



MASTER SERVICE AGREEMENT (MSA)
CALIFORNIA PRISON HEALTH CARE SERVICES

STATE OF CALIFORNIA
DEPARTMENT OF CORRECTIONS AND REHABILITATION

REQUEST FOR OFFER

LEVERAGED PROCUREMENT AGREEMENT
INFORMATION TECHNOLOGY CONSULTING SERVICES
BARCODE MEDICATION ADMINISTRATION RECORD DEVELOPMENT
RFO #11-013-ITS

April 4, 2011

The California Department of Corrections and Rehabilitation (CDCR), California Prison Health Care Services (CPHCS), is requesting offers for a Contractor to develop CPHCS' Barcode Medication Administration Record (bMAR) system. Contractor will work in conjunction with CPHCS' Health Care Applications Development and Support Unit, and Allied Health Services, to provide all development, implementation, maintenance, and knowledge transfer activities for the Barcode Medication Administration Record Development (bMAR) project.

Contractor will report to CPHCS' Deputy Chief Information Officer (DCIO), Clinical Applications, or designee(s). In submitting an offer vendor must comply with the instructions found herein.

The term of the proposed Agreement is targeted for May 2, 2011, through May 1, 2012. CPHCS reserves the option to extend the Agreement for up to two (2) additional one-year terms at the same rate of award and/or to add additional funds up to the maximum MSA threshold. The contract award is subject to availability of funds approved for this purpose and renewal of the IT Consulting Services MSA.

All offers must be signed by an authorized officer of the company or firm who has legal and binding authority. By submitting an offer, your firm agrees to the terms and conditions stated in this Request for Offer and in accordance with your authorized Leveraged Procurement Agreement (i.e., Master Service Agreement [MSA] contract).

Offers are due by **4:00 p.m., Monday, April 18, 2011. Responses and any required copies must be submitted by electronic mail and clearly labeled to the department contact noted below.**

Department Contact:

California Prison Health Care Services
Attention: CYNTHIA BASA
P.O. Box 4038
Sacramento, CA 95812-4038
(916) 324-8045
Cynthia.Basa@cdcr.ca.gov

RESPONSE GUIDELINES

This RFO, Offeror's response, the General Provisions – Information Technology (GSPD 401IT, effective 06/08/2010), and applicable IT Services Special Provisions will be made part of the ordering department's Purchase Order and/or procurement contract file.

Offers must be submitted electronically to the departmental contact address noted on page 1. All pages of Offeror's response received prior to due date and time will be considered. CPHCS is not responsible for any e-mail loss and/or failure to receive an Offeror's response. CPHCS assumes no responsibility if Offeror cannot transmit their response electronically to the departmental e-mail address and/or if the entire response is not received prior to Request for Offer (RFO) due date.

The delivery of any offer via U.S. mail, private delivery service, and/or by personal service will not be accepted by CPHCS. In the event of such delivery, CPHCS may consider the offer as non-responsive.

Offers submitted in response to this RFO must include all of the following information:

1. Cover letter signed by the authorized officer of the company or firm who has legal and binding authority;
2. Full legal name of Offeror's organization or firm, mailing address, telephone and facsimile numbers;
3. Name, telephone number, and electronic mail (i.e., e-mail) address of Offeror's contact person;
4. Submission date of Offer;
5. A copy of Offeror's MSA that includes the California Department of General Services (DGS) logo, MSA number, term and DGS' signature approval;
6. Copy of Liability Insurance Certificate;

Offeror must provide CPHCS with a Certificate of Insurance showing that there is liability insurance currently in effect for Offeror of not less than \$1,000,000, per occurrence, for bodily injury and property damage liability combined. The Certificate of Insurance must include the following provisions:

- a. The insurer will not cancel the insured's coverage without 30 days prior written notice to the State;¹ and
- b. The State of California is included as additional insured.

7. Proof of Worker's Compensation Insurance;

Offeror shall provide CPHCS with a Certificate of Insurance showing that there is current workers' compensation insurance coverage for its employees who will be engaged in performance of the requested services. The Certificate of Insurance must include provision that the insurer will not cancel the insured's coverage without 30 days prior written notice to the State.

¹ "Days" means calendar days unless otherwise specified.

8. Completed Rate Sheet (Exhibit B-1);

Exhibit B-1 (Rate Sheet) must provide: 1) deliverable task number; 2) description of deliverable(s); 3) cost per deliverable; 4) proposed resources per deliverable; 5) resource's classification; 6) estimated number of hours per deliverable; and 7) total cost. The ensuing Agreement will be invoiced and reimbursed on a deliverable basis (i.e., fixed-cost).

- a. An example of Offeror's proposed Rate Sheet (Exhibit B-1) has been included within RFO.

Any modifications to SOW of the ensuing Agreement will be defined, documented, and mutually agreed upon by Contractor and CIO, or designee, and may be reimbursed on a time and materials rate or fixed-cost as proposed via work a authorization.

9. Offeror Declaration Form (GSPD-05-105);

Offerors must complete the Offeror Declaration and include it with response. When completing the declaration, Offerors must identify all subcontractors proposed for participation in the contract. Offerors awarded a contract are contractually obligated to use the subcontractors for requested services unless CPHCS agrees to a substitution via amendment to the Agreement.

The GSPD-05-105 can be found at <http://www.documents.dgs.ca.gov/pd/poliproc/MASTER-BidDeclar08-09.pdf#search=gspd%2005-105&view=FitH&pagemode=none>.

- a. At CPHCS' option prior to award, contractors maybe required to submit additional written clarifying information (e.g., STD. 843 – Disabled Veteran Business Enterprise Declaration, etc.). Failure to submit the requested information as specified may be grounds for rejection of offer.

10. Contractor's Small Business and/or Disabled Veteran's Business Enterprise Certification, if applicable;

11. Completed Payee Data Record (STD 204) - (Attachment A);

12. A detailed description of Contractor's approach for completing the services requested in Exhibit A (Statement of Work), Section C (Scope of Services) including, but not limited to, the functions, roles, and responsibilities of vendor personnel (i.e., team of consultants);

13. A description of Offeror's expertise and experience (e.g., type of services rendered, projects completed, etc.) performing IT consulting services as requested in Exhibit A (Statement of Work);

14. Three (3) customer references for Offeror to verify engagement(s) similar in scope as requested in Exhibit A (Statement of Work);

- Include a brief narrative of project description and Offeror's role for each reference provided.
 - a. Customer references will be used to verify information provided by Offeror and/or consultant for selection purposes;

15. Resume(s) of Offeror's proposed personnel must include all of the following:

- All relevant barcode and/or healthcare development experience(s);
- A start and end date for each job cited;
- Consultant qualifications and experience(s) developing .NET frameworks; and
- Three (3) customer references².

16. Other Requirements:

Offeror's proposed staff will be required to complete the following documents prior to award.

a. Contractor Confidentiality Statement (Attachment B):

The Political Reform Act of 1974 (Government Code Sections 81000-91015) requires consultants to file a Contractor Confidentiality Statement certifying no personal or financial interest with the eUHR and CDR projects, and agreeing to keep all information concerning the project confidential.

b. Non-Disclosure Agreement (Attachment C)

c. Statement of Economic Interests (Form 700) - (Attachment D)

Interested Offerors may submit questions and/or requests for clarification, via e-mail, to Cynthia.Basa@cdcr.ca.gov. CDCR responses to Offeror questions that provide new or additional information will be provided to all Offerors.

² Offerors are not precluded from using the same reference for proposed candidates.

KEY DATES

Event	Date	Time
Release of Request for Offer	04/04/2011	
Questions or Clarifications Submittal (latest date)	04/08/2011	4:00 p.m.
Offer Response Submission Due Date	04/18/2011	4:00 p.m.
Comparison of Offers and Interview(s), if warranted.	04/19/2011 to 04/22/2011	
Best Value Determination – Selection of Vendor	04/25/2011	4:00 p.m.
Proposed Contract Start Date ³	05/02/2011	

³ Date subject to change.

SELECTION PROCESS

All offers will be reviewed for responsiveness to requirements of the RFO. If a response is missing required information, it may be deemed non-responsive. Responsive offers will be scored on the “Best Value” criteria listed below. Further review is subject to CDCR’s discretion.

Best Value Criteria	
Technical Experience:	60 Points
1. At least ten (10) years of enterprise level information technology (IT) application design and development experience using Microsoft (MS) technologies;	0-6
2. At least three (3) years experience developing multi-modal user interfaces using MVC or MV-VM .NET design patterns;	0-6
3. At least three (3) years experience developing barcode scanning interfaces with MS .NET web and desktop forms-based applications;	0-6
4. At least five (5) years experience developing thick-client applications with data synchronization techniques (e.g., application runs without requiring persistent network connection, uploading all data to a centralized database server when connection is established);	0-6
5. At least five (5) years Service Oriented Architecture (SOA) development experience using MS .NET framework, and three (3) years SOA development experience using Windows Communication Foundation (WCF) Services;	0-12
6. At least ten (10) years experience developing transactional databases using MS SQL Server and manipulating data using MS SQL Server Integration Services (SSIS);	0-6
7. At least three (3) years experience developing MS SQL Server (version 2005/2008 R1 and version 2008 R2) Reporting Services (SSRS);	0-6
8. At least five (5) years development experience using Microsoft.NET Technologies	0-6
9. At least five (5) years experience integrating a Team Foundation Server with development tools, including all of the following features: <ul style="list-style-type: none"> • Build Automation; • Release Notes; and • A TFS to add Use Cases and create Requirements Traceability Matrix. 	0-6
Administrative Criteria:	20 Points
1. Completeness of response package;	0-5
2. Detailed resumes of proposed personnel describing experience levels that support Statement of Work; and	0-10
3. Three (3) references for Offeror and/or company and/or firm. ⁴	0-5
Cost:	20 Points
1. Lowest cost proposal will receive full cost points and each proposal with higher cost will receive a percentage of total points.	0-20

⁴ Customer references must support consultative services offered.

CPHCS reserves the sole right to reject any and all offers, and reissue this RFO. In the event CPHCS determines that the requested services would be best served by awarding of multiple agreements for this RFO, CPHCS reserves the right to make this determination and negotiate with Offerors having “best value” to award more than one company and/or firm. The awarded Contractor will be obligated to provide services at the deliverable price (i.e., fixed cost) offered in Exhibit B-1 (Rate Sheet), which under no circumstances may exceed their authorized MSA hourly rate(s) and/or dollar threshold.

EXHIBITS AND ATTACHMENTS:

Exhibit A	Statement of Work
Exhibit B	Budget Detail and Payment Provisions
Exhibit B-1	Rate Sheet (Attached as “Exhibit B-1 Rate Sheet.xls”)
Exhibit C	CPHCS Special Provisions
Attachment 1	Cost Proposal Worksheet
Attachment A	Payee Data Record (STD 204)
Attachment B	Contractor Confidentiality Statement
Attachment C	Non-Disclosure Agreement
Attachment D	Statement of Economic Interests (Form 700)
Appendix A	bMAR Project Concept
Appendix B	bMAR Use Cases
Appendix C	bMAR Requirements Matrix

EXHIBIT A STATEMENT OF WORK

A. BACKGROUND AND PURPOSE

The California Prison Health Care Receivership Corporation is a non-profit organization created to house activities of the Federal Receiver. United States District Court Judge, Thelton E. Henderson, established the Receivership as the result of a 2001 class action lawsuit (Plata v. Schwarzenegger) brought against the State of California over the quality of medical care in the State's prison system.

All activities of the Receivership have one common purpose: to create a collaborative environment where custody and health care staff improve upon the quality of medical services in California prisons in order to meet constitutional standards while reducing avoidable morbidity and mortality. The Receiver has adopted six goals that are necessary for CDCR's health care program to meet rise to constitutionally acceptable and sustainable levels. The goals are: 1) ensure timely access to health care services; 2) establish a prison medical program addressing the full continuum of health care services; 3) recruit, train and retain a professional quality medical workforce; 4) implement a quality assurance and continuous improvement program; 5) establish medical support infrastructure; and 6) provide for necessary clinical, administrative and housing facilities.

California Prison Health Care Services (CPHCS) has embarked on a number of information technology (IT) projects necessary to achieve the Receiver's efforts in raising the level of health care of patient-inmates to constitutional standards. Some of these projects include, but are not limited to: Mental Health Tracking System (MHTS), Clinical Data Repository (CDR), Business Information System (BIS), Central Fill Pharmacy, and Hire Tracking System.

To support continued implementation of these and other IT projects, CPHCS seeks a Contractor to develop CPHCS' Barcode Medication Administration Record (bMAR) system. Contractor will work in conjunction with CPHCS' Health Care Applications Development and Support Unit, and Allied Health Services, to provide all development, implementation, maintenance, and knowledge transfer activities for the bMAR project.

Development of CPHCS' bMAR system will be performed within Phase I of the bMAR Project. The project's Phase II will implement the developed system and associated processes at CDCR's adult institutions statewide. The project is projecting at a minimum two releases for the system. The first release of its thick client user interface (UI) design has an anticipated delivery date, including all software testing and documentation, of September 12, 2011.

Contractor performance of deliverables shall include all of the following:

- Design, development, and implementation of a bMAR solution for supporting the management and distribution of bar-coded medications as well as their corresponding medication administration records;
- Design, develop, and implement system interfaces between bMAR and all of the following CPHCS healthcare IT systems:
 - GuardianRx Pharmacy System for medication data;
 - Strategic Offender Management System (SOMS) for patient-inmate housing information;
 - Electronic Medical Administration Record (eMAR) to store and archive medication administration with the patient-inmate medical record; and

- Madrid Personal Information Management System (MPIMS) to capture medication administration information from Pelican Bay State Prison for analysis, reporting, and continuity of care using CPHCS' bMAR system.
- CASI Cornerstone Pharmacy Medication Packaging System
- Design and development of a bMAR system that does not require a constant network connection to function at all times;
- Interface solution between developed bMAR system and CPHCS' current GuardianRx solution.
 - Interface between bMAR system and CPHCS' current GuardianRx solution must have 100% data accuracy prior to deliverable acceptance.

Contractor will report to CPHCS' Deputy Chief Information Officer (DCIO), Clinical Applications, or designee(s).⁵

B. CONTRACTOR QUALIFICATIONS

Contractor must meet all of the following Mandatory Qualifications to be considered for award. Contractors will be evaluated on expertise and experience stated in the resume against the mandatory qualifications. At discretion of CPHCS, interviews may be a part of the selection process.

Mandatory Qualifications:

Qualification Statement	Qualifying Entity
At least ten (10) years of enterprise level information technology (IT) application design and development experience using Microsoft (MS) technologies.	Firm and at minimum one (1) proposed consultant
At least three (3) years experience developing multi-modal user interfaces using MVC or MV-VM .NET design patterns.	Proposed team and at minimum one (1) proposed consultant
At least three (3) years experience developing barcode scanning interfaces with MS .NET web and desktop forms-based applications.	Proposed team
At least five (5) years experience developing thick-client applications with data synchronization techniques (e.g., application runs without requiring constant network connection, uploading all data to a centralized database server when connection is established).	Proposed team
At least five (5) years Service Oriented Architecture (SOA) development experience using MS .NET framework, and three (3) years SOA development experience using Windows Communication Foundation (WCF) Services.	Proposed team and at minimum one (1) proposed consultant
At least ten (10) years experience developing transactional databases using MS SQL Server and manipulating data using MS SQL Server Integration Services (SSIS).	At least one (1) proposed consultant
At least five (5) years experience developing MS SQL Server (i.e., version 2005, 2008-R1, and/or version 2008-R2) Reporting Services (SSRS).	Proposed team
At least two (2) years development experience using MS .NET	At least one (1) proposed

⁵ Appendix A (bMAR Project Concept) and Appendix B (bMAR Use Cases) have been included for reference.

technologies.	consultant
At least five (5) years experience integrating a Team Foundation Server with development tools, including all of the following features: <ul style="list-style-type: none"> • Build Automation; • Release Notes; and • A TFS to add Use Cases and create Requirements Traceability Matrix. 	Firm and at minimum one (1) proposed consultant

Desirable Qualifications:

Qualification Statement	Qualifying Entity
Vendor should be Microsoft Certified Gold Partner.	Vendor firm
Experience designing and developing applications based on the CSLA.NET framework.	Proposed team
Experience designing and developing touch-screen user interfaces (UIs).	At least one (1) proposed consultant
Experience designing and developing applications for a health care IT environment.	Proposed team
Verifiable ability to work both independently and in a distributed team environment.	Firm and consultants
Experience developing pharmacy and/or medication administration system(s).	Proposed team
Experience developing HL-7 messages for internal or external interfaces.	At least one (1) proposed consultant

C. MILESTONES AND DELIVERABLES

Deliverables will be performed using a Waterfall System Development Life Cycle (SDLC), or other SDLC as specified by CPHCS' Project Manager. Unified Modeling Language (UML) must be the primary notation used to produce all technical design deliverable. While other forms of documenting technical design can still be used, they must be used for supplemental purposes only. UML diagrams must be created using either MS VISIO or Visual Studio.

Contractor shall perform all of the following deliverable tasks:⁶

MILESTONE 1: REQUIREMENTS

- A. Contractor shall meet with CPHCS' Deputy Chief Information Officer (DCIO), or designee to gain understanding of design requirements and clinical applications;
- B. Contractor shall gather and clarify the remaining requirements to produce a finalized set of system requirements;
- C. Contractor shall combine established requirements provided by CPHCS in Use Cases (Appendix B) and the Requirements Traceability Matrix (Appendix C) to complete and maintain the Requirements Traceability Matrix (Appendix C); and
- D. Contractor shall produce and document an accepted System Development Life Cycle (SDLC) methodology for use with bMAR system development and in accordance with CPHSC development methodologies and processes.

⁶ Any supporting activities performed by Contractor in support of this Statement of Work (SOW) must be scheduled and approved by CPHCS' DCIO, or designee.

Note: This milestone is estimated to use 2.5% of the total contract resources.

Deliverables:

1. Gathering, clarification, and finalization of bMAR system requirements and supporting documents;

Note: CPHCS has completed a set of draft use cases as shown in Appendix B.

2. Completion and maintenance of Requirements Traceability Matrix (Appendix C); and
3. bMAR SDLC processes and methodology, including all supporting documentation (e.g., System Engineering Management Plan, Standards, etc.).

Acceptance Criteria:

1. Approval of deliverables by CPCHS' DCIO, or designee.

MILESTONE 2: SYSTEM ARCHITECTURE

- A. Contractor shall produce a bMAR system architecture with sufficient detail to demonstrate that bMAR will:
 - i. Operate without continuous network connections;
 - ii. Accommodate multiple user interface (UI) types (e.g., thick-client UI, web UI, mobile-device UI, etc.) without impacting and/or modifying bMAR system architecture or design; and
 - iii. Function with a barcode scanner and signature tablet.
- B. Contractor shall produce an executable prototype that demonstrates architecture viability.
 - The “proof of architecture” prototype shall not be re-purposed or used in any part of the solution implementation.

Note: This milestone is estimated to use 10% of the total contract resources.

Deliverables:

1. Detailed bMAR System Architecture documented in UML notation and using Microsoft (MS) Visio and/or other development tools provided by CPHCS; and
2. Executable system prototype that demonstrates architecture viability.

Acceptance Criteria:

Approval of deliverables by CPCHS' DCIO, or designee.

MILESTONE 3: SYSTEM DESIGN

- A. Contractor shall produce a bMAR Design Analysis Model and accompanying Data Model including, but not limited to, all of the following:
 - i. Domain class diagrams;
 - ii. Sequence and activity diagrams;
 - iii. Interaction diagrams; and
 - iv. All design details.

- B. Contractor shall design bMAR thick-client UI. Design shall include, but not be limited to, all of the following:
 - i. High-fidelity UI mockup;
 - ii. Navigation flow; and
 - iii. Design specifications of UI layer interface(s) with application layer.
- C. Contractor shall design bMAR web UI. Design shall include, but not be limited to, all of the following:
 - i. High-fidelity UI mockup;
 - ii. Site map;
 - iii. Navigation flow; and
 - iv. Design specifications of UI layer interface(s) with application layer.
- D. Contractor shall design bMAR touch-screen UI. Design shall include, but not be limited to, all of the following:
 - i. High-fidelity UI mockup;
 - ii. Navigation flow; and
 - iii. Design specifications of UI layer interface(s) with application layer.
- E. Contractor shall produce a complete Design Model, for bMAR with Thick-Client UI, that includes all of the following:
 - i. System class diagrams;
 - ii. Sequence diagrams;
 - iii. Logical partitioning of system components; and
 - iv. All other applicable design diagrams and/or details.

Note: Design Model must have sufficient detail to describe how application logic is implemented within underlying technology stacks; and be evolved from (i.e. demonstrating traceability) the Analysis Model that conforms to System Architecture.

- F. Contractor shall produce a complete Design Model, for bMAR with Web UI, that includes all of the following:
 - i. System class diagrams;
 - ii. Sequence diagrams;
 - iii. Logical partitioning of system components; and
 - iv. All other applicable design diagrams and/or details.

Note: Design Model must have sufficient detail to describe how application logic is implemented within underlying technology stacks; and be generated using Analysis Model that will conform to the System Architecture.

- The key difference between the two design models will be the presentation logic and particular thick-client constraints.

- G. Using a CPHCS provided template, Contractor shall provide one bMAR Detail Design Documentation (DDD) based on each use case, which will describe all UIs being developed, middle tier integration, and database objects to be used.

Note: This milestone is estimated to use 20% of the total contract resources.

Deliverables:

1. bMAR Design Analysis Model and Data Model;
2. Thick-client User Interface design;
3. Web User Interface design;
4. Touch-screen User Interface design;
5. Design Model for bMAR System for Thick-client UI;
6. Design Model for bMAR system for Web UI; and
7. Detail Design Documentation (DDD) per use case.

Acceptance Criteria:

Approval of deliverables by CPCHS' DCIO, or designee.

MILESTONE 4: TEST PLAN

- A. Contractor shall produce a bMAR development Test Plan that describes how to test the bMAR system including, but not limited to, all of the following:
- i. Testing methodology;
 - ii. Test areas;
 - iii. Test tools/harnesses (i.e., automated test frameworks);
 - iv. Test constraints; and
 - v. All other test details.
- B. Contractor shall produce all test cases and test scripts (i.e., unit testing, integration/interface testing, system testing, regression testing, and performance testing).
- C. Notwithstanding unit testing Contractor shall automate all tests using a testing tool.

Note: This milestone is estimated to use 5% of the total contract resources.

Deliverables:

1. Test Plan;
2. Test cases and scripts; and
3. Setup Test automation.

Acceptance Criteria:

Approval of deliverables by CPCHS' DCIO, or designee.

MILESTONE 5: TEST REPORTS

- A. Contractor shall conduct integration/interface tests and produce bMAR Integration/Interface Test Reports that are generated after running all applicable test cases and scripts.
 - Regression testing is inclusive and must be part of report(s).
- B. Contractor shall conduct bMAR system tests and produce bMAR System Test Reports that are generated after running all applicable test cases and scripts.
 - Regression testing is inclusive and must be part of report(s).
- C. Contractor shall conduct bMAR system load tests and produce bMAR System Load Test Reports that are generated after system is fully load-tested for 800 concurrent users with distributed traffic from 33 sites (i.e., adult institutions).
- D. Contractor shall conduct bMAR user acceptance tests and produce bMAR UAT Test Report.

Note: This milestone is estimated to use 15% of the total contract resources.

Deliverables:

- 1. Integration/Interface Test Report 1;
- 2. Integration/Interface Test Report 2;
- 3. Integration/Interface Test Report 3;
- 4. System Test Report 1;
- 5. System Test Report 2;
- 6. System Test Report 3;
- 7. Performance/Load Test Report 1;
- 8. Performance/Load Test Report 2; and
- 9. UAT Test Report.

Acceptance Criteria:

Approval of deliverables by CPCHS' DCIO, or designee.

MILESTONE 6: SYSTEM DEVELOPMENT

- A. Contractor shall develop and fully test bMAR with Thick-client Windows UI source-code with middle tier integration and database integration for first phase of testing (i.e., functional, technical and UAT, Pilot).

Note: Must be version controlled and fully tested within TFS 2010.

- B. Contractor shall develop and fully test bMAR with Web UI source-code with middle tier integration and database integration for second phase of testing (functional, technical and UAT, Production).

Note: Must be version controlled and fully tested within TFS 2010.

- C. Contractor shall develop and fully test bMAR with Touch-screen UI source-code with middle tier integration and database integration for third phase of testing (functional, technical and UAT, Production).

Note: Must be version controlled and fully tested within TFS 2010.

- D. Contractor shall develop and implement within bMAR inventory control management for medications, and integrate/interface with CPHCS' Central Fill Pharmacy (i.e., CASI system) to obtain stock medication information and to provide stock orders using bMAR.

Note: This milestone is estimated to use 30% of the total contract resources.

Deliverables

1. Source codes for bMAR with thick-client Windows UI and Phase 1 testing;
2. Source codes for bMAR with Web UI and Phase 2 testing;
3. Source codes for bMAR with Touch-screen UI and Phase 2 testing; and
4. bMAR inventory control management for medications, and integration/interface with CPHCS' Central Fill Pharmacy.

Acceptable Criteria

Approval of deliverables by CPCHS' DCIO, or designee.

MILESTONE 7: PRODUCTION DEPLOYMENT

- A. Contractor shall prepare and deploy the bMAR solution to one pilot adult-institution selected by CPHCS.
- B. Contractor shall support the pilot bMAR deployment throughout the pilot program and resolve issues related to the bMAR system.

Note: This milestone is estimated to use 10% of the total contract resources.

Deliverables

1. Pilot Production Preparation and Deployment; and
2. Pilot Deployment Support.

Acceptable Criteria

Approval of deliverables by CPCHS' DCIO, or designee.

MILESTONE 8: DOCUMENTATION

- A. Contractor shall produce bMAR System Administration Documentation (i.e., software manual) both as an online version (i.e., integrated into the system) and an independent (i.e., master) softcopy version.
- B. Contractor shall produce bMAR User Manuals both as an online version (i.e., integrated into the system) and an independent (i.e., master) softcopy version.
- C. Contractor shall support the bMAR training contractor develop all bMAR system training materials including, but not limited to, all of the following:
- i. Training flow(s);
 - ii. Procedural steps;
 - iii. Manuals; and
 - iv. Any other training documentation.

Note: This milestone is estimated to use 5% of the total contract resources.

Deliverables:

1. bMAR System Administration Documentation;
2. bMAR User Manuals; and
3. bMAR System Training Materials Support.

Acceptance Criteria:

Approval of deliverables by CPCHS' DCIO, or designee.

MILESTONE 9: PROJECT ADMINISTRATION

Contractor shall produce all of the following:

- A. Contractor shall produce a Project Management Plan defining how the contractor will manage the development project, and should include at a minimum
 - i. Communications Plan;
 - ii. Change Management Plan;
 - iii. Resource Plan; and,
 - iv. Risk management Plan ;
- B. Contractor shall produce and maintain a detailed development schedule in Microsoft Project;
- C. Contractor shall provide Weekly Written Status Reports; and,
- D. Contractor shall attend monthly and weekly project team meetings.

Note: This milestone is estimated to use 2.5% of the total contract resources.

Deliverables:

1. Project Management Plan;
2. Detailed Development Schedule; and
3. Weekly Written Status Reports.

Acceptance Criteria:

Approval of deliverables by CPCHS' DCIO, or designee.

D. DELIVERABLE ACCEPTANCE CRITERIA

1. All concluded work shall be submitted to the CPCHS' DCIO, or designee, for review, approval or rejection.
 - A Deliverable Expectations Document and/or Deliverable Acceptance Document must be submitted by Contractor and approved by CPCHS' DCIO, or designee.
2. It is CPHCS' sole determination as to whether a deliverable has been successfully completed and is acceptable to CPCHS' DCIO, or designee.
 - CPCHS will review and validate deliverables prior to final acceptance.

3. If a deliverable is not accepted, the State shall provide the reason, in writing, within ten (10) business days of receipt of said deliverable.

E. ASSUMPTIONS AND CONSTRAINTS

1. Work hours for this Agreement must be consistent with CPHCS' normal business hours 8:00 a.m. to 5:00 p.m., Monday through Friday, excluding State holidays.
2. Contractor shall ensure availability of staff to perform the requirements of the ensuing Agreement at all times during the period described in the preceding paragraph 1 above.
3. The work location will be at 660 J Street, Sacramento, California, or at another designated location within the greater Sacramento area.
4. Any modifications to SOW of the ensuing Agreement will be defined, documented and mutually agreed upon by Contractor and CPHCS' CIO, or designee.
5. Services not specified in Scope may only be performed pursuant to a work authorization signed by CPHCS.
6. Contractor must submit, in advance, a resume of all personnel substitutions. All Contractor personnel substitutions must be approved by CPHCS CIO, or designee, prior to substituted personnel commencing work.
7. CPHCS, in its sole discretion, reserves the right to require Contractor to substitute personnel.
8. CPHCS reserves the right to renegotiate services deemed necessary to meet the needs of the project according to State priorities. CPHCS and Contractor shall mutually agree to all changes; and renegotiated services outside the scope of original contract may require control agency approval prior to commencement of work.
 - Work Authorization

Either party may at any time propose a change to Scope. If Contractor believes that such change will increase Contractor's costs or delay completion, the parties will negotiate in good faith to try to accommodate such requests. Contractor will price any additional fees, at CPHCS' option, based on time and material rate(s) or fixed cost. Contractor will disclose and explain to CPHCS its method of pricing a change order. At CPHCS' request, the parties will use project estimation tools to aid in determining pricing and to ensure that it is competitive in the marketplace. No change will be effective unless and until set forth in a written amendment to the Agreement, which is approved and signed by the parties. Any agreed upon modifications will be performed by Contractor in accordance with the amendment and Agreement provisions. Any failure to agree to a proposed change will not impair the enforceability of other Agreement terms or in Scope.
10. CPHCS and Contractor are mutually obligated to keep open channels of communications to ensure successful performance of the ensuing Agreement. Both parties are responsible for communicating any potential problem(s) or issue(s) to CPHCS' CIO, or designee, and the Contractor, respectively, within eight (8) hours of becoming aware of said problem(s).
11. Contractor certifies that it has appropriate systems and controls in place to ensure that State funds will not be used in performance of this Agreement for the acquisition, operation, or maintenance of computer software in violation of copyright laws.

F. CPHCS ROLES AND RESPONSIBILITIES

1. CPHCS will provide accommodations at 660 J Street, Sacramento, California or another designated location in the greater Sacramento area. Accommodations may include a desk, telephone, computer hardware, and software necessary for performance of work.
 - CPHCS shall not provide cell phones, smart phones, etc.
2. CPHCS will be responsible for monitoring and reviewing of services as invoiced.
3. CPHCS will help resolve and escalate issues within the organization, as necessary.
4. CPHCS may provide Contractor access to applicable files, reports, contracts, documents, and other relevant information.
5. CPHCS will provide staff availability for consultation meetings.
6. Provision of clerical or other support services is strictly at the option of CPHCS. Contractor should assume that CPHCS will not provide any assistance of a clerical nature for documents or telephone support.

G. CONTRACTOR ROLES AND RESPONSIBILITIES

In addition to Scope of Services specified in Item C, above, Contractor is required to do all of the following:

1. Work with CPCHS' DCIO, or designee, Clinical Applications, and/or designee(s) to ensure that any issue(s) concerning coordination and integration of the database project(s) are addressed.
2. Participate in information gathering meetings, fact-finding meetings, working sessions, status reporting (both written and verbal), presentations, and general communication(s) to ensure success of consultant activity performance.
3. Comply with all applicable State and Agency policies and procedures, including those enumerated in Exhibit C (Special Provisions).
 - By accepting Agreement, Contractor (including personnel) acknowledges that he/she has read and agrees to the provisions of Exhibit C;
4. Return all State property including security badges, computer laptop, work products, etc., prior to termination of Agreement;
5. Be tested for Tuberculosis and certified to be free of tuberculosis on the TB Infectious Free Staff Certification in order to gain entrance to the Institutions;
6. Complete a Request for Gate Clearance Form, Application for Identification Card, and/or Emergency Notification form in order to gain entrance to the institutions;
7. Agree to abide by the Digest of Laws Related to Association with Prison Inmates; and
8. Perform any other duties as requested by CPHCS' CIO or designee.

H. PERIOD OF PERFORMANCE

It is anticipated that the ensuing Agreement will begin May 2, 2011 through May 1, 2012. CPHCS reserves the option to extend Agreement for two (2) additional years at the same rate of award, and/or to add additional funds up to the maximum MSA threshold.

I. EVALUATION OF CONTRACTOR

The Deputy Chief Information Officer, Clinical Applications, or designee, will complete a written evaluation of Contractor's performance under the ensuing Agreement within sixty (60) days following the term end date. The evaluation shall be prepared on the Contract/Contractor Evaluation Form (STD 4) and maintained in the Agreement file for three (3) years. If Contractor's performance is deemed unsatisfactory, a copy of the evaluation shall be sent to the California Department of General Services (DGS), Office of Legal Services (OLS), within five (5) days, and to Contractor within fifteen (15) days, following completion of the evaluation.

"Days" means calendar days unless otherwise specified.

J. TERMINATION

Notwithstanding provisions #21, #22, and #23 of the State's General Provisions – IT (GSPD 401-IT, effective 06/08/2010), CPHCS reserves the right to terminate the ensuing Agreement immediately with or without cause.

K. CPHCS CONTRACT MANAGER

DEPUTY CHIEF INFORMATION OFFICER
Clinical Applications
California Prison Health Care Services
P.O. Box 4038
Sacramento, California 95812-4038

EXHIBIT B
BUDGET DETAIL AND PAYMENT PROVISIONS

1. INVOICING AND PAYMENT

- A. For services satisfactorily rendered and upon receipt and approval of invoices, CPHCS agrees to pay Contractor on a deliverable basis (i.e., Fixed Price) in accordance with Exhibit B-1 (Rate Sheet).
- i. During execution of each task, which involves delivery of identified deliverables, and upon CPHCS' approval, Contractor may submit periodically to CPHCS invoices reflecting a pro-rata cost of the task based on the following:
- a. Number of work hours expended by Consultant in performance of each task divided by the number of work hours scheduled for the task, less a ten-percent (10%) withhold, less any amount(s) previously invoiced; and
- b. Signed acceptance of a Deliverable Expectations Document (DED) for task(s) performed by Contractor from CPHCS' CIO or designee, that clearly identifies stages of progress as reflected in written status reports submitted with invoices.
- ii. Upon completion of a deliverable in accordance with the acceptance criteria set forth in Exhibit A (Statement of Work), the full charge for such deliverable, less amount(s) previously invoiced to CPHCS, may be submitted for payment.
- a. A Deliverable Acceptance Document (DAD) must be approved by CPHCS' DCIO or designee, before approval of Contractor's invoice for payment.
- B. Contractor invoices shall not be submitted more frequently than monthly to the CPHCS.
- C. Invoices reflecting progress payments shall not exceed ninety percent (90%) of the total amount of this Agreement, with the balance to be invoiced upon successful completion of all deliverables.
- i. It is CPHCS's sole determination as to whether all deliverables haven been successfully completed and are acceptable to CPHCS.
- D. All invoices shall be submitted in triplicate on Contractor's letterhead and include the CPHCS Purchase Order and Agreement numbers, Consultant's name, task title, task and/or deliverable title, and invoice total.
- ii. Any invoices submitted without the above referenced information may be returned to Contractor for revision(s).
- E. Contactor shall address and submit all invoices to:

IT ACQUISITIONS
Administrative Support Division
California Prison Health Care Division Services
P.O. Box 4038
Sacramento, California, 95812-4038
ATTENTION: JOSIE PROVERBS

2. BUDGET CONTINGENCY CLAUSE

- a. It is mutually agreed that if the California State Budget Act for the current fiscal year and/or any subsequent fiscal years covered under this Agreement does not appropriate sufficient funds for the project, this Agreement shall be of no further force and effect. In this event, the State shall have no liability to pay any funds whatsoever to Contractor, or to furnish any other considerations under this Agreement and Contractor shall not be obligated to perform any provisions of the Agreement.
- b. If funding for purposes of this project is reduced or deleted for any fiscal year by the California State Budget Act, the State shall have the option to either cancel the Agreement with no liability occurring to the State, or offer an Agreement amendment to Contractor to reflect the reduced amount.

3. PROMPT PAYMENT CLAUSE

Payment will be made in accordance with, and within the time specified in, Government Code Chapter 4.5, commencing with Section 927. Payment to small/micro businesses shall be made in accordance with and within the time specified in Chapter 4.5, Government Code 927 et seq.



MASTER SERVICE AGREEMENT (MSA) **CALIFORNIA PRISON HEALTH CARE SERVICES**

EXHIBIT B-1 **EXAMPLE RATE SHEET⁷**

Contractor hereby agrees to provide all labor and transportation necessary to perform services in accordance with the Statement of Work and the Terms and Conditions of this Agreement.

This Agreement will be invoiced and reimbursed on a deliverable basis subject to completion, and approval by CPHCS' DCIO, or designee, of tasks or deliverables performed by Contractor.

Deliverables shall be reimbursed in accordance with contractors Attachment 1 (Cost Proposal Worksheet)

⁷ Contractor may customize Rate Sheet to correspond to Offer.

EXHIBIT C
CPHCA SPECIAL PROVISIONS

1. ACCOUNTING PRINCIPLES

The Contractor will adhere to generally accepted accounting principles as outlined by the American Institute of Certified Public Accountants. Dual compensation is not allowed; a Contractor cannot receive simultaneous compensation from two or more funding sources for the same services performed even though both funding sources could benefit.

2. SUBCONTRACTOR/CONSULTANT INFORMATION

Contractor is required to identify all subcontractors who will perform labor or render services in the performance of the Agreement. Additionally, the Contractor shall notify the CPHCS, DCIO, within ten (10) working days, of any changes to the subcontractor and/or consultant information.

3. EMPLOYMENT OF EX-OFFENDERS

a. Contractor cannot and will not either directly, or via a subcontracted consultant and/or firm, employ in connection with this Agreement:

- (1) Ex-Offenders on active parole or probation;
- (2) Ex-Offenders at any time if they are required to register as a sex offender pursuant to Penal Code Section 290 or if such ex-offender has an offense history involving a “violent felony” as defined in subparagraph (c) of Penal Code Section 667.5; or
- (3) Any ex-felon in a position which provides direct supervision of parolees.

b. Ex-Offenders who can provide written evidence of having satisfactorily completed parole or probation may be considered for employment by the Contractor subject to the following limitations:

- (1) Contractor shall obtain the prior written approval to employ any such ex-offender from the Authorized Administrator; and
- (2) Any ex-offender whose assigned duties are to involve administrative or policy decision-making; accounting, procurement, cashiering, auditing, or any other business-related administrative function shall be fully bonded to cover any potential loss to the State of California.

4. LICENSES AND PERMITS

The Contractor shall be an individual or firm licensed to do business in California and shall obtain at Contractor’s expense all license(s) and permit(s) required by law for accomplishing any work required in connection with this Agreement.

In the event any license(s) and/or permit(s) expire at any time during the term of this Agreement, Contractor agrees to provide the CPHCS with a copy of the renewed license(s) and/or permit(s) within thirty (30) days following the expiration date. In the event the

Contractor fails to keep in effect at all times all required license(s) and permit(s), the State may, in addition to any other remedies it may have, terminate this Agreement upon occurrence of such event.

5. CONFLICT OF INTEREST

The Contractor and their employees shall abide by the provisions of Government Code (GC) Sections 1090, 81000 et seq., 82000 et seq., 87100 et seq., and 87300 et seq., Public Contract Code (PCC) Sections 10335 et seq. and 10410 et seq., California Code of Regulations (CCR), Title 2, Section 18700 et seq. and Title 15, Section 3409, and the Department Operations Manual (DOM) Section 31100 et seq. regarding conflicts of interest.

a. Contractors and Their Employees

Consultant Contractors shall file a Statement of Economic Interests, Fair Political Practices Commission (FPPC) Form 700 prior to commencing services under the Agreement, annually during the life of the Agreement, and within thirty (30) days after the expiration of the Agreement. Other service Contractors and/or certain of their employees may be required to file a Form 700 if so requested by the CPHCS or whenever it appears that a conflict of interest may be at issue. Generally, service Contractors (other than consultant Contractors required to file as above) and their employees shall be required to file an FPPC Form 700 if one of the following exists:

- (1) The Agreement service has been identified by the CDCR as one where there is a greater likelihood that a conflict of interest may occur;
- (2) The Contractor and/or Contractor's employee(s), pursuant to the Agreement, makes or influences a governmental decision; or
- (3) The Contractor and/or Contractor's employee(s) serves in a staff capacity with the CDCR and in that capacity participates in making a governmental decision or performs the same or substantially all the same duties for the CDCR that would otherwise be performed by an individual holding a position specified in the CDCR's Conflict of Interest Code.

b. Current State Employees

- (1) No officer or employee shall engage in any employment, activity or enterprise from which the officer or employee receives compensation or has a financial interest and which is sponsored or funded by any state agency, unless the employment, activity or enterprise is required as a condition of regular state employment.
- (2) No officer or employee shall contract on his or her own behalf as an independent Contractor with any state agency to provide goods or services.
- (3) In addition to the above, CDCR officials and employees shall also avoid actions resulting in or creating an appearance of:
 - (a) Using an official position for private gain;
 - (b) Giving preferential treatment to any particular person;
 - (c) Losing independence or impartiality;

- (d) Making a decision outside of official channels; and
 - (e) Affecting adversely the confidence of the public or local officials in the integrity of the program.
- (4) Officers and employees of the Department must not solicit, accept or receive, directly or indirectly, any fee, commission, gratuity or gift from any person or business organization doing or seeking to do business with the State.

c. Former State Employees

- (1) For the two year (2-year) period from the date he or she left state employment, no former state officer or employee may enter into an Agreement in which he or she engaged in any of the negotiations, transactions, planning, arrangements or any part of the decision-making process relevant to the Agreement while employed in any capacity by any state agency.
- (2) For the twelve-month (12-month) period from the date he or she left state employment, no former state officer or employee may enter into an Agreement with any state agency if he or she was employed by that state agency in a policy-making position in the same general subject area as the proposed Agreement within the 12-month period prior to his or her leaving state service.

In addition to the above, the Contractor shall avoid any conflict of interest whatsoever with respect to any financial dealings, employment services, or opportunities offered to inmates or parolees. The Contractor shall not itself employ or offer to employ inmates or parolees either directly or indirectly through an affiliated company, person or business unless specifically authorized in writing by the CDCR. In addition, the Contractor shall not (either directly, or indirectly through an affiliated company, person or business) engage in financial dealings with inmates or parolees, except to the extent that such financial dealings create no actual or potential conflict of interest, are available on the same terms to the general public, and have been approved in advance in writing by the CDCR. For the purposes of this paragraph, “affiliated company, person or business” means any company, business, corporation, nonprofit corporation, partnership, limited partnership, sole proprietorship, or other person or business entity of any kind which has any ownership or control interest whatsoever in the Contractor, or which is wholly or partially owned (more than 5% ownership) or controlled (any percentage) by the Contractor or by the Contractor’s owners, officers, principals, directors and/or shareholders, either directly or indirectly. “Affiliated companies, persons or businesses” include, but are not limited to, subsidiary, parent, or sister companies or corporations, and any company, corporation, nonprofit corporation, partnership, limited partnership, sole proprietorship, or other person or business entity of any kind that is wholly or partially owned or controlled, either directly or indirectly, by the Contractor or by the Contractor’s owners, officers, principals, directors and/or shareholders.

The Contractor shall have a continuing duty to disclose to the State, in writing, all interests and activities that create an actual or potential conflict of interest in performance of the Agreement.

The Contractor shall have a continuing duty to keep the State timely and fully apprised in writing of any material changes in the Contractor’s business structure and/or status. This includes any changes in business form, such as a change from sole proprietorship or partnership into a corporation or vice-versa; any changes in company ownership; any

dissolution of the business; any change of the name of the business; any filing in bankruptcy; any revocation of corporate status by the Secretary of State; and any other material changes in the Contractor's business status or structure that could affect the performance of the Contractor's duties under the Agreement.

If the Contractor violates any provision of the above paragraphs, such action by the Contractor shall render this Agreement void.

Members of boards and commissions are exempt from this section if they do not receive payment other than payment for each meeting of the board or commission, payment for preparatory time and payment for per diem.

6. DISCLOSURE

Neither the State nor any State employee will be liable to the Contractor or its staff for injuries inflicted by inmates or parolees of the State. The State agrees to disclose to the Contractor any statement(s) known to State staff made by any inmate or parolee which indicates violence may result in any specific situation, and the same responsibility will be shared by the Contractor in disclosing such statement(s) to the State.

7. SECURITY CLEARANCE/FINGERPRINTING

The State reserves the right to conduct fingerprinting and/or security clearance through the California Department of Justice, Bureau of Criminal Identification and Information (BCII), prior to award and at any time during the term of the Agreement, in order to permit Contractor and/or Contractor's employees' access to State premises. The State further reserves the right to terminate the Agreement should a threat to security be determined.

8. NOTIFICATION OF PERSONNEL CHANGES

Contractor must notify the State, in writing, of any changes of those personnel allowed access to State premises for the purpose of providing services under this Agreement. In addition, Contractor must recover and return any State-issued identification card provided to Contractor's employee(s) upon their departure or termination.

9. NON ELIGIBLE ALIEN CERTIFICATION

By signing this Agreement Contractor certifies, under penalty of perjury, that Contractor, if a sole proprietor, is not a nonqualified alien as that term is defined by the United States Code (U.S.C.) Title 8, Chapter 14, Section 1621 et seq.

The following provisions apply to services provided on departmental and/or institution grounds:

10. BLOODBORNE PATHOGENS

Provider shall adhere to California Division of Occupational Safety and Health (CAL-OSHA) regulations and guidelines pertaining to bloodborne pathogens.

11. TUBERCULOSIS (TB) TESTING

In the event that the services required under this Agreement will be performed within a CDCR institution/parole office/community based program, prior to the performance of contracted duties, Contractors and their employees who are assigned to work with inmates/parolees on a regular basis shall be required to be examined or tested or medically evaluated for TB in an infectious or contagious stage, and at least once a year thereafter or more often as directed by CDCR. Regular contact is defined as having contact with inmates/parolees in confined quarters more than once a week.

Contractors and their employees shall be required to furnish to CDCR, at no cost to CDCR, a form CDCR 7336, "Employee Tuberculin Skin Test (TST) and Evaluation," prior to assuming their contracted duties and annually thereafter, showing that the Contractor and their employees have been examined and found free of TB in an infectious stage. The form CDCR 7336 will be provided by CDCR upon Contractor's request.

12. PRIMARY LAWS, RULES, AND REGULATIONS REGARDING CONDUCT AND ASSOCIATION WITH STATE PRISON INMATES

Individuals who are not employees of the California Department of Corrections and Rehabilitation (CDCR), but who are working in and around inmates who are incarcerated within California's institutions/facilities or camps, are to be apprised of the laws, rules and regulations governing conduct in associating with prison inmates. The following is a summation of pertinent information when non-departmental employees come in contact with prison inmates.

By signing this contract, the Contractor agrees that if the provisions of the contract require the Contractor to enter an institution/facility or camp, the Contractor and any employee(s) and/or subcontractor(s) shall be made aware of and shall abide by the following laws, rules and regulations governing conduct in associating with prison inmates:

- a. Persons who are not employed by CDCR, but are engaged in work at any institution/facility or camp must observe and abide by all laws, rules and regulations governing the conduct of their behavior in associating with prison inmates. Failure to comply with these guidelines may lead to expulsion from CDCR institutions/facilities or camps.

SOURCE: California Penal Code (PC) Sections 5054 and 5058; California Code of Regulations (CCR), Title 15, Sections 3285 and 3415

- b. CDCR does not recognize hostages for bargaining purposes. CDCR has a "NO HOSTAGE" policy and all prison inmates, visitors, and employees shall be made aware of this.

SOURCE: PC Sections 5054 and 5058; CCR, Title 15, Section 3304

- c. All persons entering onto institution/facility or camp grounds consent to search of their person, property or vehicle at any time. Refusal by individuals to submit to a search of their person, property, or vehicle may be cause for denial of access to the premises.

SOURCE: PC Sections 2601, 5054 and 5058; CCR, Title 15, Sections 3173, 3177, and 3288

- d. Persons normally permitted to enter an institution/facility or camp may be barred, for cause, by the CDCR Director, Warden, and/or Regional Parole Administrator.

SOURCE: PC Sections 5054 and 5058; CCR, Title 15, Section 3176 (a)

- e. It is illegal for an individual who has been previously convicted of a felony offense to enter into CDCR institutions/facilities or camps without the prior approval of the Warden. It is also illegal for an individual to enter onto these premises for unauthorized purposes or to refuse to leave said premises when requested to do so. Failure to comply with this provision could lead to prosecution.

SOURCE: PC Sections 602, 4570.5 and 4571; CCR, Title 15, Sections 3173 and 3289

- f. Encouraging and/or assisting prison inmates to escape are a crime. It is illegal to bring firearms, deadly weapons, explosives, tear gas, drugs or drug paraphernalia on CDCR institutions/facilities or camp premises. It is illegal to give prison inmates firearms, explosives, alcoholic beverages, narcotics, or any drug or drug paraphernalia, including cocaine or marijuana.

SOURCE: PC Sections 2772, 2790, 4533, 4535, 4550, 4573, 4573.5, 4573.6 and 4574

- g. It is illegal to give or take letters from inmates without the authorization of the Warden. It is also illegal to give or receive any type of gift and/or gratuities from prison inmates.

SOURCE: PC Sections 2540, 2541 and 4570; CCR, Title 15, Sections 3010, 3399, 3401, 3424 and 3425

- h. In an emergency situation the visiting program and other program activities may be suspended.

SOURCE: PC Section 2601; CCR, Title 15, Section 3383

- i. For security reasons, visitors must not wear clothing that in any way resembles state issued prison inmate clothing (blue denim shirts, blue denim pants).

SOURCE: CCR, Title 15, Section 3171 (b) (3)

- j. Interviews with SPECIFIC INMATES are not permitted. Conspiring with an inmate to circumvent policy and/or regulations constitutes a rule violation that may result in appropriate legal action.

SOURCE: CCR, Title 15, Sections 3261.5, 3315 (3) (W), and 3177

13. CLOTHING RESTRICTIONS

While on institution grounds, Contractor and all its agents, employees, and/or representatives shall be professionally and appropriately dressed in clothing distinct from that worn by inmates at the institution. Specifically, blue denim pants and blue chambray shirts, orange/red/yellow/white/chartreuse jumpsuits and/or yellow rainwear shall not be worn onto institution grounds, as this is inmate attire. The Contractor should contact the

institution regarding clothing restrictions prior to requiring access to the institution to assure the Contractor and their employees are in compliance.

14. TOBACCO-FREE ENVIRONMENT

Pursuant to Penal Code Section 5030.1, the use of tobacco products by any person on the grounds of any institution or facility under the jurisdiction of the Department of Corrections and Rehabilitation is prohibited.

15. SECURITY REGULATIONS

- a. Unless otherwise directed by the entrance gate officer and/or Contract Manager, the Contractor, Contractor's employees and subcontractors shall enter the institution through the main entrance gate and park private and nonessential vehicles in the designated visitor's parking lot. Contractor, Contractor's employees and subcontractors shall remove the keys from the ignition when outside the vehicle and all unattended vehicles shall be locked and secured while on institution grounds.
- b. Any State- and Contractor-owned equipment used by the Contractor for the provision of contract services, shall be rendered temporarily inoperative by the Contractor when not in use, by locking or other means unless specified otherwise.
- c. In order to maintain institution safety and security, periodic fire prevention inspections and site searches may become necessary and Contractor must furnish keys to institutional authorities to access all locked areas on the worksite. The State shall in no way be responsible for Contractor's loss due to fire.
- d. Due to security procedures, the Contractor, Contractor's employees and subcontractors may be delayed at the institution vehicle/pedestrian gates and sally ports. Any loss of time checking in and out of the institution gates and sally ports shall be borne by the Contractor.
- e. Contractor, Contractor's employees and subcontractors shall observe all security rules and regulations and comply with all instructions given by institutional authorities.
- f. Electronic and communicative devices such as pagers, cell phones and cameras/microcameras are not permitted on institution grounds.
- g. Contractor, Contractor's employees and subcontractors shall not cause undue interference with the operations of the institution.
- h. No picketing is allowed on State property.

16. GATE CLEARANCE

Contractor and Contractor's employee(s) and/or subcontractors(s) must be cleared prior to providing services. The Contractor will be required to complete a Request for Gate Clearance for all persons entering the facility a minimum of ten (10) working days prior to commencement of service. The Request for Gate Clearance must include the person's name, social security number, valid state driver's license number or state identification card number and date of birth. Information shall be submitted to the Contract Liaison or his/her designee. CDCR uses the Request for Gate Clearance to run a California Law Enforcement Telecommunications System (CLETS) check. The check will include a California Department of Motor Vehicles check, Wants and Warrants check, and Criminal History check.

Gate clearance may be denied for the following reasons: Individual's presence in the institution presents a serious threat to security, individual has been charged with a serious crime committed on institution property, inadequate information is available to establish positive identity of prospective individual, and/or individual has deliberately falsified his/her identity.

All persons entering the facilities must have a valid state driver's license or photo identification card on their person.

17. BUSINESS ASSOCIATE AGREEMENT

The awarded Contractor will be required meet provisions of the Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191 ("HIPAA") and the regulations promulgated thereunder. The Business Associate Agreement can be located at the link below:

http://www.cdcr.ca.gov/Divisions_Boards/Plata/HIPPA_ExhibitG.html.

18. ELECTRONIC WASTE RECYCLING

The Provider certifies that it complies with the requirements of the Electronic Waste Recycling Act of 2003, Chapter 8.5, Part 3 of division 30, commencing with Section 42460 of the Public Resources Code, relating to hazardous and solid waste. Provider shall maintain documentation and provide reasonable access to its records and documents that evidence compliance. CPHCS electronic data stored upon any Provider device must be returned to the CPHCS immediately and the vendor must certify that CPHCS data is either removed from the Providers devices by degaussing or shredding per National Institute of Standards and Technology (NIST) Special Publication Series 800-88 and National Industrial Security Program (NISP) Operating Manual (DOD 5220.22-M) and Clearing and Sanitization Matrix (C&SM) based on NSA/CSS Policy Manual 9-12, "Storage Device Declassification Manual".

**ATTACHMENT A
PAYEE DATA RECORD (STD 204)**

The Payee Data Record (STD 204) can be located at the link below:

<http://www.documents.dgs.ca.gov/osp/pdf/std204.pdf>

**ATTACHMENT B
CONTRACTOR CONFIDENTIALITY STATEMENT**

I understand that Consultant can be categorized as a public official for purposes of adherence to Conflict of Interest laws and the filing of a Statement of Economic Interests (Form 700). I certify that I have read and understand Conflict of Interest provisions identified in the online presentation “Ethics Orientation for State Officials” sponsored by the State of California Department of Justice, Office of the Attorney General and the Fair Political Practices Commission located at <http://caag.state.ca.us/ethics/index.htm>.

I certify that I have no personal or financial interest and no present or past employment or activity which would be incompatible with my participation in any activity related to the planning or procurement processes for bMAR Development (RFO #11-013-ITS). For the duration of my involvement in this Project, I agree not to accept any gift, benefit, gratuity or consideration, or begin a personal or financial interest in a party who is offering, or associated with a business, on the Project.

I certify that I will keep confidential and secure and will not copy, give or otherwise disclose to any other party who has not signed a copy of this confidentiality Agreement, all information concerning the planning, processes, development or procedures of the Project and all bids, proposals, correspondence, etc. which I learn in the course of my duties on the Project. I understand that the information to be kept confidential includes, but is not limited to, specifications, administrative requirements, terms and conditions, any aspect of any supplier’s response or potential response to the solicitation, and includes concepts and discussions as well as written or electronic materials. I understand that if I leave this Project before it ends, I must still keep all Project information confidential. I understand that following completion of this project that I must still maintain confidentiality should the Project and/or my organization be subject to follow-on contracting criteria per Public Contract Code §10365.5. I agree to follow any instructions provided related to the Project regarding the confidentiality of Project information.

I fully understand that any unauthorized disclosure I make may be grounds for civil or criminal penalties and/or contract termination. I agree to advise the Director of the CPHCS Project Management Office immediately in the event that I either learn or have reason to believe that any person who has access to Project confidential information has or intends to disclose that information in violation of this Agreement. I also agree that any questions or inquiries from bidders, potential bidders or third parties shall not be answered by me and that I will direct them to CPHCS’ Project Management Office.

Signature: _____ Date: _____

Printed Name: _____ Title: _____

Organization: _____ Telephone Number: _____

Fax Number: _____

Email Address: _____

ATTACHMENT C
NON-DISCLOSURE AGREEMENT

I certify that I will hold in confidence all discussions, bids, proposals, correspondence, memoranda, working papers, procurement of goods and services, or any other information on any media, which has any bearing on or discloses any aspect of the Barcode Medication Access Record (bMAR) projects. Based on my involvement with CPHCS bMAR project, where applicable, I certify that I have no personal or financial interest and no present employment or activity, which would be incompatible with my participation in the discussions, review and or participation in the procurement process for the bMAR, CDR and related initiative(s)/procurement(s)/trainings thereof.

At all times during and after the process by which the California Prison Health Care Services and/or the California Department of Corrections and Rehabilitation (CDCR) procures goods and services to create the Project, CPHCS' and/or CDCR's employees, CPHCS' prospective bidders, and/or CPHCS and/or CDCR's vendors will keep confidential, and will not disclose to any third party or use, such confidential information, except in the course of their employment by or contractual relationship with the Department, and for the benefit of CDCR. The parties will protect CPHCS' and/or CDCR's confidential information using the same degree of care, but no less than a reasonable degree of care, as such party uses to protect his/her/its own confidential information. The parties will carefully restrict access to CPHCS' confidential information, and they may disclose it only to their employees, contractors, and/or other State agencies that have a need to know it and are bound by obligations of confidentiality.

I certify that I am fully able to provide fair and impartial consideration and contribution to all aspects of this project in which I am directly involved. I fully understand that any such disclosure by an employee of the State of California may be considered as a basis for disciplinary action.

Signature: _____ Date: _____

Printed Name: _____

Title _____

Organization: _____

Telephone Number: _____

Fax Number: _____

Email Address: _____

ATTACHMENT D
STATEMENT OF ECONOMIC INTERESTS (FORM 700)

The Statement of Economic Interests (Form 700) can be located at the link below:

<http://www.fppc.ca.gov/forms/700-10-11/Form700-10-11.pdf>

PROJECT CONCEPT

1-28-2011

California Prison Health Care Services

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1. BACKGROUND

1.1 Business Problem

The paper medication administration record (MAR) process has resulted in large amounts of paper being consumed for the purpose of printing MARs and Supplemental MARs. This paper has resulted in a significant increase of loose filing for Medical Records to place in the Unit Health Record.

The paper MAR process also presents opportunity for error during the recording of medications. It does not currently record the actual time of administration, only that a medication intended during a particular medication pass has been administered.

The paper MAR process does not support medication administration analysis or auditing without significant manual effort being expended to review each MAR.

Patient specific medication has resulted in a significant increase of medication inventory to be stored in the medication service areas, most of which are limited in space.

Patient specific medication has resulted in much larger on hand inventory in the system than would be required if medications were not patient specific.

Patient specific medication has resulted in a significant amount of effort to reclaim unused medication returned to pharmacy or waste when the medication cannot be reclaimed. Very often the returned medication cannot be reclaimed and must be wasted resulting in significant cost to the state.

The Central Fill Pharmacy project has been halted due to concerns that the facility will not be able to handle the level of patient specific medication filling that would be required when rolled out to all 33 institutions.

1.2 Background

Current institutional processes for recording, tracking and storing the administration of medication are manual and paper based. The pharmacy prints a MAR that is delivered to medication nurses with the medications. Nurses record administration directly on the paper MAR which is then sent to Medical Records on at least a monthly basis as loose filing to be placed in the Unit Health Record (UHR).

In addition, as part of the GuardianRx Pharmacy Conversion Project medication was converted from clinic stock to patient specific filling to address concerns with patient safety.

2. SYSTEM CONCEPT

2.1 Project Goal Statement

The primary goal of the Bar Code MAR project is to define, develop and deliver a technology replacement to the paper MAR processes currently employed in 32 institutions.

2.2 Project Objectives Statements

To meet the project goal to develop a Bar Code MAR solution the project objectives are:

- Document cross-program agreement on the business requirements that define the solution
- Develop system and technology requirements that fully satisfy the business requirements
- Develop a solution that satisfies all defined requirements
- Fully test, with proper documentation the solution and formally accept the solution
- Reengineer current medication administration processes
- Reengineer current medication inventory processes
- Develop a roll out plan to the institutions to include the reengineered process and training on the Bar Code MAR system
- Place the solution into production

2.3 Project Scope

The Bar Code MAR Project will be performed in two phases. Phase I will address the development of a Bar Code MAR system. Phase II will address the implementation of the system and associated processes in the institutions. Phase II will also address requirements identified as enhancements to the system

2.3.1 In Scope

- Define and approve business, system, and technical requirements
- Reengineer affected business processes, clinical and pharmacy
- Develop a Bar Code MAR system
- Define the roll out plan for implementing the solution in 33 institutions
- Keep on Person (KOP) and Nurse Administered (NA)/Directly Observed Therapy (DOT) MAR replacement for out-patient medications
- Review and modification of patient-specific filling model

- Identification and procurement of equipment that will support or present the solution (e.g., mobile devices, server infrastructure, mounting equipment)
- Procurement of resources
- Reengineering of medication administration processes
- Reengineering of medication dispensing models
- Review of and championing necessary policy requirements to align with new processes
- Development and deployment of inmate IDs containing bar coded information
- Deployment of the bMAR technology to 32 institutions
- Interface development to other CPHCS healthcare systems
 - GuardianRx Pharmacy System for medication data
 - Strategic Offender Management System (SOMS) for inmate housing information
 - Electronic Medical Record (eMR) to store and archive medication administration with the inmate medical record
 - MPIMS, to capture medication administration information from Pelican Bay State Prison in bMAR for analysis, reporting, and continuity of care

2.3.2 Out of Scope

- Other recording requirements by nursing not specifically defined as “In Scope”, e.g., treatment MAR
- Recording of in-patient medication administration
- Computerized Physician Order Entry (CPOE)
- Pharmacy system shortcomings
- Will not provide automated medication use feedback to pharmacy for inventory control and auditing
- Base infrastructure upgrades (e.g., power, construction, network)

2.4 Solution Vision

The Bar Code MAR Project will allow CPHCS to significantly reduce the amount of paper that must be printed and subsequently filed by Medical Records. The project will allow for CPHCS to modify its medication filling practices, taking advantage of technology safeguards to improve medication availability and reduce medication inventory and storage.

This project focuses on supporting the following business functions:

- Providing a digital replacement to paper for Medication Administration

- Providing a platform for health care services to modify medication dispensing practices to improve medication availability, reduce drug inventory on hand requirements, and reduce space requirements for the storage of medications
- Providing a platform to improve reporting and analytic research of medication administration practices

2.5 Critical Success Factors

The following are the critical success factors of the Bar Code MAR project:

- Cross functional program agreement and support of the project.
- Use of an experienced and respected project team using proven life cycle processes.
- Input to, and acceptance of, the system and the related process changes by nurses, pharmacy staff and other key personnel for medical, mental health and dental practices.
- Adequate technology resource support in terms of staff, infrastructure, and equipment
- Deployment of inmate IDs containing a bar coded unique identifier

3. PROJECT APPROACH

3.1 Approach

To meet the project goal to deliver a digital MAR solution to CPHCS the project will:

- Define the business, system and technical requirements of a digital MAR system
- Obtain client and user input on the requirements
- Obtain cross functional agreement of the requirements with positive validation of elements that are in scope and those that are out of scope
- Conduct a product analysis for COTS packages that will satisfy the requirements
- Design and develop the system using a waterfall approach consisting of timed releases thereby mitigating risks to running multiple parallel activities.
- Assign state resources or individual contractors as development leads
- Contract with a vendor for core design and development responsibilities
- Follow a rigorous, fully documented test process and plan to ensure system stability and accuracy
- Project will use Request for Offers (RFOs), leveraging CMAS and MSA, to procure the development resources
- Project will be developed using CPHCS Standards in application development which is .NET technologies and SQL Server 2008 database.

Once the solution has been placed into production and is ready for deployment the project will:

- Conduct a single pilot site deployment to test and validate the technology, processes, policies, and change management
- The project will pause in before moving to the next deployment, allowing for a “burn-in” period during which the institution staff and headquarters management will assess the system for suitability to proceed
- Any issues identified during the “burn in” period will be addressed and signed off by the project stakeholders prior to initiating further deployments
- Once deployments initiate to the remaining sites that project will schedule periodic pauses to reassess the success of the project and address any issues that are identified
- bMAR project deployment will incorporate the Central Fill Pharmacy deployment within the schedule to limit pharmacy project deployment impact to the institutions

- Professional trainers will be engaged to provide nurse training on the system
- Extended onsite support will be engaged

3.2 Assumptions and Constraints

- Sufficient resources can be obtained to maintain multiple parallel tracked activities
- Resources with the correct knowledge, experience, and skills can be obtained for the solution development
- The solution must be designed to work without a persistent network connection
- The solution will focus on functions that represent the majority of medication administration to maintain a rapid delivery schedule
- Functions that represent the minority of medication administration will be delayed for future releases
- The solution will not prevent documentation of medication administration in favor of system checks
- Systems from which bMAR must obtain information will be capable of collaborating with the development team to satisfy the project schedule
- The bMAR solution will define the system and technical requirements to satisfy the timelines and critical requirements; additional interfaces to other stakeholders will not delay the development schedule
- The solution must be proven to have 100% data accuracy on the interface from the GuardianRx pharmacy system prior to going live with the system at the first institution
- The Central Fill Pharmacy will be licensed as a repackaging facility thereby allowing the Central Fill Pharmacy to package and deliver medication into blister cards that is not patient specific
- External agencies such as the State Board of Pharmacy will not block the institution from providing non-patient specific medications to nurse administration points



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Barcode Medication Administration Record

bMAR Use Cases

Version <1.0>

Use Case	Version: <1.0>
bMAR Use Cases	Issue Date: <dd/mmm/yy>
<document identifier>	

Revision History

Date	Version	Description	Author
<dd/mmm/yy>	<x.x>	<details>	<name>

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Use Case Specification: Manage Prescriber Order

UC 1: Overview: Manage Prescriber Order

Goal and Summary

Activities depicted in this use case does not utilize bMAR and hence, this use case serves only as an entry point leading to other activities that use bMAR.

The goal of this use case is to describe the process and circumstances when managing prescriber orders. Each prescriber order may contain one or more medications. There are three types of prescriber order, Stat order, Medication Renewal order (a.k.a. Continuation or Interim order), and New order. Prescriber order is always given to Nurse first. Nurse takes different actions depending on the type of prescriber order given. For managing Stat order, see [Use Case 2: Manage Stat Order]. This use case document the activities that Nurse performs after receiving a New or Medication Renewal prescriber order.

See the last section, [Overview of Use Cases](#), to gain an overall understanding of how use cases relate to each other.

Actors

Primary Actor: Nurse

Secondary Actor: Prescriber, Pharmacy, GuardianRx

Trigger

Whenever a prescriber writes a New or Medication Renewal order and gives to Nurse.

Flow of Events

Basic Flow

1. Prescriber writes an order and the order is always given to Nurse (never given directly to Pharmacy). See [\[Special Requirement 1, 2, and 3\]](#).
2. Nurse takes the order, keeps a copy, sends a copy to Pharmacy, and forwards the original order to UHR (HIM is in charge of UHR). [Policy: For brand new order, Nurse cannot do anything until Pharmacy has completed its work and verification]. In some institutions, Nurse uses scanner to scan orders directly into GuardianRx.
3. Pharmacy has the medication ready on the next business day if the order is received by 3 PM on the previous day. Otherwise, pharmacy needs one extra business day to have the medication ready. See [\[Special Requirement 4\]](#).

Special Requirements

< 1 Expiration Time of Prescriber Order >

bMAR will make all prescriber orders expire at midnight on the 30th calendar day starting the day the medication is filled by Pharmacy. If there are refills, they will be treated as Medication Renewal orders. If there are no more refills, a New prescriber order will be required. No grace period is allowed for expired orders.

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< 2 Order Entry in GuardianRx >

Pharmacies need to enter prescriber orders into GuardianRx by their respective closing times of local pharmacies. NOTE: This has a down stream impact to bMAR because bMAR retrieves details about orders from GuardianRx.

< 3 Out of Scope Areas >

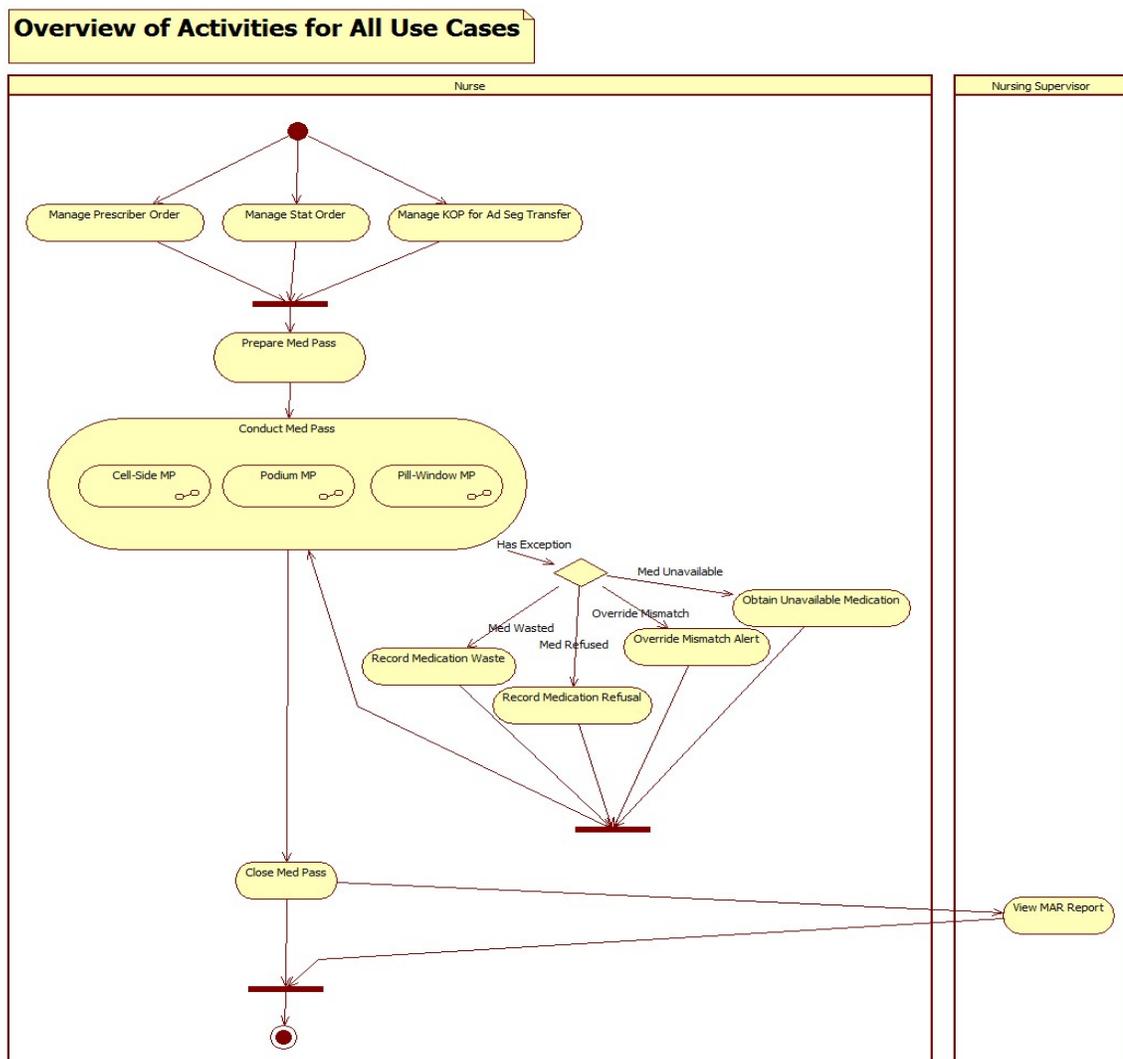
Management of prescriber orders and medication administration that are related to in-patient care is out of scope for bMAR. Nursing will continue to follow existing practices for all in-patient care.

< 4 Pharmacy Cut-Off Time for Prescriber Orders >

Central Fill has a daily 3 PM cut-off time. Nursing prefers to change the cut-off time to 4 PM if possible in the future.

Overview of Use Cases

This section provides a visual overview of use cases and how they relate to each other.



California Prison Health Care System

Use Case Specification: Manage Stat Order

UC2: Overview: Manage Start Order

Goal and Summary

Activities depicted in this use case does not utilize bMAR and hence, this use case serves only as an entry point leading to other activities that use bMAR.

The goal of this use case is to describe the process and circumstances when managing Stat orders. There are three types of prescriber order, Stat order, Medication Renewal order (a.k.a. Continuation or Interim order), and New order. Even though Stat order is also a prescriber order, it is handled very differently by Nurse. Furthermore, there are two types of Stat order, emergent and urgent. This use case documents the activities that Nurse performs after receiving a Stat order.

See the last section, [Overview of Use Cases](#), to gain an overall understanding of how use cases relate to each other.

Actors

Primary Actor: Nurse
Secondary Actor: Pharmacy, Patient/Inmate

Trigger

Whenever a prescriber writes a Stat order and gives to Nurse

Flow of Events

Basic Flow

4. Prescriber writes a Stat order and gives to Nurse.
5. If it's an emergent Stat order, Nurse immediately administers medication(s). Go to Step 5 if it's a urgent Stat order.
6. Nurse writes notes on the emergent Stat order (paper form) and forwards a copy to Pharmacy.
7. Pharmacy ensures MAR (as a result of Stat order) is recorded in GuardianRx, which would in turn enable bMAR to obtain the recorded details of MAR.
8. If it's a urgent Stat order, Nurse sends a copy of urgent Stat order to Pharmacy to obtain the medication(s).
9. Pharmacy has a limited time to transcribe the order, fill the order, and deliver the medication back to Nurse.
10. Currently, Nurse reconciles the order/medication, see [Use Case 3: Reconcile Prescriber Order]. NOTE: In the future, Nurse will no longer perform order reconciliation.
11. Nurse administers the medication to Patient/Inmate.

Overview of Use Cases

This section provides a visual overview of use cases and how they relate to each other.

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Use Case Specification: Reconcile Prescriber Order

UC 3: Overview: Reconcile Prescriber Order

Goal and Summary

In the future, Nursing will no longer perform prescriber order reconciliation. Thus, bMAR will not support any activities related to order reconciliation. This use case, Reconcile Prescriber Order, is deprecated.

The goal of this use case is to describe the process when reconciling prescriber orders, which may contain one or more medications. Prescriber orders should always be reconciled by Nurse. There are three types of prescriber order, stat order, medication renewal order, and new order. Nurse takes different actions during reconciliation depending on the type of prescriber order and type of medication (i.e. NA/DOT vs. KOP). This use case documents the activities that Nurse performs when reconciling prescriber orders.

See the last section, [Overview of Use Cases](#), to gain an overall understanding of how use cases relate to each other.

Actors

Primary Actor: Nurse
Secondary Actor: Pharmacy

Pre-Conditions

< Logged in bMAR >

Nurse is already logged into bMAR successfully.

Trigger

When medication(s) in a prescriber order is scheduled to be available to Nurse.
Whenever Nurse chooses to reconcile prescriber orders.

Flow of Events

Basic Flow

12. Nurse navigates to the prescriber order reconciliation function in bMAR. Optionally, Nurse selects MSA location(s) for filtering unreconciled orders.
13. bMAR shows a list of orders that is scheduled to be available on the same day. <Clifton: Expected delivery time is not entered/available in GRx. Currently, Pharmacy delivers KOP at 10am and 2pm. BID requires 8 hours spread.> For emergent Stat Order, see [\[Alternate Flow: Reconcile Emergent Stat order\]](#).
14. For every prescriber order on the list, Nurse verifies the MAR (displayed by bMAR) matches the details on the copy of prescriber order, which Nurse has on file when first received the order from prescriber. <CR: Check to see if noting of order by Nursing is still required, for in-patient, out-patient>. For KOP, see [\[Alternate Flow: Reconcile Order for KOP\]](#).
15. If reconciled correctly, Nurse prompts bMAR to record the successful reconciliation. If there is a mismatch, Nurse does not change the status of unreconciled prescriber order in bMAR until discrepancy is resolved with Pharmacy. Note: How Nurse resolve discrepancy with Pharmacy is out of scope of bMAR. [\[Special Requirement: 1 Status of Medication\]](#)
16. bMAR records the time, date, and Nurse, who performed the reconciliation, for the medication order by Physician.
17. Step 3 to 5 are repeated for every medication on a prescriber order that needs to be reconciled.

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Alternative Flows

< Reconcile Emergent Stat Order >

1. In the case when Nurse administers an emergent Stat order immediately, Nurse writes notes on Stat order (paper form) afterward and sends a copy of Stat order to Pharmacy.
2. Pharmacy transcribes the Stat order for medication(s), which is already administered, into GuradianRx.
3. bMAR synchronizes with GuradianRx about the detail of Stat order. Medication(s) in such situation would show up as “Administered” in bMAR.
4. Nurse does not need to reconcile emergent Stat order.
5. Return to the Basic Flow

< Reconcile Order for KOP >

1. Only after KOP is delivered by Pharmacy, Nurse tries to reconcile KOP. <All KOP delivered need to be reconciled for out-patient.> <Option to mail KOP and barcode will not be needed> <Inmate fills out 7362-svc request that can go straight to Pharm for refilling KOP>.
2. For KOP medication, Nurse scans the bar code (e.g. CDCR#) on the package of KOP.
3. bMAR performs a “reverse look-up” to retrieve and display medication profile of the Inmate who needs the KOP. This step verifies that KOP medication matches to the correct Patient/Inmate. <Clifton input: What are the additional information (e.g. barcode for CDCR #) that can be printed on the package of KOP so that bMAR can performs this verification through reverse look-up?>
4. Nurse visually verifies the MAR (displayed by bMAR) matches the details on Nurse's copy of prescriber order.

Post-Conditions

< Post-condition One >

Business Rules

List the harvested business rules here, if any.

Special Requirements

< 1. Status of Medication >

bMAR must provide a mechanism for Nurse to see the status of medication with respects to ordering, reconciling, and administering. The status of medication can be the following:

1. Order Status: Ordered, Filled, or Delivered. Initial default value is Ordered. As soon as a prescriber order is entered into GRx/bMAR, its status should be Ordered. <Thsu: Not sure if “Filled” or “Delivered” is technically possible if Pharmacy is not tracking the progress of filling/delivering medications>
2. Reconciliation Status: Reconciled or Unreconciled. Initial default value is Unreconciled. Unreconciled status should not prevent Nurse from administering the medication. bMAR will provide a special indication for an unreconciled medication that is administered.
3. Administration Status: Administered or Not-administered. Initial default value is Not-administered.

< 2. Forward and Reverse Look-Up >

A forward look-up is when P/I's CDCR # (or barcode of CDCR #) is first entered into bMAR to retrieve a list of active medications from P/I's medication profile, bMAR then looks up or verifies that Nurse's selection of medication (through scanning barcode on the package of medication) indeed matches one of the active medications on P/I's medication profile. Forward look-up is usually performed when verifying clinic stock medications. A reverse look-up is when Nurse's selection of a patient-specific medication (through scanning barcode on the package of medication) is first entered into bMAR, bMAR then looks up or verifies that Nurse's selection is indeed one of the active medications on P/I's medication profile.

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Reverse look-up is needed for efficiently reconciling patient-specific medications. Additional barcode and/or details must be included on the packaging of patient-specific medications in order to enable bMAR to perform reverse look-up.

Overview of Use Cases

This section provides a visual overview of use cases and their relationship to each other.

California Prison Health Care System

Use Case Specification: Manage KOP for Ad Seg Transfer

UC4: Overview: Manage KOP for Ad Seg Transfer

Goal and Summary

The goal of this use case is managing KOP for Inmates who are being transferred in or out of Administration Segregation (Ad Seg). Depending on whether an Inmate is being transferred in or out of Ad Seg, KOP needs to be managed differently. In addition, Custody needs to be involved in recovering KOP from Inmate when transferring into an Ad Seg.

See the last section, [Overview of Use Cases](#), to gain an overall understanding of how use cases relate to each other.

Actors

Primary Actor: Nurse

Secondary Actor: Custody, Patient/Inmate (P/I), Pharmacy, GuardianRx

Pre-Conditions

An Inmate is prescribed with KOP.

Trigger

When Custody contacts Nurse through Form 154 that an Inmate is about to be transferred in or out of Ad Seg.

Flow of Events

Basic Flow

18. Custody notifies Nurse with Form 154 that P/I is about to be transferred into Ad Seg. In addition, Custody gives KOP, which is recovered from P/I, to Nurse. See [[Alternate Flow: Keeping Inmate's KOP](#)]
19. Nurse notifies Pharmacy that P/I is being transferred into Ad Seg and passes along the recovered KOP medication back to Pharmacy.
20. GuradianRx obtains the Ad Seg transfer status (once daily) and marks P/I's housing assignment status as "Ad Seg". bMAR synchronizes with GuardianRx and places a special flag on P/I's KOP as DOT for Med Passes. Note that administering medications to P/I in Ad Seg is no different than administering medications to P/I during Cell-Side med passes. As long as clinic stock medication has the same KOP, Nurse can continue to administer to P/I in Ad Seg from existing clinic stock med. See [[Special Requirement 1](#)]
21. When P/I is being transferred out of Ad Seg, see [[Alternate Flow 1: Manage KOP for Transferring Out of Ad Seg](#)]

Alternative Flows

< Manage KOP for Transferring Out of Ad Seg >

6. Custody provide form-154 to Nurse. <Thsu: Does Nurse need to notify Pharmacy that Inmate is being transferred out of Ad Seg?>

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7. GuradianRx obtains the Ad Seg transfer status daily and marks P/I's housing assignment status as normal, i.e. not in Ad Seg. Then, bMAR synchronizes with GuardianRx and removes the special flag that marked P/I's KOP as DOT.
8. Custody returns KOP to P/I if Custody has kept P/I's KOP together with P/I's personal belonging.
9. If P/I does not have KOP for any reasons, Nurse can administer KOP (from clinic stock) during med passes until P/I's new KOP is mailed or delivered.

< Keeping Inmate's KOP >

- Custody may choose to keep P/I's KOP together with all other personal belonging until P/I is transferred out of Ad Seg.
- In this case, Custody will return P/I's KOP when P/I is being transferred out of Ad Seg.

Special Requirements

< Stocking Common KOP at MSA >

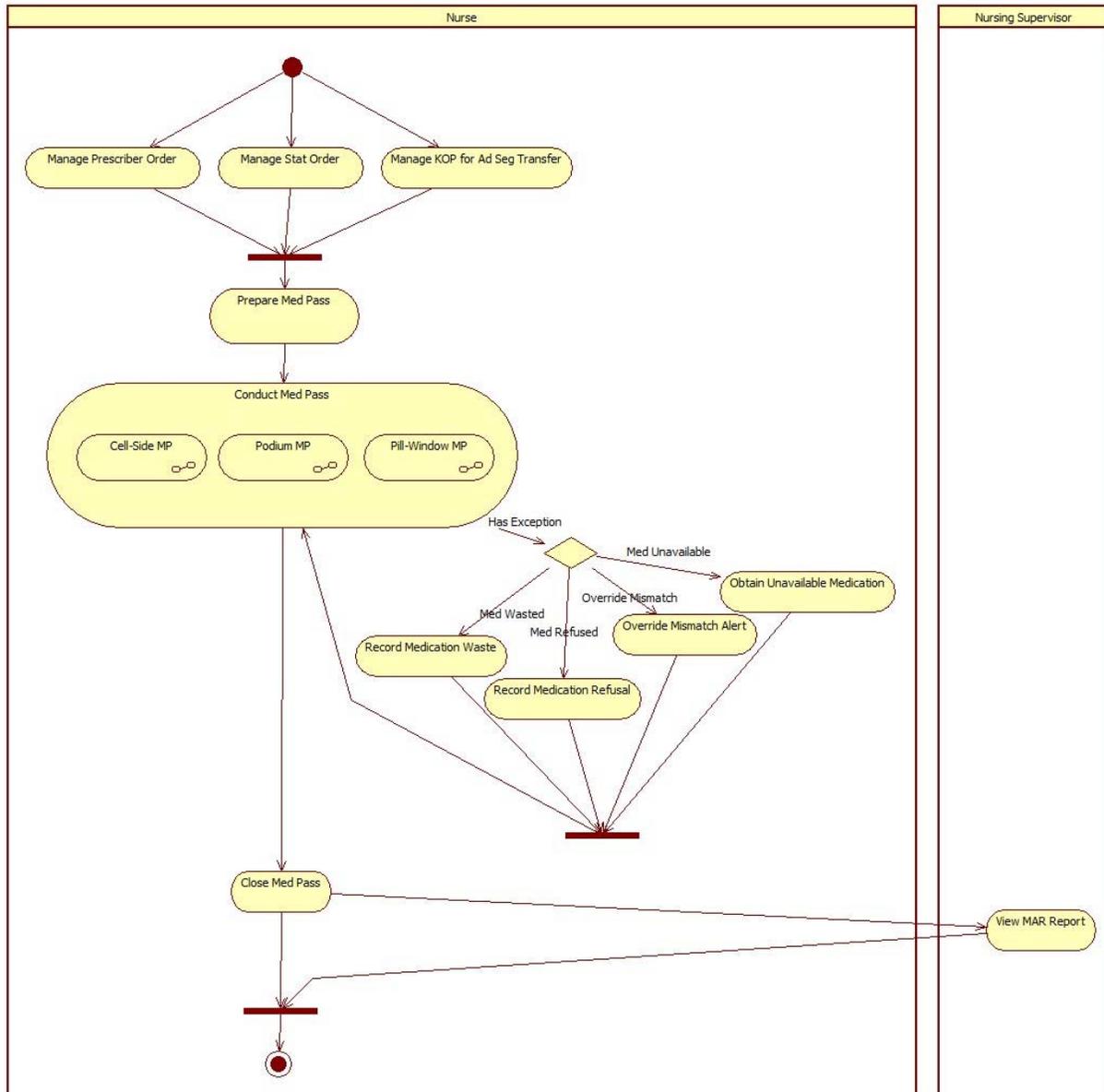
Pharmacy will provide common KOP at MSA locations as part of clinic stock medication. Such practice will enable Nurse to administer KOP (from clinic stock) to Inmates who are either in Ad Seg or who are temporarily out of KOP after being transferred out of Ad Seg.

Overview of Use Cases

This section provides a visual overview of use cases and their relationship to each other.

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Overview of Activities for All Use Cases



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Use Case Specification: Prepare Med Pass

UC5: Overview: Prepare Med Pass

Goal and Summary

The goal of this use case is to describe the preparation needed by a nurse before conducting a medical pass, or Med Pass (MP), which is a scheduled occurrence for the administration and/or distribution of medication to inmates. There are three types of Med Passes, Cell-Side, Podium, and Pill-Window.

See the last section, [Overview of Use Cases](#), to gain an overall understanding of how use cases relate to each other.

Actors

Primary Actor: Nurse

Secondary Actor: DDPS, GuardianRx

Pre-Conditions

Nurse is already logged into bMAR

GuardianRx, and/or DDPS must be available for exchanging information with bMAR

Trigger

Nurse starts the preparation work based on schedules of MPs. The schedules vary from prison to prison. It's usually between 6am-9am for morning MP, and 11am-1pm for afternoon MP, 4pm-7pm for evening MP, and 8pm for HS MP.

Flow of Events

Basic Flow

In bMAR, Nurse navigates to the MP preparation page and selects a type of MP to prepare for [[Special Requirement: Type of Med Passes](#)] and then prompts bMAR to start recording the duration needed for preparation work.

bMAR timestamps the start of preparation work, marks the type of MP being prepared for, and, based on the selected type of MP, displays (A) applicable MSA locations, (B) Summary of preparation tasks to be performed by a Nurse.

Nurse selects one or more MSA location(s) within a prison [[Special Requirement: MSA Location](#)].

bMAR retrieves Inmate's profile (including both medical and demographic details) [[Special Requirement: P/I Demographic Information](#)], generates, and displays the Med Pass Report based on Nurse's selection of MSA location(s). For Pill-Window MP, see [[Alternate Flow: Prepare Pill-Window MP](#)].

Nurse ensures that hand-held device (HHD) is properly seated in its docking station and prompts bMAR to upload/synchronize Med Pass Report with the HHD [[Special Requirement: Hand Held Device](#)].

bMAR uploads Med Pass report to the HHD. For Podium Med Pass, see [[Alternate Flow: Prepare Podium Med Pass](#)].

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Nurse prompts bMAR to switch to the View 2, which is the profile-centric view of Med Pass Report [[Special Requirement: Views of Med Pass Report](#)]. In addition, Nurse indicates in bMAR that a pre-pour is needed [[Special Requirement: Elimination of Pre-Pour](#)].

For each P/I listed on View 2 of Med Pass Report shown by bMAR, Nurse finds the pill envelop for the P/I and scans the bar code on the envelop. If there is no pill envelop for the selected P/I, see [[Alternate Flow: Print Bar Code Label Sticker](#)]

bMAR displays a visual message and an audible sound to confirm the correct selection of P/I's pill envelop or to alert an incorrect selection. In addition, bMAR marks P/I's MAR as being a pre-pour.

For each medication listed on a P/I's medication profile, Nurse finds the proper medication from clinic stock inventory, scans its packaging barcode. [[Special Requirement: No Bar Codes](#)]

bMAR verifies Nurse's selection of medication, display a visual message and an audible sound to confirm a match or to alert a mismatch [[Special Requirement: Verification of Selection](#)]. If it's a mismatch, Nurse will either override bMAR or find the correct medication. If overriding a mismatch, see [Use Case: Override Mismatch Alert].

Nurse breaks the medication package and pours appropriate number of pills into P/I's pill envelop.

Nurse repeats Step 10 to 12 for each medication listed on a P/I's filtered medical profile.

Nurse repeats Step 8 to 13 for each P/I on the Med Pass Report.

Nurse proceeds to conduct Med Pass. See [Special Requirements: [Liquid Medication](#), [Injectible](#), and [Narcotics](#)]

Alternative Flows

<Prepare Pill-Window Med Pass>

10. There isn't any more preparation that a Nurse needs to do for Pill-Window MP. Nurse proceeds to conduct MP. See [Use Case: Conduct Pill-Window Med Pass]

<Prepare Podium Med Pass>

5. Nurse prompts bMAR to display the MP Med List [[Special Requirement: Views of Med Pass Report](#)], which is an aggregated list of medications that a Nurse must pack onto a cart/pack.
6. bMAR displays MP Med List and its sorting options [[Special Requirement: Sorting of MP Med List](#)].
7. If desired, Nurse sorts MP Med List using the preferred attribute and proceeds to pull medications by following the sorted MP Med List shown in bMAR.
8. For each medication shown on the MP Med List, Nurse retrieves a medication from clinic stock inventory and scans its bar code.
9. bMAR verifies that the medication retrieved by Nurse matches one of the medications (name, dose, time) on the MP Med List. If it's a match, bMAR confirms the selection by a visual and audible confirmation. In addition, if bar codes contains quantity information, bMAR deducts the count or quantity of that medication. If it's a mismatch, bMAR alerts the mistake by both a visual and audible alarm.
10. Nurse loads the correct medication onto a cart or into a backpack after bMAR confirms the correct selection of medication.
11. Nurse repeats Step 4 to 6 until all medications on the MP Med List are loaded/packed. Note that in some prisons, pharmacy technician sorts KOP alphabetically based on P/I names.
12. Nurse proceeds to conduct MP. See [Use Case: Conduct Podium Med Pass]

<Print Bar code Label Sticker>

22. For the purpose of pre-pouring, if there is no properly labeled pill envelop/cup for a P/I, Nurse prompts bMAR to print a barcode label sticker for the selected P/I.
23. bMAR prints the label sticker.
24. Nurse applies the label sticker to the pill envelop and resumes to pre-pouring of P/I's medication [in Basic Flow].

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Special Requirements

< P/I Demographic Information >

For all inmates, demographic details needed by bMAR are (1) inmate name, (2) inmate's CDCR #, (3) inmate's housing assignment, and optionally (4) inmate's race, and (5) additional classifications.

< MSA Location >

Within each prison, a designated MSA serves one or more areas/levels, which may be facility (i.e. yard), housing (i.e. building), or tier (i.e. floor). bMAR should automatically populate the default prison location based on the prison a nurse is stationed at. A Nurse can still select a different prison location if desired.

<Technical Question: What is the source for obtaining Nurse's assigned prison location? How accurate or up-to-date is the source?>

< Types of Med Pass >

Possible types of MP are Pill-Window MP, Cell-Side MP, and Podium MP. Frequency of occurrence is approximately 30% for Pill-Window, 40%-50% for Cell-Side, and 30% for Podium.

< Liquid Medication >

If a medication is in liquid form and a Nurse must pour the exact amount for a P/I, bMAR must provide an input field for a Nurse to document the exact amount administered to a P/I. In the future, Pharmacy will explore options to package liquid med in several standardized dosages and coordinate with prescribers to write orders using one of the standardized dosages.

< Injectable >

Injectible medications, not related to in-patient care, are in scope, for example, insulin. For injectible, bMAR can verify the type of injectible but not the exact dosage given by Nurse. bMAR must provide an input field for a Nurse to document the exact amount administered to a P/I. Mass-injectible, e.g. flu shots, is out of scope for bMAR and Nursing must follow existing practices for mass-injectible.

< Narcotics >

If a Nurse administers narcotics, the Nurse must sign off on the administration of Narcotics according to State/Federal regulation. Documenting such sign off is out of scope of bMAR.

< Hand-Held Device >

For both Cell-Side and Podium MP, a Nurse must have a hand-held device to document medication administration. Weight, screen size, and overall size are three key consideration factors. It must have a keyboard and a docking station for synchronization of data and charging of battery. It should also have the capability to wireless communicate with bMAR server for those prisons that have wireless connectivity.

< Views of Med Pass Report >

Each MP Report has three views (i.e. View 1, View 2, and View 3). View 1 is profile-centric and it shows the filtered medication profile for each inmate. MP Med List is View 2, which is medication-centric and it shows a list of all medications needed by all inmates during a particular Med Pass. View 3 is inmate-centric and it shows a list of inmates' names, CDCR #s, and bar codes of CDCR #s.

< Sorting of MP Med List >

View 2 of MP Report (aka MP Med List) must be sortable by these attributes, alphabetically by inmates' names, CDCR #s, race (if data attribute is available to bMAR), additional inmate classification attributes (if data attribute is available to bMAR), MSA locations (e.g. cell numbers, tiers, yard, etc.), alphabetically by medication names, and quantities of the same type of medications.

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< Verification of Selection >

When bMAR verifies Nurse's selection of a medication, as long as the selected medication matches one of medications to be administered during a particular MP, it is considered a successful verification. This enables Nurses to select medication in any order they wish, that is, without following the sorted order of the medications listed. However, bMAR must ensure that no medication is duplicated.

< Mailing of KOP >

Pharmacy and Nursing will explore the options to mail KOP directly to Patient/Inmate. Hence, Nursing may not need to prepare any KOP in the future.

< No Bar Codes >

Not all unit doses are barcoded by manufactures. Currently, Pharmacy does not have a fix for this issue. Hence, bMAR will not be able to perform any verification for unit doses that do not have bar codes on the packaging. Nurse will have to perform visual verifications in such situations.

< Provide Duplicating Clinic Stock Inventory >

Accessing limited number of cabinets/carts containing medications is currently a bottleneck to Nurses, especially during busy time when preparing/conducting med passes. Pharmacy will explore the possibility of maximizing the number of cabinets/carts, with duplicating inventory, in order to enable simultaneous accessing to medications by nurses.

< Elimination of Pre-Pour >

Pharmacy plans to find ways to eliminate pre-pours. One option is to utilize push carts with several easily removable baskets. Such baskets would contain clinic stock meds and can be easily carried up and down tiers in an institution. During preparation, instead of pre-pouring, Nurse would stock such baskets with clinic stock meds needed for a particular Cell-Side MP to a particular area of an institution.

Extension Points

<Conduct Med Pass>

Overview of Use Cases

This section provides a visual overview of use cases and their relationship to each other.

California Prison Health Care System

Use Case Specification: Conduct Cell-Side Med Pass

UC 6a: Overview: Conduct Cell Side Med Pass

Goal and Summary

The goal of this use case is to administer medications to inmates. Nurse administers medications to inmates regularly through conducting Med Passes. There are three types of Med Passes, Pill-Window, Podium, and Cell-Side. This use case describes activities when conducting a Cell-Side Med Pass.

See the last section, [Overview of Use Cases](#), to gain an overall understanding of how use cases relate to each other.

Actors

Primary Actor: Nurse

Secondary Actor: Patient/Inmate (or P/I)

Pre-Conditions

Nurse already logged into bMAR

All preparation work for a Med Pass has been completed as described in the Prepare Med Pass use case

Trigger

Mandatory time/schedule for conducting a Med Pass.

Flow of Events

Basic Flow

- Nurse arrives at the 1st cell with a hand-held device (HHD) and prepared medications. Nurse prompts HHD to start the Cell-Side Med Pass (MP).
- bMAR timestamps the starting of a MP.
- At the cell of a P/I, Nurse collects P/I's ID, visually authenticates P/I, and scans the barcode on P/I's ID card. If barcode scanning fails, Nurse keys in the CDCR# on P/I's ID into the HHD. Note that HHD is either wirelessly connected to bMAR or has a Med Pass Report pre-loaded in HHD during preparation of this MP. [[Alternate Flow: No Barcoded ID](#)] [Policy: If P/I cannot produce an ID, no medication will be administered.]
- HHD shows P/I's identity profile and “filtered” medication profile [[See Special Requirement 1 and 2](#)]. Nurse has the option to display the entire medication profile.
- Nurse visually ensures the identity information about P/I as shown on HHD is consistent with ID and returns ID to P/I.
- Nurse pulls the already prepared pill envelop/cup, scans the barcode on the envelop.
- HHD verifies that Nurse has selected the correct envelop for the P/I. If it's a mismatch, HHD sounds an alarm and displays a visual warning.
- Nurse pours all pills out of the envelop into a cup and gives the cup to P/I.
- After P/I accepts the medication, Nurse records the medication administration in HHD. For KOP, see [[Alternate Flow: Deliver KOP](#)]. If P/I refuses the medication or whenever Nurse decides a medication is no longer safe/sanitary to be given to a P/I (due to whatever reasons), see [Use Case: Record Medication Refusal] and [Use Case: Record Medication Waste.]

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- HHD marks the medication as administered, records administration details: actual administration notes, actual P/I, actual date, actual time, actual location, and actual administering nurse.
- Nurse walks to the cell of the next P/I listed on the Med Pass Report (shown on HHD) and repeats steps 3-10.
- Nurse closes a Med Pass in HHD. A visual and audible alert will be generated if there are still P/Is that need to be given medications during a Med Pass. Nurse has the option to force the closing of Med Pass.
- HHD timestamps the closing of a Med Pass.
- After returning to MSA, Nurse docks the HHD in its docking station, and prompts HHD to upload/synchronize with bMAR server. If wireless communication is available, uploading/synchronizing occurs in real time and is transparent to Nurse.
- HHD uploads/synchronizes MP details with bMAR server.

Alternative Flows

< No Barcoded ID >

1. If Inmates do not have the new barcoded ID card, Nurse has two options (A) print out a MP Report to carry to Cell-Side MP, or (B) keying in CDCR # for each Inmate.
2. Return to Basic Flow.

< Deliver KOP >

13. Nurse asks P/I to sign the electronic acceptance form on HHD as a confirmation of acceptance of KOP.
14. Return to the Basic Flow. Note: Pharmacy and Nursing will explore the options to mail KOP directly to Patient/Inmate. Hence, Nursing may not need to deliver any KOP to Inmates in the future.

Business Rules

Cell-Side Pass: If inmate doesn't provide ID, no medication will be given.

Special Requirements

< 1. Filtered Medication Profile >

Filtered medication profile is a subset of an Inmate's entire medication profile. This subset of medications are to be administered to an inmate during a particular med pass. bMAR pre-filters an Inmate's full medication profile based on certain criteria such as time, date, or MSA. <Jason: It's a desired feature. Not a mandatory requirement. Depending on the data attributes, it may or may not be technically feasible.>

< 2. Display of Inmate Name and CDCR Number >

For every page/screen rendered by bMAR that shows medication(s) for a particular inmate, inmate's name and CDCR # must be shown on the page/screen for visual verification purposes by Nurses.

< 3. Backup Med Pass Report >

<CR: What is the backup plan if there is no connectivity to bMAR server? How does a Nurse pull MP report or P/I's MAR?>

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Extension Points

Close Out Med Pass.

<name of extension point>

Definition of the location of the extension point in the flow of events.

Overview of Use Cases

This section provides a visual overview of use cases and their relationship to each other.

California Prison Health Care System

Use Case Specification: Conduct Podium Med Pass

UC 6b: Overview: Conduct Podium Med Pass

Goal and Summary

The goal of this use case is to administer medications to inmates. Nurse administers medications to inmates regularly through conducting Med Passes. There are three types of Med Passes, Pill-Window, Podium, and Cell-Side. This use case describes activities when conducting a Podium Med Pass.

See the last section, [Overview of Use Cases](#), to gain an overall understanding of how use cases relate to each other.

Actors

Primary Actor: Nurse

Secondary Actor: Patient/Inmate (or P/I)

Pre-Conditions

Nurse already logged into bMAR

All preparation work for a Med Pass has been completed as described in the Prepare Med Pass use case

Trigger

Mandatory time/schedule for conducting a Med Pass.

Flow of Events

Basic Flow

- Nurse arrives at the podium with a hand-held device (HHD) and prepared medications. Nurse prompts HHD to start the Podium Med Pass (MP).
- bMAR timestamps the starting of a Podium MP.
- For each P/I in the MP Line, Nurse collects P/I's ID, visually authenticates P/I, and scans the barcode on P/I's ID card. If barcode scanning fails, Nurse keys in the CDCR# on P/I's ID into the HHD. Note that HHD is either wirelessly connected to bMAR or has a Med Pass Report pre-loaded in HHD during preparation of this MP. [[Alternate Flow: No Barcoded ID](#)]
- HHD shows P/I's identity profile and "filtered" medication profile [[See Special Requirement 1 and 2](#)]. Nurse has the option to display the entire medication profile.
- Nurse visually ensures the identity information about P/I as presented by HHD is consistent with ID and returns ID to P/I.
- For each medication listed on HHD (sorted alphabetically with medication names, sortable by either generic or trade names), bMAR shows the medication details, full medication name, prescribed dosage, time of med administration, route (e.g. topical, oral), and administering instruction, if Nurse chooses to explicitly select/highlight a particular med on the list.
- Nurse finds the matching medication from the medication cart inventory and scans the medication's barcode.

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- HHD verifies that the medication retrieved by Nurse from the medication cart stock matches one of the medications (name, dose, time) on the list that should be administered to the P/I. [[Special Requirement: Verification of Selection](#)]. If it's a match, HHD confirms the selection by visual and audible notification. If it's a mismatch, HHD alerts the mistake by both visual and audible alarm. Nurse has the option to override the mismatch, see [Use Case: Override Mismatch Alert].
- Nurse repeats steps 6 to 8 to pick out all pills, put them together in a cup, and then give the cup to P/I.
- Nurse records the medication administration in HHD after P/I accepts the medication. For KOP, see [[Alternate Flow: Deliver KOP](#)]. If P/I refuses the medication or whenever Nurse decides a medication is no longer safe/sanitary to be given to a P/I (due to whatever reasons), see [Use Case: Record Medication Refusal] and [Use Case: Record Medication Waste]. HHD verifies that all medications are administered and closes an P/I's profile. If there is still medication not yet administered, HHD sounds an alarm and provides a visual indication on the medication(s) that is not yet administered.
- HHD marks the medication as administered, records administration details: actual administration notes, actual P/I, actual date, actual time, actual location, and actual administering nurse.
- Nurse repeat steps 3-11 for each P/I in a Podium Med Pass line.
- Nurse closes a Med Pass in HHD. A visual and audible alert will be generated if there are still P/Is that need to be given medications during a Med Pass. Nurse has the option to force the closing of Med Pass.
- HHD timestamps the closing of a Med Pass.
- After returning to MSA, Nurse docks the HHD in its docking station, and prompts HHD to upload/synchronize with bMAR. If wireless communication is available, uploading/synchronizing occurs in real time and is transparent to Nurse.
- HHD uploads/synchronizes MP details with bMAR.

Alternative Flows

< No Barcoded ID >

3. If Inmates do not have the new barcoded ID card, Nurse has two options (A) print out a MP Report to carry to Podium MP, or (B) keying in CDCR # for each Inmate.
4. Return to Basic Flow.

< Deliver KOP >

15. Nurse asks P/I to sign the electronic acceptance form on HHD as a confirmation of acceptance of KOP.
16. Return to the Basic Flow. Note: Pharmacy and Nursing will explore the options to mail KOP directly to Patient/Inmate. Hence, Nursing may not need to deliver any KOP to Inmates in the future.

Special Requirements

< 1. Filtered Medication Profile >

Filtered medication profile is a subset of an P/I's entire medication profile. This subset of medications are to be administered to an P/I during a particular med pass. bMAR pre-filters a P/I's full medication profile based on certain criteria such as time, date, or MSA. < Jason: It's a desired feature. Not a mandatory requirement. Depending on the data attributes, it may or may not be technically feasible. >

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< 2. Display of Inmate Name and CDCR Number >

For every page/screen rendered by bMAR that shows medication(s) for a particular inmate, inmate's name and CDCR # must be shown on the page/screen for visual verification purposes by Nurses.

< 3 Verification of Selection >

When bMAR verifies Nurse's selection of a medication, as long as the selected medication matches one of medications to be administered during a particular MP, it is considered a successful verification. This enables Nurses to select medication in any order they wish, that is, without following the sorted order of the medications listed. However, bMAR must ensure that no medication is duplicated.

Extension Points

Close Out Med Pass.

<name of extension point>

Definition of the location of the extension point in the flow of events.

Overview of Use Cases

This section provides a visual overview of use cases and their relationship to each other.

California Prison Health Care System

Use Case Specification: Conduct Pill-Window Med Pass

UC 6c: Overview: Conduct Pill Window Med Pass

Goal and Summary

The goal of this use case is to administer medications to inmates. Nurse administers medications to inmates regularly through conducting Me Passes. There are three types of Med Passes, Pill-Window, Podium, and Cell-Side. This use case describes activities when conducting a Pill-Window Med Pass.

See the last section, [Overview of Use Cases](#), to gain an overall understanding of how use cases relate to each other.

Actors

Primary Actor: Nurse

Secondary Actor: Patient/Inmate (P/I)

Pre-Conditions

Nurse already logged into bMAR

All preparation work for Pill-Window Med Pass has been completed as described in the Prepare Med Pass use case

Trigger

Mandatory time/schedule for conducting a Med Pass.

Flow of Events

Basic Flow

1. Nurse prompts bMAR to start a Pill-Window Med Pass (MP).
2. bMAR timestamps the starting of a MP.
3. For each Patient/Inmate (P/I) in the MP line, Nurse collects Inmate's ID, visually authenticates Inmate, and scans the barcode on Inmate's ID card. If barcode scanning fails, Nurse keys in the CDCR# on Inmate's ID into bMAR. [[Alternate Flow: No Barcoded ID](#)]
4. bMAR shows P/I's identity profile and "filtered" medication profile [[See Special Requirement 1 and 2](#)]. Nurse has the option to display the entire medication profile <[TBD: how much detail to show e.g. expired med within last 3 days, etc.](#)>. [[Alternative Flow: Cannot Find Inmate](#)]
5. Nurse visually ensures the identity information about P/I as shown by bMAR is consistent with ID and returns ID to P/I.
6. For each medication listed (sorted alphabetically with medication names, sortable by either generic or trade names), bMAR shows the medication details, full medication name, prescribed dosage, time of med administration, route (e.g. topical, oral), and administering instruction, if Nurse chooses to explicitly select/highlight a particular med on the list.
7. Nurse finds the matching medication from clinic stock medication inventory and scans the medication's barcode. [[Special Requirement: Verification of Selection](#)]

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8. bMAR verifies that the medication retrieved by Nurse from the clinic stock inventory matches the selected medication (name, dose, time) as shown on bMAR. If it's a match, bMAR confirms the selection by a visual and audible confirmation. If it's a mismatch, bMAR alerts the mistake by a visual and audible alarm. If Nurse wants to override bMAR alert, see [Use Case: Override Mismatch Alert] and see also [Alternate Flow: Obtain Unavailable Medication]
9. Nurse repeats step 6 to 8 to pick out all pills, put them together in a cup, and then give the cup to P/I.
10. Nurse records the medication administration in bMAR after P/I accepts the medication. For KOP, see [[Alternate Flow: Deliver KOP](#)]. If P/I refuses the medication or whenever Nurse decides a medication is no longer safe/sanitary to be given to a P/I (due to whatever reasons), see [Use Case: Record Medication Refusal] and [Use Case: Record Medication Waste]. bMAR verifies that all medications are administered and if there is still medication not yet administered, bMAR sounds an alarm and provides a visual indication on the medication(s) that is not yet administered.
11. bMAR marks the medication as administered, records administration details: actual administration notes, actual P/I, actual date, actual time, actual location, and actual administering nurse.
12. Nurse repeat steps 3-11 for each P/I in a Med Pass line.
13. Nurse closes a Med Pass in bMAR. A visual and audible alert will be generated if there are still P/Is that need to be given medications during a Med Pass. Nurse has the option to force the closing of Med Pass.
14. bMAR timestamps the ending of a Med Pass.

Alternative Flows

< No Barcoded ID >

1. If Inmates do not have the new barcoded ID card, Nurse has two options (A) print out a MP Report to carry to Podium MP, or (B) keying in CDCR # for each Inmate.
2. Return to Basic Flow.

< Deliver KOP >

1. Nurse asks P/I to sign the electronic acceptance on a electronic signature table as a confirmation of acceptance of KOP.
2. Return to the Basic Flow. Note: Pharmacy and Nursing will explore the options to mail KOP directly to Patient/Inmate. Hence, Nursing may not need to deliver any KOP to Inmates in the future.

< Cannot Find Inmate >

1. When P/I isn't in bMAR, Nurse decides when and how to conduct the research and asks P/I to wait aside or come back at certain time.
2. In addition to checking paper MAR, if available, Nurse can contact Pharmacy, Prescriber, or even bMAR administrator if Nurse suspects its an error in bMAR.
3. Return to Basic Flow

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Special Requirements

< 1. Filtered Medication Profile >

Filtered medication profile is a subset of an P/I's entire medication profile. This subset of medications are to be administered to an P/I during a particular med pass. bMAR pre-filters a P/I's full medication profile based on certain criteria such as time, date, or MSA. < Jason: It's a desired feature. Not a mandatory requirement. Depending on the data attributes, it may or may not be technically feasible.>

< 2. Display of Inmate Name and CDCR Number >

For every page/screen rendered by bMAR that shows medication(s) for a particular inmate, inmate's name and CDCR # must be shown on the page/screen for visual verification purposes by Nurses.

< 3 Verification of Selection >

When bMAR verifies Nurse's selection of a medication, as long as the selected medication matches one of medications to be administered during a particular MP, it is considered a successful verification. This enables Nurses to select medication in any order they wish, that is, without following the sorted order of the medications listed. However, bMAR must ensure that no medication is duplicated.

Extension Points

Close Out Med Pass.

Overview of Use Cases

This section provides a visual overview of use cases and their relationship to each other.

California Prison Health Care System

Use Case Specification: Obtain Unavailable Medication

UC 7a: Overview: Obtain Unavailable Medication

Goal and Summary

The goal of this use case is to describe the process to obtain medication that is not available to be administered to Patient/Inmate. During med passes (MP), medication(s) listed on Patient/Inmate's medical profile are expected to be available to be administered to Patient/Inmate. However, there are times when medications are unavailable due to various reasons. This use case describes activities that Nurse takes to obtain unavailable medications.

This use case represents a common alternate flow to three other use cases, Conduct Cell-Side Med Pass, Conduct Podium Med Pass, and Conduct Pill-Window Med Pass. Since Cell-Side MP and Podium MP utilizes a Hand-Held Device (HHD), which synchronizes with bMAR either in real time or at a later time, this use case will use the term “bMAR/HHD” as a logical representation for using bMAR on a PC or on a HHD.

See the last section, [Overview of Use Cases](#), to gain an overall understanding of how use cases relate to each other.

Actors

Primary Actor: Nurse

Secondary Actor: Pharmacy, Patient/Inmate (P/I)

Pre-Conditions

Nurse already logged into bMAR/HHD

Nurse is actively administering medication to P/I during a Med Pass

Trigger

Whenever a medication is unavailable for a P/I but, according to bMAR, that medication should have been available

Flow of Events

Basic Flow

1. When a medication cannot be found on the clinic stock medication inventory during a Med Pass, Nurse asks P/I to wait on the side or come back after X number of hours (for Pill-Window MP Podium MP); or tells P/I that Nurse will come back to P/I's cell to provide more details about his/her expected medications (for Cell-Side MP).
2. If it's a new prescription and it has never been administered before, Nurse informs P/I about the availability of new medication based on the estimated time when the medication will be delivered by Pharmacy.
3. If it's an active prescription as shown in bMAR/HHD, Nurse checks if pharmacy is open by calling Pharmacy. If so, Nurse asks pharmacy to deliver the missing medication, confirms an estimated delivery date/time, and informs P/I to return when called or after X number of hour.
4. If pharmacy is not open, Nurse checks in bMAR/HHD where the medication was last administered for the P/I in question.

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5. bMAR shows the historical time, date, and MSA that this medication was administered. <Thsu: in reverse chronological order?>
6. Nurse identifies the most convenient and accessible MSA that may have the medication in stock. Nurse instructs P/I to return, when called or after X number of hours, based on the estimated time needed to retrieve medication from another MSA.
7. Nurse returns to following the same procedures described in conducting med pass use cases.

Post-Conditions

Nurse must return to the same procedures for administering medication.

Overview of Use Cases

This section provides a visual overview of use cases and their relationship to each other.

California Prison Health Care System

Use Case Specification: Override Mismatch Alert

Overview

Goal and Summary

The goal of this use case is to record occurrences of overriding medication mismatch alerts by Nurse and their respective reasons. When Nurse administers medications to Patient/Inmate during med passes (MP), bMAR always verifies Nurse's selection of medication to those listed on Patient/Inmate's medical profile. If verification fails, bMAR generates a mismatch alert. There are times when Nurse may override a medication mismatch alert due to various reasons. This use case describes activities that take place when recording the overriding of mismatch alerts in bMAR.

This use case represents a common alternate flow to three other use cases, Conduct Cell-Side Med Pass, Conduct Podium Med Pass, and Conduct Pill-Window Med Pass. Since Cell-Side MP and Podium MP utilizes a Hand-Held Device (HHD), which synchronizes with bMAR either in real time or at a later time, this use case will use the term "bMAR/HHD" as a logical representation for using bMAR on a PC or on a HHD.

See the last section, [Overview of Use Cases](#), to gain an overall understanding of how use cases relate to each other.

Actors

Primary Actor: Nurse

Secondary Actor: Patient/Inmate (P/I)

Pre-Conditions

Nurse already logged into bMAR.

Nurse is actively administering medication to P/I during a Med Pass.

Trigger

When Nurse intends to override a mismatch alert generated by bMAR.

Flow of Events

Basic Flow

1. Nurse selects a medication for P/I and scans medication's barcode.
2. bMAR generates a mismatch alert because Nurse's selection of medication is not an exact match of the correct medication. In addition to the mismatch alert, bMAR shows an option for Nurse to override the alert.
3. Nurse overrides the medication mismatch alert in bMAR/HHD.
4. bMAR presents a list of common reasons for overriding the alert, as well as an optional text field for entering a reason. <Thsu: SME to provide a list of common reasons for overriding a mismatch alert.>
5. Nurse selects and/or enters the reason for overriding bMAR/HHD's alert.
6. bMAR/HHD records the expected medication, actual medication administered (Nurse own selection), Nurse' overriding reason, and an indication flag that this particular medication was overridden during a Med Pass.
7. Nurse returns to following the same procedures described in conducting med pass use cases.

Post-Conditions

Nurse must return to the same procedures for administering medication.

California Prison Health Care System

Overview of Use Cases

This section provides a visual overview of use cases and their relationship to each other.

California Prison Health Care System

Use Case Specification: Record Medication Refusal

UC 7c: Overview: Record Medical Refusal

Goal and Summary

The goal of this use case is to record Patient/Inmate's refusals of medication and their respective reasons. When Nurse administers medications to Patient/Inmate during med passes (MP), there are times when Patient/Inmate may refuse a medication due to various reasons. This use case describes activities that take place when recording medication refusals in bMAR.

This use case represents a common alternate flow to three other use cases, Conduct Cell-Side Med Pass, Conduct Podium Med Pass, and Conduct Pill-Window Med Pass. Since Cell-Side MP and Podium MP utilizes a Hand-Held Device (HHD), which synchronizes with bMAR either in real time or at a later time, this use case will use the term "bMAR/HHD" as a logical representation for using bMAR on a PC or on a HHD.

See the last section, [Overview of Use Cases](#), to gain an overall understanding of how use cases relate to each other.

Actors

Primary Actor: Nurse

Secondary Actor: Patient/Inmate (P/I)

Pre-Conditions

Nurse already logged into bMAR/HHD

Nurse is actively administering medication to P/I during a Med Pass

Trigger

When P/I refuses a medication.

Flow of Events

Basic Flow

1. Whenever P/I refuses to take/accept a medication, Nurse prompts bMAR/HHD to records such refusal.
2. bMAR determines whether the medication in question is DOT and shows a list of common reasons for Nurse to select as well as an optional text field for entering a reason. <Thsu: If Nurse always gives out all pills together (in a cup) and Inmates rejects only certain pills, Nurse will have to know/distinguish rejected pills and select those meds in bMAR to document "selective" refusals.> If bMAR determines the medication in question is KOP, it shows a signature field.
3. For DOT, Nurse selects a reason from the list or enters a reason. <Thsu: SME to provide a list of common waste reasons, e.g. accidental drop, etc., for Nurse to quickly choose from.> For KOP, Nurse asks P/I to sign on a signature tablet (or HHD) and bMAR/HHD records P/I's electronic signature as a confirmation of refusal of KOP.
4. bMAR/HHD records the reason for refusal.
5. Nurse returns to following the same procedures described in conducting med pass use cases.

Post-Conditions

Nurse must return to the same procedures for administering medication.

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Business Rules

P/I must sign refusal form if refusing a KOP.

Overview of Use Cases

This section provides a visual overview of use cases and their relationship to each other.

California Prison Health Care System

Use Case Specification: Record Medication Waste

UC 7c: Overview: Record Medication Waste

Goal and Summary

The goal of this use case is to record occurrences of medication waste and their respective reasons. When Nurse administers medications to Patient/Inmate during med passes (MP), there are times when medications must be disposed and thus wasted due to various reasons. This use case describes activities that take place when recording medication waste in bMAR.

This use case represents a common alternate flow to three other use cases, Conduct Cell-Side Med Pass, Conduct Podium Med Pass, and Conduct Pill-Window Med Pass. Since Cell-Side MP and Podium MP utilizes a Hand-Held Device (HHD), which synchronizes with bMAR either in real time or at a later time, this use case will use the term “bMAR/HHD” as a logical representation for using bMAR on a PC or on a HHD.

See the last section, [Overview of Use Cases](#), to gain an overall understanding of how use cases relate to each other.

Actors

Primary Actor: Nurse

Secondary Actor: Patient/Inmate (P/I)

Pre-Conditions

Nurse already logged into bMAR/HHD.

Nurse is actively administering medication to P/I during a Med Pass.

Trigger

When a medication cannot be given to P/I and must be disposed, i.e. wasted.

Flow of Events

Basic Flow

1. Whenever a Nurse decides a medication is no longer safe/sanitary to be given to a patient (due to whatever reasons) and the medication must be disposed, Nurse prompts bMAR/HHD to records such waste.
2. bMAR/HHD shows a list of common reasons for Nurse to choose from, as well as an optional text field for Nurse to enter a reason. <Thsu: SME to provide a list of common waste reasons, e.g. accidental drop, etc., for Nurse to quickly choose from.>
3. Nurse selects a reason from the list or enters a reason.
4. bMAR/HHD records the reason for waste and prompts Nurse to retrieve again the medication of the same type.
5. Nurse returns to following the same procedures described in conducting med pass use cases.

Post-Conditions

Nurse must return to the same procedures for administering medication.

Overview of Use Cases

California Prison Health Care System

Use Case Specification: Close Med Pass

UC8: Overview: Close Med Pass

Goal and Summary

The goal of this use case is to close out a Med Pass. Closing out a Med Pass usually includes activities such as identifying no-show Inmates, finding and documenting possible reasons for no shows, reconciling KOP, and viewing reports about various aspects of a Med Pass.

See the last section, [Overview of Use Cases](#), to gain an overall understanding of how use cases relate to each other.

Actors

Primary Actor: Nurse
Secondary Actor: None

Pre-Conditions

Nurse is logged into bMAR.
A Med Pass has just been conducted.

Trigger

Whenever a Med Pass has been conducted and closed in bMAR, activities described in this use case must also be performed immediately after a Med Pass is closed in bMAR.

Flow of Events

Basic Flow

1. Nurse prompts bMAR to close a Med Pass.
2. bMAR automatically generates reports of no-shows, and medications not picked up or administered.
3. Nurse cross checks no-show Inmates in bMAR to determine if no-show Inmates have received medication at another MSA location.
4. bMAR verifies whether no-show P/I has missed/refused 3 consecutive days of meds or 50% of med in 1 week. If any of the conditions are true, generate an alert for Nurse. In addition, bMAR verifies if any of the following types of med have been missed/refused: Keyhea med (court ordered medication that cannot be refused), insulin, TB, designated HIV med, and clozapine. If so, bMAR will generate alerts so that Nurse can take additional actions (other paper work on the side). See [[Special Requirement: Documentation of Paperwork](#)]
5. Nurse notes such situation according the policy in bMAR and notifies Prescriber separately about it. Note: bMAR does not keep regenerating alerts unless the situation persists for another 5 days.
6. For each no-show Inmate who needs DOT medications, Nurse identifies barriers for being no show (e.g. lock down). Also, Nurse contacts Custody to facilitate the administration of medication.
7. For each no-show Inmate who needs KOP medication, Nurse checks whether Inmate has been notified of the availability of KOP within the last two business days. If more than two business days, contact Custody to have Inmate escorted to a Pill Line. If less than two days, ducat (a notification to) Inmate.

California Prison Health Care System

Special Requirements

< Documentation of Paperwork >

For certain types of medications that are refused or missed due to no shows, Nurse must document such cases by following Nursing policies and procedures. Currently, such paperwork is done on paper. It can be done in Clindocs in future. Nursing would prefer to have the documentation of such paperwork be supported by bMAR as well.

Overview of Use Cases

This section provides a visual overview of use cases and their relationship to each other.

California Prison Health Care System

Use Case Specification: View MAR Report

UC 9: Overview: View MAR Report

Goal and Summary

This use case enables Nurse to view MAR report about an Inmate. MAR reports can be generated and printed based on various filtering criteria.

See the last section, [Overview of Use Cases](#), to gain an overall understanding of how use cases relate to each other.

Actors

Primary Actor: Nurse
Secondary Actor: None

Flow of Events

Basic Flow

1. Nurse logs into bMAR and selects a type of reports to view. <Thsu: Need details on the types (i.e. purposes) of reports and the content that should be on each type of report?>
2. bMAR shows options available for the type of report selected by Nurse.
3. Nurse selects specific filtering criteria (available based on the report type) in bMAR.
4. bMAR generates MAR report for a particular Inmate based on the filtering criteria.
5. Nurse can view or print MAR report.

Overview of Use Cases

This section provides a visual overview of use cases and their relationship to each other.

<i>R-ID</i>	<i>Priority</i>	<i>Requirement Statement</i>
	Mandatory	The solution shall expire a prescriber order at midnight on the expiration day.
	Out of Scope	The solution shall support medication administration related to in-patient care.
	Desirable	The solution shall allow a user to track medication administration of emergency (TTA) orders.
	Out of Scope	The solution shall support the reconciliation of prescriber orders and medications
	Desirable	The solution shall display an inmate's Ad Seg status.
	Mandatory	The solution shall enable User to flag a KOP as a temporary DOT, as well as to remove such flag.
	Mandatory	The solution shall allow Nurse to select any one of three types of medical pass, Cell-Side, Podium, or Pill-Window.
	Mandatory	The solution shall allow a Nurse to initiate the start of preparation for a med pass.
	Mandatory	The solution shall record the start time of preparation for a med pass.
	Mandatory	The solution shall display only those MSA locations that are applicable to the selected type of med pass (e.g. Cell-Side, Podium, Pill-Window); i.e. automatically filters out MSA locations that are not relevant to the selected type of med pass.
	Mandatory	The solution shall pre-populate the display of institution location, on applicable pages/screens, that a Nurse is assigned to.
	Desirable	The solution shall allow Nurse to change own default institution location.
	Mandatory	The solution shall allow Nurse to change institution location for an active login session.
	Mandatory	The solution shall be able to display inmate's basic demographic profile, which includes inmate's full name, unique identifying number, date of birth, and housing assignment.
	Desirable	The solution shall be able to display inmate's full demographics profile, which includes inmate's race and any additional classification, in addition to the mandatory details from the basic demographic profile.
	Mandatory	The solution shall be able to display inmate's full medical profile, which includes known allergies, active medications, and expired/inactive medications from the past X days. X to be defined.
	Mandatory	The solution shall be able to display inmate's filtered medication profile, which includes known allergies and active medications that should be administered during an upcoming med pass.
	Mandatory	The solution shall display view 1 of a Med Pass Report by default if Pill-Windows med pass is selected. View 1 of Med Pass Report shows an inmate's filtered medical profiles.
	Mandatory	The solution shall display view 2 of a Med Pass Report by default if Podium or Cell-Side med pass is selected. View 2 of Med Pass Report shows a list of all medications needed by inmates for an upcoming med pass.

<i>R-ID</i>	<i>Priority</i>	<i>Requirement Statement</i>
	Mandatory	The solution shall be able to keep track of whether a medication is DOT or KOP.
	Mandatory	The solution shall keep track of restricted KOP that are temporarily flagged as DOT (e.g. for Inmates in Ad Seg). That is, the solution must treat/manage such restricted KOP as DOT during med passes and preparation of med passes until such special flag is removed.
	Mandatory	The solution shall allow user to choose between three different views of a Med Pass Report.
	Mandatory	The solution shall be able to display View 1 of a Med Pass Report. View 1 is profile-centric and it shows the filtered medication profile for each inmate. Filtered medication profile means that medications that are not suppose to be administered during a particular MP is automatically filtered out (i.e. hidden by default).
	Mandatory	The solution shall be able to display MP Med List. MP Med list is also referred to as the View 2 of a Med Pass Report, which is medication-centric and it shows a list of <u>all</u> medications needed by <u>all</u> inmates during a particular Med Pass.
	Mandatory	The solution shall be able to display view 3 of a Med Pass Report. View 3 is inmate-centric and it shows a list of inmates' names, inmates' unique identifying numbers, and bar codes of inmates' unique identifying numbers for a particular med pass.
	Mandatory	The solution shall allow users to use either a battery operated hand-held devise (e.g. tablet computer, notebook computer) or a desktop Personal Computer.
	Mandatory	The battery-operated hand-held devise shall be rechargeable.
	Mandatory	The battery-operated hand-held devise shall have a user removable/replaceable battery that does not require the use of special tool.
	Desirable	The battery-operated hand-held devise shall have one extra backup battery.
	Mandatory	The battery-operated hand-held devise shall have WiFi, i.e. 802.11 a/b/g/n capabilities.
	Mandatory	Each Nurse shall have own dedicated hand-held devise for medication administration during a med pass.
	Desirable	The solution must provide an extra 2 hand-held devises as back up at each institution.
	Desirable	The battery-operated hand-held devise shall have a screen size between 10"-13" and a native screen resolution of no less than 1024 x 600.
	Mandatory	The solution shall display information in a manner that minimizes horizontal scrolling by users unless absolutely necessary.
	Desirable	The solution shall display information in the most appropriate format, e.g. screen resolution, based on the type of computing machine, e.g. mobile/laptop or desktop, that user is using.
	Mandatory	The battery-operated hand-held devise shall have a physical QWERTY keyboard
	Desirable	The battery-operated hand-held devise shall have a touch sensitive screen.
	Desirable	The touch sensitive screen shall work with inanimate objects, e.g. fingernails, gloved fingers, etc.
	Mandatory	The solution shall allow the use of an independent bar code scanning devise
	Mandatory	The bar code scanning devise shall accommodate a wired or wireless operating distance of at least 3 feet radius from the hand-held device.
	Mandatory	The battery-operated hand-held devise shall be capable of reading bar codes, or be connected to a bar code reader/scanner that is capable of reading bar codes.
	Mandatory	The battery-operated hand-held devise shall have persistent memory for storing a local copy of the solution's software module and/or data.
	Mandatory	The solution shall allow Nurse to indicate whether pre-pour is or is not needed/performed for a MAR.

<i>R-ID</i>	<i>Priority</i>	<i>Requirement Statement</i>
	Mandatory	The solution shall set the default value of pre-pour as “Yes” for all MARs during Cell-Side med passes.
	Desirable	The solution shall enable Nurse to change the default value for pre-pour to either “Yes” or “No”.
	Mandatory	The solution shall be able to read a unique identifying number in bar code format.
	Mandatory	The solution shall provide both visual and audio confirmation for a correct match when comparing two pieces of information, e.g. a scanned barcode number and a reference number.
	Mandatory	The solution shall provide both visual and audio alert for a mismatch when comparing two pieces of information, e.g. a scanned barcode number and a reference number.
	Mandatory	The solution shall be able to read a medication barcode encoded using Codabar (a specific bar code symbology) or ISBT 128.
	Mandatory	The solution shall display medication list sortable by any one of the following attributes: inmate name (first or last), inmate's unique identifying number, race, classification, inmate's housing location, MSA locations (cell number, tier, year), medication names (generic or trade), or quantity of the same medications.
	Mandatory	The solution shall provide an option for a user to initiate the printing of the bar code of an inmate's unique identifying number onto a sticker
	Mandatory	The solution shall allow a Nurse to enter the exact amount of medication administered when administering either liquid medication or injectible.
	Mandatory	The solution shall allow a Nurse to initiate the start of a med pass.
	Mandatory	The solution shall record the start time of a med pass.
	Desirable	The solution shall support user interface through a touch screen.
	Mandatory	The solution shall allow entering of an inmate's unique identifying number by a QWERTY keyboard.
	Mandatory	The solution shall record a successful identification of a patient/inmate.
	Mandatory	The solution shall enable a user to record a failed authentication of inmate.
	Mandatory	The solution shall support 800 or more concurrent active user sessions for Nurses during med passes.
	Mandatory	The solution shall support 200 or more concurrent active user sessions for MAR report users during normal business hours, i.e. 8AM to 6PM.
	Mandatory	The solution shall support no less than 6,000 user accounts.
	Mandatory	The solution shall time stamp the end of preparation for a med pass when Nurse manually indicates that MP preparation is completed or when Nurse prompts the solution to start a MP.
	Mandatory	The solution shall have a 3-second or less response time, i.e. page load time from end user perspective.
	Mandatory	The solution shall have 99% up time from 4 AM to 9 PM daily.
	Mandatory	The solution shall allow a Nurse to record a successful administration of medication.
	Mandatory	The solution shall provide a field for an inmate to sign signature when accepting/refusing KOP and record the signature electronically.
	Mandatory	The solution shall provide the option to allow entering of additional notes during an administration of medication.
	Mandatory	The solution shall record the following details for an administration of medication: administration notes if any, actual patient/inmate, actual date, actual time, actual location, and actual administering Nurse.

<i>R-ID</i>	<i>Priority</i>	<i>Requirement Statement</i>
	Mandatory	The solution shall generate both visual and audio alert if a Nurse attempts to close med pass when there are still inmates who should receive medications.
	Mandatory	The solution shall allow a user to override an alert and proceed forward with user's original selection.
	Mandatory	The solution shall synchronize data between a hand-held device and the solution's central server when a user initiates the synchronization.
	Mandatory	The solution shall automatically synchronize data between a hand-held device and the solution's central server whenever communication channel/connection is available for synchronization. I.e. automatic and seamless synchronization, without requiring explicit user actions, at real-time or near real-time intervals without degrading performance.
	Mandatory	The solution shall display inmate's name, unique identifying number, housing location, and known allergies on every page/screen that displays inmate's filtered or full medication profile.
	Mandatory	The solution shall allow a user to display full medication details, which include medication names (generic & trade), prescribed dosage, time of med administration, route (e.g. topical, oral), and any additional administration instruction.
	Mandatory	The solution shall match a piece of information (e.g. scanned through bar code) against a set of one or more reference information (e.g. a list of meds) regardless of the order of reference information in a set.
	Mandatory	The solution shall generate both visual and audio alert if a Nurse attempts to mark a successful medication administration for an inmate when there is still medication that needs to be administered for the inmate.
	Mandatory	The solution shall enable a user to review the history of an inmate's MAR from the past X days (X to be defined).
	Mandatory	The solution shall allow Nurse to select from a list of common reasons for overriding a medication mismatch alert and record user's selection. The selections on the list shall be selectable through alphanumeric identifiers.
	Mandatory	The solution shall enable Nurse to select from a list of common reasons for refusing a medication and records user's selection. The selections on the list shall be selectable through alphanumeric identifiers.
	Mandatory	The solution shall enable Nurse to select from a list of common reasons for wasting a medication and records user's selection. The selections on the list shall be selectable through alphanumeric identifiers.
	Mandatory	The solution shall provide an optional field of no more than 15 characters for a Nurse to document additional information regarding a medication refusal or medication waste.
	Mandatory	The solution shall enable a Nurse to indicate the end of a med pass, i.e. close a med pass.
	Mandatory	The solution shall generate alerts for inmates who have missed/refused 3 consecutive days of meds or 50% of med in 1 week.
	Mandatory	The solution shall generate alerts, at the closing of a med pass, for inmates who have missed/refused mandatory medications, e.g. keyhea, insulin, TB, desig HIV, etc.
	Desirable	The solution shall enable user to mark and keep track of mandatory medications that warrant special attention from Nurse if refused or missed. For example, Keyhea med, insulin, TB, designated HIV med, and clozapine.
	Desirable	The solution shall enable MARs to be modified to accommodate policy and practice changes.
	Mandatory	The hand-held device shall have a battery life of at least 5 hours without the need to recharge the battery.

<i>R-ID</i>	<i>Priority</i>	<i>Requirement Statement</i>
	Desirable	The hand-held device shall weigh no more than 3 lbs.
	Desirable	The hand-held device shall be capable of capturing patient-inmate's written signature (using a stylus) either through a touch sensitive screen or a dedicated signature tablet.
	Desirable	The solution shall be able to export MAR report information into standard file formats (e.g., xls, csv, txt)
	Mandatory	The solution shall enable an authorized user to print MAR reports.
	Mandatory	The solution shall provide a mechanism to uniquely identify and authenticate a user.
	Mandatory	The solution shall record the unique identifier of the nurse who performed a medication administration.
	Mandatory	The solution shall employ a role-based authorization model to manage user access rights.
	Desirable	The solution shall interface with the CPHCS Electronic Unit Health Record (eUHR) to send electronic medication administration records
	Desirable	The solution shall interface with the CPHCS Clinical Data Repository (CDR) to send electronic medication administration records
	Desirable	The solution shall retrieve inmates' housing assignments from SOMS
	Mandatory	The solution shall retrieve inmates' housing assignments from GuardianRx
	Mandatory	The solution shall be able to retrieve information about medications and patients' medication/prescription details from GuardianRx
	Desirable	The solution shall have the flexibility to accommodate 2-D, 3-D barcode formats for the future.
	Mandatory	The solution must be able to generate alert, box warning, or flag certain high-priority/critical instructions for med admin (to get nursing attention).
	Mandatory	The solution must provide a free text field for Nurse to enter additional documentation, e.g. inmate's blood pressure, for an administration of Digoxin (a type of medication).
	Desirable	#####
	Mandatory	The solution shall produce electronic reports that is the same format as current paper MAR report available today (sample & format to be provided by SME)
	Desirable	The solution shall generate a report of patient-inmates that did not receive their medications during a Med Pass.
	Desirable	The solution shall be able to produce Coleman report (Sample and format to be provided by SME)
	Desirable	Must have a physical docking station that has power, data, and peripherals connected
	Out of Scope	The solution shall track clinic stock medication inventory levels on a UPC/NDC basis.
	Out of Scope	The solution shall track clinic stock medication inventory minimum and maximum levels by UPC/NDC.
	Mandatory	The solution shall support sliding scale MAR. That is, a text field for Nurse to enter the exact amount administered. This is applicable to liquid medications, injectible, etc.
	Mandatory	The solution shall display the "Rx Number" on the MAR.
	Mandatory	The solution shall display the "Rx Date Written" on the MAR.
	Desirable	The solution shall display medications discontinued within the last 30 days on the MAR.
	Desirable	The solution shall display pending prescriptions on the MAR.
	Desirable	#####
	Desirable	The solution shall display an injection history and exactly where on the patient's body, in the form of standard representation codes, the injection has been given.
	Desirable	The solution shall display easily identifiable, full-color photographs of patient-inmate from his/her medical profile at the time of medication administration

<i>R-ID</i>	<i>Priority</i>	<i>Requirement Statement</i>
	Desirable	The solution shall track vital measurements for medications that require them.
	Desirable	The solution shall enforce vitals requirements at the time of medication administration. For example, blood pressure must be above XYZ to administer a medication.
	Mandatory	The solution shall provide, during medication administration, a link directly to a database containing precautions, interactions, dosing guidelines, and side effects of the medications.
	Mandatory	The solution shall protect data in accordance with all HIPPA privacy regulations.
	Desirable	The solution shall support HIPPA privacy regulations by hiding the screen when the nurse gets interrupted during a medication pass and has to walk away from the medication cart.
	Mandatory	The solution shall display PRNs (as-needed medications) that may be administered to residents.
	Mandatory	The solution shall allow filtering of the medications to select NOW medications (needs to be started the same day as ordered).
	Desirable	The solution shall allow the user to specify that the medication was obtained from DocuMed.
	Mandatory	The solution shall display if the patient-inmate is on the Keyhea list (e.g. involuntary administration of medications).

<i>FURPS+ Classification</i>	<i>Source e.g. UC Name</i>	<i>UC Section</i>	<i>Technical Assumption(s) and/or Dependency</i>	<i>Architectural/Design Document</i>	<i>Technical Specification</i>	<i>System Component(s)</i>
Functionality	UC1 – Manage Prescriber Order	Special Requirement: Expiration Time of Prescriber Order				
Functionality	UC1 – Manage Prescriber Order	Special Requirement: Out of Scope Areas				
Functionality						
Functionality	UC3 – Reconcile Prescriber Order					
Functionality	UC4 – Manage KOP for Ad Seg Transfer	Basic Flow: 1	Nursing receives form 154 in real time. GuardianRx is currently providing this information, which can be one day old.			
Functionality	UC4 – Manage KOP for Ad Seg Transfer	Basic Flow: 2				
Functionality	UC5 – Prepare Med Pass	Basic Flow: 1				
Functionality	UC5 – Prepare Med Pass	Basic Flow: 2				
Functionality	UC5 – Prepare Med Pass	Basic Flow: 2				
Functionality	UC5 – Prepare Med Pass	Basic Flow: 2	Information from GuardianRx/SOMS			
Functionality	UC5 – Prepare Med Pass	Basic Flow: 3	Information from GuardianRx/SOMS			
Functionality	UC5 – Prepare Med Pass	Basic Flow: 3				
Functionality	UC5 – Prepare Med Pass	Basic Flow: 3				
Functionality	UC5 – Prepare Med Pass	Basic Flow: 4	Information from GuardianRx/SOMS			
Functionality	UC5 – Prepare Med Pass	Basic Flow: 4	Information from GuardianRx/SOMS			
Functionality	UC5 – Prepare Med Pass	Basic Flow: 4	Information from GuardianRx/SOMS			
Functionality	UC5 – Prepare Med Pass	Basic Flow: 4				
Functionality	UC5 – Prepare Med Pass	Basic Flow: 4				
Functionality	UC5 – Prepare Med Pass	Basic Flow: 4				

<i>FURPS+ Classification</i>	<i>Source e.g. UC Name</i>	<i>UC Section</i>	<i>Technical Assumption(s) and/or Dependency</i>	<i>Architectural/Design Document</i>	<i>Technical Specification</i>	<i>System Component(s)</i>
Functionality	UC5 – Prepare Med Pass	Basic Flow: 4				
Functionality	UC5 – Prepare Med Pass	Special Requirement: Restricted KOP				
Functionality	UC5 – Prepare Med Pass	Special Requirement: Views of Med Pass Report				
Functionality	UC5 – Prepare Med Pass	Special Requirement: Views of Med Pass Report				
Functionality	UC5 – Prepare Med Pass	Special Requirement: Views of Med Pass Report				
Functionality	UC5 – Prepare Med Pass	Special Requirement: Views of Med Pass Report				
Usability	UC5 – Prepare Med Pass	Basic Flow: 5				
Physical	UC5 – Prepare Med Pass	Special Requirement: Hand-Held Devise				
Physical	Derived Requirement					
Physical	SME Request					
Physical	UC5 – Prepare Med Pass	Special Requirement: Hand-Held Devise				
Physical	SME Request					
Reliability						
Physical	UC5 – Prepare Med Pass	Special Requirement: Hand-Held Devise				
Usability	SME Request					
Usability						
Physical	UC5 – Prepare Med Pass	Special Requirement: Hand-Held Devise				
Physical	Derived Usability					
Physical	Derived Usability					
Physical	SME Request					
Physical	SME Request					
Physical	UC5 – Prepare Med Pass	Special Requirement: Hand-Held Devise				
Physical	UC5 – Prepare Med Pass	Basic Flow: 6				
Functionality	UC5 – Prepare Med Pass	Basic Flow: 7				

<i>FURPS+ Classification</i>	<i>Source e.g. UC Name</i>	<i>UC Section</i>	<i>Technical Assumption(s) and/or Dependency</i>	<i>Architectural/Design Document</i>	<i>Technical Specification</i>	<i>System Component(s)</i>
Functionality	UC5 – Prepare Med Pass	Basic Flow: 7				
Functionality	UC5 – Prepare Med Pass	Basic Flow: 7				
Functionality	UC5 – Prepare Med Pass	Basic Flow: 8				
Functionality	UC5 – Prepare Med Pass	Basic Flow: 9				
Functionality	UC5 – Prepare Med Pass	Basic Flow: 9				
Functionality	UC5 – Prepare Med Pass	Basic Flow: 10				
Functionality	UC5 – Prepare Med Pass	Special Requirement: Sorting of MP Med List				
Functionality	UC5 – Prepare Med Pass	Alternate Flow: Print Bar Code Label Sticker				
Functionality	UC5 – Prepare Med Pass	Special Requirement: Liquid Medication, Injectable				
Functionality	UC6a, UC6b, UC6c	Basic Flow: 1				
Functionality	UC6a, UC6b, UC6c	Basic Flow: 2				
Usability						
Usability	UC6a, UC6b, UC6c	Basic Flow: 3				
Functionality	UC6a, UC6b, UC6c	Basic Flow: 3				
Functionality	UC6a, UC6b, UC6c	Basic Flow: 5				
Performance	Derived Requirement					
Performance	Derived Requirement					
Performance	Derived Requirement					
Functionality	UC5, UC6a, UC6b, UC6c					
Performance	Derived Requirement					
Reliability						
Functionality	UC6a – Conduct Cell-Side Med Pass	Basic Flow: 9				
Functionality	UC6a – Conduct Cell-Side Med Pass	Basic Flow: 9				
Functionality	UC6a – Conduct Cell-Side Med Pass	Basic Flow: 9				
Functionality	UC6a – Conduct Cell-Side Med Pass	Basic Flow: 10				

<i>FURPS+ Classification</i>	<i>Source e.g. UC Name</i>	<i>UC Section</i>	<i>Technical Assumption(s) and/or Dependency</i>	<i>Architectural/Design Document</i>	<i>Technical Specification</i>	<i>System Component(s)</i>
Functionality	UC6a – Conduct Cell-Side Med Pass	Basic Flow: 12				
Functionality	UC6a – Conduct Cell-Side Med Pass	Basic Flow: 12	Generic requirement that applies to overriding a alert under different circumstances. E.g. med mismatch alert, meds left un-administered alert, etc.			
Interface	UC6a – Conduct Cell-Side Med Pass	Basic Flow: 14, 15				
Interface	Derived Requirement					
Reliability	UC6a – Conduct Cell-Side Med Pass	Special Requirement: Display of Inmate Name and CDCR Number				
Functionality	UC6b, UC6c	Basic Flow: 6				
Functionality	UC6b – Conduct Podium Med Pass	Special Requirement: Verification of Selection				
Reliability	UC6b, UC6c	Basic Flow: 10				
Functionality	UC7a – Obtain Unavailable Medication	Basic Flow: 5	Maybe redundant with row 12			
Functionality	UC7b – Override Mismatch Alert	Basic Flow: 3				
Functionality	UC7c – Record Medication Refusal	Basic Flow: 3				
Functionality	UC7d – Record Medication Waste	Basic Flow: 3				
Functionality	UC7c, UC7d	Basic Flow: 3				
Functionality	UC8 – Close Med Pass	Basic Flow: 1				
Functionality	UC8 – Close Med Pass	Basic Flow: 4				
Functionality	UC8 – Close Med Pass	Basic Flow: 4	Information from GuardianRx/SOMS			
Functionality	UC8 – Close Med Pass	Basic Flow: 4				
Supportability						
Physical	SME Request 11/30/06					

<i>FURPS+ Classification</i>	<i>Source e.g. UC Name</i>	<i>UC Section</i>	<i>Technical Assumption(s) and/or Dependency</i>	<i>Architectural/Design Document</i>	<i>Technical Specification</i>	<i>System Component(s)</i>
Functionality						
Functionality						
Functionality						
Design						
Design						
Functionality						
Functionality						
Functionality						
Functionality						

