of CDCR provider contracting activities.
- A.4.4. Establish CDCR provider contracting capacity to perform a full complement of services including:
 - Provider network selection and development management,
 - Credentialing,
 - Rate setting,
 - Contracting and contract management,
 - Quality and utilization monitoring,
 - Electronic claims payment and adjudication,
 - Contract performance metrics monitoring and reporting.
- Objective A.5. Develop a Responsibility-Focused Financial Reporting Process and System.
 - A.5.1. Identify appropriate metrics as a basis for monitoring CDCR DCHCS financial operations.
 - A.5.1.1. Focus initial efforts on paid and worked hours.
 - A.5.1.2. Develop and implement a system-wide training program appropriate to each level of CDCR and DCHCS financial staff.
 - A.5.1.3. Establish a multi-year goal to decrease the lag in periodic reporting to the health care industry standard of 10 working days.
 - A.5.1.4 Redesign the Reporting Structure of DHCS' Financial Staff
 - A.5.2.Create a "Controller" position solely dedicated and responsible to CPR leadership.

- A.5.2.1. Identify key staff members to fill top technical/decision making financial positions at CDCR and DCHCS headquarters.
- A.5.3. Focus on timely and accurate reporting of financial information useful in decision making to CDCR and DCHCS headquarters and from/to regions, and facilities.
 - A.5.3.1. Improve and increase quality communication by removing barriers to inter- and intra- department communication, and communication between headquarters, regions, and facilities.
 - A.5.3.2. Delegate decision-making authority to appropriate management and staff levels.
 - A.5.3.3. Provide recognized industry standard processes and tools to help staff do their job efficiently and effectively.

Objective A.6. Redesign, pilot, and implement a sound contract negotiation and management process based on industry standard and ethical business practices. (Refer to A.4.)

- A.6.1. Design, pilot, and implement a cohesive approach to the contract negotiation of scope and rates for those contracts which are not competitively bid.
 - A.6.1.1. Establish a benchmark rate system taking into account specific geographic areas and types of service.
 - A.6.1.2. Establish a training program for all contracts staff on medical services negotiations, diagnoses and procedures, rate analysis, etc.
 - A.6.1.3. Build interdisciplinary negotiation teams that include subject matter experts such as payment data experts, clinicians, and negotiation specialists.
 - A.6.1.4. Standardize a contract and processes for specialty services to increase percentage of specialty care performed on-site via local providers or "circuit" physicians; and increase use of telemedicine for specialty services.
 - A.6.1.5. Establish mechanisms to ensure contract providers are adhering to CDCR utilization management protocols, clinical guidelines, and quality standards.

- A.6.2. Design, pilot, and implement an automated contract management and monitoring system including policies and procedures to ensure accurate documentation, adequate monitoring of key information such as licenses, performance, usage, and credentialing.
 - A.6.2.1.Establish separate units to focus on contract management and internal auditing functions.
 - A.6.2.2. Establish an external, independent auditing program.
 - A.6.2.3. Develop policies and procedures and a training program.
- A.6.3. Design, pilot, and implement a mechanism, including policies and procedures, to provide timely review, approval, adjudication, and payment for services rendered.
 - A.6.3.1. Adopt an electronic invoicing process to automatically capture critical information to support contract monitoring, analysis, negotiation and auditing.
 - A.6.3.2. Implement a standard mechanism to give providers instructions for correctly formatted information needed for invoicing prior to or at the time of service.
 - A.6.3.3. Review and analyze contract providers' utilization data as one of the contract performance indicators to monitor appropriate utilization patterns.
- Objective A.7. Create a pool of at-will, civil service, Career Executive Appointment (CEA) positions in order to populate local, regional, and statewide leadership positions with qualified, responsive leaders.
- Objective A.8. Develop a human resources program focused on providing patient—centered health care services based on industry standards that effectively manages staffing, compensation, job descriptions, competency, performance evaluation, professional development, and training in collaboration with clinical teams or other subject matter experts. (Refer to Goals B and C)
 - A.8.1. Restore and standardize competency levels of clinical staff based on health care industry standards.
 - A.8.2. Redesign, pilot, and implement clinical staffing model for all levels of care within the prison health care system.

- A.8.2.1. Define roles, responsibilities, and clinical accountabilities for mid-level practitioners and advanced practice professionals.
- A.8.2.2. Develop, pilot, and implement plan for adequate minimum staffing including physicians, nurses, and ancillary services throughout the system with enhanced staffing to match needs at particular prisons.
- A.8.3. Recruit adequate numbers of qualified clinical staff within each discipline.
 - A.8.3.1. Adjust clinical and support salaries as needed based on competitive industry, market, and community rates.
 - A.8.3.2. Implement a loan forgiveness program as an incentive to recruit and retain qualified physicians and nurses.
 - A.8.3.3. Design and implement "24-hour" expedited hiring process to address clinical staff vacancies.
- A.8.4. Develop appropriate administrative and clerical support after the redesign of work processes.
- A.8.5. Standardize orientation, training, and professional development programs through the prison health care system for employees of all levels in collaboration with clinical team and other subject matter experts.
 - A.8.5.1. Review and revise orientation programs including appropriate prison health care information and specific orientation for providers, nurses, and ancillary clinical staff.
 - A.8.5.2. Develop a centralized approach to education and training in collaboration with academic institutions.
 - A.8.5.3. Develop adequate leadership and support for medical staff credentialing, privileging, and peer review, as well as for other essential committees of all other disciplines.
 - A.8.5.3.1. Implement an information system to track credentialing and education requirements including Continued Medical Education (CME) and Continued Education Units (CEU).
 - A.8.5.4. Develop ongoing leadership and managerial training

programs to support clinical professionals in leadership positions as well as direct patient care areas.

- A.8.5.5. Develop communities of practice within each clinical discipline with designated leadership and appropriate communication tools.
- A.8.5.6. Develop interdisciplinary communities of practice within clinical topic areas with designated leadership and appropriate communication tools.
- A.8.5.7. Develop systems for routinely reviewing and revising health care policies and procedures and making them readily accessible to staff.
- A.8.6. Develop and implement innovative approaches to address professional staffing needs of remote facilities.
 - A.8.6.1. Implement an air-force program using chartered airplanes to transport clinical personnel from San Francisco, Los Angeles, and San Diego areas to work three-four days a week in remote prisons.
- Goal B: Redesign, pilot, and implement an effective prison health care continuum of services utilizing evidence-based, standardized processes and including screening, medical management, care coordination, case management, discharge planning, ancillary services, and other clinical support.
 - Objective B.1. Develop, pilot, and implement emergency response staffing models, protocols, and programs to prevent unnecessary patient or staff injury or death.
 - B.1.1. Develop, pilot and implement a statewide emergency response mechanism through an on-site paramedics pilot program.
 - B.1.2. Develop and implement emergency response training programs for clinical and custody staff.
 - B.1.3. Develop an ongoing mechanism to improve interface with local ambulance services.
 - Objective B.2. Pilot and implement statewide initiatives to redesign and support screening, primary care and chronic care processes and programs. (Refer to Objective D.6.)

- B.2.1. Redesign and replicate reception center intake processes and staffing model based on the San Quentin pilot or alternative pilot site.
- B.2.2. Redesign and replicate primary care processes and staffing model based on the San Quentin pilot and other pilot sites.
- B.2.3. Develop a pain management initiative and implement statewide, building on CDCR's current collaboration with the University of California, Davis.
- B.2.4. Expand cultural and linguistically appropriate patient education resources by collaborating with community health education programs.
- B.2.5. Develop and pilot appropriate inmate peer education programs, *e.g.*, for diabetes and asthma.
- B.2.6. Design and implement structure, process, and staffing to support evidence-based chronic care management including overall vision and leadership.
 - B.2.6.1. Establish clinical/administrative leadership for chronic care program by condition, e.g., cardiovascular, diabetes, asthma, seizure disorders, HIV/AIDS, hepatitis C.
 - B.2.6.2. Pilot and implement disease registries for chronic disease management and monitoring.
 - B.2.6.3. Review and revise Plata chronic care policies and procedures to be consistent with community chronic care standards.
- B.2.7. Design and implement structure, process, and staffing to support evidence-based prenatal care and post-delivery services, including appropriate and timely management of high risk pregnancies.
- Objective B.3. Design and implement programs and processes to ensure patient-centered continuity of care including care coordination, case management, utilization management, and quality management. (Refer to Goal C)
 - B.3.1. Design, pilot, and implement care coordination and case management mechanism to ensure continuity of care.

- B.3.1.1. Develop position descriptions, recruit, and train care coordinators and case managers.
- B.3.1.2. Direct high-risk chronic care patients to qualified providers, teams, prisons (including telemedicine option).
- B.3.1.3. Develop a new nursing functional assessment and acuity assessment form based on experience and data from the medical bed assessment sweep conducted in March 2007.
- B.3.1.4. Plan and implement case management software as part of an enterprise-wide electronic health record. (Refer to Goal D)
- B.3.1.5. Incorporate social worker expertise into care coordination and case management teams by developing new social worker positions and recruiting qualified professionals.
- B.3.1.6. Develop care transitions programs to ensure continuity of care from jail to prison, general population (GP) to medical beds and back, prison to prison, and prison to community.
- B.3.1.7. Redesign and pilot community hospital utilization management and optimize the use of utilization review nursing knowledge in case management.
- B.3.1.8. Redesign and pilot a standardized specialty utilization management process including indicators to monitor specialty utilization and quality of services.
- Objective B.4. Improve coordination of medical, mental, and substance abuse services to promote patient-centered care.
 - B.4.1. Create a designated CPR staff position to be responsible for coordination and integration of programs between medical, mental health, and substance abuse to ensure patient—centered care.
 - B.4.2. Incorporate behavioral/mental health and substance abuse knowledge competencies into primary care and chronic care programs via interdisciplinary collaboration, staff training, and/or new staff recruitment.
- Objective B.5. Optimize placement and care of impaired and/or aging prisoners with chronic conditions by expanding long-term care (LTC) services and bed capacity in the prison health care system.

- B.5.1. Increase LTC services and bed capacity to address immediate needs.
 - B.5.1.1. Develop additional sheltered dorms within CDCR.
 - B.5.1.2. Acquire additional LTC beds off-site by leasing or purchasing additional facilities if needed.
 - B.5.1.3. Support aging inmates and inmates with disabilities in general population housing via environmental modifications, inmate helper programs, care management, staff training, and adult day health programs.
 - B.5.1.1. Develop inpatient neurobehavioral programs with appropriate levels of care.
 - B.5.1.2. Develop palliative care program for terminal inmates not requiring hospice placement, and optimize use of hospice beds at California Medical Facility (CMF) and Central California Women's Facility (CCWF).
 - B.5.1.3. Recruit and optimize use of clinical staff with geriatric and LTC nursing expertise.
 - B.5.1.4. Recruit and optimize use of clinical staff with physiatry and rehabilitation expertise, including expertise in traumatic brain injury.
 - B.5.1.4.1. Optimize use of physical, occupational, and speech therapies to keep inmates functional at lowest possible level of care.
- B.5.2. Design and implement new clinical assessment forms and processes and placement criteria based on Abt Associates project (medical beds assessment sweep and 5000 beds planning).
 - B.5.2.1. Incorporate new custody risk assessment distinguishing inmates who could be in dorm setting from those requiring cells.
 - B.5.2.2. Enhance Health Care Placement Unit (HCPU) capacity with information technology support and clinical leadership including medical and mental health services collaboration.
 - B.5.2.3. Implement new criteria for placement in medical beds such as Correctional Treatment Center (CTC), Outpatient

Housing Unit (OHU), and sheltered dorms.

- B.5.2.4. Convert inappropriately used General Acute Care Hospital (GACH) beds to infirmary and long-term care medical beds.
- B.5.3. Design new LTC facilities planning (5000 beds project) for physical plants and clinical programming to address future needs.
 - B.5.3.1. Complete Abt Associates project to estimate future chronic disease burden and long-term care burden.
 - B.5.3.2. Plan clinical programs for new facilities.
 - B.5.3.3. Begin working with construction management contractors, CDCR, and other state agencies to oversee facility location, design, and construction.
- Objective B.6. Develop a centralized Public Health Unit to be responsible for pandemic preparedness; communicable disease outbreak response; immunization and tuberculosis testing administration; and surveillance, communication, and training to prevent the spread of infectious diseases.
 - B.6.1. Establish centralized clinical/administrative leadership for public health and infection control.
 - B.6.2. Develop communication and training infrastructure for regional and local prison health care teams.
 - B.6.3. Develop outbreak response collaboration and other projects with local public health officers and Department of Health Services (DHS).
- Objective B.7. Redesign, pilot, and implement clinical post hours to optimize space and coverage to ensure patient access to care.
 - B.7.1. Develop, pilot, and implement statewide model hours of operation for yard clinics and central clinics including provider lines, face-to-face RN triage, and specialty clinics.
 - B.7.2. Develop, pilot, and implement statewide model hours of operation for pharmacies, labs, radiology, and other ancillary and support services.

Objective B.8. Improve CDCR's pharmacy management and operations system by implementing the Maxor's road map to produce sustainable, patient-centered, and outcome-driven processes.

Objective B.9. Develop nutrition programs for inmate-patients who are pregnant or who have chronic conditions or dysphagia requiring modifications in diet.

B.9.1. Recruit and hire a team of Registered Dietitians with centralized leadership to develop statewide nutrition programs.

Objective B.10. Create ethics resources within health care services to support health care and custody staff, inmates, and families.

B.10.1. Develop expertise, resources, and quality metrics for advance care planning.

B.10.2. Provide ethics education for health care and custody staff.

B.10.3. Make ethics consultation available to health care and custody staff, inmates, and families.

Objective B.11. Continue to expand CDCR collaborations with University of California campuses, California State University, other universities, and community colleges to enhance clinical service delivery, system improvement, staff education, staff recruitment, and health services research.

Objective B.12. Redesign, pilot, and implement centrally-managed clinical operations to ensure standardization of data, processes, and costs across the system and to take advantage of economies of scale in driving efficiency.

Objective B.12.1. Design, pilot, and implement a statewide, centrally-managed approach to imaging and radiology, including equipment, supplies, staffing, training, certification, external contracts and information systems.

Objective B.12.2. Design, pilot, and implement a statewide, centrally-managed approach to clinical laboratory services, including equipment, supplies, staffing, training, certification, external contracts and information systems.

Objective B.12.3. Design, pilot, and implement a statewide, centrally-managed approach to materials management, including a modern, just-in-time supply chain, equipment, supplies, staffing, external contracts and information systems.

- Goal C: Design, pilot, and implement a CDCR quality and patient safety infrastructure including measurement and evaluation components to guide system improvement, accountability, and effectiveness.
 - Objective C.1. Recruit and hire a Chief Quality Officer to develop and manage the CDCR Quality and Patient Safety program.
 - Objective C.1.1. Develop and lead implementation of quality and patient safety programs that integrate clinical quality metrics, complaints and appeals, incident reporting, sentinel event reviews and root cause analysis, and clinical improvement initiatives.
 - Objective C.1.2. Ensure linkage of interdisciplinary quality improvement and peer review to education and training.
 - Objective C.2. Design, pilot, and implement clinical quality metrics consistent with appropriate free world health care delivery systems. (Refer to Evaluation, Measurement and Compliance Section)
 - C. 2.1. Pilot measurement of patient-centered care, e.g., using patient satisfaction surveys.
 - C. 2.2. Pilot measurement of organizational culture, e.g., using nursing turnover rates.
 - C.2.3. Collaborate with other correctional systems in efforts to standardize correctional metrics throughout the country.
 - Objective C.3. Redesign, pilot, and implement a credible complaint and appeal process that is efficient, responsive, and effective in achieving rapid resolutions.
 - C.3.1. Build on lessons learned from the San Quentin Patient Advocacy model.
 - C.3.2. Develop adequate staffing and software to track and analyze complaints and appeals.
 - C.3.3. Continue to maintain an independent response process for complaints to Receiver (*versus* complaints to CDCR) and use findings to inform interventions.
 - C.3.4. Expand collaboration with CDCR ombudsman program for early resolution of complaints.
 - Objective C.4. Institute reliable patient safety, incident, and near-miss incident reporting and link reports to improvement initiatives and education.

- Objective C.5. Develop sentinel event and root cause analysis policies, protocols, and curricula.
 - C.5.1 Train clinical, administrative, and custody leadership in sentinel event review and root cause analysis.
- Objective C.6. Design and implement organizational structures, staff and technological support, and processes for evaluation, measurement, analysis, and improvement of organizational and clinical performance. (Refer to D.4)
 - Objective C.6.1. Introduce a culture of ongoing clinical improvement initiatives at all levels of health care delivery.
 - C.6.2. Develop and implement strategies for utilizing process improvement methodologies in the prison system.
 - C.6.3. Train clinical and administrative staff in rapid cycle quality improvement and high-reliability practices.
 - C.6.4. Develop custody/health care collaborations in high-reliability practices.
- Objective C.7. Design, pilot, and implement a combined clinical-administrative crisis management team model to provide timely response to address prison crises with potential for adverse impact to access or quality.
- Objective C.8. Enhance system-wide clinical accountability through peer review mechanisms.
 - C.8.1. Expand focus of PPEC beyond review of individual performance to focus on process and system vulnerabilities and link findings to educational and quality improvement initiatives.
 - C.8.2. Develop custody/health care capacity for joint investigations as needed.

- Goal D: Design, pilot, and implement integrated health information system(s) including network infrastructure, patient scheduling and tracking, disease registries, electronic health records, medical management including utilization management, decision support, performance measurement, and reporting to support safe, effective, timely, cost-efficient, and patient-centered care based on a thorough understanding of redesigned work flows.
 - Objective D.1. Design, pilot, and implement a health care information infrastructure to support health care clinical and business operations with compliance to record retention, privacy, HIPAA, and State law, if applicable.
 - D.1.1. Conduct health care network assessments including scope of work for engineering, installation, and operations.
 - D.1.2. Select, test, and implement network-centric clinical technology.
 - D.1.3. Design and implement a network engineering layout of highly reliable, ubiquitous high speed bandwidth for clinical operations utilizing leading technology such as wide area wireless, multi-protocol layers services, bandwidth management and upon demand bandwidth utilization management.
 - D.1.4. Design, develop, and implement processes for system operation at clinical service levels including functionality to ensure timely electronic processing of clinical information.
 - D.1.5. Design, develop, and implement system support operations to support health care service levels including system operation redundancy, change control, customer service surveys, interoperability testing, automatic testing, and clinical help desk.
 - D.1.6. Design and implement programming standards to allow for industry standard desk top, network and application data housing to allow for minimal acceptable down times through highly redundant and reliable technology.
 - D.1.7. Implement industry standard project methodology to allow for full project charter compliance to budget, expected results, and post implementation project reviews to allow for system standard Information service costs.
 - D.1.8. Design, develop, and implement data security systems and

- operations to ensure privacy, HIPAA, audit, proactive data intruder diction systems, internet monitoring and management systems, email filters, and records retention are in compliance with Federal and State laws as well as correctional level security.
- Objective D.2. Standardize data through verifiable data processes and compile medical data across all compliant data sources into a unified database that can be used to generate information valuable for patient care and health care management.
 - D.2.1. Develop implementation plan to achieve health care industry clinical data standards for clinical services and operations including standardization of data architecture design, data repository, communication tools, electronic data engine, and master patient, and master provider indexing for statewide adult corrections clinical staff access.
 - D.2.2. Standardize data models for pharmacy, laboratory, radiology, PACS, medical management, case management, schedule tracking, and encounters including dental, mental health, Americans with Disabilities Act (ADA), and other medical service data records through interoperable data standards, technical data standards, and data engine.
 - D.2.3. Standardize automatic and ad hoc reporting of metrics required by the Federal Court and ongoing performance monitoring.
 - D.2.4. Develop and implement a secure clinical web-based portal tool that allows clinical staff appropriate access to verified and standardized patient data at the point of care or clinical work areas.
 - D.2.5. Develop and implement a data security system to ensure Federal and California State HIPAA and privacy laws pertaining to correctional related health care services.
- Objective D.3. Create systems for compiling and managing medical knowledge that will enable clinical service providers to have timely and medically significant data in order to make the appropriate evidence-based decisions for their patients at the point-of-care.
 - D.3.1.Create and implement a system for developing, documenting, disseminating, and maintaining clinical protocols, guidelines, and algorithms required to manage care of patients throughout the system.
 - D.3.2. Implement online medical library services to support clinical information, research, and clinical CME requirements.

- D.3.3. Implement appropriate clinical decision support tools, both electronically and on paper that provide just-in-time information to clinicians to ensure that patients continually receive the most cost-effective and appropriate care.
- D 3.4. Redesign, pilot, and maintain clinical information tools that inform and influence patient care, including clinical documentation forms, flow sheets, and order sheets.
- Objective D.4. Improve and streamline care-delivery processes in preparation for automation.
 - D.4.1. Redesign, pilot, and implement clinical and business processes in preparation for implementation of electronic health records.
 - D.4.2. Redesign, pilot, and implement a laboratory information system process to allow for point-of-care testing, automated assays and virtual systems to allow for faster point-of-care test turn-around times and accuracy.
 - D.4.3. Develop and implement a digital radiography central image storage, retrieval, and review through data standard systems.
 - D.4.4. Develop and implement a pharmacy bar code system for patient safety through unit dose in conjunction with Maxor Pharmacy roll out that will allow for an electronic Medical Administration Record.
- Objective D.5. Implement system—wide, standardized clinical transformation change management initiatives and training to ensure clinical staff acceptance and adoption of information technology solutions such as the electronic health record and evidence based medical decision systems.
 - D.5.1. Design, pilot, and implement processes for health care information management document storage and maintenance, electronic forms workflow, auto routing for "whole system" access, scanned data storage and access.
 - D.5.2. Design, pilot, and implement information system applications to support business processes such as provider credentialing, continuing education tracking, scheduling, time keeping, contracting for provider services, equipment, and supplies,

materials management, and supply chain. (Refer to Goal A)

Objective D.6. Improve and enhance the existing telemedicine program and integrate it into continuum of inmate medical care to provide primary, emergency and specialty care to allow for greater access to inmates while reducing cost of care as well as custody inmate transportation to outside clinical care locations.

- D.6.1. Expand telemedicine clinical processes to all correctional facilities as part of core primary and specialty care operations for inmate health care including medical, dental, and mental health.
 - D.6.1.1.Conduct a system- wide assessment of the current telemedicine practices by external experts to develop a road map for improvement of CDCR telemedicine services.
 - D.6.1.2. Upgrade telemedicine technology, including Internet Protocol (IP) infrastructure, to ensure sufficient bandwidth and security and to allow for optimal and flexible location of telemedicine units in correctional facilities as well as contracted specialty clinician offices, in hospitals with a "high availability" technical infrastructure, and for use in emergency conditions at various locations.
 - D.6.1.3. Redesign telemedicine workflows to allow for clinical visit optimization through ensuring that all needed tests and documentation are completed prior to the visit according to standardized protocols consistent with all other care delivered for a given condition.
 - D.6.1.4. Provide specialized telemedicine carts to each site that enable tools including remote electronic monitoring, EKGs, point-of-care laboratory test units, electronic whiteboard data sharing, high definition dermatology imaging, and ultrasound.
 - D.6.1.5 Develop methodology and clinical workflow for multi-care provider conference and specialty consults.
 - D.6.1.6. Develop "smart" databases that will enhance patient care through proactive monitoring of specific care plans by working with industry vendors.
- D.6.2. Redesign and implement facility and telemedicine staff training to ensure competency level to maximize timely use of telemedicine.
 - D.6.2.1. Implement on-going training and in-services reviews to

ensure the reliable availability of qualified clinical support staff to maximize inmate access to clinical care.

D.6.2.2. Establish programs and protocols for virtual expert visits for remote monitoring, observation, and consultations with centralized and contracted specialty staff through "IP" enabled web conferencing through Data Security Health Care standards.

Objective D.7. Establish a statewide project governance model for integrated health information system(s) and related applications, with representation by multi-disciplinary clinicians to allow for the clinical staff cultural adoption of the electronic health record and evidence based decision support systems.

Objective D.8. Create and successfully implement an enterprise electronic health record that is consistent with current health care information technology trends regarding functionality, paperless workflow systems, security, and interoperability.

Goal E: Develop, pilot, and implement institution-specific, on-site custody capacity to ensure safe and timely patient access to health care services.

Objective E.1. Design, pilot, and implement necessary institution-specific on-site custody components that ensure appropriate patient security, escorting and transporting for health care services.

- E.1.1. Analyze, develop, and implement institution specific on-site health care access teams to ensure patient access to health care services.
- E.1.2. Conduct analyses of custody requirements for the day-to-day operations and security for each institution's health care services.
- E.1.3. Conduct analyses of custody personnel and equipment/vehicles needs for institution access teams.
- E.1.4.Conduct analyses of personnel needs for community hospital custody coverage.
- E.1.5. Activate San Quentin pilot custody access team and replicate model statewide.

Objective E.2. Redesign, pilot, and implement transportation support for off-site health care teams to ensure safe and timely transport of patients to services in the community.

- E.2.1. Analyze current statewide transportation operations to determine necessary resources for providing adequate/timely medical transportation.
- E.2.2. Develop, and implement institution-specific off-site custody transportation unit to ensure patient access to community-based health care services.
- E.2.3. Develop Regional Medical Transportation Units to move patients from prison to hospital, hospital to hospital, and hospital to prison.
- E.2.4. Develop and implement Regional medical guarding units within community facilities in collaboration with clinical leadership.
- Goal F Create new clinical and administrative space to provide a safe environment for staff and patients based on the new clinical process redesign and on projections of future bed capacity needs.
 - Objective F.1. Plan, design, and build clinical space to provide a safe environment for staff to deliver appropriate patient care at all levels.
 - F.1.1. Review reception center space needs based on reception center process redesign and supplement or redesign the space to match the new processes.
 - F.1.1.1. Review primary care (sick call, chronic care, TTA) and infirmary space needs at all prisons and supplement or redesign the space.
 - F.1.2. Plan, design, and build work space to provide a safe environment for staff to provide support to the delivery of safe patient care at all levels.
 - F.1.2.1. Conduct reviews of clinical space around the state to ensure inmate access areas and holding cell areas are adequate.
 - F.1.2.2. Identify areas, where clinical space is inadequate, to place new space, e.g., modular buildings, within secure areas of the prison.
 - F.1.2.3. Establish adequate custody work stations within institution clinics and institution medical housing areas.
 - F.1.2.4. Implement space additions at the prison sites in

collaboration with contract construction managers.

Objective F.2. Oversee construction of comprehensive new clinical complex at San Quentin to provide medical, mental health, and dental services.

Objective F.3. Plan, design, and build 5,000 new medical beds and 5,000 new mental health beds (estimates) in various regions to provide additional bed space and appropriate levels of care.

Goal G: Develop a transition plan including timelines, knowledge management, and oversight monitoring to ensure successful transition of the new prison health care system from the Receiver back to the State, with continuing mandates which guarantee that medical services meet constitutional standards for access and quality.

G. Organizational Transformation Strategies

On the one hand, the Receiver is committed to using evidence-based organizational change strategies as recommended by the Institute of Medicine. For example, a meta-analysis of 39 controlled trials of diabetes care showed that the following interventions improve outcomes: provider education, provider reminders, audit with feedback to providers, patient education, case management, and team-based changes. Unfortunately, each of these interventions requires infrastructure elements that still do not exist within the CDCR. Cutting-edge interventions or even the most basic educational strategies are futile in the absence of stable staff and functional management. Over the next two years, the steps just outlined within this Plan of Action will guide the Receiver's team and CDCR through infrastructure development into a new world of organizational transformation focused on improving outcomes for California's inmate-patients. The good news is that progress in some domains has already been substantial:

- Recruitment and retention of sufficient qualified clinical staff requires competitive salaries. The Receiver has made significant strides in recruitment by raising salaries and he has plans for developing professional working environments, another critical element for recruitment and retention.
- Adequate support and supervision of frontline clinicians will require smaller regions managed by qualified, responsive leaders. The Receiver has filed a motion to waive state law regarding creation of new at-will, civil service, Career Executive Appointment (CEA) positions in order to recruit these leaders.
- Adequate peer review and clinical accountability requires provisions for terminating unqualified or unscrupulous clinicians, who in the current system may

be reinstated by the State Personnel Board. The Receiver has filed a motion to waive state law regarding peer review and physician discipline.

- Provision of health care requires adequate space. The Receiver has launched major building projects at San Quentin, has facilitated modest improvements elsewhere, and has begun plans for fast-tracking construction of up to 5,000 new medical beds and 5,000 new mental health beds.
- Access to care in correctional settings requires adequate custody escorts. The Receiver is piloting dedicated health care access teams and is ordering muchneeded transport vehicles.
- Effective use of outside providers for specialty and hospital services requires coherent contracting procedures. The Receiver's team revised the invoice payment system to pay off debts to providers that were up to four years old, and the Receiver has since taken over all aspects of health care contracting, which was dysfunctional under the former CDCR management.
- The chronic care model, case management, utilization management, and appropriate long-term care all require a modicum of reliable clinical information, none of which is currently available even in hard-copy format. The Abt Associates project includes a pilot model for development of the necessary information sources, and the Receiver's IT team is developing an electronic platform for information distribution.

Leadership and Human Resources

As noted earlier and illustrated in the examples above, in his first year the Receiver has focused heavily on leadership and human resources. The shift from using peace officer MTAs to using LVNs has been a time-consuming challenge, yet one that is essential for aligning all clinical staff with the clinical mission. The Receiver has prioritized restoring a statewide nursing structure and empowering nursing leadership. Nurses must function as change agents and drivers of patient-centered care throughout the organization in order to create and implement new clinical models. Contracting pharmacy management to Maxor National Pharmacy Corporation is another illustration of the Receiver's early emphasis on the leadership and human resources infrastructure.

As the infrastructure elements develop, including leadership, human resources, space, and information technology, the Receiver will be able to implement IOM strategies for process redesign, knowledge management, teamwork, and care coordination, and the pace of change at the patient level will accelerate. Meanwhile, one should not underestimate the clinical impact even now as good clinicians assume care and competent local leaders begin to exert managerial direction.

Takeovers, Interim Fixes, and Pilots

The above initiatives illustrate the Receiver's practical approach to initial reforms, with an emphasis on implementing and then stabilizing infrastructure changes. One principle reappearing throughout is the need to pilot changes before attempting system-wide implementation. The San Quentin project and the Receiver's takeovers of contracting and pharmacy management have piloted new programs, processes, positions, and software prior to full-scale implementation. The Receiver is determined to avoid the pre-determined, entire-system "roll-out" projects that were characteristic of prior State efforts, most of which were cumbersome affairs that fell far short of full implementation. The Receiver has looked for opportunities to turn even interim "quick fixes" into organized pilot projects. For example, the mobilization of CDCR and University of California clinicians and leaders to physician-deprived Avenal in January illustrated the need for clinical and administration "SWAT" teams that can mobilize to points of crisis within the organization. Because the Receiver anticipates that crises will continue to occur within the system, the development of crisis teams has become an objective within the Plan of Action (Objective C.7).

A Toolkit of New Practices

In order to change expectations, performance, and outcomes in CDCR health care, the Receiver will promulgate a toolkit of process improvement skills and practices which are new to CDCR but well-proven elsewhere, including:

- Sentinel event review and root cause analysis
- Rapid cycle quality improvement and small tests of change using "just enough" data
- Human factors analysis for development of safety and high-reliability systems

Sentinel event review and root cause analysis are familiar to community hospital leaders but done poorly or not at all in CDCR prisons. Difficult though it may be, teams must be willing and able to reflect upon their work, relationships, and vulnerabilities in order to develop a culture of improvement. Skills development in process improvement techniques will help clinical, administrative, and custody leaders get beyond preconceived ideas and defensiveness in order to make real changes in the ways they work together.

With adequate support from management and clinical leadership, frontline clinicians will learn how to test small changes in their work processes in rapidly repeating cycles. Small scale in this context can be a few clinicians and a dozen or so patients. The teams need to collect only enough data to provide credible guidance, and then move on to other small changes, week by week.

In addition to process improvement skills, the Receiver will promote specific techniques that have proven useful for patient safety. The SBAR (Situation,

Background, Assessment, Recommendation) technique, for example, is easy to learn and helps communicate essential information in critical situations. In addition to its role in fostering patient safety and teamwork, it has become a marker for professional environments that are supportive of nurses.

Learning Collaborative Model

Once an adequate infrastructure has stabilized, the Receiver intends to pilot use of the Learning Collaborative Model (based on the Break-Through Series developed by the Institute for Healthcare Improvement) for clinical improvement initiatives. The Collaborative Model promotes sustainable cultural change through a dynamic collaborative learning process. Deployment of collaboratives will engage a critical mass of staff members in process improvement, disseminate practical skills, and promote a patient-centered culture.

The pilot sites within each CDCR region will be selected based on leadership commitment, presence of opinion / thought leaders, and willingness to embrace change, among other factors. A steering committee and external subject matter experts will help design, organize, and standardize pilot interventions to minimize variations in care, improve quality, and harvest replicable best practices. The clinical team members will be given protected time away from routine work duties to participate in the project. Regular data collection and reporting of processes and proxy outcome measures will be used monitor effectiveness of the interventions. Technical assistance calls and face-to-face meetings will be scheduled throughout the pilot period to share lessons learned. Effective interventions or processes will be replicated state-wide.

H. 18-24 Month Focus of the Receivership

As pointed out above, the Plan of Action is a living document. This initial version of the Plan must incorporate existing programs, and provide the Court with information concerning the Receiver's priorities. During the next 18 to 24 months, the Receivership will focus on the following projects:

- 1. Establish programs for appropriate and timely recruitment and hiring programs to increase the number and quality of prison clinician personnel (top priority for the next eighteen months) (see Plan of Action Objective A.8). Establish a program for the recruitment and hiring of 250 Receiver's Career Executive Assignment staff (see Plan of Action Objective A.7).
- 2. Commence a program to construct approximately 5,000 prison medical beds (see Plan of Action Objective F.3).**1

¹ Those programs followed by a * represent programs where the Receiver will manage health care administrative functions that will serve all disciplines (medical, mental health, and dental). Those programs followed by a ** represent programs where the Receiver may, after further coordination discussions with the Special Master in *Coleman* and Court

- 3. Commence a program to construct necessary clinical space and medical support facilities (e.g. medical records and administrative office space) in existing prisons (approximately 8 to 12 prisons per year) (see Plan of Action Objective F.1).**
- 4. Implement the custody access team program at San Quentin and commence a time phased roll out at three other prisons (see Plan of Action Goal E).*
- 5. Begin with constructing the "foundation" and "walls" of the Receiver's health care system wide IT program (including telemedicine) (see Plan of Action Goal D).*
- 6. Continue the existing system-wide pharmacy restructuring program (see Plan of Action Objective B.8).*
- 7. Continue the existing remedial program re contract re-structuring (specialty care, registries, hospitals) and expand the program to re-structure aspects of contracting that involve negotiations and payments (see Plan of Action Objectives A.4 and A.6).*
- 8. Re-structure existing State medical care support services functions (both the support services staff at 501 J Street and support service staff at 1515 S Street) into a single appropriately organized and managed Plata Support Services Division (see Plan of Action Objectives A.1 and A.2).
- 9. Re-structure the health care credentialing process (see Plan of Action Objective A.8.5.3).*
- 10. Continue several existing pilot projects, including the San Quentin Pilot (see Plan of Action Objective B.2) and the LAC/CCI Specialty Care Pilot.
- 11. Initiate several new pilot projects: including a pilot project to bring emergency response staff and ambulance on-site at eight California prisons (see Plan of Action Objective B.1); a pilot project to establish the Receiver's Air Force to deliver full time permanent State physicians from urban locations (e.g. Los Angeles, Sacramento) into rural prisons (see Plan of Action Objective A.8.6.1); a pilot project for joint clinical/internal affairs investigations (to be developed cooperatively with the Office of Internal Affairs and the California Inspector General) (see Plan of Action Objective C.8); and a pilot project enabling clinical SWAT teams to be dropped into prisons to resolve clinical crisis (see Plan of Action Objective C.7).
- 12. Implement an initial model of an appropriate medical care budget (see Plan of Action Objectives A.2.4 and A.2.5).
- 13. Implement a clinical peer review based program to evaluate physician clinical

experts in *Perez*, manage health care administrative functions that will serve all disciplines (medical, mental health, and dental).

competency (see Plan of Action Objective C.8).*

- 14. Participate actively in coordinating remedial efforts with the Special Master in *Coleman*, the Court experts in *Perez*, and the Court in *Armstrong*.*
- 15. Design phase II of the Plan of Action.
- 16. Establish an Office of Evaluation, Measurement and Compliance (see below).

In providing this list, the Receiver emphasizes two points. First, the list set forth above is subject to change. The Receiver has scheduled two days of meetings with his staff at the end of May 2007 concerning this list because there are indications that resources do not exist to fulfill each of these activities in a careful, complete, and responsible manner. Second, while staff have been assigned to each project and directed to prepare a project roadmap including the time lines for project completion, certain projects may be commenced in a slow paced manner or as limited pilot efforts prior to system-wide implementation.

Metrics

In 2001 the IOM identified one of its six essential strategies for health care transformation as "the incorporation of performance and outcome measurements for improvement and accountability." In 2006 the IOM consolidated current thinking from measurement science in a volume called *Performance Measurement: Accelerating Improvement*.

Prior CDCR Attempts to Measure Quality

The Plata Court experts and CDCR leadership recognized the importance of measurement. The June 2002 Stipulation for Injunctive Relief called for monitoring compliance with an extensive new set of policies and procedures using an audit instrument. Quality Management Assistance Teams (QMAT) of physicians, nurses, and support staff were assembled to descend upon individual prisons for a roughly weeklong administration of the audit instrument. The QMAT audit instrument was designed to generate 213 indicators, some from an electronic tracking system, most from manual chart reviews.

While well-intentioned, this measurement strategy suffered from multiple flaws. The electronic tracking system consisted of unconnected, unsupported Access databases that soon varied from location to location and contained unreliable data. In addition to being overwhelming in number, the individual measures were unvalidated and yielded results that often flew in the face of direct observation. The attempt to average all the measures into a composite score was wholly uninformed and misguided. Most critically, the findings, even had they been trustworthy, were not actionable. The available management infrastructure could not support development and implementation of appropriate interventions, for reasons already discussed.

The National Quality Forum evaluates candidate measures based on four sets of standardized criteria: importance, scientific acceptability, usability, and feasibility. Approved measures are deployed by federal, state, and private sector health care organizations. To be worthy of use in accountability and public reporting, a measure should address one or more key leverage points for improving quality. It should be valid, precise, and reliable, yielding consistent and credible results when implemented. The benefit should outweigh the burden of measurement. The results should be useful in making decisions.

QMAT attempted to use the audit instrument in 2004 and 2005, and then abandoned the effort. In 2006 the QMAT physicians were redirected to assist with peer review activities and direct patient care, and the QMAT nurses were reassigned to consultant roles.

Moving Measurement into Corrections

Several state prison systems have made significant progress in developing useful measurement strategies. In 1999 the Missouri Department of Corrections began a measurement collaboration with the University of Missouri–Columbia School of Medicine's Center for Health Care Quality and the Department of Health Management and Informatics. In 2006 these researchers described their initial experience in the Journal of Correctional Health Care. Their initial measurement matrix consisted of 50 indicators, a number that was considered "unmanageable for annual data collection." The final matrix is shown below. The indicators are adapted from free-world sources and from state and national correctional standards.

WOMEN'S HEALTH

Response to an abnormal mammogram Timeliness of prenatal care

Checkups after delivery

Cesarean section rate

HEART DISEASE

Monitoring hypertension

Response to an abnormal blood pressure test Myocardial infarction, aspirin when sent out

Myocardial infarction, aspirin at return to facility

Beta-blocker treatment after a heart attack

Cholesterol management after

cardiovascular events, LDL screening

Cholesterol Management after

cardiovascular events, LDL level

INFECTIOUS DISEASES

Tuberculosis treatment completed

HIV viral load levels

PULMONARY DISEASE

COPD receiving appropriate care

Response to an abnormal chest x-ray

WELLNESS AND PREVENTION

Physical exam in past year Breast cancer screening

Cervical cancer screening

Yearly influenza immunization

High blood cholesterol levels

High blood cholesterol management

Cholesterol management

ASTHMA

Frequency of preventable acute episodes

DIABETES

Annual eye exams

MEDICATION ADMINISTRATION

Tegretol levels

SCREENING

Physical appraisal exam within 1st week

Dental exam within 1st week

BEHAVIORAL HEALTH

Optimal practitioner contacts for depression

Effective acute treatment for depression

Effective continuation treatment for

depression

Follow-up within a week of intake

Suicide attempts after positive screen

DIALYSIS

Adequacy of dialysis

Hemoglobin levels in dialysis patients

Missouri Department of Corrections Quality Performance Indicator Matrix

The Missouri quality measurement initiative is truly groundbreaking for corrections, but it has several limitations as a model for California at this point. The Missouri Department of Corrections uses an electronic health record, so it is possible to identify all the inmates in the state with a given health condition, at least for some conditions. The CDCR Division of Correctional Health Care Services has no reliable electronic databases, with the possible exception of the one used to track invoices from outside hospitals and specialists. Furthermore, the Missouri measures are statewide aggregates generated annually, so their utility in identifying specific problems in a timely fashion is limited.

The University of Texas Medical Branch (UTMB) took a different approach in 2002 when it contracted with the Texas Medical Foundation, a quality improvement organization, to review the quality of care provided by UTMB to state prison inmates. The Texas Medical Foundation performed manual chart audits on 385 inmates and derived measures of utilization and measures of compliance with prevention and chronic care guidelines similar to those above. In addition, the Texas Medical Foundation assessed UTMB for compliance with managed care organization guidelines and correctional standards.

The burden of manual measurement limits the frequency and therefore utility of this approach for guiding quality initiatives. UTMB also routinely gleans a variety of quality measures from its electronic health record, but again, that approach is presently out of reach in California.

Plans for Rigorous Metrics in CDCR

Over the next several years, however, the Receiver will develop a robust information technology system well-informed by current measurement science, so an increasing number of rigorous measures will be available for quality improvement and accountability purposes.

In the short term, several forthcoming information technology projects present opportunities for generating data. A new enterprise-wide patient scheduling and tracking system will allow routine analysis of delays in requests for clinical services such as chronic care or specialty appointments. The pharmacy information system being provided by Maxor will allow us to confirm that patients with various chronic conditions are receiving appropriate and timely pharmaceutical treatments. We will combine scheduling, pharmacy, laboratory, and imaging data into a clinical data warehouse, once each source of data is verified as reliable. These data can be mined for operational metrics useful for utilization management and population assessments, as well as for valuable clinical information at the point-of-care.

The scheduling and tracking data in the warehouse, to be operational later this year, will begin to yield measures of access to care for most of the metrics embedded in the Plata standards, as shown in the box below. Over time the diagnostic services metrics will also be available.

Plata Standard	Metric
Health Screening	 History and physical examination for all patients within 14 days of arrival at Reception Center
Access to Primary Care (Sick Call)	 Face-to-face nurse triage for patients with symptoms within 24 hours An appointment with a primary care provider within 5 days
	for patients classified as urgent
Outpatient Specialty Services	 Within 14 days for patients classified as routine Policies require that high-priority consultations or procedures occur within 14 calendar days Routine consultations or referrals with 90 calendar days With follow-up by a primary care provider within 14 calendar days
Diagnostic Services	 Routine laboratory tested processed within 14 days of orders X-ray examinations completed within 30 days of order Primary care provider review of lab results within two business days of receipt Notification of patient of results within 14 days of receipt
Medication Management	"Stat" medications be issued within 1 hour
Urgent/Emergent Response	 24 hour emergency medical treatment Policies require follow-up within five days
Outpatient Housing Unit and Licensed Care	 Policies require physician evaluation within 24 hours of admission
	• Evaluation by a primary care provider within 5 days for all patients returning from an impatient acute care facility
Pregnant Patient Care and the Birth of Children	 Policies require that patients be seen by a obstetrics provider within 7 calendar days of determination of pregnancy Each patient be provided six-weeks post delivery for follow-
	up
Chronic Care Program	 Policies require an initial intake evaluation within 30 days for patients referred to the Chronic Care Program Ongoing evaluations every 90 days

A number of the measures available from the clinical data warehouse will meet the National Quality Forum's criteria for importance, validity, usability, and feasibility. Most importantly, as the Receiver develops the infrastructure elements to support quality interventions, the measures will be actionable.

Once clinical data at the individual level are available, it will be easy to aggregate them into measures of population health for specific groups, *e.g.*, for older inmates, inmates with HIV, and women.

Uses of Rigorous and Non-Rigorous Data

The IOM makes a distinction between data for accountability *versus* data for improvement. Non-rigorous quantitative data, as well as qualitative data that may be rigorous or not, have critically important roles to play in the Receiver's quality improvement agenda.

Clinicians and managers need timely data at every level of rigor to guide improvement initiatives. At the microsystem level, frontline change agents need to develop skills in gathering just enough data to provide credible guidance for their improvement efforts, e.g., reviewing six charts before next Tuesday. If it is already clear that a clinical process is broken, then waiting for an annual audit on the topic is unnecessary and unwise. Such measurement strategies are core elements of the rapid cycle quality improvement and high-reliability methodologies discussed above.

It is important to emphasize the critical role of qualitative (non-numeric) data in quality reporting systems. Root cause analysis of a single sentinel event could suffice to drive a statewide system redesign initiative, once we have adequate quality and managerial resources to carry out such an initiative. Research-level qualitative data and analysis may be warranted to provide guidance for more challenging system improvements. Also, just as there is a role for "quick-and-dirty" quantitative data for improvement initiatives, there is also an invaluable role for qualitative anecdotes and personal stories in gathering support for system change.

Death Reviews and Mortality Data

In a 1998 report (Summarizing Population Health), the IOM concluded that "Mortality measures, although important, provide incomplete and insensitive information for decision-making." At the same time, the report acknowledged that "Both ordinary people and policymakers are deeply interested in extending life." In its 2006 report on measurement, the IOM acknowledged the multiple controversies that surround mortality measures, but some of the committee members felt that mortality is "too important to ignore."

We will continue to track the aggregate number of deaths per year, but this figure has limited value for assessing the quality of medical care or driving system changes. A measure of preventable deaths would be more useful. Unfortunately, the large literature on preventable deaths and excess mortality is almost entirely epidemiological, that is, it estimates such things as expected versus actual deaths within very large populations. There are few reports of systematic retrospective chart reviews examining the quality of care given prior to death, mostly in the setting of trauma care. Although every death is reviewed in the CDCR as in many other systems, no one has published a validated method for determining preventable versus non-preventable deaths using chart review in a primary care setting. The determination rests on the reviewer's best judgment.

This limitation in measurement, however, does not diminish the value of the death reviews. As noted above regarding qualitative data, a review of even one sentinel event could produce enough cause for concern to launch a statewide system redesign. Close reviews using root cause analysis are invaluable in revealing vulnerabilities in care processes. The Receiver's team will continue to oversee disciplined reviews of deaths within the CDCR.

Measures of Organizational Culture and Satisfaction

In addition to access, quality, and cost measures, the Receiver will begin to develop measures of organizational culture and change. The Centers for Medicare and Medicaid Services (CMS) has begun to use staff turnover rates as a marker for organizational culture, and several state prison systems have begun to explore this use as well. Staff satisfaction surveys can also serve as measures of organizational culture and provide guidance for change.

The Receiver will also explore the use of patient satisfaction surveys. Patient satisfaction measures are increasingly required by managed care oversight organizations and state and federal agencies. Several state prison systems have begun to track inmate satisfaction with health care. These patient-centered measures complement complaint and appeal systems.

Balanced Scorecards

As the Receiver's new information and managerial systems begin to mature over the next two years, his team will develop balanced scorecards for each prison, eventually to be available on a monthly basis. These one-page scorecards will include measures of population health, clinical quality, utilization, financial performance, and management.

Balanced scorecards facilitate transparency and accountability, bridging long-term goals and immediate challenges. They focus attention on organizational initiatives and provide early alerts regarding trouble areas. Showing the disease burden and staffing resources in a prison can put into context that facility's access, utilization, and clinical indicators.

Going forward, California will join with other leading state prison systems in an effort to standardize a measurement portfolio for the correctional setting, drawing heavily from the ambulatory care measures already endorsed by the National Quality Forum.

Office of Evaluation, Measurement and Compliance

Despite serious problems with data collection, the Receiver will begin the process of establishing accurate metric reporting with a three prong intermediate program comprised of the following programs, all of which the Receiver plans to have operational at the time of the filing of his November 15, 2007 modified Plan of

Action:

- (1) a system to objectively measure the basics of *Plata* remedial plan compliance at no less than six pilot prisons;
- (2) an accurate and objective system of mortality reviews;
- (3) a pilot program for institutional inspections and Plata remedial plan compliance developed with California's Office of the Inspector General.

To effectuate this program, as well as to manage the development of the more sophisticated longer term metrics set forth in the Plan of Action Objective C.2, the Receiver will establish a new administrative structure within California Prison Receivership, an Office of Evaluation, Measurement and Compliance. This Office is planned to be operational prior to the filing of the November 15, 2007 modified Plan of Action.

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