



September 22, 2023

TO: Legal Counsel

News Media

Salinas Californian

El Sol

Monterey County Herald

Monterey County Weekly

KION-TV

KSBW-TV/ABC Central Coast

KSMS/Entravision-TV

The next regular meeting of the **BOARD OF DIRECTORS OF SALINAS VALLEY HEALTH<sup>1</sup>** will be held **THURSDAY, SEPTEMBER 28, 2023, AT 3:30 P.M., DOWNING RESOURCE CENTER, ROOMS A, B, & C, SALINAS VALLEY HEALTH MEDICAL CENTER, 450 E. ROMIE LANE, SALINAS, CALIFORNIA** or via **TELECONFERENCE** (visit [SalinasValleyHealth.com/virtualboardmeeting](https://www.SalinasValleyHealth.com/virtualboardmeeting) for Access Information).

A handwritten signature in black ink, appearing to read "Pete Delgado", written in a cursive style.

Pete Delgado  
President/Chief Executive Officer

**REGULAR MEETING OF THE BOARD OF DIRECTORS  
 SALINAS VALLEY HEALTH<sup>1</sup>**

**THURSDAY, SEPTEMBER 28, 2023, 3:30 P.M.  
 DOWNING RESOURCE CENTER, ROOMS A, B & C  
 SALINAS VALLEY HEALTH MEDICAL CENTER  
 450 E. ROMIE LANE, SALINAS, CALIFORNIA  
 or via TELECONFERENCE**

**(Visit [salinasvalleyhealth.com/virtualboardmeeting](https://salinasvalleyhealth.com/virtualboardmeeting) for Access Information)**

**AGENDA**

	<i><u>Presented By</u></i>
<b>1. CALL TO ORDER / ROLL CALL</b>	<i>Victor Rey, Jr.</i>
<b>2. CLOSED SESSION</b> <i>(See Attached Closed Session Sheet Information)</i>	<i>Victor Rey, Jr.</i>
<b>3. RECONVENE OPEN SESSION/CLOSED SESSION REPORT</b> <i>(Estimated time 5:00 pm)</i>	<i>Victor Rey, Jr.</i>
<b>4. REPORT FROM THE PRESIDENT/CHIEF EXECUTIVE OFFICER</b>	<i>Pete Delgado</i>
<b>5. PUBLIC INPUT</b>  This opportunity is provided for members of the public to make a brief statement, not to exceed three (3) minutes, on issues or concerns within the jurisdiction of this District Board which are not otherwise covered under an item on this agenda.	<i>Victor Rey, Jr.</i>
<b>6. BOARD MEMBER COMMENTS</b>	<i>Board Members</i>
<b>7. CONSENT AGENDA - GENERAL BUSINESS</b> <i>(Board Member may pull an item from the Consent Agenda for discussion.)</i>	<i>Victor Rey, Jr.</i>
A. Minutes of August 24, 2023, Regular Meeting of the Board of Directors	
B. Financial Report	
C. Statistical Report	
<b>8. REPORTS ON STANDING AND SPECIAL COMMITTEES</b>	
A. <b>Quality and Efficient Practices Committee</b> Minutes of the September 25, 2023 Quality and Efficient Practices Committee meeting have been provided to the Board for their review. Additional Report from Committee Chair, if any.	<i>Catherine Carson</i>
B. <b>Finance Committee</b> Minutes of the September 25, 2023 Finance Committee meeting have been provided to the Board for their review. The following recommendation has been made to the Board:	<i>Joel Hernandez Laguna</i>
1. Consider Recommendation for Board of Directors Approval of Preliminary Project Budget for the Medical Center Campus Colorization Project <ul style="list-style-type: none"> <li>▪ Committee Chair Report</li> <li>▪ Questions to Committee Chair/Staff</li> <li>▪ Motion/Second</li> <li>▪ Public Comment</li> </ul>	

<sup>1</sup>Salinas Valley Memorial Healthcare System operating as Salinas Valley Health

- Board Discussion/Deliberation
- Action by Board/Roll Call Vote

**C. Personnel, Pension and Investment Committee**

*Juan Cabrera*

Minutes of the September 26, 2023 Personnel, Pension and Investment Committee meeting have been provided to the Board for their review.

1. Recommendation for Board approval: Amendment to the Salinas Valley Memorial Healthcare System 403(b) Retirement Plan.
  - Committee Chair Report
  - Questions to Committee Chair/Staff
  - Motion/Second
  - Public Comment
  - Board Discussion/Deliberation
  - Action by Board/Roll Call Vote
  
2. Consider recommendation for Board Approval of:
  - a. The findings supporting the recruitment of Nima Beheshti, DO;
  - b. The contract terms for Dr. Beheshti's Recruitment Agreement, and;
  - c. The contract terms for Dr. Beheshti's Neurology Professional Services Agreement.
  - Committee Chair Report
  - Questions to Committee Chair/Staff
  - Motion/Second
  - Public Comment
  - Board Discussion/Deliberation
  - Action by Board/Roll Call Vote
  
2. Consider recommendation for Board Approval of
  - a. The Findings Supporting Recruitment of Gurbinder Kaur, MD;
  - b. The contract terms for Dr. Kaur's Recruitment Agreement, and;
  - c. The contract terms for Dr. Kaur's Neurosurgery Professional Services Agreement.
  - Committee Chair Report
  - Questions to Committee Chair/Staff
  - Motion/Second
  - Public Comment
  - Board Discussion/Deliberation
  - Action by Board/Roll Call Vote

**D. CORPORATE COMPLIANCE AND AUDIT COMMITTEE**

*Juan Cabrera*

Minutes of the September 26, 2023 Corporate Compliance and Audit Committee meeting have been provided to the Board for their review. Additional Report from Committee Chair, if any.

**9. REPORT ON BEHALF OF THE MEDICAL EXECUTIVE COMMITTEE (MEC) MEETING OF SEPTEMBER 14, 2023, AND RECOMMENDATIONS FOR BOARD APPROVAL OF THE FOLLOWING:**

*Theodore,  
Kaczmar, Jr.,  
MD*

A. Reports

1. Credentials Committee Report
2. Interdisciplinary Practice Committee

B. Policies/Plans/Procedures

1. Chest Pain Standardized Procedure – Revised
2. Intraosseous Infusion Standardized Procedure Nursing Standardized Procedure – Revised
3. Vaginal Bleeding Standardized Procedure – Revised
4. Surgical Wound Classification System – Revised
5. Antibiotic Stewardship Policy – Revised
6. Medication Error Reduction Plan (MERP) - Revised

**10. EXTENDED CLOSED SESSION** *(if necessary)*

*Victor Rey, Jr.*

**11. ADJOURNMENT**

The Regular Meeting of the Board of Directors is scheduled for **Thursday, October 26, 2023, at 4:00 p.m.**

The complete Board packet including subsequently distributed materials and presentations is available at the Board Meeting and in the Human Resources Department of the District. All items appearing on the agenda are subject to action by the Board. Staff and Committee recommendations are subject to change by the Board.

Requests for a disability related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting should be made to the Board Clerk during regular business hours at 831-759-3050. Notification received 48 hours before the meeting will enable the District to make reasonable accommodations.

# SALINAS VALLEY HEALTH BOARD OF DIRECTORS

## AGENDA FOR CLOSED SESSION

*Pursuant to California Government Code Section 54954.2 and 54954.5, the board agenda may describe closed session agenda items as provided below. No legislative body or elected official shall be in violation of Section 54954.2 or 54956 if the closed session items are described in substantial compliance with Section 54954.5 of the Government Code.*

### CLOSED SESSION AGENDA ITEMS

#### HEARINGS/REPORTS

(Government Code §37624.3 & Health and Safety Code §§1461, 32155)

**Subject matter:** (Specify whether testimony/deliberation will concern staff privileges, report of medical audit committee, or report of quality assurance committee):

1. Strategic Planning
2. Report of the Medical Staff Quality and Safety Committee
  - a. Pathology Tissue Review 1-2 Q 2023
3. Quality and Efficient Practices Committee
  - a. Opioid/Pain Committee
  - b. Sepsis
  - c. MERP attachment updates and the Medication Error Analysis
  - d. Cath Lab/Cardiac Rehab/CDOC
  - e. Environmental Services
  - f. Pharmacy & Therapeutics/Infection Prevention Full Report
  - g. Service Excellence

#### PUBLIC EMPLOYEE PERFORMANCE EVALUATION

(Government Code §54957)

**Title:** President/CEO \_\_\_\_\_

#### REPORT INVOLVING TRADE SECRET

(Government Code §37606 & Health and Safety Code § 32106)

Discussion will concern: (Specify whether discussion will concern proposed new service, program, or facility): Trade Secret, Strategic Planning, Proposed New Programs and Services

**Estimated date of public disclosure:** (Specify month and year): Unknown

**CONFERENCE WITH REAL PROPERTY NEGOTIATORS**

(Government Code §54956.8)

**Property:** (Specify street address, or if no street address, the parcel number or other unique reference, of the real property under negotiation): 1067 N. Davis Road, Salinas, Ca.

**Agency negotiator:** (Specify names of negotiators attending the closed session): Pete Delgado

**Negotiating parties:** (Specify name of party (not agent): Farmers Daughter LP

**Under negotiation:** (Specify whether instruction to negotiator will concern price, terms of payment, or both): Price and Terms

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**ADJOURN TO OPEN SESSION**

*CALL TO ORDER/ROLL CALL*

*(VICTOR REY, JR.)*

*CLOSED SESSION*

*(Report on Items to be  
Discussed in Closed Session)*

*(VICTOR REY, JR.)*

*RECONVENE OPEN SESSION/  
CLOSED SESSION REPORT  
(ESTIMATED TIME: 5:00 P.M.)*

*(VICTOR REY, JR.)*

*REPORT FROM THE PRESIDENT/  
CHIEF EXECUTIVE OFFICER*

*(VERBAL)*

*(PETE DELGADO)*

# *PUBLIC INPUT*

*BOARD MEMBER COMMENTS*

*(VERBAL)*

# *MINUTES*



**SALINAS VALLEY MEMORIAL HEALTHCARE SYSTEM<sup>1</sup>  
REGULAR MEETING OF THE BOARD OF DIRECTORS  
MEETING MINUTES  
AUGUST 24, 2023**

Committee Members Present:

In-person: President Victor Rey Jr.; Vice-President Joel Hernandez Laguna, Juan Cabrera, Rolando Cabrera MD., and Catherine Carson

Via Teleconference: None

Absent: None

Also Present:

Pete Delgado, President/Chief Executive Officer

Theodore Kaczmar, Jr., MD., Chief of Staff

Matthew Ottone, Esq., District Legal Counsel

Julian Lorenzana, Board Clerk

## **1. CALL TO ORDER/ROLL CALL**

A quorum was present and President Victor Rey, Jr. called the meeting to order at 4:05 p.m. in the Downing Resource Center, Rooms A, B, and C.

## **2. CLOSED SESSION**

President Victor Rey, Jr. announced items to be discussed in Closed Session as listed on the posted Agenda are *(1) Hearings and Reports (2) Conference with Legal Counsel – Anticipated Litigation, (3) Reports Involving Trade Secret*. The meeting recessed into Closed Session under the Closed Session Protocol at 4:07 p.m. The Board completed its business of the Closed Session at 5:14 p.m.

## **3. RECONVENE OPEN SESSION/REPORT ON CLOSED SESSION**

The Board reconvened Open Session at 5:24 p.m. President Victor Rey, Jr. reported that in Closed Session, the Board discussed *(1) Hearings and Reports (2) Conference with Legal Counsel – Anticipated Litigation, (3) Report Involving Trade Secret*. The Board received the reports listed on the Closed Session agenda, no additional actions were taken.

## **4. EDUCATION PROGRAM – EMPLOYEE ENGAGEMENT 2023**

Murat Phillipe, Workforce Engagement Advisor with Press Ganey reviewed the 2023 Employee Engagement Survey. The national healthcare average for employee engagement has been declining due to the pandemic. Employee engagement at Salinas Valley Health has stayed relatively the same, ranking in the 84<sup>th</sup> percentile for the last couple of years with an 83% response rate. 46% of current employees are highly engaged and only 3% are disengaged. Some strengths are high quality safe care, community commitment, and perceptions of fair compensation and satisfactory benefits. Opportunities for

<sup>1</sup>Salinas Valley Memorial Healthcare System operating as Salinas Valley Health

improvement are perceptions of respect from managers, communication across different levels of the organization, and connection with team members while working remotely.

**Comments from the Board:**

Vice President Joel Hernandez Laguna asked to clarify the section where employees were asked if they believe that their work unit is adequately staffed. Mr. Phillippe explained that 59% of employees had a favorable response, 22% were neutral, and 22% of employees had an unfavorable response

Director Catherine Carson commented that the Hospital should share the results from Leapfrog so that the employees know how well we are doing. She also suggested that the Hospital should publicize this information to the community as well.

**PUBLIC COMMENT:**

No public comment

**5. REPORT FROM THE PRESIDENT/CHIEF EXECUTIVE OFFICER**

This month’s mission moment features David Spilker, MD. a patient who was diagnosed with mitral valve prolapse. He underwent a cardiovascular procedure where a mitral clip was surgically inserted into his heart, using very light anesthesia. Mr. Spilker said that he felt no pain and is now walking a mile a day and is back to feeling good.

**Service:** Daniel Van-Victorino, Chair of the Emergency Department Unit Practice Council, reported on patients being seen at the hospital. The hospital is currently seeing more patients than Natividad and CHOMP. Door-to-needle times have improved from 46.05 minutes last year to 40.22 minutes this year. Their goal for door-to-needle time is to be under 30 minutes. Another goal that the council is working on is that of blood contamination rates. Their goal was to see less than 3%. This year they are well below 2%.

**Growth:** A new clinic location for Urology opened on August 1<sup>st</sup>. There are currently 3 Urologists, we are actively recruiting for one more provider. The new parking structure is moving along and is expected to be completed in November.

**Quality:** Salinas Valley Health was recently recognized by US News and World Report. We ranked as a high-performing hospital in nine procedures and were regionally ranked 50<sup>th</sup> in California.

**Industry:** Many hospitals around the nation continue to have financial problems and are struggling with layoffs.

**People:** Employee Forums have resumed after a hiatus due to COVID. These meetings are an opportunity for staff to share their ideas and input to improve operations. Our Director Victor Rey, Jr. was recognized by Modern Healthcare for Excellence in Governance. Pete Delgado, President/CEO was also recognized for his ten years of service to Salinas Valley Health

**Community:** Asthma Camp wrapped up this month. Our next Walk With A Doc is scheduled for September 9<sup>th</sup> with Dr. Stephanie Trost. OD Awareness Day is scheduled for August 31 and will be held in the MRI parking lot.

**Public Comment:**

No public comment

**6. PUBLIC INPUT**

No public input

## 7. BOARD MEMBER COMMENTS

**President Victor Rey, Jr.:** The Mobile Clinic is amazing with all that they do and the impact they have on the community. This was a great investment, thank you to the Foundation for making it happen.

**Vice President Joel Hernandez Laguna:** Thank you to all the staff who set up the site visit today. Learned a lot about the Emergency Department and safety around the hospital.

**Director Rolando Cabrera, MD.:** No comment.

**Director Juan Cabrera:** Saw the Mobile Clinic at Alisal High School. There were a lot of young people there getting physicals.

**Director Catherine Carson:** No comment,

## 8. CONSENT AGENDA – GENERAL BUSINESS

- A. Minutes of July 27, 2023, regular meeting of the Board of Directors
- B. Financial Report
- C. Statistical Report
- D. Policies Requiring Approval
  1. Nursing Standardized Procedure for First Aid at Community Events
  2. Restraints Policy
  3. Rules and Regulations Amendments

### **PUBLIC COMMENT:**

No public comment

### **MOTION:**

Upon motion by Director Rolando Cabrera, second by Director Joel Hernandez Laguna, the Board of Directors approved the Consent Agenda, Items (a) through (d), as presented.

### **ROLL CALL VOTE:**

Ayes: Directors Rey, Hernandez Laguna, J. Cabrera, R Cabrera, MD., and Carson;

Noes: None;

Abstentions: None;

Absent: None

### **Motion Carried**

## 9. REPORTS ON STANDING AND SPECIAL COMMITTEES

### ***A. QUALITY AND EFFICIENT PRACTICES COMMITTEE***

Received a report from Director Catherine Carson regarding the Quality and Efficient Practices Committee.

**B. FINANCE COMMITTEE**

Received a report from Director Hernandez Laguna regarding the Finance Committee.

- 1. Consider Recommendation for Board Approval of the Purchase of Internet Connectivity Services Fees from CENIC as Sole Source Justification and Contract Award***

**PUBLIC COMMENT:**

None

**MOTION:**

Upon motion by Director Rolando Cabrera, MD., and second by Director Juan Cabrera, the Board of Directors approved the purchase of internet connectivity services fees from CENIC as sole source justification and contract award in the amount of \$493,687.88 over a five-year term.

**ROLL CALL VOTE:**

Ayes: Directors Rey, Hernandez Laguna, J. Cabrera, R Cabrera, MD., and Carson;

Noes: None;

Abstentions: None;

Absent: None

**Motion Carried**

- 2. Consider Recommendation for Board Approval of the MetTel Addendum to Transfer Select Existing AT&T Carrier as Sole Source Justification and Contract Award***

**PUBLIC COMMENT:**

No public comment

**MOTION:**

Upon motion by Director Juan Cabrera, and second by Director Joel Hernandez Laguna, the Board of Directors approved the MetTel Addendum to Transfer Select Existing AT&T Carrier as Sole Source Justification and Contract Award in the amount of \$307,915.56 over a three-year term.

**BOARD DISCUSSION:**

Director Catherine Carson commented that this is outstanding and commended the staff that brought this forward.

**ROLL CALL VOTE:**

Ayes: Directors Rey, Hernandez Laguna, J. Cabrera, R Cabrera, MD., and Carson;

Noes: None;

Abstentions: None;

Absent: None

**Motion Carried**

## **ADDITIONS AND CHANGES**

Chair Victor Rey, Jr. announced two items being added to the Personnel, Pension, and Investment Committee under Reports on Standing and Special Committees

1. Consider recommendation for Board approval of:
  - Findings Supporting Recruitment of Vivian Monique McCorvey, MD.;
  - Contract Terms for Dr. McCorvey's Recruitment Agreement, and;
  - Contract Terms for Dr. McCorvey's Mammography Professional Services Agreement

### **PUBLIC COMMENT:**

No public comment

### **MOTION:**

Upon motion by Director Carson, second by Director Rolando Cabrera, MD.; the Board of Directors approved the addition to the Board of Directors agenda.

### **ROLL CALL VOTE:**

Ayes: Directors Rey, Hernandez Laguna, J. Cabrera, R Cabrera, MD., and Carson;

Noes: None;

Abstentions: None;

Absent: None

### **Motion Carried**

2. Consider recommendation for Board Approval of contract terms for Katherine Noel, MD's Obstetrics and Gynecology Professional Services Agreement

### **PUBLIC COMMENT:**

No public comment

### **MOTION:**

Upon motion by Director Carson, second by Director Joel Hernandez Laguna, the Board of Directors approved the addition to the Board of Directors agenda.

### **ROLL CALL VOTE:**

Ayes: Directors Rey, Hernandez Laguna, J. Cabrera, R Cabrera, MD., and Carson;

Noes: None;

Abstentions: None;

Absent: None

### **Motion Carried**

**C. PERSONNEL, PENSION, AND INVESTMENT COMMITTEE**

Received a report from Director Juan Cabrera regarding the Personnel, Pension, and Investment Committee.

1. **Consider recommendation for Board approval of:**
  - a. **Findings Supporting Recruitment of Vivian Monique McCorvey, MD.;**
  - b. **Contract Terms for Dr. McCorvey’s Recruitment Agreement, and;**
  - c. **Contract Terms for Dr. McCorvey’s Mammography Professional Services Agreement**

**PUBLIC COMMENT:**

No public comment

**MOTION:**

Upon motion by Director Carson, second by Director Joel Hernandez Laguna, the Board of Directors approved Dr. McCorvey’s Mammography Professional Services Agreement with a recruitment incentive of \$40,000.

**ROLL CALL VOTE:**

Ayes: Directors Rey, Hernandez Laguna, J. Cabrera, R Cabrera, MD., and Carson;

Noes: None;

Abstentions: None;

Absent: None

**Motion Carried**

2. **CONSIDER RECOMMENDATION FOR BOARD APPROVAL OF CONTRACT TERMS FOR KATHERINE NOEL, MD’S OBSTETRICS AND GYNECOLOGY PROFESSIONAL SERVICES AGREEMENT:**

**PUBLIC COMMENT:**

No public comment

**MOTION:**

Upon motion by Director Catherine Carson, second by Director Rolando Cabrera, MD., the Board of Directors approved the contract terms of the Obstetrics and Gynecology Professional Service Agreement for Katherine Noel, MD.

**ROLL CALL VOTE:**

Ayes: Directors Rey, Hernandez Laguna, J. Cabrera, R Cabrera, MD., and Carson;

Noes: None;

Abstentions: None;

Absent: None

**Motion Carried**

#### ***D. COMMUNITY ADVOCACY COMMITTEE***

Received a report from Director Rolando Cabrera, MD. regarding the Community Advocacy Committee. Both the Blue Zones Project and the Mobile Clinic have been working diligently. The Mobile Clinic has been conducting many physicals for students going back to school

#### **BOARD DISCUSSION:**

President Victor Rey, Jr. commented that he has been taking his children to the Mobile Clinic for physicals and has been recommending others to use the Mobile Clinic as a resource.

### **10. REPORT ON BEHALF OF THE MEDICAL EXECUTIVE COMMITTEE (MEC) MEETING OF JUNE 8, 2023, AND RECOMMENDATIONS FOR BOARD APPROVAL OF THE FOLLOWING:**

#### **A. REPORTS**

1. Credentials Committee Report
2. Interdisciplinary Practice Committee Report
3. Medical Staff Excellence Committee Report
4. Quality and Safety Committee Report
  - Stroke Program Update
  - Risk Management
  - Clinical Nutrition Services – Malnutrition Update
  - Accreditation & Regulatory Update
  - Beta HEART Update
  - Commission on Cancer Update
  - TJC National Patient Safety Goals

Dr. Allen Radner reported on the update for MEC on behalf of Dr. Theodore Kaczmar.

### **11. EXTENDED CLOSED SESSION**

An extended Closed Session was not required

### **12. ADJOURNMENT**

The next Regular Meeting of the Board of Directors is scheduled for **Thursday, September 28 at 4:00 p.m.** There being no further business, the meeting was adjourned at 6:50 p.m.

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Rolando Cabrera, MD  
Secretary, Board of Directors

# *Financial Report*

SALINAS VALLEY HEALTH MEDICAL CENTER  
SUMMARY INCOME STATEMENT  
August 31, 2023

	<u>Month of August,</u>		<u>Two months ended August 31,</u>	
	<u>current year</u>	<u>prior year</u>	<u>current year</u>	<u>prior year</u>
Operating revenue:				
Net patient revenue	\$ 46,220,446	\$ 54,037,184	\$ 95,511,162	\$ 98,206,039
Other operating revenue	<u>1,186,536</u>	<u>876,946</u>	<u>2,228,398</u>	<u>1,573,099</u>
Total operating revenue	<u>47,406,982</u>	<u>54,914,130</u>	<u>97,739,560</u>	<u>99,779,138</u>
Total operating expenses	47,591,796	48,625,055	94,607,592	91,460,304
Total non-operating income	<u>(450,187)</u>	<u>(4,049,023)</u>	<u>(1,236,790)</u>	<u>(2,654,432)</u>
Operating and non-operating income	<u>\$ (635,002)</u>	<u>\$ 2,240,052</u>	<u>\$ 1,895,178</u>	<u>\$ 5,664,402</u>

SALINAS VALLEY HEALTH MEDICAL CENTER  
 BALANCE SHEETS  
 August 31, 2023

	<u>Current year</u>	<u>Prior year</u>
<b>ASSETS:</b>		
Current assets	\$ 445,929,153	\$ 395,627,087
Assets whose use is limited or restricted by board	159,053,150	150,535,522
Capital assets	248,850,702	237,862,826
Other assets	170,736,355	187,372,094
Deferred pension outflows	<u>116,911,125</u>	<u>95,857,027</u>
	<u>\$ 1,141,480,485</u>	<u>\$ 1,067,254,556</u>
<b>LIABILITIES AND EQUITY:</b>		
Current liabilities	82,777,137	106,264,372
Long term liabilities	17,007,738	18,514,233
Lease deferred inflows	2,856,606	1,911,058
Pension liability	124,875,355	79,111,485
Net assets	<u>913,963,649</u>	<u>861,453,408</u>
	<u>\$ 1,141,480,485</u>	<u>\$ 1,067,254,556</u>

**SALINAS VALLEY HEALTH MEDICAL CENTER  
SCHEDULES OF NET PATIENT REVENUE  
August 31, 2023**

	<u>Month of August,</u>		<u>Two months ended August 31,</u>	
	<u>current year</u>	<u>prior year</u>	<u>current year</u>	<u>prior year</u>
Patient days:				
By payer:				
Medicare	1,791	2,030	3,653	3,896
Medi-Cal	921	1,036	1,947	2,125
Commercial insurance	561	770	1,252	1,548
Other patient	93	109	204	219
Total patient days	<u>3,366</u>	<u>3,945</u>	<u>7,056</u>	<u>7,788</u>
Gross revenue:				
Medicare	\$ 113,231,345	\$ 107,307,517	\$ 224,212,310	\$ 201,070,958
Medi-Cal	67,435,695	64,717,339	128,243,403	123,547,651
Commercial insurance	51,931,778	54,731,567	102,001,344	103,825,171
Other patient	<u>9,874,241</u>	<u>8,307,858</u>	<u>18,992,826</u>	<u>16,651,622</u>
Gross revenue	<u>242,473,059</u>	<u>235,064,281</u>	<u>473,449,883</u>	<u>445,095,403</u>
	74.5%	73.2%	74.4%	72.9%
Deductions from revenue:				
Administrative adjustment	201,462	445,416	546,325	502,780
Charity care	1,275,270	922,558	1,926,685	1,718,108
Contractual adjustments:				
Medicare outpatient	37,772,969	32,066,624	71,927,614	61,578,570
Medicare inpatient	47,527,738	46,992,416	95,809,741	90,293,094
Medi-Cal traditional outpatient	2,743,779	3,530,319	5,109,016	6,728,151
Medi-Cal traditional inpatient	4,037,810	3,890,601	9,784,360	8,987,520
Medi-Cal managed care outpatient	31,410,007	25,051,448	57,624,795	48,183,509
Medi-Cal managed care inpatient	23,530,377	23,830,410	43,275,873	45,486,678
Commercial insurance outpatient	22,382,793	18,777,864	41,947,359	35,119,730
Commercial insurance inpatient	19,770,883	20,752,986	38,951,207	38,444,130
Uncollectible accounts expense	4,415,706	4,175,568	8,487,471	7,900,767
Other payors	<u>1,183,819</u>	<u>590,886</u>	<u>2,548,275</u>	<u>1,946,327</u>
Deductions from revenue	<u>196,252,613</u>	<u>181,027,097</u>	<u>377,938,721</u>	<u>346,889,364</u>
Net patient revenue	<u>\$ 46,220,446</u>	<u>\$ 54,037,184</u>	<u>\$ 95,511,162</u>	<u>\$ 98,206,039</u>
	19.06%	22.99%	20.17%	22.06%
Gross billed charges by patient type:				
Inpatient	\$ 118,058,944	\$ 124,806,208	\$ 237,520,920	\$ 236,050,463
Outpatient	92,426,725	82,086,994	174,338,706	153,682,338
Emergency room	<u>31,987,390</u>	<u>28,171,080</u>	<u>61,590,256</u>	<u>55,362,602</u>
Total	<u>\$ 242,473,059</u>	<u>\$ 235,064,281</u>	<u>\$ 473,449,882</u>	<u>\$ 445,095,403</u>

**SALINAS VALLEY HEALTH MEDICAL CENTER  
STATEMENTS OF REVENUE AND EXPENSES  
August 31, 2023**

	<u>Month of August,</u>		<u>Two months ended August 31,</u>	
	<u>current year</u>	<u>prior year</u>	<u>current year</u>	<u>prior year</u>
Operating revenue:				
Net patient revenue	\$ 46,220,446	\$ 54,037,184	\$ 95,511,162	\$ 98,206,039
Other operating revenue	1,186,536	876,946	2,228,398	1,573,099
Total operating revenue	<u>47,406,982</u>	<u>54,914,130</u>	<u>97,739,560</u>	<u>99,779,138</u>
Operating expenses:				
Salaries and wages	16,259,581	19,579,449	32,435,126	35,638,600
Compensated absences	2,897,556	2,826,365	5,945,662	5,439,480
Employee benefits	9,178,334	7,587,087	17,865,559	14,805,225
Supplies, food, and linen	7,311,261	6,863,466	13,918,750	12,972,922
Purchased department functions	3,861,763	3,641,021	7,824,372	7,215,400
Medical fees	2,918,877	2,001,209	5,045,162	3,370,302
Other fees	1,499,051	2,284,660	4,387,647	4,639,728
Depreciation	1,805,101	2,139,860	3,611,600	4,031,730
All other expense	1,860,272	1,701,938	3,573,714	3,346,917
Total operating expenses	<u>47,591,796</u>	<u>48,625,055</u>	<u>94,607,592</u>	<u>91,460,304</u>
Income from operations	<u>(184,814)</u>	<u>6,289,075</u>	<u>3,131,968</u>	<u>8,318,834</u>
Non-operating income:				
Donations	1,153,867	170,325	1,132,687	2,131,824
Property taxes	333,333	333,333	666,667	666,667
Investment income	1,996,078	(2,319,356)	4,540,738	(240,526)
Taxes and licenses	0	0	0	0
Income from subsidiaries	<u>(3,933,465)</u>	<u>(2,233,325)</u>	<u>(7,576,882)</u>	<u>(5,212,397)</u>
Total non-operating income	<u>(450,187)</u>	<u>(4,049,023)</u>	<u>(1,236,790)</u>	<u>(2,654,432)</u>
Operating and non-operating income	(635,002)	2,240,052	1,895,178	5,664,402
Net assets to begin	<u>914,598,651</u>	<u>859,213,356</u>	<u>912,068,471</u>	<u>855,789,006</u>
Net assets to end	<u>\$ 913,963,649</u>	<u>\$ 861,453,408</u>	<u>\$ 913,963,649</u>	<u>\$ 861,453,408</u>
Net income excluding non-recurring items	\$ (635,002)	\$ 2,240,052	\$ 1,895,178	\$ 5,664,402
Non-recurring income (expense) from cost report settlements and re-openings and other non-recurring items	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Operating and non-operating income	<u>\$ (635,002)</u>	<u>\$ 2,240,052</u>	<u>\$ 1,895,178</u>	<u>\$ 5,664,402</u>

**SALINAS VALLEY HEALTH MEDICAL CENTER  
SCHEDULES OF INVESTMENT INCOME  
August 31, 2023**

	Month of August,		Two months ended August 31,	
	current year	prior year	current year	prior year
Detail of other operating income:				
Dietary revenue	\$ 186,989	\$ 117,173	\$ 392,769	\$ 261,932
Discounts and scrap sale	283,407	267,808	288,234	273,675
Sale of products and services	52,869	68,008	112,797	79,570
Clinical trial fees	0	0	0	0
Stimulus Funds	0	0	0	0
Rental income	190,384	174,735	380,768	349,851
Other	472,887	249,222	1,053,830	608,071
	<u>\$ 1,186,536</u>	<u>\$ 876,946</u>	<u>\$ 2,228,398</u>	<u>\$ 1,573,099</u>
Detail of investment income:				
Bank and payor interest	\$ 1,463,761	\$ 143,730	\$ 2,864,451	\$ 517,820
Income from investments	532,316	(2,463,086)	1,733,174	(758,346)
Gain or loss on property and equipment	0	0	(56,887)	0
	<u>\$ 1,996,078</u>	<u>\$ (2,319,356)</u>	<u>\$ 4,540,738</u>	<u>\$ (240,526)</u>
Detail of income from subsidiaries:				
Salinas Valley Medical Center:				
Pulmonary Medicine Center	\$ (182,625)	\$ (200,808)	\$ (359,989)	\$ (407,414)
Neurological Clinic	(56,266)	(29,459)	(135,431)	(76,576)
Palliative Care Clinic	(62,133)	(55,680)	(146,654)	(132,254)
Surgery Clinic	(173,977)	(197,637)	(400,367)	(290,416)
Infectious Disease Clinic	(26,966)	(28,792)	(61,449)	(54,844)
Endocrinology Clinic	(209,293)	(229,051)	(418,560)	(360,338)
Early Discharge Clinic	0	0	0	0
Cardiology Clinic	(470,433)	(273,445)	(996,965)	(750,274)
OB/GYN Clinic	(379,119)	(336,004)	(698,916)	(612,418)
PrimeCare Medical Group	(763,843)	(353,702)	(1,497,877)	(888,298)
Oncology Clinic	(324,643)	(327,564)	(618,421)	(503,258)
Cardiac Surgery	(267,302)	(203,668)	(490,177)	(437,700)
Sleep Center	(35,147)	(44,249)	(72,356)	(83,084)
Rheumatology	(67,371)	(63,242)	(130,945)	(116,222)
Precision Ortho MDs	(395,399)	(218,034)	(801,762)	(444,216)
Precision Ortho-MRI	0	0	0	0
Precision Ortho-PT	(38,538)	(192,000)	(101,870)	(224,994)
Vaccine Clinic	0	124	0	(224)
Dermatology	(48,127)	(121,216)	(49,769)	(125,298)
Hospitalists	0	0	0	0
Behavioral Health	(36,959)	690,215	(73,801)	644,118
Pediatric Diabetes	(40,007)	(43,679)	(91,614)	(89,534)
Neurosurgery	(29,828)	(27,346)	(60,354)	(58,246)
Multi-Specialty-RR	3,783	4,947	11,416	10,746
Radiology	(450,756)	(206,339)	(426,963)	(319,116)
Salinas Family Practice	(148,785)	(62,793)	(265,764)	(173,704)
Urology	(91,677)	(190,607)	(238,252)	(221,628)
Total SVMC	(4,295,411)	(2,710,029)	(8,126,840)	(5,715,192)
Doctors on Duty	152,462	310,470	186,331	225,107
Vantage Surgery Center	0	0	0	0
LPCH NICU JV	0	0	0	0
Central Coast Health Connect	0	0	0	0
Monterey Peninsula Surgery Center	115,107	84,895	225,757	189,519
Coastal	64,488	34,985	87,381	(28,650)
Apex	0	0	0	0
GenesisCare USA	17,428	23,876	1,017	47,753
Monterey Bay Endoscopy Center	12,461	22,479	49,472	69,066
	<u>\$ (3,933,465)</u>	<u>\$ (2,233,325)</u>	<u>\$ (7,576,882)</u>	<u>\$ (5,212,397)</u>

**SALINAS VALLEY HEALTH MEDICAL CENTER  
BALANCE SHEETS  
August 31, 2023**

	<b>Current year</b>	<b>Prior year</b>
<b>Current assets:</b>		
Cash and cash equivalents	\$ 342,311,300	\$ 289,242,125
Patient accounts receivable, net of estimated uncollectibles of \$26,733,775	80,708,653	84,274,211
Supplies inventory at cost	7,922,313	7,577,979
Current portion of lease receivable	1,921,803	534,201
Other current assets	13,065,084	13,998,571
	445,929,153	395,627,087
<b>Assets whose use is limited or restricted by board</b>	<b>159,053,150</b>	<b>150,535,522</b>
<b>Capital assets:</b>		
Land and construction in process	65,148,659	38,411,356
Other capital assets, net of depreciation	183,702,043	199,451,470
	248,850,702	237,862,826
<b>Other assets:</b>		
Right of use assets, net of amortization	5,681,859	7,137,296
Long term lease receivable	1,115,546	1,462,610
Investment in securities	139,513,295	144,284,830
Investment in SVMC	3,643,019	8,219,949
Investment in Aspire/CHI/Coastal	1,769,022	1,615,050
Investment in other affiliates	21,122,341	23,313,309
Net pension asset	(2,108,727)	1,339,050
	170,736,355	187,372,094
<b>Deferred pension outflows</b>	<b>116,911,125</b>	<b>95,857,027</b>
	<b>\$ 1,141,480,485</b>	<b>\$ 1,067,254,556</b>

**LIABILITIES AND NET ASSETS**

<b>Current liabilities:</b>		
Accounts payable and accrued expenses	\$ 57,318,155	\$ 60,393,423
Due to third party payers	6,167,894	24,708,173
Current portion of notes payable	0	0
Current portion of self-insurance liability	17,396,477	18,226,809
Current portion of lease liability	1,894,611	2,935,968
	82,777,137	106,264,372
Long term portion of notes payable	0	0
Long term portion of workers comp liability	13,027,333	14,058,922
Long term portion of lease liability	3,980,405	4,455,311
	99,784,875	124,778,605
Lease deferred inflows	2,856,606	1,911,058
Pension liability	124,875,355	79,111,485
<b>Net assets:</b>		
Invested in capital assets, net of related debt	248,850,702	237,862,826
Unrestricted	665,112,947	623,590,582
	913,963,649	861,453,408
	<b>\$ 1,141,480,485</b>	<b>\$ 1,067,254,556</b>

**SALINAS VALLEY HEALTH MEDICAL CENTER**  
**STATEMENTS OF REVENUE AND EXPENSES - BUDGET VS. ACTUAL**  
**August 31, 2023**

	Month of August,				Two months ended August 31,			
	Actual	Budget	Variance	% Var	Actual	Budget	Variance	% Var
Operating revenue:								
Gross billed charges	\$ 242,473,059	\$ 235,748,845	6,724,214	2.85%	\$ 473,449,883	\$ 471,497,689	1,952,194	0.41%
Deductions from revenue	196,252,613	185,229,895	11,022,718	5.95%	377,938,721	370,937,339	7,001,382	1.89%
Net patient revenue	46,220,446	50,518,950	(4,298,504)	-8.51%	95,511,162	100,560,350	(5,049,188)	-5.02%
Other operating revenue	1,186,536	1,332,540	(146,004)	-10.96%	2,228,398	2,665,080	(436,682)	-16.39%
<b>Total operating revenue</b>	<b>47,406,982</b>	<b>51,851,490</b>	<b>(4,444,508)</b>	<b>-8.57%</b>	<b>97,739,560</b>	<b>103,225,430</b>	<b>(5,485,870)</b>	<b>-5.31%</b>
Operating expenses:								
Salaries and wages	16,259,581	17,357,179	(1,097,598)	-6.32%	32,435,126	33,937,349	(1,502,223)	-4.43%
Compensated absences	2,897,556	2,974,990	(77,434)	-2.60%	5,945,662	6,518,329	(572,667)	-8.79%
Employee benefits	9,178,334	8,182,386	995,948	12.17%	17,865,559	16,088,185	1,777,374	11.05%
Supplies, food, and linen	7,311,261	6,899,278	411,983	5.97%	13,918,750	13,798,557	120,193	0.87%
Purchased department functions	3,861,763	3,539,230	322,533	9.11%	7,824,372	7,078,460	745,912	10.54%
Medical fees	2,918,877	2,359,060	559,817	23.73%	5,045,162	4,718,120	327,042	6.93%
Other fees	1,499,051	2,269,528	(770,477)	-33.95%	4,387,647	4,539,056	(151,409)	-3.34%
Depreciation	1,805,101	2,135,892	(330,791)	-15.49%	3,611,600	4,279,481	(667,881)	-15.61%
All other expense	1,860,272	1,841,330	18,942	1.03%	3,573,714	3,682,661	(108,947)	-2.96%
<b>Total operating expenses</b>	<b>47,591,796</b>	<b>47,558,874</b>	<b>32,922</b>	<b>0.07%</b>	<b>94,607,592</b>	<b>94,640,199</b>	<b>(32,607)</b>	<b>-0.03%</b>
<b>Income from operations</b>	<b>(184,814)</b>	<b>4,292,616</b>	<b>(4,477,430)</b>	<b>-104.31%</b>	<b>3,131,968</b>	<b>8,585,231</b>	<b>(5,453,263)</b>	<b>-63.52%</b>
Non-operating income:								
Donations	1,153,867	166,667	987,200	592.32%	1,132,687	333,333	799,354	239.81%
Property taxes	333,333	333,333	(0)	0.00%	666,667	666,667	0	0.00%
Investment income	1,996,078	1,185,806	810,272	68.33%	4,540,738	2,371,611	2,169,127	91.46%
Income from subsidiaries	(3,933,465)	(3,660,748)	(272,717)	7.45%	(7,576,882)	(7,414,475)	(162,407)	2.19%
<b>Total non-operating income</b>	<b>(450,187)</b>	<b>(1,974,942)</b>	<b>1,524,755</b>	<b>-77.21%</b>	<b>(1,236,790)</b>	<b>(4,042,864)</b>	<b>2,806,074</b>	<b>-69.41%</b>
<b>Operating and non-operating income \$</b>	<b>(635,001)</b>	<b>\$ 2,317,674</b>	<b>(2,952,675)</b>	<b>-127.40%</b>	<b>\$ 1,895,178</b>	<b>\$ 4,542,367</b>	<b>(2,647,189)</b>	<b>-58.28%</b>

# *Statistical Report*

**SALINAS VALLEY HEALTH MEDICAL CENTER**

**PATIENT STATISTICAL REPORT**

For the month of Aug and two months to date

	<u>Month of Aug</u>		<u>Two months to date</u>		<u>Variance</u>
	<u>2022</u>	<u>2023</u>	<u>2022-23</u>	<u>2023-24</u>	
<u>NEWBORN STATISTICS</u>					
Medi-Cal Admissions	39	40	74	71	(3)
Other Admissions	90	89	182	171	(11)
Total Admissions	129	129	256	242	(14)
Medi-Cal Patient Days	60	56	118	107	(11)
Other Patient Days	159	146	300	276	(24)
Total Patient Days of Care	219	202	418	383	(35)
Average Daily Census	7.1	6.5	6.7	6.2	(0.6)
Medi-Cal Average Days	1.7	1.6	1.6	1.6	0.0
Other Average Days	1.5	1.7	1.6	1.7	0.0
Total Average Days Stay	1.7	1.6	1.6	1.7	0.0
<u>ADULTS &amp; PEDIATRICS</u>					
Medicare Admissions	407	376	801	763	(38)
Medi-Cal Admissions	330	269	533	505	(28)
Other Admissions	425	269	638	571	(67)
Total Admissions	1,162	914	1,972	1,839	(133)
Medicare Patient Days	1,636	1,538	3,250	3,168	(82)
Medi-Cal Patient Days	1,097	960	2,218	2,018	(200)
Other Patient Days	1,125	701	2,067	1,371	(696)
Total Patient Days of Care	3,858	3,199	7,535	6,557	(978)
Average Daily Census	124.5	103.2	121.5	105.8	(15.8)
Medicare Average Length of Stay	4.0	4.0	4.0	4.2	0.1
Medi-Cal Average Length of Stay	3.3	3.2	3.5	3.4	(0.1)
Other Average Length of Stay	2.7	1.9	2.6	1.9	(0.7)
Total Average Length of Stay	3.3	3.0	3.4	3.2	(0.2)
Deaths	21	26	42	51	9
Total Patient Days	4,077	3,401	7,953	6,940	(1,013)
Medi-Cal Administrative Days	9	2	23	5	(18)
Medicare SNF Days	0	0	0	0	0
Over-Utilization Days	0	0	0	0	0
Total Non-Acute Days	9	2	23	5	(18)
Percent Non-Acute	0.22%	0.06%	0.29%	0.07%	-0.22%

**SALINAS VALLEY HEALTH MEDICAL CENTER**

**PATIENT STATISTICAL REPORT**

For the month of Aug and two months to date

	<u>Month of Aug</u>		<u>Two months to date</u>		<u>Variance</u>
	<u>2022</u>	<u>2023</u>	<u>2022-23</u>	<u>2023-24</u>	
<u>PATIENT DAYS BY LOCATION</u>					
Level I	280	216	546	439	(107)
Heart Center	365	338	687	667	(20)
Monitored Beds	659	598	1,292	1,223	(69)
Single Room Maternity/Obstetrics	376	329	717	642	(75)
Med/Surg - Cardiovascular	976	765	1,894	1,656	(238)
Med/Surg - Oncology	183	264	403	557	154
Med/Surg - Rehab	544	439	1,086	906	(180)
Pediatrics	119	150	239	245	6
Nursery	219	202	418	383	(35)
Neonatal Intensive Care	95	100	259	222	(37)
<u>PERCENTAGE OF OCCUPANCY</u>					
Level I	69.48%	53.60%	67.74%	54.47%	
Heart Center	78.49%	72.69%	73.87%	71.72%	
Monitored Beds	78.73%	71.45%	77.18%	73.06%	
Single Room Maternity/Obstetrics	32.78%	28.68%	31.26%	27.99%	
Med/Surg - Cardiovascular	69.96%	54.84%	67.89%	59.35%	
Med/Surg - Oncology	45.41%	65.51%	50.00%	69.11%	
Med/Surg - Rehab	67.49%	54.47%	67.37%	56.20%	
Med/Surg - Observation Care Unit	0.00%	0.00%	0.00%	0.00%	
Pediatrics	21.33%	26.88%	21.42%	21.95%	
Nursery	42.82%	39.49%	20.43%	18.72%	
Neonatal Intensive Care	27.86%	29.33%	37.98%	32.55%	

**SALINAS VALLEY HEALTH MEDICAL CENTER**

**PATIENT STATISTICAL REPORT**

For the month of Aug and two months to date

	<u>Month of Aug</u>		<u>Two months to date</u>		<u>Variance</u>
	<u>2022</u>	<u>2023</u>	<u>2022-23</u>	<u>2023-24</u>	
<u>DELIVERY ROOM</u>					
Total deliveries	135	125	254	236	(18)
C-Section deliveries	34	45	71	77	6
Percent of C-section deliveries	25.19%	36.00%	27.95%	32.63%	4.67%
<u>OPERATING ROOM</u>					
In-Patient Operating Minutes	19,891	17,669	37,292	33,916	(3,376)
Out-Patient Operating Minutes	27,185	28,638	49,024	57,267	8,243
Total	47,076	46,307	86,316	91,183	4,867
Open Heart Surgeries	15	12	22	21	(1)
In-Patient Cases	139	128	277	246	(31)
Out-Patient Cases	286	299	523	572	49
<u>EMERGENCY ROOM</u>					
Immediate Life Saving	23	38	60	75	15
High Risk	563	744	1,060	1,443	383
More Than One Resource	3,002	3,005	5,872	5,772	(100)
One Resource	2,023	1,924	3,924	3,558	(366)
No Resources	112	110	182	225	43
Total	<u>5,723</u>	<u>5,821</u>	<u>11,098</u>	<u>11,073</u>	<u>(25)</u>

**SALINAS VALLEY HEALTH MEDICAL CENTER**

**PATIENT STATISTICAL REPORT**

For the month of Aug and two months to date

	<u>Month of Aug</u>		<u>Two months to date</u>		<u>Variance</u>
	<u>2022</u>	<u>2023</u>	<u>2022-23</u>	<u>2023-24</u>	
<b>CENTRAL SUPPLY</b>					
In-patient requisitions	15,042	13,697	28,908	27,788	-1,120
Out-patient requisitions	10,175	10,996	18,755	21,150	2,395
Emergency room requisitions	604	1,140	1,205	1,753	548
Interdepartmental requisitions	7,114	6,220	14,492	12,563	-1,929
Total requisitions	<u>32,935</u>	<u>32,053</u>	<u>63,360</u>	<u>63,254</u>	<u>-106</u>
<b>LABORATORY</b>					
In-patient procedures	39,936	35,536	77,397	71,532	-5,865
Out-patient procedures	11,597	11,764	22,005	22,459	454
Emergency room procedures	12,702	14,285	25,546	26,447	901
Total patient procedures	<u>64,235</u>	<u>61,585</u>	<u>124,948</u>	<u>120,438</u>	<u>-4,510</u>
<b>BLOOD BANK</b>					
Units processed	<u>367</u>	<u>365</u>	<u>674</u>	<u>665</u>	<u>-9</u>
<b>ELECTROCARDIOLOGY</b>					
In-patient procedures	1,169	1,019	2,150	2,096	-54
Out-patient procedures	400	426	756	822	66
Emergency room procedures	1,132	1,249	2,230	2,459	229
Total procedures	<u>2,701</u>	<u>2,694</u>	<u>5,136</u>	<u>5,377</u>	<u>241</u>
<b>CATH LAB</b>					
In-patient procedures	109	125	192	240	48
Out-patient procedures	94	103	183	193	10
Emergency room procedures	0	0	0	0	0
Total procedures	<u>203</u>	<u>228</u>	<u>375</u>	<u>433</u>	<u>58</u>
<b>ECHO-CARDIOLOGY</b>					
In-patient studies	455	353	794	683	-111
Out-patient studies	249	245	462	493	31
Emergency room studies	0	0	0	0	0
Total studies	<u>704</u>	<u>598</u>	<u>1,256</u>	<u>1,176</u>	<u>-80</u>
<b>NEURODIAGNOSTIC</b>					
In-patient procedures	161	138	313	256	-57
Out-patient procedures	19	22	40	42	2
Emergency room procedures	0	0	0	0	0
Total procedures	<u>180</u>	<u>160</u>	<u>353</u>	<u>298</u>	<u>-55</u>

**SALINAS VALLEY HEALTH MEDICAL CENTER**

**PATIENT STATISTICAL REPORT**

For the month of Aug and two months to date

	<u>Month of Aug</u>		<u>Two months to date</u>		<u>Variance</u>
	<u>2022</u>	<u>2023</u>	<u>2022-23</u>	<u>2023-24</u>	
<b>SLEEP CENTER</b>					
In-patient procedures	0	0	0	0	0
Out-patient procedures	176	245	314	434	120
Emergency room procedures	0	0	0	0	0
<b>Total procedures</b>	<b>176</b>	<b>245</b>	<b>314</b>	<b>434</b>	<b>120</b>
<b>RADIOLOGY</b>					
In-patient procedures	1,411	1,214	2,700	2,468	-232
Out-patient procedures	389	451	741	858	117
Emergency room procedures	1,431	1,568	2,817	2,989	172
<b>Total patient procedures</b>	<b>3,231</b>	<b>3,233</b>	<b>6,258</b>	<b>6,315</b>	<b>57</b>
<b>MAGNETIC RESONANCE IMAGING</b>					
In-patient procedures	199	153	349	305	-44
Out-patient procedures	115	145	220	278	58
Emergency room procedures	13	11	16	20	4
<b>Total procedures</b>	<b>327</b>	<b>309</b>	<b>585</b>	<b>603</b>	<b>18</b>
<b>MAMMOGRAPHY CENTER</b>					
In-patient procedures	4,611	4,360	8,719	8,003	-716
Out-patient procedures	4,561	4,331	8,639	7,939	-700
Emergency room procedures	2	0	2	0	-2
<b>Total procedures</b>	<b>9,174</b>	<b>8,691</b>	<b>17,360</b>	<b>15,942</b>	<b>-1,418</b>
<b>NUCLEAR MEDICINE</b>					
In-patient procedures	26	18	49	39	-10
Out-patient procedures	98	112	197	222	25
Emergency room procedures	0	0	1	0	-1
<b>Total procedures</b>	<b>124</b>	<b>130</b>	<b>247</b>	<b>261</b>	<b>14</b>
<b>PHARMACY</b>					
In-patient prescriptions	99,070	80,197	186,722	161,993	-24,729
Out-patient prescriptions	16,230	16,710	30,759	32,059	1,300
Emergency room prescriptions	8,324	9,502	17,225	18,273	1,048
<b>Total prescriptions</b>	<b>123,624</b>	<b>106,409</b>	<b>234,706</b>	<b>212,325</b>	<b>-22,381</b>
<b>RESPIRATORY THERAPY</b>					
In-patient treatments	15,753	15,381	30,401	27,910	-2,491
Out-patient treatments	1,146	1,606	1,713	2,785	1,072
Emergency room treatments	339	366	583	688	105
<b>Total patient treatments</b>	<b>17,238</b>	<b>17,353</b>	<b>32,697</b>	<b>31,383</b>	<b>-1,314</b>
<b>PHYSICAL THERAPY</b>					
In-patient treatments	2,484	2,330	4,948	4,776	-172
Out-patient treatments	179	234	416	497	81
Emergency room treatments	0	0	0	0	0
<b>Total treatments</b>	<b>2,663</b>	<b>2,564</b>	<b>5,364</b>	<b>5,273</b>	<b>-91</b>

**SALINAS VALLEY HEALTH MEDICAL CENTER**

**PATIENT STATISTICAL REPORT**

For the month of Aug and two months to date

	<u>Month of Aug</u>		<u>Two months to date</u>		<u>Variance</u>
	<u>2022</u>	<u>2023</u>	<u>2022-23</u>	<u>2023-24</u>	
<b>OCCUPATIONAL THERAPY</b>					
In-patient procedures	2,037	1,539	3,181	2,957	-224
Out-patient procedures	153	216	317	475	158
Emergency room procedures	0	0	0	0	0
Total procedures	<u>2,190</u>	<u>1,755</u>	<u>3,498</u>	<u>3,432</u>	<u>-66</u>
<b>SPEECH THERAPY</b>					
In-patient treatments	462	406	940	887	-53
Out-patient treatments	29	49	51	73	22
Emergency room treatments	0	0	0	0	0
Total treatments	<u>491</u>	<u>455</u>	<u>991</u>	<u>960</u>	<u>-31</u>
<b>CARDIAC REHABILITATION</b>					
In-patient treatments	0	0	0	2	2
Out-patient treatments	531	585	875	1,084	209
Emergency room treatments	0	0	0	0	0
Total treatments	<u>531</u>	<u>585</u>	<u>875</u>	<u>1,086</u>	<u>211</u>
<b>CRITICAL DECISION UNIT</b>					
Observation hours	<u>352</u>	<u>239</u>	<u>664</u>	<u>611</u>	<u>-53</u>
<b>ENDOSCOPY</b>					
In-patient procedures	121	77	213	137	-76
Out-patient procedures	42	49	70	95	25
Emergency room procedures	0	0	0	0	0
Total procedures	<u>163</u>	<u>126</u>	<u>283</u>	<u>232</u>	<u>-51</u>
<b>C. T. SCAN</b>					
In-patient procedures	715	680	1,411	1,402	-9
Out-patient procedures	444	491	825	962	137
Emergency room procedures	721	813	1,395	1,566	171
Total procedures	<u>1,880</u>	<u>1,984</u>	<u>3,631</u>	<u>3,930</u>	<u>299</u>
<b>DIETARY</b>					
Routine patient diets	21,208	21,027	41,349	42,325	976
Meals to personnel	<u>25,472</u>	<u>28,688</u>	<u>50,257</u>	<u>56,633</u>	<u>6,376</u>
Total diets and meals	<u>46,680</u>	<u>49,715</u>	<u>91,606</u>	<u>98,958</u>	<u>7,352</u>
<b>LAUNDRY AND LINEN</b>					
Total pounds laundered	<u>99,249</u>	<u>95,358</u>	<u>196,106</u>	<u>193,409</u>	<u>-2,697</u>

*QUALITY AND EFFICIENT  
PRACTICES COMMITTEE*

*Minutes of the  
Quality and Efficient Practices Committee  
will be distributed at the Board Meeting*

*(CATHERINE CARSON)*

*FINANCE COMMITTEE*

*Minutes from of the  
Finance Committee  
will be distributed at the Board Meeting*

*(JOEL HERNANDEZ LAGUNA)*

## Board Paper: Finance Committee

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Agenda Item: Consider Recommendation for Board of Directors Approval of Preliminary Project Budget for the Medical Center Campus Colorization Project

Executive Sponsor: Clement Miller, Chief Operating Officer  
Earl Strotman, Director Facilities Management & Construction  
Dave Sullivan, Facilities Management & Construction

Date: September 18, 2023

### Executive Summary

Salinas Valley Health has implemented a comprehensive re-branding campaign, one which included re-naming corporate entities, with a roll out of new logo and signage installations. Concurrently, Salinas Valley Health pursued re-envisioning the 450 East Romie medical center campus with a fresh color scheme consistent with re-branding goals and characteristics that will result in a new visual presentation of campus structures to the community. Schematic evaluation resulted in the production of several different color schemes, and one was recently selected by the Executive Leadership Alignment Committee. Board approval is now requested to fund costs associated with the exterior re-finishing of campus buildings, implementing the approved new color scheme.

Scope of this project includes production of permit plans, costs associated with a competitive bid process, and execution of the work, which will include re-finishing the exterior of the main hospital building(s), the existing DRC, and stand-alone buildings housing administrative staff, energy plant infrastructure, and the leased MRI facility. At the time of request, we expect a process of design development, permitting, and project execution to take roughly 10 months, which includes numerous mobilization phases to allow for on-going hospital operations and the impacts of winter weather cycles.

### Background/Situation/Rationale

In recognition that the campus is a prominent presence in the community and visible from miles away, the new scheme will not only need internal approval but also community acceptance and jurisdictional review and approval prior to implementation. The new coloration of the exterior will require design and permitting with the City of Salinas Community Development Department. Final design and implementation costs will be brought forward to the Board for re-review upon completion of the entitlement and construction bidding process. The objective of this project is to modernize the medical center buildings to comply with the re-branding campaign and comply with current rules and regulations enforced by all agencies having jurisdiction, primarily within the City of Salinas.

Salinas Valley Health will be responsible for securing City or other approvals necessary to execute the work. Over the course of the project, design and planning oversight meetings will be completed with executive leadership and other key stakeholders.

Facilities Management will be responsible for securing approvals necessary to execute the work and will coordinate mobilization impacts with inter-department representatives to minimize disruption of hospital operations.

### Financial Implications

<u>Indirect Construction Costs:</u>	\$ 500,000
<u>Construction/Mobilization Costs:</u>	\$2,500,000
<u>Reserves and Contingencies:</u>	\$ 500,000
<u>Total:</u>	\$3,500,000

Budget:

As currently programmed, the Medical Center Campus Colorization Project cost estimate is \$3,500,000. Project reserves from the DRC Parking Garage Annex project are currently being applied to offset impacts to the overall capital improvement budget in fiscal year 2024. The project cost estimate includes design and engineering fees, permitting, project contingency, program management, and construction services as required to complete the project.

Current capital budget forecast includes:

Fiscal Year 2024 - \$3,000,000

Fiscal Year 2025 - \$ 500,000

Following completion of the construction bidding process, the budget will be reconciled to account for proposed configuration.

Schedule:

August 2023 –	Executive alignment of main program schematic configuration
October 2023 –	Commence construction documentation and agency permitting
January 2024 –	Anticipated bidding for construction services
March 2024 –	Anticipated construction commencement
August 2024 –	Anticipated construction completion

Procurement:

Facilities Management plans to prepare bidding documents for solicitation to qualified painting contractors. Each of the responses was reviewed by Materials Management and Facilities Management to compare initial capital construction costs. Facilities Management will prepare a Board Paper to review project costs and consider award of construction services to the successful low bidder.

Recommendation

Consider recommendation for Board of Directors to approve the total estimated project budget for the Medical Center Campus Colorization Project in the budgeted amount of \$3,500,000.

Attachments

- Attachment 1: WRD Color Scheme Presentation



# Rebranding Campus Colors

# Color Scheme

**Paint Colors:** Benjamin Moore

A-1 Classic Gray (OC-23)

A-2 Silver Chain (1472)

A-3 Adagio (1593)

A-4 Deep Secret (CSP-625)

**Metal Colors:** Morin

AM-1 Chromium Gray (432R1689)

A-1



A-2

A-3

AM-1



A-4

# 1. Bed Tower - Existing



# 1. Bed Tower – New Color



# 2. Entrance - Existing



# 2. Entrance - New Color



# 4. Emergency Entrance - Existing



# 4. Emergency Entrance - New Color B



# 5. Street View - Existing



# 5. Street View - New Color



# 6. Garage - Existing



# 6. Garage - New Color A



# 7. Garage - Existing



# 7. Garage - New Color



# 8. Garage - New Color



# 10. Garage - New Color



*PERSONNEL, PENSION AND  
INVESTMENT COMMITTEE*

*Minutes of the  
Personnel, Pension and Investment Committee  
will be distributed at the Board Meeting*

*(JUAN CABRERA)*

# Memorandum

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To: Personnel, Pension and Investment Committee  
From: Michelle Childs  
Chief Human Resources Officer  
Date: March 14, 2023  
Re: Recommendation for Board Approval: Amendment to the Salinas Valley Memorial Healthcare System 403(b) Retirement Plan (“403b plan”)

The Non-affiliated employees and SVMC physicians have been eligible for the Defined Contribution Plan (i.e. 403b plan) which offers employer basic and matching contributions to eligible employees.

Salinas Valley Health Medical Center and the Engineers and Scientists of California, Local 20 (ESC) have reached tentative agreement on an initial collect bargaining agreement in which the former non-affiliated staff will remain eligible for the Salinas Valley Memorial Healthcare System 403(b) Retirement Plan.

Attached is the Amendment necessary to permit staff represented by ESC to be eligible for the 403b plan.

**AMENDMENT TO THE  
SALINAS VALLEY MEMORIAL HEALTHCARE SYSTEM  
403(b) RETIREMENT PLAN**

The Salinas Valley Memorial Healthcare System 403(b) Retirement Plan (Plan) is amended, effective as if the date this Amendment is executed as follow:

1. Section 3.01, "Eligible Employees; Excluded Employees," is amended and restated to read as follows:

*3.01. Eligible Employees; Excluded Employees.*

*All Employees of the Employer, who are not otherwise excluded from participation in the Plan, are eligible to participate in the Plan after completion of the eligibility requirements set forth in the Eligibility Requirements section, below. This Plan excludes the following Employees (even if they might otherwise satisfy the eligibility criteria specified in the Plan):*

- A. *Employees who are eligible to participate in the Salinas Valley Memorial Healthcare System 403(b) Tax Deferred Salary Reduction Plan and whose employment is governed by the terms of a collective bargaining agreement between Employee representatives (within the meaning of Code section 7701(a)(46)) and the Employer under which retirement benefits were the subject of good faith bargaining, unless the collective bargaining agreement specifically requires participation in this Plan (referred to as "affiliated employees").*
- B. *Employees who are nonresident aliens and who receive no earned income (within the meaning of Code section 911(d)(2)) from the Employer that constitutes income from sources within the United States (within the meaning of Code section 861(a)(3)).*
- C. *Employees who are students performing services described in Code section 3121(b)(10).*
- D. *Employees of an Affiliated Employer that has not adopted the Plan.*
- E. *Leased Employees.*

- F. *Except to the extent required by Code section 403(b)(12)(A)(ii), a worker that the Employer did not treat as an Employee, but who is subsequently determined to be an Employee by a local, State or federal governmental entity or by a court of competent jurisdiction.*
- G. *Employees who are eligible to participate in the Salinas Valley Memorial Healthcare System 403(b) Tax Deferred Salary Reduction Plan.*
- H. *Non-affiliated Employees who become covered by the terms of a collective bargaining agreement, unless the collective bargaining agreement specifically requires participation in this Plan.*
- I. *In addition to the foregoing exclusions, for purposes of the Nonelective Contributions and Matching Contributions, the following additional Employees shall be excluded:*
  - 1. *Non-affiliated Employees (Employees whose employment is not governed by the terms of a collective bargaining agreement between Employee representatives and the Employer) who are temporary Employees.*
  - 2. *Non-affiliated Employees (Employees whose employment is not governed by the terms of a collective bargaining agreement between Employee representatives and the Employer) who are Per Diem Employees.*
  - 3. *Employees of an entity in which the Employer is an investor.*
- J. *In addition to the foregoing exclusions, for purposes of the Matching Contributions, physicians and non-physicians of the Salinas Valley Health Clinics shall be excluded.*

- 2. The Plan is further amended by changing all references in the Plan to the “Salinas Valley Medical Clinic” to the “Salinas Valley Health Clinics.”

All other provisions of the Plan as in effect prior to this Amendment shall remain unchanged by this Amendment.

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 2023

SALINAS VALLEY MEMORIAL  
HEALTHCARE SYSTEM

By: \_\_\_\_\_

Title: \_\_\_\_\_

## Board Paper: Personnel, Pension and Investment Committee

Agenda Item: **Consider Recommendation for Board Approval of (i) the Findings Supporting Recruitment of Nima Beheshti, DO, (ii) the Contract Terms for Dr. Beheshti's Recruitment Agreement, and (iii) the Contract Terms for Dr. Beheshti's Neurology Professional Services Agreement**

Executive Sponsor: Allen Radner, MD, Chief Medical Officer, Salinas Valley Health  
Gary Ray, Chief Administrative Officer, Salinas Valley Health Clinics

Date: September 26, 2023

### Executive Summary

In consultation with members of the medical staff, Salinas Valley Health (SVH) executive management has identified the recruitment of a physician specializing in neurology as a recruiting priority for the Medical Center's service area. Based on the Medical Staff Development Plan, completed by ECG Management Group in January 2023, the specialty of Neurology is recommended as a high priority for recruitment.

The recommended physician, Nima Beheshti, DO, received his Doctor of Osteopathic Medicine in 2019 at Rocky Vista University in Greenwood Village, CO. Dr. Beheshti completed his resident training at University of California Davis where he served as Chief Neurology Resident from 2021-2022. Dr. Beheshti will complete his Movement Disorders Fellowship at University of California Davis in 2024. Dr. Beheshti also holds a Masters of Public Health degree from University of California Berkeley and is fluent in Spanish. He will join Salinas Valley Health Clinics in the fall of 2024.

### Terms and Conditions of Agreements

The proposed physician recruitment requires the execution of two types of agreements:

- 1. Professional Services Agreement.** The proposed professional services agreement includes the following terms and conditions:
  - **Professional Services Agreement (PSA).** Physician will be contracted under a PSA with Salinas Valley Health and a member of Salinas Valley Health Clinics that provides W-2 relationship for IRS reporting.
  - **Term.** PSA is for a term of 2 years. Physician's annual compensation will be reported on an IRS W-2 Form as a contracted physician.
  - **Schedule.** Physician will be a 1.0 Full-Time Equivalent (FTE).
  - **Base Compensation.** Physician will receive base compensation of \$350,000 per year.
  - **Productivity Compensation.** To the extent it exceeds the base salary, physician will earn productivity compensation at \$60.50 work Relative Value Unit (wRVU) conversion factor.
  - **Hospital Call.** Physician will participate in unassigned patient call coverage.
  - **Benefits.** Physician will be eligible for standard SVH Clinics physician benefits:
    - ❖ Access to SVH Health Plan for physician and qualified dependents. Premiums are projected based on 15% of SVH cost.
    - ❖ Access to SVH 403(b) and 457 retirement plans. Five percent (5%) base contribution to 403b plan that vests after three years. This contribution is capped at the limits set by Federal law.
    - ❖ Four weeks (20 days) of time off each calendar year.
    - ❖ Continuing Medical Education (CME) annual stipend in the amount of \$2,400 paid directly to physician and reported as 1099 income.
  - **Professional Liability.** Physician will receive professional liability policy through BETA Healthcare Group.

2. **Recruitment Agreement** that provides a sign-on bonus of \$50,000 which is structured as forgivable loan over two years of service.

### Meeting our Mission, Vision, Goals Strategic Plan Alignment:

The recruitment of Dr. Beheshti is aligned with our strategic priorities for the growth and finance pillars. We continue to develop Salinas Valley Health Clinics infrastructure that engages our physicians in a meaningful way, promotes efficiencies in care delivery and creates opportunities for expansion of services. This investment provides a platform for growth that can be developed to better meet the needs of the residents of our District by opening up access to care regardless of insurance coverage or ability to pay for services.

#### Pillar/Goal Alignment:

Service     People     Quality     Finance     Growth     Community

#### Financial/Quality/Safety/Regulatory Implications

The addition of Dr. Beheshti to SVH Clinics has been identified as a need for recruitment while also providing additional resources and coverage for the SVH Neurology practice.

The compensation proposed in these agreements have been reviewed and compared to published industry benchmarks to confirm that the terms contemplated are fair market value and commercially reasonable.

#### Recommendation

Salinas Valley Health Administration requests that the Personnel, Pension and Investment Committee recommend to the Salinas Valley Health Board of Directors approval of the following:

1. **The Findings Supporting Recruitment of Nima Beheshti, DO,**
  - That the recruitment of a neurologist to Salinas Valley Health Clinics is in the best interest of the public health of the communities served by the District; and
  - That the recruitment benefits and incentives the hospital proposes for this recruitment are necessary in order to attract and relocate an appropriately qualified physician to practice in the communities served by the District;
2. **The Contract Terms of the Recruitment Agreement for Dr. Beheshti; and**
3. **The Contract Terms of the Neurology Professional Services Agreement for Dr. Beheshti.**

#### Attachments

- Curriculum Vitae for Nima Beheshti, DO

## EDUCATION

<b>Resident Physician, Neurology</b> University of California, Davis Chief resident Fellow, Movement Disorders	2019 - 2024  2021 - 2022 exp 2023-2024
<b>Doctor of Osteopathic Medicine</b> Rocky Vista University	2019
<b>Master of Public Health, Nutrition</b> University of California, Berkeley Thesis; Physician Empathy and Communication towards Mexican-American Patients	2015
<b>Bachelor of Science, Biology</b> <b>Bachelor of Arts, Political Science</b> <b>Minor, Art History</b> University of California, Irvine	2011

## ADMINISTRATIVE AND LEADERSHIP EXPERIENCE

<b>Fellow, Academic Pathways for Health Science Trainees Program, Davis, CA</b> <ul style="list-style-type: none"><li>Completed a one-year training program to refine my leadership style, with MBTI integration</li><li>Provided insights from multiple industry experts on the strengths and weaknesses of various management methods</li><li>Took part in simulations to navigate difficult workplace scenarios using different conflict resolution techniques</li></ul>	2021 - 2022
<b>Fellow, UC Davis / UC Irvine Clinician Health and Wellbeing Fellowship, Davis, CA</b> <ul style="list-style-type: none"><li>Completed 7-month long specialty program designed to help identify and tackle barriers to wellness in healthcare</li><li>Topics included physician burnout, suicide, substance abuse, and cognitive concerns</li><li>Designed a needs assessment to determine what residents are looking for in program-sponsored wellness activities</li><li>Research culminated in the development and deployment of a survey to assess resident physician wellness needs, and to evaluate previous wellness strategies attempted by both individual departments and GME.</li></ul>	2021
<b>Fellow, Center for Health Leadership, Berkeley, CA</b> <ul style="list-style-type: none"><li>Was coached through intensive self-reflection and personal growth exercises to identify my strengths and weaknesses as a leader, and was given a framework to improve these skills</li><li>Developed project management and leadership skills during bi-weekly sessions</li><li>Met with leaders in health care to observe different leadership styles in action</li></ul>	2013-2015
<b>Project Manager Intern, Alta Bates Medical Group, Emeryville, CA</b> <ul style="list-style-type: none"><li>Performed network analysis to identify more cost effective sites of care delivery</li><li>Identified differentially priced codes based on site of service to reduce patient costs of care</li><li>Worked alongside executive management and medical directorate in developing future strategies for growth, cost reduction, and quality improvement measures</li></ul>	2014-2015

## CONSULTING EXPERIENCE

<b>Consultant, Alameda County WIC Association, Hayward, CA</b> <ul style="list-style-type: none"><li>Performed needs assessment towards increasing patient recapture rate for clinically underserved area</li><li>Prepared evidence based, budget neutral approaches to better coordinating care among young Latina mothers</li><li>Made recommendations for expanding services and to better utilize web services via a complete plan of action</li></ul>	2014
<b>Consultant, Center for Care Innovations, San Francisco, CA</b> <ul style="list-style-type: none"><li>Identified key marketing strategies to reach possible donors and investors</li><li>Collaborated with industry leaders to learn how to sell a brand's image to interested parties</li><li>Spurred development of cohesive mission, vision, and values of organization</li><li>Synthesized findings and developed marketing materials for CCI to use in future expansion</li></ul>	2014-2015

# Dr. Nima Beheshti, DO MPH

UC Davis Department of Neurology

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## RESEARCH EXPERIENCE

**Junior Specialist, UC Irvine Medical Center Department of Urology** Irvine, CA 2010-2013

- Worked closely with an interdisciplinary team of surgeons and coordinated research and evaluation
- Performed patient debrief after surgery and followed up with over 1,500 patients to track cancer recurrence
- Initiated and investigated multiple projects that led to two publications (see below)
- Established databases and advised on their use

## TEACHING EXPERIENCE

**Class Director, Model United Nations Course** UC Irvine 2009-2011

- Instructed class of 30 students for six consecutive quarters
- Presented lecture material, facilitated discussion, coordinated guest speakers, and managed grades
- Prioritized international relations, legal writing, cooperation, public speaking, research, and debate skills

**Graduate Student Instructor, Molecular and Cell Biology,** Berkeley, CA 2014-2015

- Taught three classes: Intro to Biology, Drugs and the Brain, and Human Physiology
- Developed weekly lesson plan suited to each group's unique needs and interests
- Prepared mock interviews for students pursuing medical internships, and provided guidance and mentorship to aspiring pre-med and pre-pharmacy students.

## LANGUAGE AND SOFTWARE SKILLS

Fluent: Spanish and Farsi (including medical topics)

Conversational: French and Italian

Prezi, STATA, Microsoft Office suite, Mac and PC

## PUBLICATIONS

Beheshti N. Long Term Followup and Recovery Outcomes Following Robotic Assisted Radical Prostatectomy. Excellence in Research Undergraduate Journal May 2011

Liss M, Lusch A, Morales B, Beheshti N, Skarecky D, Narula N, Osann K, Ahlering T. Robot-Assisted Radical Prostatectomy: 5-Year Oncological and Biochemical Outcomes. J Urol April 2012

Beheshti N. The State of Early Childhood Mental Health in El Paso County, Colorado. Western States Medical Monographs, Volume 5, 2017

## HOBBIES AND INTERESTS

-Cooking and Baking

-Yoga, Kickboxing

-Board games, Role-Playing Games

-Japanese Sumi-e Painting, woodburning, leathercraft

-History: Specifically Latin American and East Asian

-Art, Art History: Specifically Edo Japan, 20th Cen Europe

## ACADEMIC HONORS AND ACCOLADES

Clinician Health and Wellbeing Innovation Award, Awarded 2021

UC Davis Medical Center Value Team Committee, Member 2021

UC Davis Neurology Department Wellness Ambassador; Accepted 2021

US Public Health Service Excellence in Public Health Award; Awarded 2019

Rocky Mountain Public Health Case Competition Finalist, 2nd place; Awarded 2015

Augustus Oliver Brown Endowment for Nutritional Research; Awarded 2013, 2014

Ruth L Huenemann Alumni Scholarship; Awarded 2014

Center for Health Leadership Fellowship; Accepted 2013

Sarah Samuels Award for Public Health Nutrition and Practice; Awarded 2013

Bocconi MiMUN Conference on International Women's Rights, Best Delegate; Awarded 2011

UC Irvine Summer Undergraduate Research Program Excellence in Research Award; Awarded 2011

UC Irvine Dean's Honor's List: Awarded five times 2009, 2010, 2011

## Board Paper: Personnel, Pension and Investment Committee

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Agenda Item: **Consider Recommendation for Board Approval of (i) the Findings Supporting Recruitment of Gurvinder Kaur, MD, (ii) the Contract Terms for Dr. Kaur's Recruitment Agreement, and (iii) the Contract Terms for Dr. Kaur's Neurosurgery Professional Services Agreement**

Executive Sponsor: Allen Radner, MD, Chief Medical Officer, Salinas Valley Health  
Gary Ray, Chief Administrative Officer, Salinas Valley Health Clinics

Date: September 26, 2023

### Executive Summary

In consultation with members of the medical staff, Salinas Valley Health (SVH) executive management has identified the recruitment of a physician specializing in neurosurgery as a recruiting priority for the Medical Center's service area. Based on the Medical Staff Development Plan, completed by ECG Management Group in January 2023, the specialty of Neurosurgery is recommended as a priority for recruitment. Furthermore, there are currently only two credentialed neurosurgeons on SVH Medical Staff. Adding another neurosurgeon to Salinas Valley Health Clinics will decrease the on-call burden for our existing providers and increase access for our clinic patients.

The recommended physician, Gurvinder Kaur, MD, received her Doctor of Medicine degree in 2013 at the University of California San Francisco and completed her neurosurgery residency at Northwestern Memorial Hospital in Chicago. Dr. Kaur completed her Neuro-Oncology Fellowship training at the University of Miami. Dr. Kaur comes to us from Centura Health in Colorado Springs where she has been practicing since 2021. She is a California native from the Bay Area. Dr. Kaur will join Salinas Valley Health Clinics in January 2024.

### Terms and Conditions of Agreements

The proposed physician recruitment requires the execution of two types of agreements:

- 1. Professional Services Agreement.** The proposed professional services agreement includes the following terms and conditions:
  - Professional Services Agreement (PSA). Physician will be contracted under a PSA with Salinas Valley Health and a member of Salinas Valley Health Clinics that provides W-2 relationship for IRS reporting.
  - Term. PSA is for a term of 2 years. Physician's annual compensation will be reported on an IRS W-2 Form as a contracted physician.
  - Schedule. Physician will be a 1.0 Full-Time Equivalent (FTE).
  - Base Compensation. Physician will receive base compensation of \$800,000 per year.
  - Productivity Compensation. To the extent it exceeds the base salary, physician will earn productivity compensation at \$90.00 work Relative Value Unit (wRVU) conversion factor.
  - Hospital Call. Physician will participate in unassigned patient call coverage.
  - Benefits. Physician will be eligible for standard SVH Clinics physician benefits:
    - ❖ Access to SVH Health Plan for physician and qualified dependents. Premiums are projected based on 15% of SVH cost.
    - ❖ Access to SVH 403(b) and 457 retirement plans. Five percent (5%) base contribution to 403b plan that vests after three years. This contribution is capped at the limits set by Federal law.
    - ❖ Four weeks (20 days) of time off each calendar year.
    - ❖ Continuing Medical Education (CME) annual stipend in the amount of \$2,400 paid directly to physician and reported as 1099 income.
  - Professional Liability. Physician will receive professional liability policy through BETA Healthcare Group.

2. **Recruitment Agreement** that provides a sign-on bonus of \$75,000 which is structured as forgivable loan over two years of service.

## Meeting our Mission, Vision, Goals

### Strategic Plan Alignment:

The recruitment of Dr. Kaur is aligned with our strategic priorities for the growth and finance pillars. We continue to develop Salinas Valley Health Clinics infrastructure that engages our physicians in a meaningful way, promotes efficiencies in care delivery and creates opportunities for expansion of services. This investment provides a platform for growth that can be developed to better meet the needs of the residents of our District by opening up access to care regardless of insurance coverage or ability to pay for services.

### Pillar/Goal Alignment:

Service     People     Quality     Finance     Growth     Community

### Financial/Quality/Safety/Regulatory Implications

The addition of Dr. Kaur to SVH Clinics has been identified as a need for recruitment while also providing additional resources and coverage for the SVH Neurosurgery practice.

The compensation proposed in these agreements have been reviewed against published industry benchmarks to confirm that the terms contemplated are fair market value and commercially reasonable.

### Recommendation

Salinas Valley Health Administration requests that the Personnel, Pension and Investment Committee recommend to the Salinas Valley Health Board of Directors approval of the following:

1. **The Findings Supporting Recruitment of Gurvinder Kaur, MD,**
  - That the recruitment of a neurologist to Salinas Valley Health Clinics is in the best interest of the public health of the communities served by the District; and
  - That the recruitment benefits and incentives the hospital proposes for this recruitment are necessary in order to attract and relocate an appropriately qualified physician to practice in the communities served by the District;
2. **The Contract Terms of the Recruitment Agreement for Dr. Kaur; and**
3. **The Contract Terms of the Neurosurgery Professional Services Agreement for Dr. Kaur.**

### Attachments

- Curriculum Vitae for Gurvinder Kaur, MD

# Gurvinder Kaur

## CURRENT POSITION

Neurosurgeon  
Centura Health, Penrose Hospital  
Colorado Springs, CO

09/2021- present

## EDUCATION/TRAINING

Neurosurgery Neuro-oncology Fellow  
Department of Neurosurgery, University of Miami

2020-2021

Resident Physician, Department of Neurosurgery  
Northwestern Memorial Hospital

2013-2020

University of California, San Francisco, School of Medicine  
Medical Doctorate

2013

University of California, Los Angeles  
Bachelor of Science, Neuroscience with Highest Honor  
Summa Cum Laude

2006

## HONORS AND AWARDS

NIH-National Research Service Award (F32)

2017-2018

Best Resident Consultant (Department of Emergency Medicine,  
Northwestern Memorial Hospital)

2015

Clinical and Translational Research Fellowship, UCSF

2011-2012

Howard Hughes Advanced Medical Student Fellowship

2011-2012

Howard Hughes Medical Student Fellowship

2010-2011

Dean's Medical Student Research Fellowship, UCSF

2008

Dean's Medical Student Research Fellowship, UCSF

2009

Dean's Honor List, UCLA

2002-2006

UCLA, Department of Neuroscience Highest Honor for Undergraduate Research

2006

Phi Beta Kappa

2006

College of Honors, UCLA

2006

Outstanding sophomore, Golden Key National Honor Society

2004

## ACADEMIC LEADERSHIP AND SERVICE

Admission Committee member, UCSF School of Medicine.

2009-2013

West Coast Regional Chair, HHMI Medical Institute

2010-2011

Vice-President, Neuroscience Undergraduate Society, UCLA.

2005-2006

Community Service Chair, Golden Key Honor Society, UCLA

2005-2006

## RESEARCH

### Grant Funding

NIH- National Research Service Award/F32 Northwestern University <i>Role of tumor induced PD-L1 expression on myeloid cells in GBM on expansion of Regulatory T cells and systemic immunosuppression</i>	2017-2018
Howard Hughes Medical Student Fellowship University of California, San Francisco <i>Necrosis Stimulates Glioblastoma Multiforme (GBM) Proliferation Through Complement Activation</i>	2010-2012
Clinical and Translational Fellowship University of California, San Francisco <i>Role of G-protein couple receptor Kinases in Glioblastoma Multiforme (GBM) Proliferation</i>	2011-2012
Dean's medical student Fellowship University of California, San Francisco <i>Investigate the role of early leukocyte infiltration post spinal cord injury in early tissue damage, wound healing and recovery of function.</i>	Summer 2008
Dean's medical student Fellowship University of California, San Francisco <i>Synaptic Plasticity in substance abuse and addiction</i>	Summer 2007
<b>Research Positions</b> Research Fellow, Bloch Laboratory PI: Orin Bloch, MD <i>Northwestern University, Brain Tumor Research Center Department of Neurosurgery, Chicago, IL</i> The role of tumor Induced PD-L1 Expression on myeloid cells in GBM on expansion of regulatory T Cells and systemic Immunosuppression	2017- 2018
Research Fellow, Parsa Laboratory PI: Andrew T. Parsa, MD PhD <i>University of California, San Francisco, Brain Tumor Research Center Department of Neurosurgery, San Francisco, CA</i> Necrosis Stimulates Glioblastoma Multiforme (GBM) Proliferation Through Complement Activation	2008-2013
Research Assistant, Noble Laboratory PI: Linda Noble, PhD <i>University of California, San Francisco, Spinal Cord Injury Center Department of Neurosurgery, San Francisco, CA</i> Function of early leukocyte infiltration post spinal cord injury in early tissue damage, wound healing and recovery of function	05/2008-09/2008
Research Assistant, UCSF Graduate Medical Education PI: Dr. Bridget O'Brien, PhD <i>UCSF Department of Medicine, Summer 2008</i> Development of benchmarking and Outcomes Reporting System for Graduate Medical Education (GME) Programs	05/2008-12/2008

Research Assistant, Bonci Laboratory. 05/2007- 09/2007  
PI: Antonello Bonci MD  
*University of California, San Francisco, Ernest Gallo Clinic and Research Center*  
Synaptic plasticity and reward-related learning-TAT-PEP2M injection in the Ventral Tegmental Area (VTA) blocks long-term potentiation (LTP)

Research Assistant, Chandler Laboratory 2005-2006  
PI: Dr. Scott Chandler, PhD  
*University of California, Los Angeles, Department of Neuroscience and Physiological Sciences*  
Participation of Kv1 channels in control of membrane excitability and burst generation in mesencephalic V neurons.

## POSITIONS AND APPOINTMENTS

Neurosurgeon, Centura Health 09/2021- present  
Penrose Hospital, Colorado Springs, CO

Neuro-oncology Fellow , Neurological Surgery 07/2020-06/2021  
University of Miami, Miami, FL

Resident, Neurological surgery 07/2013- 2020  
*Northwestern University, Chicago, IL*

McGaw House Staff Association; Neurosurgical Representative 06/2017-2020  
*Northwestern University, Chicago, IL*

Instructor; Problem Based Learning 07/2017- 12/2017  
Course Directors: Dr. Robyn Bockrath, and Dr. Aneesha Shetty  
*Northwestern University Feinberg School of Medicine, Chicago, IL*

Instructor, Neuro-anatomy small groups 04/2008-06/2008  
Course Director: Dr. Peter O'Hara, PhD  
*University of California San Francisco, San Francisco, CA*

Instructor, Summer Math excellence program Summer 2002-  
Summer 2005  
Jose Valdes Math Institute, San Jose, CA

## PROFESSIONAL MEMBERSHIP

American Association of Neurological Surgeons 2011- Present  
Congress of Neurological Surgeons 2011- Present  
Society of Neuro-oncology 2011- Present

## PUBLICATIONS

**Kaur G**, Han SJ, Yang I, Crane C. Microglia and central nervous system immunity. *Neurosurgery clinics of North America.* 2010; 21(1):43-51.

**Kaur G**, Kim J, Kaur R, Tan I, Bloch O, Sun MZ, Safaee M, Oh MC, Sughrue M, Phillips J, Parsa AT. G-protein coupled receptor kinase (GRK)-5 regulates proliferation of glioblastoma-derived stem cells. *Journal of clinical neuroscience.* 2013; 20(7):1014-8.

**Kaur G**, Sayegh ET, Larson A, Bloch O, Madden M, Sun MZ, Barani IJ, James CD, Parsa AT. Adjuvant radiotherapy for atypical and malignant meningiomas: a systematic review. *Neuro-oncology*. 2014; 16(5):628-36.

**Kaur G**, Kane AJ, Sughrue ME, Oh M, Safaee M, Sun M, Tihan T, McDermott MW, Berger MS, Parsa AT. MIB-1 labeling index predicts recurrence in intraventricular central neurocytomas. *Journal of clinical neuroscience*. 2013; 20(1):89-93.

**Kaur G**, Kane AJ, Sughrue ME, Madden M, Oh MC, Sun MZ, Safaee M, El-Sayed I, Aghi M, McDermott MW, Berger MS, Parsa AT. The prognostic implications of Hyam's subtype for patients with Kadish stage C esthesioneuroblastoma. *Journal of clinical neuroscience*. 2013; 20(2):281-6. 15.

**Kaur G**, Bloch O, Jian BJ, Kaur R, Sughrue ME, Aghi MK, McDermott MW, Berger MS, Chang SM, Parsa AT. A critical evaluation of cystic features in primary glioblastoma as a prognostic factor for survival. *Journal of neurosurgery*. 2011; 115(4):754-9.

Hsiao CF, **Kaur G**, Vong A, Bawa H, Chandler SH. Participation of Kv1 channels in control of membrane excitability and burst generation in mesencephalic V neurons. *Journal of neurophysiology*. 2009; 101(3):1407-16.

Han SJ, **Kaur G**, Yang I, Lim M. Biologic principles of immunotherapy for malignant gliomas. *Neurosurgery clinics of North America*. 2010; 21(1):1-16.

Bloch O, **Kaur G**, Jian BJ, Parsa AT, Barani IJ. Stereotactic radiosurgery for benign meningiomas. *Journal of neuro-oncology*. 2012; 107(1):13-20.

Sayegh ET, **Kaur G**, Bloch O, Parsa AT. Systematic review of protein biomarkers of invasive behavior in glioblastoma. *Molecular neurobiology*. 2014; 49(3):1212-44.

Jian BJ, **Kaur G**, Sayegh ET, Bloch O, Parsa AT, Barani IJ. Fractionated radiation therapy for vestibular schwannoma. *Journal of clinical neuroscience*. 2014; 21(7):1083-8.

Zygourakis CC, **Kaur G**, Kunwar S, McDermott MW, Madden M, Oh T, Parsa AT. Modern treatment of 84 newly diagnosed craniopharyngiomas. *Journal of clinical*. 2014; 21(9):1558-66.

Oh T, **Kaur G**, Madden M, Bloch O, Parsa AT. Pleomorphic xanthoastrocytomas: institutional experience of 18 patients. *Journal of clinical neuroscience*. 2014; 21(10):1767-72.

Sayegh ET, **Kaur G**, Ivan ME, Bloch O, Cheung SW, Parsa AT. Facial neuroma masquerading as acoustic neuroma. *Journal of clinical neuroscience*. 2014; 21(10):1817-8.

Luther E, **Kaur G**, Komotar R, Ivan M. Commentary: Bilateral "Rescue Strip" Technique for Endoscopic Endonasal Approaches to the Clivus. *Oper Neurosurg (Hagerstown)*. Jan 13 2021;20(2):E116-e117. doi:10.1093/ons/opaa346

Luther E, **Kaur G**, Komotar R, Ivan ME. Commentary: Concomitant Embolization and Microsurgical Resection of a Giant, Hypervascular Skull Base Meningioma: 2-Dimensional Operative Video. *Oper Neurosurg (Hagerstown)*. Jul 15 2021;21(2):E99-e100. doi:10.1093/ons/opab164

Luther E, **Kaur G**, Komotar R, Ivan ME. Commentary: Early Experience With Virtual and Synchronized Augmented Reality Platform for Preoperative Planning and Intraoperative Navigation: A Case Series. *Oper Neurosurg (Hagerstown)*. Sep 15 2021;21(4):E300-e301. doi:10.1093/ons/opab201

Luther E, **Kaur G**, Komotar R, Ivan ME. Commentary: Infra-Occipital Supra-Tentorial Approach for Resection of Low-Grade Tumor of the Left Lingual Gyrus: 2-Dimensional Operative Video. *Oper Neurosurg (Hagerstown)*. Aug 16 2021;21(3):E259-e260. doi:10.1093/ons/opab210

Luther E, **Kaur G**, Komotar R, Dinh C, Ivan ME. Commentary: Interposition Grafting of the Facial Nerve After Resection of a Large Facial Nerve Schwannoma: 2-Dimensional Operative Video. *Oper Neurosurg (Hagerstown)*. Sep 15 2021;21(4):E342-e343. doi:10.1093/ons/opab254

Luther E, **Kaur G**, Komotar R, Ivan ME. Commentary: Resection of a Medulla Oblongata Hemangioblastoma: 2-Dimensional Operative Video. *Oper Neurosurg (Hagerstown)*. Oct 13 2021;21(5):E436-e437. doi:10.1093/ons/opab295

Luther E, **Kaur G**, Komotar R, Ivan ME. Commentary: The Infratemporal Retro-Eustachian Transposition of the Temporoparietal Fascial Flap for Clival Reconstruction After Endoscopic Endonasal Approach: An Anatomic Conceptual Technique. *Oper Neurosurg (Hagerstown)*. Jul 15 2021;21(2):E171-e172. doi:10.1093/ons/opab147

Li D, Lamano J, **Kaur G**, Lamano J, Veliceasa D, Biyashev D, Bloch O. 305 Lymphopenia predicts response to stereotactic radiosurgery for brain metastases in lung cancer patients. *Neurosurgery*, Vol 65, 2018.

Yang I, Han SJ, **Kaur G**, Crane C, Parsa AT. The role of microglia in central nervous system immunity and glioma immunology. *Journal of clinical neuroscience*. 2010; 17(1):6-10.

Ivan ME, Cheng JS, **Kaur G**, Sughrue ME, Clark A, Kane AJ, Aranda D, McDermott M, Barani IJ, Parsa AT. Association of morbidity with extent of resection and cavernous sinus invasion in sphenoid wing meningiomas. *Journal of neurological surgery. Part B, Skull base*. 2012; 73(1):76-83.

Bloch O, Sun M, **Kaur G**, Barani IJ, Parsa AT. Fractionated radiotherapy for optic nerve sheath meningiomas. *Journal of clinical neuroscience*; 19(9):1210-5.

Oh MC, Kim JM, **Kaur G**, Safae M, Sun MZ, Singh A, Aranda D, Molinaro AM, Parsa AT. Prognosis by tumor location in adults with spinal ependymomas. *Journal of neurosurgery. Spine*. 2013; 18(3):226-35.

Zygourakis CC, Davis JL, **Kaur G**, Ames CP, Gupta N, Auguste KI, Parsa AT. Management of central nervous system teratoma. *Journal of clinical neuroscience*. 2015; 22(1):98-104.

Kumthekar PU, Macrie BD, Singh SK, **Kaur G**, Chandler JP, Sejpal SV. A review of management strategies of malignant gliomas in the elderly population. *Am J Cancer Res*. 2014 Sep 6;4(5):436-44

Oh MC, Ivan ME, Sun MZ, **Kaur G**, Safae M, Kim JM, Sayegh ET, Aranda D, Parsa AT. Adjuvant radiotherapy delays recurrence following subtotal resection of spinal cord ependymomas. *Neuro-oncology*. 2013; 15(2):208-15.

Oh MC, Kim JM, Safae M, **Kaur G**, Sun MZ, Kaur R, Celli A, Mauro TM, Parsa AT. Overexpression of calcium-permeable glutamate receptors in glioblastoma derived brain tumor initiating cells. *PloS one*. 2012; 7(10): e47846.

Sun MZ, Oh MC, Safae M, **Kaur G**, Parsa AT. Neuroanatomical correlation of the House-Brackmann grading system in the microsurgical treatment of vestibular schwannoma. *Neurosurgical focus*. 2012; 33(3): E7.

DiDomenico J, Lamano JB, Oyon D, Li Y, Veliceasa D, **Kaur G**, Ampie L, Choy W, Lamano JB, Bloch O. The immune checkpoint protein PD-L1 induces and maintains regulatory T cells in glioblastoma. *Oncoimmunology*. 2018 Apr 25;7(7).

Li YD, Veliceasa D, Lamano JB, Lamano JB, **Kaur G**, Biyashev D, Horbinski CM, Kruser TJ, Bloch O. Systemic and local immunosuppression in patients with high-grade meningiomas. *Cancer Immunol Immunother*. 2019 Jun;68(6):999-1009

Sughrue ME, Kaur R, Kane AJ, Rutkowski MJ, **Kaur G**, Yang I, Pitts LH, Parsa AT. The value of intraoperative facial nerve electromyography in predicting facial nerve function after vestibular schwannoma surgery. *Journal of clinical neuroscience*. 2010; 17(7):849-52.

Sun MZ, Oh MC, Ivan ME, **Kaur G**, Safae M, Kim JM, Phillips JJ, Auguste KI, Parsa AT. Current management of choroid plexus carcinomas. *Neurosurgical review*. 2014; 37(2):179-92; discussion 192.

Safae M, Oh MC, Bloch O, Sun MZ, **Kaur G**, Auguste KI, Tihan T, Parsa AT. Choroid plexus papillomas: advances in molecular biology and understanding of tumorigenesis. *Neuro-oncology*. 2013; 15(3):255-67.

Jian BJ, Sughrue ME, Kaur R, Rutkowski MJ, Kane AJ, **Kaur G**, Yang I, Pitts LH, Parsa AT. Implications of cystic features in vestibular schwannomas of patients undergoing microsurgical resection. *Neurosurgery*. 2011; 68(4):874-80; discussion 879-80.

Bloch O, Sughrue ME, Kaur R, Kane AJ, Rutkowski MJ, **Kaur G**, Yang I, Pitts LH, Parsa AT. Factors associated with preservation of facial nerve function after surgical resection of vestibular schwannoma. *Journal of neuro-oncology*. 2011;102(2):281-6.

Sughrue ME, Kaur R, Rutkowski MJ, Kane AJ, **Kaur G**, Yang I, Pitts LH, Parsa AT. Extent of resection and the long-term durability of vestibular schwannoma surgery. *Journal of neurosurgery*. 2011; 114(5):1218-23.

Safae M, Clark AJ, Oh MC, Ivan ME, Bloch O, **Kaur G**, Sun MZ, Kim JM, Oh T, Berger MS, Parsa AT. Overexpression of CD97 confers an invasive phenotype in glioblastoma cells and is associated with decreased survival of glioblastoma patients. *PloS one*. 2013; 8(4):e62765.

Oh MC, Sayegh ET, Safae M, Sun MZ, **Kaur G**, Kim JM, Aranda D, Molinaro AM, Gupta N, Parsa AT. Prognosis by tumor location for pediatric spinal cord ependymomas. *Journal of neurosurgery. Pediatrics*. 2013; 11(3):282-8.

Li D, Lamano J, DiDomenico J, Biyashev D, Veliceasa D, **Kaur G**, Lamano J, Bloch O. Peripheral myeloid cell pd-l1 is a biomarker for high- grade intracranial malignancy. *Neuro-Oncology*. 2018

Li YD, Lamano JB, Lamano JB, Quaggin-Smith J, Veliceasa D, **Kaur G**, Biyashev D, Unruh D, Bloch O. Tumor-induced peripheral immunosuppression promotes brain metastasis in patients with non-small cell lung cancer. *Cancer Immunol Immunother*. 2019 Sep;68(9):1501-1513

Safae M, Oh MC, Sughrue ME, Delance AR, Bloch O, Sun M, **Kaur G**, Molinaro AM, Parsa AT. The relative patient benefit of gross total resection in adult choroid plexus papillomas. *Journal of clinical neuroscience*. 2013; 20(6):808-12.

DeLance AR, Safae M, Oh MC, Clark AJ, **Kaur G**, Sun MZ, Bollen AW, Phillips JJ, Parsa AT. Tuberculoma of the central nervous system. *Journal of clinical neuroscience*. 2013; 20(10):1333-41.

Oh MC, Tarapore PE, Kim JM, Sun MZ, Safae M, **Kaur G**, Aranda DM, Parsa AT. Spinal ependymomas: benefits of extent of resection for different histological grades. *Journal of clinical neuroscience*. 2013; 20(10):1390-7.

Sun MZ, Kim JM, Oh MC, Safae M, **Kaur G**, Clark AJ, Bloch O, Ivan ME, Kaur R, Oh T, Fouse SD, Phillips JJ, Berger MS, Parsa AT. Na<sup>+</sup>/K<sup>+</sup>-ATPase  $\beta$ 2-subunit (AMOG) expression abrogates invasion of glioblastoma-derived brain tumor-initiating cells. *Neuro-oncology*. 2013; 15(11):1518-31.

Sun MZ, Ivan ME, Clark AJ, Oh MC, Delance AR, Oh T, Safae M, **Kaur G**, Bloch O, Molinaro A, Gupta N, Parsa AT. Gross total resection improves overall survival in children with choroid plexus carcinoma. *Journal of neuro-oncology*. 2014; 116(1):179-85.

Kumthekar PU, Macrie BD, Singh SK, **Kaur G**, Chandler JP, Sejal SV. A review of management strategies of malignant gliomas in the elderly population. *American journal of cancer research*. 2014; 4(5):436-44.

Safae M, Ivan ME, Oh MC, Oh T, Sayegh ET, **Kaur G**, Sun MZ, Bloch O, Parsa AT. The role of epidermal growth factor-like module containing mucin-like hormone receptor 2 in human cancers. *Oncology reviews*. 2014; 8(1):242.

Sun MZ, Ivan ME, Oh MC, Delance AR, Clark AJ, Safae M, Oh T, **Kaur G**, Molinaro A, Gupta N, Parsa AT. Effects of adjuvant chemotherapy and radiation on overall survival in children with choroid plexus carcinoma. *Journal of neuro-oncology*. 2014; 120(2):353-60.

Sun MZ, Oh T, Ivan ME, Clark AJ, Safae M, Sayegh ET, **Kaur G**, Parsa AT, Bloch O. Survival impact of time to initiation of chemoradiotherapy after resection of newly diagnosed glioblastoma. *Journal of neurosurgery*. 2015; 122(5):1144-50.

Lamano JB, Lamano JB, Li YD, DiDomenico JD, Choy W, Veliceasa D, Oyon DE, Fakurnejad S, Ampie L, Kesavabhotla K, Kaur R, **Kaur G**, Biyashev D, Unruh DJ, Horbinski CM, James CD, Parsa AT, Bloch O. Glioblastoma-Derived IL6 Induces Immunosuppressive Peripheral Myeloid Cell PD-L1 and Promotes Tumor Growth. *Clin Cancer Res*. 2019 Jun 15. 25(12):3643-3657

*CORPORATE COMPLIANCE  
AND AUDIT COMMITTEE*

*Minutes of the  
Corporate Compliance and Audit Committee  
will be distributed at the Board Meeting*

*(JUAN CABRERA)*

**Medical Executive Committee Summary – September 14, 2023**

**Items for Board Approval:**

**Credentials Committee**

**Initial Appointments:**

<b>APPLICANT</b>	<b>SPECIALTY</b>	<b>DEPT</b>	<b>PRIVILEGES</b>
Bonano, John, MD	Orthopedic Surgery	Surgery	Orthopedic Surgery
Chaudhry, Haider, MD	Neurology	Medicine	Tele-Neurology
Erlichman, Oren, MD	Anesthesiology	Anesthesiology	Anesthesiology
Kadakia, Rikin, MD	Interventional Cardiology	Medicine	Cardiology Interventional Cardiology Peripheral Endovascular Cardiac Diagnostic Outpatient Center (CDOC) Center for Advanced Diagnostic Imaging (CADI)
Lee, Sherry, DO	Pediatrics	Pediatrics	Pediatrics
Logono, Alex, MD	Family Medicine	Medicine	Adult Hospitalist
McCorvey, Vivian Monique, MD	Radiology	Surgery	Mammography
Rashid, Samiya, DO	Neurology	Medicine	Tele-Neurology
Shen, Jason, MD	Neurology	Medicine	Tele-Neurology
Wang, Aileen, MD	Endocrinology	Medicine	Endocrinology General Internal Medicine

**Reappointments:**

<b>APPLICANT</b>	<b>SPECIALTY</b>	<b>DEPT</b>	<b>PRIVILEGES</b>
Abundis, Rebecca, DO	Internal Medicine	Medicine	Medicine – Active Community
Chan, Erica, MD	Ob/Gyn	Ob/Gyn	Obstetrics and Gynecology
DeFilippi, Vincent, MD	Cardiothoracic Surgery	Surgery	Cardiac Surgery Thoracic Surgery
Petrini, Joseph, MD	Family Medicine	Family Medicine	Family Medicine – Active Community
Ponzio, Christine, MD	Family Medicine	Family Medicine	Taylor Family Farms Health & Wellness Center
Rana, Naeem, MD	Sleep Medicine	Medicine	Sleep Center
Reddy, Kartheek, MD	Orthopedic Surgery	Surgery	Orthopedic Surgery Hand Surgery
Renfer, Leonard, MD	Urology	Surgery	Urology
Santiago-Vergara, Diana, MD	Psychiatry	Medicine	Tele-Psychiatry
Seid, Terrence, DO	Anesthesiology	Anesthesiology	Anesthesiology
Siqueiros, Rafael, MD	Family Medicine	Family Medicine	Family Medicine Active Community

**Staff Status Modifications:**

<b>NAME</b>	<b>SPECIALTY</b>	<b>STATUS</b>	<b>RECOMMENDATION</b>
Carlson, Steven, MD	Pathology	Provisional	Recommend advancement to Active staff.
Hell, Richard, MD	Gastroenterology	Provisional	Recommend advancement to Active staff.
Mercado, Ma Cristina, MD	Pediatrics	Active	Active Community effective 10/01/2023.
Nguyen, Bich-Ha, MD	Internal Medicine	Active	Resignation effective 09/28/2023.
Moser, Evan, DO	Radiology	Leave of Absence	Resignation effective 09/01/2023.

**Privilege Modifications:**

NAME	SPECIALTY	PRIVILEGE
Blakemore, Tonya, MD	Pediatrics	Newborn Circumcision relinquished
Dickey, James, MD	General Surgery	Regional Wound Healing Center (RWHC) added
Markovtsova, Anastasia, MD	Emergency Medicine	Emergency Medicine added

**Temporary/Locum Tenens Privileges:**

NAME	SPECIALTY	DATES	RECOMMENDATION
Dickey, James W., MD	General Surgery	9/5/2023 – 9/29/2023	Locum tenens privileges for Regional Wound Healing Center (RWHC)
Hussain, Jamal, MD	Interventional Cardiology	9/8/2023 – 9/11/2023	Locum tenens STEMI coverage

**Interdisciplinary Practice Committee****Initial Appointment:**

NAME	SPECIALTY	DEPARTMENT	SUPERVISOR(S)
Serrano-Perez, Karen, PA-C	Physician Assistant	Emergency Medicine	Misty Navarro, MD Cristina Martinez, MD

**Modification of Privileges:**

NAME	SPECIALTY	PRIVILEGE	RECOMMENDATION
Aliotti, Alexandria, PA-C	Physician Assistant	Cardiology	Voluntary relinquishment of Hospital Privileges
Davis, Christopher PA-C	Cardiac Surgery	Insertion of intravenous arterial, central venous and Swan-Ganz catheters	Voluntary relinquishment of specific privileges
Shaw, Scott Eric, PA-C	Physician Assistant - Cardiac Surgery	Ordering of Schedule II-V Drugs	Temporary privileges as of 9/13/2023 pending Board approval.

**Other Items: (Attached)**

Chest Pain Standardized Procedure	Reviewed and recommend approval of the revised standardized procedure as presented.
Intraosseous Infusion Standardized Procedure	Reviewed and recommend approval of the revised standardized procedure as presented.
Vaginal Bleeding Standardized Procedure	Reviewed and recommend approval of the revised standardized procedure as presented.

**Policies and Plans: (Attached)**

1. Surgical Wound Classification System – Revised
2. Antibiotic Stewardship Policy - Revised
3. Medication Error Reduction Plan (MERP) - Revised

## **Informational Items:**

### **I. Order Sets/Treatment Plans:**

<b>Treatment Plans</b>	Hyperkalemia
	SEWS/Minds Scoring for Alcohol Withdrawal
	Delirium Treatment
<b>Order Sets</b>	
ONC.BKTANIV	ONC Antiemetic Breakthrough IV
ONC.BKTANPO	ONC Antiemetic Breakthrough PO
ONC.STEMTRANS	ONC Pre-Stem Cell Transplant
ONC.THROMBOSIS	ONC Venous Thrombosis
ONC.BOTOXSUP	OPI Botox Supportive Meds
ONC.EMLA	ONC Emla Cream
ONC.TUMORMA	ONC Tumor Marker Labs
ONC.INTLS	ONC TLS Labs: Inpatient
ONC.AMBTLS	ONC TLS Labs: Ambulatory
ONC.ANTIINPT	ONC Antiemetics: Inpatient
ONC IR PROCEDURES	ONC Port & PICC Procedures
ONC.IVIGLAB2	ONC AMB IVIG Labs
ONC.BBK	ONC Blood Products
ONC.MMAOM	ONC Multiple Myeloma Labs AOM
ONCMYELOMALABS	ONC Multiple Myeloma Initial 2
ONC.AMBCEA	ONC AMB CEA unchecked
ONC.PSATES	ONC AMB PSA & Testosterone unc
ONC.TESTOS	ONC AMB Testoster Free & Total
ONC.PSA	ONC AMB PSA

### **II. Committee Reports:**

- a. Credentials Committee
- b. Interdisciplinary Practice Committee
- c. Quality and Safety Committee Reports:
  - Opioid/Pain Committee Report
  - Service Excellence Update
  - Sepsis Initiative Quality Improvement Report
  - Pharmacy and Therapeutics Committee/Infection Control Committee
    - Antibiotic Stewardship
    - Medication Safety – Medication Error Reduction Plan – Updated Crosswalk
    - Order Sets
  - Tissue Review
  - Cardiovascular Services Quality Improvement Report
  - Environmental Services Quality Improvement Report
  -

### **III. Other Reports:**

- a. Summary of Executive Operations Committee Meetings
- b. Summary of Medical Staff Department/Committee Meetings – August 2023
- c. Medical Staff Treasury Report – September 7, 2023
- d. Medical Staff Statistics Year to Date
- e. HCAHPS Update – September 6, 2023



Last Approved N/A  
Last Revised 08/2023  
Next Review 3 years after approval

Owner **Darlene Vaughan:  
Nursing Director**  
Area **Nursing  
Standardized  
Procedures**

## Chest Pain Standardized Procedure

### **POLICY**

1. N/A

### **DEFINITIONS**

1. ~~Wong-Baker Scale: System to rate pain on a numeric scale, zero (0) to ten (10).~~
2. ~~EKG: Electrocardiogram~~
3. ~~IV/INT: Intravenous Therapy (saline lock) with intermittent flushes.~~
4. ~~CBC: Complete Blood Count~~
5. ~~CMP: Comprehensive Metabolic Panel~~

### **PROCEDURE**

1. ~~Function~~
  1. ~~To expedite care for patients who present to the Emergency Department (ED) with a chief complaint of chest pain that may be cardiac in nature.~~
2. ~~Circumstances~~
  1. ~~Setting Emergency~~
    - a. ~~Registered Nurses (RN) assigned to the ED may initiate orders for patients presenting with chest pain or symptoms that may be cardiac in nature prior to physician evaluation IF: the ED physician is not immediately available. The RN will obtain an EKG within 10 minutes, ensure blood is drawn, order approved laboratory tests, initiate cardiac monitoring, place oxygen per protocol and place an INT with routine flushes. This will apply to patients with symptoms listed in the PATIENT CONDITIONS section below.~~

## 2. Supervision

- a. Registered Nurses who are qualified to perform this standardized procedure may independently order approved laboratory tests, order an EKG, previous EKG, Oxygen Administration, and start/place an IV saline lock with intermittent flushes of 10cc normal saline to patients who present with a chief complaint of chest pain and for whom meet the criteria above. Physician supervision is not required.

## 3. Patient Conditions

- a. Emergency Department patients who present with **any** of the following symptoms, the procedure will be initiated:
  - i. **Chest Pain** – Discomfort in the center of the chest that lasts more than a few minutes, or that goes away and comes back. Patients may describe the pain as uncomfortable pressure, squeezing, fullness or pain.
  - ii. **Pain in other areas of the upper body** – Symptoms can included pain in one or both arms, the back, neck, jaw or stomach. Patient may describe the pain as deep aching and throbbing in one or both arms.
  - iii. **Shortness of breath** – May occur with or without chest pain/ discomfort. May be described as breathlessness and/or inability to catch breath when waking up.
  - iv. **Anxiety** – Unusual nervousness, and/or feelings of impending doom.
  - v. **Other signs** – These may include clammy sweating, nausea, lightheadedness or dizziness, syncope, palpations or irregular heartbeat.
- b. **NOTE:** Symptoms of heart attack in women are often different than in men. Women are more likely to experience shortness of breath, fatigue, nausea, dizziness and anxiety as presenting symptoms.

## 3. Data Base

### 1. Subjective

- a. Prioritization and Severity of Illness
  - i. Patients with a chief complaint of chest pain that may be cardiac in nature will be triaged (prioritized) according to accepted triage policy based on the severity of their illness and incorporating other medical conditions and/or additional features of their illness using the Emergency Severity Index (ESI) 5-level triage (see [TRIAGE ASSESSMENT](#))
  - ii. History of present illness/injury/chief complaint
  - iii. Characteristic of Chest Pain using the Wong-Baker Pain Scale
  - iv. Consider conditions related to cardiac disease i.e.) pericarditis,

cardiomyopathy, or coronary artery disease

v. History of cardiac surgeries/illness

## 2. Objective

a. Chief complaint of chest pain

i. Signs of hypovolemia

ii. Chest excursion, symmetry and pain upon palpation

iii. Level of consciousness

iv. Color of skin/sclera

v. Presence or absence of peripheral edema

vi. Objective signs of pain

## 4. Diagnosis

1. Chest Pain suspect to be cardiac in nature

## 5. Plan

1. Treatment

a. The following laboratory tests may be ordered: CBC, CMP, POC I-stats as needed, Troponin I, Draw Extra, Chest XRay 1 View.

b. The order must be placed under the name of the supervising ED physician. If a different provider is later assigned to the patient, the orders will be transferred to the provider assigned.

c. The blood and urine specimens must be labeled accurately with the patient's name and account number. The accuracy of the label must be verified by using the hospital approved patient identification process (see [PATIENT IDENTIFICATION](#) policy). The labeling of specimens must occur AT THE PATIENT'S BEDSIDE.

d. Specimens collected by the ED nursing staff must be timed and initialed by the person drawing the specimen and placed in a bio-hazard specimen bag

e. Specimens collected in the ED will be handed to a phlebotomist or transported in person or by the pneumatic tube system to the lab.

f. Cardiac monitor with rhythm interpretation (rhythm strip to be mounted in patient's medical record)

2. Patient conditions requiring consultation/reportable conditions:

a. Notify an Emergency Department physician immediately of the following:

i. Changes in airway, breathing, circulation or altered level of consciousness.

ii. Change in triage acuity.

a. Patients presenting with signs and symptoms of

possible ACS (acute coronary syndrome).

- b. ~~Note: If the patient appears unstable and/or a life threatening condition is identified: the ED RN will notify the ED physician IMMEDIATELY. Conditions requiring immediate treatment include: Expanding or acute aortic abdominal aneurysm, acute myocardial infarction, pulmonary embolism or spontaneous pneumothorax.~~

3. ~~Education – Patient/Family~~

- a. ~~Instruct patient or care provider on types of blood tests being ordered and necessity of intravenous therapy.~~

4. ~~Follow Up~~

- a. ~~As needed to maintain continuity of care~~

5. ~~Documentation of Patient Treatment~~

- a. ~~Document all patient procedures and care on the appropriate nursing clinical documents along with any patient responses from the interventions.~~
- b. ~~Enters "supervising ED physician as ordering provider.~~
- c. ~~Navigates to Emergency Department Nursing Order Sets~~
- d. ~~Selects "Chest Pain Standardized Procedure" as the order source.~~

6. ~~Record Keeping~~

- 1. ~~The facility will retain the patients' record according to the [RECORD RETENTION](#) procedure.~~

## ~~REQUIREMENTS FOR THE REGISTERED NURSE~~

1. ~~Education~~

- 1. ~~A registered nurse who has completed orientation and has demonstrated clinical competency may perform the procedures listed in this protocol. Education will be given upon hire with a RN preceptor/designee~~

2. ~~Training~~

- 1. ~~Clinical competency must be demonstrated and approved by supervising personnel or preceptor.~~

3. ~~Experience~~

- 1. ~~Current California RN license and designated to work in ED~~

4. ~~Evaluation~~

- 1. ~~Initial: at 3 months, 6 months, and 12 months by the nurse manager through feedback from colleagues, physicians, and chart review during performance period being evaluated.~~

2. Routine: annually after the first year by the nurse manager through feedback from colleagues, physicians and chart review.
3. Follow up: areas requiring increased proficiency as determined by the initial or routine evaluation will be re-evaluated by the nurse manager at appropriate intervals until acceptable skill level is achieved, e.g. direct supervision.
4. Demonstrates knowledge of procedure through clinical performance.

## ~~DEVELOPMENT AND APPROVAL OF THE STANDARDIZED PROCEDURE~~

### ~~1. Method~~

1. Review and approval every three (3) years.
2. Policy goes through the Emergency Department Physician Group every three (3) years.
3. Policy goes through the interdepartmental policy committee (IDPC) upon creation of policy and when changes are made.
4. Chief Nursing Officer (Vice President of Patient Care Services) upon creation of policy and with significant changes.

### ~~2. Review schedule~~

1. Review of policy every three (3) years

### ~~3. Signatures of authorized personnel approving the standardized procedure and dates:~~

1. Approval of the standardized procedure is outlined in the electronic policy and procedure system.
2. Nursing
  - a. Director of Emergency Department every three (3) years
3. Medicine
  - a. Medical Director of Emergency Department every three (3) years
  - b. Chair of Interdisciplinary Medical Practice Committee every three (3) years
4. Administration
  - a. Chief Nursing Officer (Vice President of Patient Care Services) every three (3) years

## ~~REGISTERED NURSES AUTHORIZED TO PERFORM PROCEDURE AND DATES~~

1. The list of qualified individuals who may perform this standardized procedure is available in the department and available upon request.

# REFERENCES

1. Board of Registered Nursing, Title 16, California Code of Regulations (CCR) Section 1474; Medical Board of California, Title 16 CCR, Section 1379.
2. Emergency Nurses Association: Emergency Nursing Core Curriculum (2016), 7<sup>th</sup> Edition. *Planning/interventions for myocardial infarction.*

## I. POLICY

- A. N/A

## II. DEFINITIONS

- A. Wong-Baker Scale: System to rate pain on a numeric scale, zero (0) to ten (10).
- B. EKG: Electrocardiogram
- C. IV/INT: Intravenous Therapy (saline lock) with intermittent flushes.
- D. CBC: Complete Blood Count
- E. CMP: Comprehensive Metabolic Panel

## III. PROCEDURE

### A. Function

1. To expedite care for patients who present to the Emergency Department (ED) with a chief complaint of chest pain that may be cardiac in nature.

### B. Circumstances

#### 1. Setting Emergency

- a. Registered Nurses (RN) assigned to the ED may initiate orders for patients presenting with chest pain or symptoms that may be cardiac in nature prior to physician evaluation IF: the ED physician is not immediately available. The RN will obtain an EKG within 10 minutes, ensure blood is drawn, order approved laboratory tests, initiate cardiac monitoring, place oxygen per protocol and place an INT with routine flushes. This will apply to patients with symptoms listed in the PATIENT CONDITIONS section below.

#### 2. Supervision

- a. Registered Nurses who are qualified to perform this standardized procedure may independently order approved laboratory tests, order an EKG, previous EKG, Oxygen Administration, and start/place an IV saline

lock with intermittent flushes of 10cc normal saline to patients who present with a chief complaint of chest pain and for whom meet the criteria above. Physician supervision is not required.

### 3. Patient Conditions

a. Emergency Department patients who present with **any** of the following symptoms, the procedure will be initiated:

- i. **Chest Pain-** Discomfort in the center of the chest that lasts more than a few minutes, or that goes away and comes back. Patients may describe the pain as uncomfortable pressure, squeezing, fullness or pain.
- ii. **Pain in other areas of the upper body** – Symptoms can included pain in one or both arms, the back, neck, jaw or stomach. Patient may describe the pain as deep aching and throbbing in one or both arms.
- iii. **Shortness of breath** – May occur with or without chest pain/ discomfort. May be described as breathlessness and/or inability to catch breath when waking up.
- iv. **Anxiety** – Unusual nervousness, and/or feelings of impending doom.
- v. **Other signs** – These may include clammy sweating, nausea, lightheadedness or dizziness, syncope, palpations or irregular heartbeat.

b. **NOTE:** Symptoms of heart attack in women are often different than in men. Women are more likely to experience shortness of breath, fatigue, nausea, dizziness and anxiety as presenting symptoms.

### C. Data Base

#### 1. Subjective

a. Prioritization and Severity of Illness

- i. Patients with a chief complaint of chest pain that may be cardiac in nature will be triaged (prioritized) according to accepted triage policy based on the severity of their illness and incorporating other medical conditions and/or additional features of their illness using the Emergency Severity Index (ESI) 5 level triage (see TRIAGE ASSESSMENT)
- ii. History of present illness/injury/chief complaint
- iii. Characteristic of Chest Pain using the Wong-Baker Pain Scale

- iv. Consider conditions related to cardiac disease i.e.) pericarditis, cardiomyopathy, or coronary artery disease
- v. History of cardiac surgeries/illness

## 2. Objective

- a. Chief complaint of chest pain
  - i. Signs of hypovolemia
  - ii. Chest excursion, symmetry and pain upon palpation
  - iii. Level of consciousness
  - iv. Color of skin/sclera
  - v. Presence or absence of peripheral edema
  - vi. Objective signs of pain

## D. Diagnosis

- 1. Chest Pain suspect to be cardiac in nature

## E. Plan

### 1. Treatment

- a. The following laboratory tests may be ordered: CBC, CMP, POC I-stats as needed, Troponin I, Draw Extra, Chest XRay 1 View.
- b. The order must be placed under the name EMERGENCY PHYSICIAN . If a different provider is later assigned to the patient, the orders will be transferred to the provider assigned.
- c. The blood and urine specimens must be labeled accurately with the patient's name and account number. The accuracy of the label must be verified by using the hospital approved patient identification process (see [PATIENT IDENTIFICATION](#) policy). The labeling of specimens must occur AT THE PATIENT'S BEDSIDE.
- d. Specimens collected by the ED nursing staff must be timed and initialed by the person drawing the specimen and placed in a bio-hazard specimen bag
- e. Specimens collected in the ED will be handed to a phlebotomist or transported in person or by the pneumatic tube system to the lab.
- f. Cardiac monitor with rhythm interpretation (rhythm strip to be mounted in patient's medical record)

2. Patient conditions requiring consultation/reportable conditions:

a. Notify an Emergency Department physician immediately of the following:

i. Changes in airway, breathing, circulation or altered level of consciousness.

ii. Change in triage acuity.

a. Patients presenting with signs and symptoms of possible ACS (acute coronary syndrome).

b. **Note: If the patient appears unstable and/or a life threatening condition is identified: the ED RN will notify the ED physician IMMEDIATELY Conditions requiring immediate treatment include: Expanding or acute aortic abdominal aneurysm, acute myocardial infarction, pulmonary embolism or spontaneous pneumothorax.**

3. Education - Patient/Family

a. Instruct patient or care provider on types of blood tests being ordered and necessity of intravenous therapy.

4. Follow Up

a. As needed to maintain continuity of care

5. Documentation of Patient Treatment

a. Document all patient procedures and care on the appropriate nursing clinical documents along with any patient responses from the interventions.

b. Enters "EMERGENCY PHYSICIAN as ordering provider.

c. Navigates to Emergency Department Nursing Order Sets

d. Selects "Chest Pain-Standardized Procedure" as the order source.

F. Record Keeping

1. The facility will retain the patients' record according to the RECORD RETENTION procedure.

## **IV. REQUIREMENTS FOR THE REGISTERED NURSE**

A. Education

1. A registered nurse who has completed orientation and has demonstrated clinical competency may perform the procedures listed in this protocol. Education will be given upon hire with a RN preceptor/designee

**B. Training**

1. Clinical competency must be demonstrated and approved by supervising personnel or preceptor.

**C. Experience**

1. Current California RN license and designated to work in ED

**D. Evaluation**

1. Initial: at 3 months, 6 months, and 12 months by the nurse manager through feedback from colleagues, physicians, and chart review during performance period being evaluated.
2. Routine: annually after the first year by the nurse manager through feedback from colleagues, physicians and chart review.
3. Follow up: areas requiring increased proficiency as determined by the initial or routine evaluation will be re-evaluated by the nurse manager at appropriate intervals until acceptable skill level is achieved, e.g. direct supervision.
4. Demonstrates knowledge of procedure through clinical performance.

## **V. DEVELOPMENT AND APPROVAL OF THE STANDARDIZED PROCEDURE**

**A. Method**

1. Review and approval every three (3) years.
2. Policy goes through the Emergency Department Physician Group every three (3) years.
3. Policy goes through the interdepartmental policy committee (IDPC) upon creation of policy and when changes are made.
4. Chief Nursing Officer (Vice President of Patient Care Services) upon creation of policy and with significant changes.

**B. Review schedule**

1. Review of policy every three (3) years

**C. Signatures of authorized personnel approving the standardized procedure and dates:**

1. Approval of the standardized procedure is outlined in the electronic policy and

procedure system.

2. Nursing

a. Director of Emergency Department every three (3) years

3. Medicine

a. Medical Director of Emergency Department every three (3) years

b. Chair of Interdisciplinary Medical Practice Committee every three (3) years

4. Administration

a. Chief Nursing Officer (Vice President of Patient Care Services) every three (3) years

## **VI. REGISTERED NURSES AUTHORIZED TO PERFORM PROCEDURE AND DATES**

A. The list of qualified individuals who may perform this standardized procedure is available in the department and available upon request.

## **VII. REFERENCES**

- A. Board of Registered Nursing, Title 16, California Code of Regulations (CCR) Section 1474; Medical Board of California, Title 16 CCR, Section 1379.
- B. Emergency Nurses Association: Emergency Nursing Core Curriculum (2016), 7<sup>th</sup> Edition. *Planning/interventions for myocardial infarction.*

### Approval Signatures

<b>Step Description</b>	<b>Approver</b>	<b>Date</b>
IDPC	Katherine DeSalvo: Director Medical Staff Services	Pending
Policy Committee	Rebecca Alaga: Regulatory/ Accreditation Coordinator	08/2023
Policy Owner	Darlene Vaughan: Nursing Director	08/2023

### Standards

No standards are associated with this document

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Last Approved N/A  
Last Revised 05/2017  
Next Review 3 years after approval

Owner **Darlene Vaughan:  
Nursing Director**  
Area **Nursing  
Standardized  
Procedures**

## Intraosseous Infusion Standardized Procedure Nursing Standardized Procedure

### I. POLICY

A. Intraosseous access and infusion is to provide an alternate means of vascular access when the IV route is not available or IV access attempts were unsuccessful and the patient would benefit from the timely administration of medications or fluids.

B. Circumstances:

- Setting:

A. Adult and pediatric patients where at least two attempts at IV access have been unsuccessful or it is determined that an IV attempt would be unsuccessful, and one of the following:

I. Cardiac arrest or impending arrest

II. Shock or evolving shock. This is a patient considered in Extremis.

- Supervision:

A. Intraosseous access and infusion may be performed in the emergency department by Registered Nurses who have successfully completed approved training within the past 12 months.

- Patient Condition:

#### *Indications*

A. Intraosseous access and infusion is approved for adult and pediatric patients.

B. Intraosseous access and infusion will never be performed to establish prophylactic vascular access

- C. Intraosseous access and infusion is approved only in the proximal tibia for children. The patient must weigh 3kg or more in order to use the EZ-IO
- D. Intraosseous access and infusion is approved only in the proximal tibia and the proximal humerus for patients age 8 and older. Sternal placement is prohibited

*Contraindications*

- A. Recent fracture of the involved bone.
- B. Infection at the site selected for insertion
- C. Inability to locate anatomical landmarks for insertion.
- D. Those patients who have a patent IV or in whom an IV may be established in a timely manner.
- E. Second attempt on the same bone.

## II. DEFINITIONS

- A. Intraosseous access and infusion: Establishing vascular access through bone marrow
- B. In Extremis: A profound state where death appears imminent
- C. EZ-IO- Type of Drill Intraosseous

## III. PROCEDURE

A. Database

- Subjective

1. Assure that indications for use have been met.
  - a. At least two attempts at IV access have been unsuccessful or it is determined that an IV attempt would be unsuccessful, and one of the following:
    - i. Cardiac arrest or impending arrest
    - ii. Shock or evolving shock. This is the patient in extremis.
2. Assure that contra-indications for use are not present.
  - a. Recent fracture of the involved bone
  - b. Infection at the insertion site
  - c. Inability to locate anatomical landmarks for insertion
  - d. Patients who have a patent IV or in whom an IV may be established in a timely manner.
  - e. Second attempt in the same bone.

- Objective

1. Determine patient age and weight to select the appropriate IO insertion device.
  - a. For a patient 3kg and under use a manual IO device
  - b. For a patient over 3kg and under 40kg and under age 8 use the Pediatric EZ-IO or manual device.
  - c. For a patient over age 8 or a weight over 40kg, use the Adult EZ-IO.
2. Approved insertion sites:
  - a. Proximal Tibia for pediatric patients. This is less than 8 year of age or less than 40kg.
  - b. Proximal Tibia or proximal humerus for adult patients. This is age 8 or older and 40kg or more.

B. Diagnosis:

- a. Cardiac Arrest
- b. Shock or evolving shock.

C. Plan

• Treatment

1. Process for Insertion

- a. Use body substance isolation precautions
  - b. Obtain age/weight appropriate supplies
  - c. Rule out contra-indications
  - d. Locate appropriate insertion site
  - e. Prepare insertion site using aseptic technique
  - f. Prepare the Intraosseous device
  - g. Stabilize the site and insert the needle at a 90 degree angle to the bone
  - h. Remove the sty let for the catheter
  - i. Confirm placement of the catheters by flushing the catheter with 10cc normal saline
  - j. Consider the administration of Lidocaine 2% solution, 20 mg for the adult or 0.5mg/kg (up to 20mg) for the pediatric patient who is conscious and complains of pain.
  - k. Dress insertion site, stabilize and secure the catheter
- Patient conditions requiring consultation/reportable conditions:
- a. Signs of infiltration of fluids
  - b. Redness or swelling at the site of insertion

- c. Duration of access approaching 24 hours
- Education-Patient/Family
  - a. Instruct patient or care provider to alert staff if site becomes painful or if the catheter becomes dislodged
  - b. Necessity of intravenous therapy
- Follow-up
  - a. As needed to maintain continuity of care
- Documentation of Patient Treatment
  - a. Document all patient procedures and care on the appropriate nursing clinical documents along with any patient response from the interventions

## **IV. REQUIREMENTS FOR THE REGISTERED NURSE**

### **A. Education**

- A registered nurse who has completed orientation and has demonstrated clinical competency may perform the procedures listed in this protocol. Education will be given upon hire with an RN preceptor/designee.

### **B. Training**

- Clinical competency must be demonstrated and approved by supervising personnel or preceptor.

### **C. Experience**

- Current California RN license and designated to work in ED

### **D. Initial Evaluation**

- Competency will be verified and documented upon hire

### **E. Ongoing Evaluation**

- Ongoing evaluation of competency to perform this procedure will be evaluated by the department supervising personnel and/or designee as needed.

## **V. DEVELOPMENT AND APPROVAL OF THE STANDARDIZED PROCEDURE**

### **A. Method**

- Review and approval every three (3) years
- Policy goes through the Emergency Department Physician group every three (3) years.
- Policy goes through the interdepartmental policy committee (IDPC) upon creation of

policy and when changes are made

- Chief Nursing Officer upon creation of policy and with significant changes.

B. Review Schedule

- Review of policy occurs every three (3) years.

C. Signatures of Authorized Personnel Approving the Standardized Procedure and Dates

1. Nursing – Director of Emergency Services
2. Medicine – Medical Director, Emergency Department
3. Administration – Chief Nursing Officer

## VI. REGISTERED NURSES AUTHORIZED TO PERFORM PROCEDURE AND DATES

- A. All Registered Nurses who have completed orientation and education regarding this standardized procedure.
- B. The list of qualified individuals who may perform this standardized procedure is available in the department and available upon request.

## VII. REFERENCES

- A. Lowther A (2011) Intraosseous access and adults in the Emergency Department. *Nursing Standard*. 25, 48, 35-48.
- B. Ashford and St Peter's Hospitals NHS Trust (2008) *Intraosseous Needle Placement Using EZ-IO System*. <http://tiny.cc/Ashford748>.

### Approval Signatures

Step Description	Approver	Date
IDPC	Katherine DeSalvo: Director Medical Staff Services	Pending
Policy Committee	Rebecca Alaga: Regulatory/ Accreditation Coordinator	07/2023
Policy Owner	Darlene Vaughan: Nursing Director	07/2023

### Standards

No standards are associated with this document

COPY



Last Approved N/A  
Last Revised N/A  
Next Review N/A

Owner **Darlene Vaughan:  
Nursing Director**  
Area **Nursing  
Standardized  
Procedures**

## Vaginal Bleeding Standardized Procedure

### I. POLICY

#### A. Function

- This standardized procedure outlines circumstances for which a registered nurse in the Emergency Department may start an IV and order blood work prior to a patient examination by a physician.

#### B. Circumstances

- Setting
  1. Registered Nurses (RNs) may order Complete Blood Count (CBC), Serum Human Chorionic Gonadotropin (sHCG), UA, **with CX** and a Blood Type and Rh factor (Type and Rh) on patients between menarche and menopause who present with a chief complaint of vaginal bleeding (DRAW EXTRA TUBES) **IF:** the ED physician is not immediately available AND the patient is between menarche and menopause.
  2. Patient to be NPO except for Meds.
- Supervision
  1. Registered Nurses, who are employed in the Emergency Department and have successfully completed the Patient's with Vaginal Bleeding competency, are qualified to perform this standardized procedure and may order CBC, sHCG, Type and Rh, place a saline lock IV when vital signs are within normal limits or initiate IV resuscitation if vital signs are abnormal, to the patients presenting with the chief complaint of vaginal bleeding and whom meet criteria. Physician supervision is not required.
- Patient Conditions
  1. Patients with a history of hysterectomy should only have blood drawn for a CBC.

2. Patients whose Type and Rh can be located in the medical record within the last one (1) year: DO NOT require a Type and Rh.
- Other
    1. Consider conditions related to vaginal bleeding, chromosomal abnormalities, endocrine dysfunction, abnormal development of the embryo, and trauma.
    2. Additional factors that increase risk of spontaneous abortion include maternal infections, advanced maternal age, malnutrition, substance abuse, immunologic incompatibility, surgery during pregnancy, and structural anomalies of the reproductive organs.

## II. DEFINITIONS

- A. CBC: Complete Blood Count
- B. sHCG: Serum Human Chorionic Gonadotropin
- C. Blood Type and Rh factor (Type and Rh)
- D. [UA with CX if indicated](#)

## III. PROCEDURE

- A. Database
  - Subjective
    1. Patients with the chief complaint of vaginal bleeding will be triaged and prioritized according to accepted triage policy based on the severity of their vaginal bleeding using the Emergency Severity Index (ESI) 5 Level Triage. (See [TRIAGE ASSESSMENT](#))
      - a. Spontaneous abortion (miscarriage) is the loss of a pregnancy before viability of the fetus defined as 20 weeks gestation. Spontaneous abortion should be considered in any woman of childbearing age who presents to the emergency department with vaginal bleeding. Spontaneous abortions are commonly categorized as threatened, inevitable, incomplete, missed, or septic.
      - b. An ectopic pregnancy (EP) could cause vaginal bleeding in pregnant women. EP intrudes into the tubal wall too deeply or grows too large, it can rupture the tube and can be life-threatening due to risk of hemorrhage.
      - c. Menopausal or women of a geriatric age, malignant disease should always be considered. Postmenopausal hormonal changes may be responsible for dysfunctional uterine bleeding (DUB). Patients in this age group with vaginal bleeding are at increased risk for uterine cancer.
      - d. Pediatric patients may have an estrogen and progesterone

production imbalance and these do increase with puberty between 8-11 years of age. Vaginal bleeding in pediatric patients could be from maltreatment and the index of suspicion on sexual abuse must be maintained.

2. All patients presenting with chief complaint of vaginal bleeding and characteristics using numerical or Wong Baker pain scale.
  - a. Onset of vaginal bleeding and potential cause (what happened)
  - b. Last normal menstrual period (LNMP) and location of pain, if present.
  - c. Duration of vaginal bleeding
  - d. Characteristics of vaginal bleeding: amount, color, presence of clots/tissue. Number of full pads/tampons used (each holds approximately 30 ml of blood).
  - e. Alleviating or aggravating factors
  - f. Radiation of pain
  - g. Treatment before arriving to the Emergency Department.
  - h. Positive pregnancy test: date and method (serum or urine).
    - i. Fatigue, dizziness, lightheadedness, syncope
    - j. Contraceptive history
    - k. Reproductive history, total number of pregnancies, live births spontaneous/therapeutic abortion(s) (gravida, para, SAB/TAB)
    - l. Recent trauma or surgery
    - m. Recent sexual intercourse

- Objective

1. Patients with vaginal bleeding will be assessed for the following
  - a. Level of consciousness, behavior, affect
  - b. Abnormal vital signs, obtain orthostatic vital signs (lying, sitting, standing)
  - c. Skin, color; moist or dry
  - d. Gait
  - e. Quality and Quantity of vaginal bleeding, color, amount, passage of clots or tissue
  - f. Presence or absence of pain/cramping and location of pain
  - g. Palpation of abdomen for tenderness
  - h. Auscultation for Fetal Heart Tones

## B. Diagnosis

- Vaginal bleeding caused by

1. Spontaneous abortion from a nonviable fetus
  2. Ectopic pregnancy invading the tubal wall
  3. Uterine dysfunction
  4. Endocrine imbalance
  5. Sexual assault/abuse or maltreatment
  6. Malignant disease
- Potential differential diagnoses
    1. Deficient fluid volume
    2. Acute pain
    3. Anticipatory grieving
  - Plan
    1. Treatment
      - a. Patient must have an accurate name-band in place before blood work is drawn.
      - b. When initiating an IV infusion the RN will label the blood tubes accurately by using the hospital approved patient identification process (see [PATIENT IDENTIFICATION POLICY](#)). The labeling of specimens must occur AT THE PATIENT'S BEDSIDE.
      - c. Specimens collected by the ED nursing staff must be timed and initialed by the person drawing the specimen and placed in a bio-hazard specimen bag.
      - d. Specimens will be handed to a phlebotomist or transported to lab in person or through the pneumatic tube system
      - e. The order must be placed under the name of the supervising ED physician. If a different provider is later assigned to the patient, the orders will be transferred to the provider assigned.
      - f. The ED RN will assess the patient presenting with vaginal bleeding according the standardized policy and procedure of Vaginal Bleeding.
        - i. The ED RN will initiate IV therapy when the following is present:
          1. Moderate to heavy vaginal bleeding present
          2. Skin signs are cool, pale, and moist
          3. Systolic blood pressure (SPB) of 100 or less and/or heart rate of greater than 100.
          4. A female staff member **MUST** be present with the ED physician during the patient's vaginal exam.

5. If specimens are obtained patient label must be taken to the bedside and verified with the patient using the two (2) Patient Identifiers (patient name and medical record number).

2. Patient conditions requiring consultation:

- a. If the patient appears unstable and/or life threatening condition is identified: the ED RN will notify the ED physician **IMMEDIATELY**.
- b. Heavy bleeding present with skin signs of cool, pale and moist.
- c. Vital signs critical less than 100 SBP and heart rate greater than 100.
- d. Changes in airway, breathing, circulation, or altered level of consciousness
- e. Change in triage acuity

3. Education-Patient/Family

a. Educate on processes of the Emergency Department

- i. Why patient must remain NPO status until results
- ii. Explain the need for blood work and initiation of blood work
- iii. Explain the procedure of vaginal exam
- iv. Explain what medication given and why
- v. Education that patient did not do anything wrong, that miscarriage or threatened miscarriage it is not the patient's fault
- vi. Educate on receiving RhoGAM, if woman is Rh-negative

b. Educating for threatened abortion

- i. Maintain bed rest for 24 to 48 hours or until bleeding subsides
- ii. Educate on the need for bed rest and pelvic rest (no sexual intercourse, do not place anything inside the vagina) until bleeding and cramping stop
- iii. Use sanitary pads only; avoid tampons
- iv. Return to the Emergency Department if bleeding or pain increases
- v. Save any clots or tissue that passes and bring to the emergency department or follow-up physician
- vi. Ensure appropriate follow-up care with obstetrician/gynecologist.

c. Education for complete abortion

- i. Mild abdominal pain/cramping is common for several days
- ii. Use sanitary pads only; avoid tampons
- iii. Take temperature four times a day
- iv. Pelvic rest
- v. Ensure follow-up care with obstetrician/gynecologist.
- vi. Activity as tolerated
- vii. Return to the emergency department if temperature is higher than 100.6 F, bleeding, pain, or foul-smelling discharge occurs or increases

d. Follow up

- i. Reassessment and reevaluation of vaginal bleeding every two (2) hours or more frequently according to the patient severity and amount of vaginal bleeding and accordance with the Emergency Department Policy and Procedure: Assessment/Reassessment (see [STANDARDS OF CARE- EMERGENCY DEPARTMENT](#))

e. Documentation of Patient Treatment

- i. Document all patient procedures and care on the appropriate nursing clinical documents along with any patient responses from the interventions.
  1. The ED RN initiating the standardized procedure will document the following: CBC, sHCG, Type and Rh, and IV therapy ordered per "standardized procedure" in the electronic medical record.
  2. Enters "supervising ED physician as ordering provider, per policy.
  3. Navigates to New Sets.
  4. Selects "ER Nursing Orders" order set
  5. Selects appropriate order.

## IV. REQUIREMENTS FOR THE REGISTERED NURSE

A. Education and Training

- The RN completes an initial review of the Standardized Procedure with an evaluation of knowledge.

B. Experience

- Current California RN license and designated to work in ED

C. Initial and Ongoing Evaluation

- Demonstrates knowledge of procedure through clinical performance.

## V. DEVELOPMENT AND APPROVAL OF THE STANDARDIZED PROCEDURE

A. Method

- Review and approval every three (3) years.
- Policy goes through the Emergency Department Physician Group every three (3) years.
- Policy goes through the interdepartmental policy committee (IDPC) upon creation of policy and when changes are made.
- Chief Nursing Officer (Vice President of Patient Care Services) upon creation of policy and with significant changes.

B. Review schedule

- Review of policy every three (3) years

C. Signatures of authorized personnel approving the standardized procedure and dates:

- Nursing
  1. Director of Emergency Department every 3 years
- Medicine
  1. Medical Director of Emergency Department every 3 years
  2. Chair of Interdisciplinary Medical Practice Committee every 3 years
- Administration
  1. Chief Nursing Officer (Vice President of Patient Care Services) every 3 years

## VI. REGISTERED NURSES AUTHORIZED TO PERFORM PROCEDURE AND DATES

- A. Records are kept electronically in Education Department Computer system and in nursing unit's education file.

## VII. REFERENCES

- A. Board of Registered Nursing, Title 16, California Code of Regulations (CCR)
- B. Section 1474; Medical Board of California, Title 16, CCR Section 1379.

- C. Emergency Nurses Association: Emergency Nursing Core Curriculum (2000)
- D. 6th Edition. *Vaginal bleeding* 536-564.
- E. [TRIAGE ASSESSMENT](#)
- F. [STANDARDS OF CARE- EMERGENCY DEPARTMENT](#)

## Approval Signatures

Step Description	Approver	Date
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## Standards

No standards are associated with this document

DRAFT



Last Approved N/A  
Last Revised N/A  
Next Review 3 years after approval

Owner Melissa Deen: Infection Prevention Manager  
Area Nursing Standardized Procedures

## Surgical Wound Classification System

### I. POLICY STATEMENT

- A. Surgical wounds are classified according to criteria used by Center for Disease Control and Prevention (CDC) uses an adaptation of the American College of Surgeons wound classification schema, which divides surgical wounds into four classes.

### II. PURPOSE

- A. Adhering to mandated reporting of denominator data of surgeries performed at Salinas Valley Health Medical Center, per Center for Disease Control and Prevention (CDC) via National Health Safety Network (NHSN), California Department of Public Health (CDPH) and Centers for Medicare & Medicaid Services (CMS)
- B. Create accuracy with which circulating nurses (CNs) classify surgical procedures by risk of contamination in the operating room.

### III. DEFINITIONS

- A. **CLASS I Operative Wound, or CLEAN WOUND:** an uninfected surgical wound in which no inflammation is encountered and the respiratory, alimentary, genital, or urinary tracts are not entered. Clean wounds are primarily closed and, if necessary, drained with closed drainage. Surgical wound incisions that are made after non-penetrating (i.e., blunt) trauma should be included in this category if they meet the criteria.

1. **Examples of CLASS I Surgical Procedures:**

Amputation	Laminectomy	Ovarian Cystectomy
Breast biopsy	Mastectomy	Porto-caval shunt
Cataract	Muscle biopsy	Skin biopsy

**Examples of CLASS I Surgical Procedures:**

Ectropion	Oophorectomy	Tubal ligation
Femoral head resection	Orbital tumor	Vascular surgery
Herniorrhaphy	ORIF	Intervertebral disc resection

B. **CLASS II Operative Wound, or CLEAN-CONTAMINATED WOUND:** a surgical wound in which the respiratory, alimentary, genital, or urinary tracts are entered under controlled conditions and without unusual contamination. Specifically included in this category are surgical procedures involving the biliary tract, appendix, vagina, and oropharynx, provided no evidence of infection is encountered and no major break in technique occurs.

1. **Note:** All clean operative wounds with open drains; (i.e. Penrose) are considered CLASS II operative wounds.

2. **Examples of CLASS II Surgical Procedures**

Anterior/Posterior vaginal repair	Appendectomy (no inflammation or infection)	Bartholin cystectomy (not infected)
Caesarean section	Cervical biopsy	Cervical conization
Cholecystectomy (without inflammation, infection or gross spillage)	Circumcision	Cystectomy
D&C of uterus (no infection present)	Endoscopic procedures (ALLI) (e.g. Bronchoscopy, Cystoscopy, Esophagoscopy, Laryngoscopy, Proctoscopy, Sigmoidoscopy, or others)	Episiotomy
Gastrectomy (no inflammation)	Gastric Bypass	Hemorrhoidectomy
Hysterectomy, abdominal or vaginal (open or laparoscopic)	Intraocular foreign body removal	Mastoidectomy
Pneumonectomy or lobectomy without infection	Prostatectomy	Pyloroplasty
Resection of small intestine or colon (no spillage)	Salpingectomy via laparotomy (e.g. Ectopic pregnancy)	Stapedectomy
Stapes mobilization	Tonsillectomy	Tracheal surgery (and biopsy)

### Examples of CLASS II Surgical Procedures

Transurethral resection	Tuboplasty	Vaginal delivery (routine)
Y-V plasty of bladder		

- C. **CLASS III Operative Wound or CONTAMINATED WOUND:** an open, fresh, accidental wound. This typically involves a surgical procedure in which a major break in sterile technique occurs (e.g., emergency open cardiac massage) or when gross spillage from the gastrointestinal tract and incisions in which acute, non-purulent inflammation is encountered.

### 1. Examples of CLASS III Surgical Procedures

Appendectomy (inflamed, not perforated)	Bartholin cystectomy (inflamed)	Bowel Surgery
Chalazion	Colostomy closure	Cholecystectomy (with inflammation, infection, or gross spillage)
Dacryocystitis	Eye Surgery with Conjunctivitis	Hordeolum
Intranasal surgery	Introcular foreign body with endophthalmitis	Lacrimal stenosis
Laryngectomy, partial to total (not inflamed or infected)	Mandibulectomy (no infection)	Oral and dental surgery infection or inflammation
Pilonidal cyst and sinus infected		

- D. **CLASS IV Operative Wound or DIRTY OR INFECTED WOUND:** an old traumatic wound with retained or devitalized tissue, as well as a wound that involves existing clinical infection or perforated viscera. This definition suggests that the organisms causing postoperative infection were present in the wound before the surgical procedure.

### 1. Examples of CLASS IV Surgical Procedures

Amputation in presence of gangrene or infection	Appendectomy purulent/perforated	Bowel resection in presence of peritonitis or perforation
Burns	D&C (uterus- infected)	Drainage of intra-abdominal abscess
Infected carcinoma	Laryngectomy, partial or total (inflamed/infected)	Lid or Orbital cellulitis or abscess

Examples of CLASS IV Surgical Procedures		
Mandibulectomy (infected)	Open fracture	Traumatic wound

## IV. GENERAL INFORMATION

- A. Circulating nurses (CNs) use the traditional wound classification system of clean, clean-contaminated, contaminated, and dirty-infected to classify surgical wounds in the operating room.

## V. PROCEDURE

- A. Documentation by the CNs, will update the wound class in the patient electronic medical record.
  1. Provided in "**III. Definitions**" section of this policy

## VI. EDUCATION/TRAINING

- A. Education and/or training is provided upon hire and reviewed annually.

## VII. REFERENCES

- A. Surgical site infection (SSI) event. In: National Healthcare Safety Network (NHSN) Patient Safety Component Manual. Atlanta GA: National Healthcare Safety Network, Centers for Disease Control and Prevention; 2018:9-1–9-32.
- B. Guideline for sterile technique. In: Guidelines for Perioperative Practice. Denver, CO: AORN, Inc; 2018: e133-e172ist top 5 current references)
- C. APIC Text of Infection Control and Epidemiology, on-line 2023
- D. CDC NHSN definitions 2023, Surgical Site Infection (SSI); <https://www.cdc.gov/nhsn/pdfs/pscmanual/9pscscsicurrent.pdf>
- E. Operational Guidance for Reporting Surgical Site Infection (SSI) Data to CDC's NHSN for the Purpose of Fulfilling CMS's Hospital Inpatient Quality Reporting (IQR) Program Requirements, updated November 2019; <https://www.cdc.gov/nhsn/pdfs/cms/ssi/Final-ACH-SSI-Guidance.pdf>

## Approval Signatures

Step Description	Approver	Date
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P&T Committee	Genevieve delos Santos: Pharmacy Operations Manager	Pending
Policy Committee	Rebecca Alaga: Regulatory/ Accreditation Coordinator	08/2023
Policy Owner	Melissa Deen: Infection Prevention Manager	08/2023

## Standards

No standards are associated with this document

## History

**Created by Deen, Melissa: Infection Prevention Manager** on 7/31/2023, 6:31PM EDT

new policy per CDPH recommendation

**Last Approved by Deen, Melissa: Infection Prevention Manager** on 7/31/2023, 6:31PM EDT

**Comment by Deen, Melissa: Infection Prevention Manager** on 7/31/2023, 6:36PM EDT

[@Tesfamariam, Haimanot: Infection Prevention Specialist](#) [@Erasquin, Melissa: Operating Room Operations Manager](#) [@Hawthorne, Leslie: Operating Room Clinical Manager](#) [@Knight, Carla: Director of Perioperative Services](#)

Please review and send me any edits.

This policy follows regulations regarding our mandated surgical denominator data for CDPH & CMS. Last year's CDPH validation audit, this policy was a recommendation in improve our wound class documentation by our surgical nursing staff.

**Draft saved by Deen, Melissa: Infection Prevention Manager** on 7/31/2023, 6:41PM EDT

**Edited by Deen, Melissa: Infection Prevention Manager** on 7/31/2023, 6:42PM EDT

typing error corrected in references.

**Last Approved by Deen, Melissa: Infection Prevention Manager** on 7/31/2023, 6:42PM EDT

**Administrator override by Alaga, Rebecca: Regulatory/Accreditation Coordinator** on 8/10/2023, 1:42PM EDT

Flow corrected. Please approve to move forward.

**Rejected by Alaga, Rebecca: Regulatory/Accreditation Coordinator** on 8/10/2023, 1:43PM EDT

Please approve to move forward with new approval flow. Thank you.

**Last Approved by Deen, Melissa: Infection Prevention Manager** on 8/10/2023, 1:45PM EDT

**Last Approved by Alaga, Rebecca: Regulatory/Accreditation Coordinator** on 8/10/2023, 2:37PM EDT

Policy Committee previously approved

COPY



## Antibiotic Stewardship Policy

ASP Policy – approved by P&T Committee on 8/18/23

### **Policy Statement:**

Salinas Valley Health actively supports its Antibiotic Stewardship Program (ASP) as an organizational priority, with the mission of promoting the appropriate use of antimicrobial agents to treat infections and to reduce possible adverse events associated with antimicrobial use.

Salinas Valley Health appoints a physician who is qualified through education, training, or experience in infectious diseases and antibiotic stewardship as the leader of the Antibiotic Stewardship Program.

Salinas Valley Health allocates financial resources for staffing and information technology to support the Antibiotic Stewardship Program. The organization's Antibiotic Stewardship Program employs active hospital-wide programs for the surveillance, prevention, and control of healthcare-associated infections and other infectious diseases. Using nationally recognized infection prevention and control guidelines, employing best practices for improving antibiotic use, and reducing the development and transmission of healthcare-associated infections and antibiotic resistant organisms, Salinas Valley Health continues to expand its robust Antibiotic Stewardship Program.

### **Purpose:**

Optimizing the use of antimicrobials through an effective Antibiotic Stewardship Program has been shown to improve patient outcomes, protect patients from harms caused by unnecessary antibiotic use, decrease the incidence of hospital-acquired *Clostridioides difficile* infections, as well as diminish the spread of infections caused by multidrug-resistant organisms (MDRO).

The leader(s) of the Antibiotic Stewardship Program is responsible for the following:

- Developing and implementing a hospital-wide Antibiotic Stewardship Program that is based on nationally recognized guidelines to monitor and improve the use of antibiotics.
- Documenting Antibiotic Stewardship activities, including any new or sustained improvements
- Communicating and collaborating with the medical staff, nursing leadership, clinical microbiology/laboratory and pharmacy leadership, as well with the hospital's infection prevention and control and quality assessment and performance improvement programs on antibiotic use issues.
- Providing competency-based training and education for staff on practical applications of antibiotic stewardship guidelines, policies, and procedures.

## **Definitions:**

- AR – Antimicrobial Resistance
- ASHP – American Society of Health System Pharmacists
- ASP – Antibiotic (Antimicrobial) Stewardship Program
- CAP – Community-acquired pneumonia
- CDC – Centers for Disease Control and Prevention, a part of the U.S. Public Health Service of the Department of Health and Human Services (DHHS)
- CRE – Carbapenem-resistant Enterobacteriaceae
- DOT – Days of therapy for which a specific antimicrobial was administered
- ESBLs – Extended-spectrum beta-lactamases
- HAI - Healthcare-associated infections
- KPC – Klebsiella pneumoniae carbapenemase
- MRSA – Methicillin-resistant *Staphylococcus aureus*
- MDRO – Multidrug-resistant organism
- P&T - Pharmacy and Therapeutics Committee
- SSTI – Skin and soft tissue infections
- TJC – The Joint Commission
- UTI – Urinary Tract Infection
- VRE – Vancomycin-resistant enterococci

## **General Information:**

Salinas Valley Health has a multidisciplinary committee, the Antibiotic Stewardship Committee, which oversees the Antibiotic Stewardship Program. The committee is composed of representation from the medical staff, pharmacy services, the infection prevention and control program, nursing services, microbiology, information technology, and the quality assessment and performance improvement program.

The Antibiotic Stewardship Committee is a subcommittee of the Pharmacy and Therapeutics Committee, working in concert with medical staff leadership and hospital administration in promoting appropriate antibiotic prescribing practices and reducing antibiotic resistance. The Antibiotic Stewardship Committee meetings take place every other month, on site, at Salinas Valley Health. ASP data is shared with the P&T Committee, Medical Executive Committee, and the Board of Directors.

The Antibiotic Stewardship Program demonstrates coordination among all components of the hospital responsible for antibiotic use and resistance, including, but not limited to, the infection prevention and control program, the quality assessment and performance improvement program, the laboratory/microbiology department, the medical staff, nursing services, and pharmacy services.

The Antibiotic Stewardship Program (ASP) initiatives are consistent with evidence-based practices and regulatory requirements. The Centers for Disease Control and Prevention (CDC), who published the Core Elements of Hospital Antibiotic Stewardship Programs and the most current guidelines, policy statements, compendiums, and regulations from relevant organizations such as ASHP, Infectious Diseases Society of America, the Society for Healthcare Epidemiology of America, The Joint Commission (TJC), Centers for Medicare and Medicaid Services, as well as the California Department of Public Health.

The CDC's Core Elements of Hospital Antibiotic Stewardship Programs that serve as guideposts for the Antibiotic Stewardship Program include: Hospital Leadership Commitment; Accountability; Pharmacy Expertise; Action; Tracking; Reporting, and Education.

In addition, TJC's new and revised requirements for antibiotic stewardship consist of twelve new and revised elements of performance (EPs) that apply to all accredited hospitals, with the goal of "optimizing antibiotic prescribing practices," provide a framework to expand the Antibiotic Stewardship Program. These ASP initiatives are designed to reduce or prevent healthcare-associated infections, including hospital-acquired *Clostridioides difficile* infections and multidrug-resistant organisms (MDROs).

Healthcare information technology (e.g., electronic medical records, computerized physician order entry, antibiogram/microbiology laboratory data and clinical decision support) is used to support and optimize ASP initiatives. The Antibiotic Stewardship Program documents the evidence-based use of antibiotics throughout the departments and services of Salinas Valley Health.

Metric, process and outcome measures are used to assess the effectiveness of the ASP initiatives and the overall impact on antimicrobial use and resistance patterns.

### **Procedure:**

The Antibiotic Stewardship Committee is responsible for oversight of the Antibiotic Stewardship Program initiatives and reports findings and recommendations to the Pharmacy and Therapeutics/Infection Prevention Committee.

The core members of the multidisciplinary Antimicrobial Stewardship committee includes an infectious diseases physician, a clinical pharmacist with infectious diseases training, a clinical microbiologist or laboratory representative, an information technology pharmacist, an infection prevention professional, a hospital epidemiologist, and a representative from nursing.

When ordering oral and parenteral antibiotics (or other antimicrobials), the provider is required to indicate the specific indication for treatment in the electronic medical record. The indications are listed in a drop-down format and include: Bloodstream; Bone/Joint; *C. difficile*; CNS/Meningitis; Genitourinary Tract; Endocarditis/Endovascular; Intra-Abdominal; Sepsis; Neutropenic Sepsis; Pulmonary; Skin/Soft tissue; and Surgical Prophylaxis.

## ***Interventions and Strategies***

The Antibiotic Stewardship Program, as developed by the Antibiotic Stewardship Committee, utilized the following interventions and strategies, as appropriate:

- Prospective Audit and Feedback
  - The clinical pharmacist interacts directly with prescribers in order to tailor specific antibiotic therapy for each patient. This entails prospective review and feedback regarding antibiotic prescribing practices, including the treatment of positive blood cultures, the review of antimicrobials for appropriateness, and patient-specific feedback.
- Approved Mechanism and Process of Communication
- Formulary Restriction and Preauthorization Requirements.
  - Antibiotic use may be limited by the following criteria: Formulary-based restriction; criteria-based restriction; preauthorization-based restriction.
  - Use of Pharmacy and Therapeutics Committee-approved Restricted Antimicrobials List (attachment)
- Education
  - Educate and promote ASP strategies and prescribing criteria.
- Guidelines, Clinical Pathways, and Order Sets
  - Develop evidence-based practice guidelines incorporating local microbiology and resistance patterns to improve antimicrobial utilization. Examples include:
    - Use of surgical prophylactic antibiotics
    - Community-acquired pneumonia
  - Develop and implement the use of order sets to facilitate implementation of practice guidelines.
- Streamlining or De-escalation
  - Streamline or de-escalate empirical antimicrobial therapy on the basis of culture and sensitivity results to eliminate redundant combination therapy and more effectively target the causative pathogen, resulting in decreased antimicrobial exposure and potential cost savings.
- Dose Optimization
  - Optimize antimicrobial dosing based on individual patient characteristics (including hepatic/renal function), causative organism(s), site of infection, pharmacokinetic/pharmacodynamic parameters.
- Intravenous to Oral (IV to PO) Conversion
  - Develop and implement the use of clinical criteria and guidelines for the systematic conversion from parenteral to oral antimicrobials, as allowed by patient's condition.
- Combination Therapy
  - Utilize combination when appropriate to minimize the emergence of resistance.
- Suppression Cascade Reporting
  - Implement cascade reporting of antibiotic susceptibilities for common pathogens (e.g., suppression of unnecessarily broad-spectrum agents for microorganisms that are susceptible to less broad-spectrum agents).

### ***Computer Surveillance and Decision Support***

Information technology (including electronic medical records, computerized physician order entry, antibiogram/microbiology laboratory data and clinical decision support) is utilized and optimized to support the ASP initiatives including, but not limited to:

- Improving access to patient-specific information, such as microbiology cultures and sensitivities, hepatic/renal function, drug interactions and allergies.
- Ensuring the effectiveness of drug regimens.
- Tracking resistance patterns.
- Identifying nosocomial infections.
- Facilitating and tracking interventions.
- Surveillance of adverse drug events (ADE).

### ***Microbiology – Laboratory Support***

The microbiology department plays a critical role in antimicrobial stewardship by providing:

- Rapid molecular diagnosis of positive blood cultures.
- Patient-specific cultures and sensitivity data using suppression cascade reporting.
- Surveillance of resistant organisms.
- Molecular epidemiologic investigation of outbreaks.
- Antibiogram data development and maintenance.

### ***Pharmacy Support***

The clinical pharmacist's role in antimicrobial stewardship includes the following:

- Prospective audit and feedback rounding with the Infectious Diseases Physician twice a week.
- Prospective audit and feedback during the other days of the week.
- Vancomycin and aminoglycoside pharmacokinetic adult dosing protocols.
- Extended infusion beta-lactam adult dosing protocols (Piperacillin/Tazobactam and Meropenem).
- Antibiotic streamlining/de-escalation.
- Drug use criteria (DUE) development and implementation.
- IV to PO conversion.
- Documentation of clinical interventions in both patient-specific pharmacy interventions and the electronic medical record notes.
- Adherence to Pharmacy and Therapeutics Committee approved "Restricted Antimicrobials List." Specific communication to the ordering physicians is necessary.  
(See Attachment.)

### ***Surveillance and Prevention of Multidrug-Resistant Organisms***

- Initiatives are developed to prevent infections due to multidrug-resistant organisms (MDRO) including, but not limited to, Methicillin-resistant *Staphylococcus aureus* (MRSA), Vancomycin-resistant enterococci (VRE), Extended-spectrum beta-lactamases (ESBL), Carbapenem Resistant Enterobacteriaceae (CRE), and *Klebsiella pneumoniae* Carbapenemase (KPC). In addition, initiatives are also developed to prevent infections due to *Clostridioides difficile* (CDI).
- Practices consistent with evidence-based standards of practice and regulatory requirements are developed and implemented to reduce the risk of transmitting multidrug-resistant organisms.
- Key opportunities to improve antibiotic use include:
  - Community-acquired pneumonia (CAP) – Avoid empiric use of antipseudomonal beta-lactams and/or MRSA agents unless clinically indicated. Guidelines suggest that in adults, many cases of uncomplicated pneumonia can be treated for 5 days when a patient has a timely clinical response.
  - Urinary tract infections (UTIs) – Avoid antibiotic therapy for asymptomatic bacteriuria except in certain clinical situations where treatment is indicated, such as pregnancy and those undergoing invasive genitourinary procedures. Usage of the shortest duration of antibiotic therapy is advisable in most situations.
  - Skin and soft tissue infections (SSTIs) – Avoid empiric use of antipseudomonal beta-lactams and/or anti-anaerobic agents in many situations. Limit duration of treatment to 5 to 7 days (excluding diabetic-foot infections).

### ***Metrics, Quality Assurance, and Performance Improvement***

- Salinas Valley Health’s Antibiotic Stewardship Program collects, analyzes, and reports data to hospital leadership and prescribers.
- Metrics are developed and used to measure the prevalence of hospital-acquired infections caused by resistant organisms, antimicrobial susceptibilities of common pathogens obtained from hospital-specific antibiograms, antimicrobial use patterns, health care costs, and other variables related to hospital-acquired antibiotic-resistant infections. The Antibiotic Stewardship Program monitors the hospital’s antibiotic use by analyzing data on days of therapy per 1,000 days at risk; it also reports antibiotic use data to the National Healthcare Safety Network’s antimicrobial Use Option of the Antimicrobial Use and Resistance Module.
- Metrics and process and outcome measures are used to assess the effectiveness of the Antibiotic Stewardship Program initiatives and the overall impact on antimicrobial use and resistance patterns.

### ***Metrics, Quality Assurance, and Performance Improvement (Continued)***

- Process and outcomes measures may include:
  - Days of Therapy (DOT) per 1,000 patient days at risk (defined as the aggregate sum of days for which a specific antimicrobial agent was administered to individual patients as documented in the electronic medication administration record [eMAR]) and/or bar coding medication record (BCMA).
  - Multidrug-resistant organism infections rates using evidence-based metrics.
  - Compliance with evidence-based guidelines or best practices.
  - Evaluation of the education programs for staff and licensed independent practitioners
  - Process and outcome data related to multidrug-resistant organisms are provided to key stakeholders, including leaders, licensed independent practitioners, nursing staff and other clinicians.

### ***Action***

- Salinas Valley Health takes action on improvement opportunities identified by the Antibiotic Stewardship Program.

### ***Documentation***

- Documentation
  - Clinical interventions and monitoring activities will be documented in the electronic medical record.

### **Education/Training:**

- Education and/or training is provided as needed:
  - Via the use of HealthStream Learning Center (HLC), the hospital's on-line health care-specific learning management system for new and updated items.
  - Written information, communicated to healthcare professionals within the organization via multiple mediums including, but not limited to:
    - Organization-wide email system in which staff members are responsible for accessing and reviewing.
    - New employee orientation using the HealthStream (e-learning) system.
  - Shift huddles, and pertinent updates when indicated.

### **Attachment(s):**

- Salinas Valley Health Restricted Antimicrobials

## **References:**

- Antibiotic Prescribing and Use  
<https://www.cdc.gov/antibiotic-use/stewardship-report/current.html>
- Antimicrobial Prophylaxis in Surgery – ASHP Therapeutic Guidelines  
<https://www.ashp.org/pharmacy-practice/policy-positions-and-guidelines/browse-by-document-type/therapeutic-guidelines?loginreturnUrl=SSOCheckOnly>
- Core Elements of Hospital Antibiotic Stewardship Programs  
<https://www.cdc.gov/antibiotic-use/core-elements/hospital.html>
- Essential Resources and Strategies for Antibiotic Stewardship Programs in the Acute Care Setting  
<https://pubmed.ncbi.nlm.nih.gov/29590355/>
- Implementing an Antibiotic Stewardship Program: Guidelines by the Infectious Diseases Society of America and the Society for Healthcare Epidemiology of America  
<https://academic.oup.com/cid/article/62/10/e51/2462846>
- Infectious Diseases Management Program at UCSF  
<https://idmp.ucsf.edu/about>
- Stanford Medicine – Stanford Antimicrobial Safety and Sustainability Program  
<https://med.stanford.edu/bugsanddrugs/guidebook.html>
- The Joint Commission R3 Report Issue 35: New and Revised Requirements for Antibiotic Stewardship  
<https://www.jointcommission.org/standards/r3-report/r3-report-issue-35-new-and-revised-requirements-for-antibiotic-stewardship/#.ZAevkXZKiUk>



**Plan To Eliminate or Substantially Reduce  
Medication-Related Errors  
(SB 1875, HSC 1339.63)**

**Medication Error Reduction Plan (MERP)**

Updated August, 2023

**Contact Person:**

Genevieve C. delos Santos  
Pharmacy Operations, Interim Pharmacist-in-Charge  
Director of Pharmacy  
(831)-759-3234

## Overview/Background and History of Salinas Valley Health

Salinas Valley Memorial Hospital, founded in 1953, is the cornerstone of what would eventually become Salinas Valley Memorial Healthcare System (SVMHS). A rebrand was necessary as there has been significant changes at the Health System and today, Salinas Valley Health serves thousands of individuals and families throughout the Salinas Valley, Monterey Peninsula and surrounding areas. Our team actively utilizes the latest medical techniques with state-of-the-art technology to improve the health and well-being of our community. In many cases, this provides our patients the opportunity to receive specialized medical care locally without the need for travel. Salinas Valley Health Medical Center, SVMHS' 263-bed general acute care hospital, employs 2,083 (non-physician/non-contingent worker) staff and has a medical staff of more than 300 dedicated physicians whose expertise comprises a broad spectrum of specialties.

### Mission and Vision

- **Mission:** It is the mission of Salinas Valley Health to provide quality healthcare to our patients and to improve the health and well-being of our community.
- **Vision:** A community where good health grows through every action, in every place, for every person.

### Programs & Specializations

Salinas Valley Health Medical Center continues to be a center of excellence where an inspired team delivers compassionate and culturally sensitive care, outstanding quality, and an exceptional patient service.

**Services provided by Salinas Valley Health Medical Center are identified under the facility license.**

### Our major Affiliates and Partnerships Include:

- Salinas Valley Health Clinics
- Doctors on Duty (urgent care) and Urgent Care Centers
- Visiting Nurse Association Hospice
- Stanford affiliation with NICU

## Medication Error Reduction Plan (MERP)

### MERP Background:

In 2001 the California legislature passed legislation resulting in HSC 1339.63 which required every general acute care hospital to adopt a formal plan to eliminate or substantially reduce medication-related errors. Salinas Valley Memorial Hospital submitted a plan to the California Department of Health Services (now California Department of Public Health [CDPH]) by the end of 2001 as required, and the plan was accepted as submitted. This plan outlined multiple methods for reducing medication errors. Many of these steps were completed and in place at that time, while others have been delayed or changed due to various factors. This revision will first outline the required elements of the plan and references to the most recent 2023 plan. The plan is reviewed annually and updated as necessary.

### Definition:

The National Coordinating Council for Medication Error Reporting and Prevention (NCC MERP) defines a medication error as: "A medication error is any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional, patient, or consumer." This standard definition is encouraged by the NCC MERP to be used by institutions and other groups to identify errors.

### California MERP Requirements:

Salinas Valley Health has adopted the California MERP initiatives, which include eleven (11) procedures and systems that are associated with medication use. They include:

1. Prescribing
2. Prescription order communications
3. Product labeling
4. Packaging and nomenclature
5. Compounding
6. Dispensing
7. Distribution
8. Administration
9. Education
10. Monitoring
11. Use

### MERP Plan Element (PE) Methodology:

- **Plan Element 1 (PE1)** – Evaluate, assess, and include a method to address each of the eleven (11) procedures and systems associated with medication use to identify weaknesses or deficiencies that could contribute to errors in the administration of medications.
- **Plan Element 2 (PE2)** – Annual review to assess the effectiveness of the implementation of each of the eleven (11) procedures and systems.
- **Plan Element 3 (PE3)** – Modify, as warranted, when weaknesses or deficiencies are noted, to achieve the reduction of medication errors.
- **Plan Element 4 (PE4)** – Describe the technology to be implemented and how it is expected to reduce medication errors associated with one or more of the eleven (11) procedures and systems.
- **Plan Element 5 (PE5)** – Include a system/process to proactively identify actual or potential medication-related errors. Shall include concurrent and retrospective review of clinical care.
- **Plan Element 6 (PE6)** – Multidisciplinary process to regularly analyze all identified actual or potential errors and describe how the analysis will be utilized to change current procedure and systems to reduce errors.
- **Plan Element 7 (PE7)** – Include a process to incorporate external medication-related error alerts to modify the eleven (11) current processes and systems as appropriate.

## ANNUAL EVALUATION OF MEDICATION ERROR REDUCTION PLAN FOR YEAR 2023

### 1. Prescribing

- *The process whereby a licensed or authorized prescriber orders a medication for a patient.*
  - This includes order sets, order strings and individual medication orders, which are prescribed using electronic computerized provider order entry (CPOE) as well as faxed paper orders. The ordering of medications must comply with the required elements of a prescription, as mandated by the California Board of Pharmacy and The Joint Commission. During the prescribing process, medication orders must be legible; they must not contain abbreviations, inappropriate leading/trailing zeroes, ranges, and as needed (PRN) orders without indication or clear instruction of use.

### 2. Prescription Order Communications

- *The process where a prescription is communicated, clarified, transcribed (if necessary), and any other communications related to a prescription order. This process may be via direct order by the provider or by means of a telephone order or verbal order to the licensed nurse/pharmacist when appropriate.*
  - This also includes communication of relevant information to the pharmacy necessary for medication order processing/verification, such as allergies, age, current weight (using metric units), height, gender, and pertinent laboratory values. In addition, medication-related electronic alerts during

prescription order entry, pharmacy validation or clinical administration related to allergies, therapeutic duplication, drug interactions, contraindications and critical laboratory values are important features that must be acknowledged during prescription order communications.

### **3. Product Labeling**

- *Product Labeling refers to the label placed on a medication at any point in the process intended to be administered to a patient.*
  - The product label shall contain the patient's name, the location where the medication is to be delivered (e.g., the patient's room), as well as the directions for use and applicable accessory and cautionary instructions (e.g., refrigerate). This also includes the use of "Tall Man" (mixed case) lettering, "Look Alike Sound Alike" (LASA), and the notation of "High Alert" for medications designated as High Alert when feasible. The product shall contain the appropriate units, such as the metric system, where applicable.

### **4. Packaging and Nomenclature**

- *Packaging and nomenclature include the process of preparing a product in a unit dose ready-to-administer package/container.*
  - This includes the repackaging of bulk products to unit dose packages. Packaging may also include the use of barcodes, as applicable. Nomenclature involves the utilization of a standard unit of measurement (metric system) and approved "Tall Man" (mixed case) lettering, as well as "Look Alike Sound Alike" (LASA) designations, where applicable.

### **5. Compounding**

- *The process of preparing a product not commercially available in the concentration ordered by the prescriber, preferably by the pharmacy.*
  - This involves utilizing a sterile compounding area as appropriate and expanding the availability of pre-made ready to use products when available. This includes employing standardized concentrations and beyond use dating pertinent to applicable rules, regulations, and laws.

### **6. Dispensing**

- *The process of a pharmacist validating a prescriber order and selecting the correct medication to dispense to a patient, including oral, parenteral, and miscellaneous medications.*
  - This includes a process for verifying and using patient's own medications, where applicable.

### **7. Distribution**

- *The process where a clinician obtains the medication on the unit to administer to the patient.*
  - This includes the use of automated dispensing cabinets (ADCs), emergency medication carts, as well as medication storage. The distribution process involves the pharmacy distribution system (centralized vs. decentralized) and the utilization of pharmacy satellites.

Automated dispensing cabinet use provides a critical role in the distribution process. Pharmacy is responsible for the stocking of the ADCs, following requirements for Look Alike Sound Alike (LASA) and High Alert medications, monitoring medication expiration dates and temperatures, and providing a process for using the override function for selected medications. In addition, ADCs provide oversight for controlled substances, including handling, discrepancy, return, and diversion documentation and monitoring.

## 8. Administration

- *The process where the clinician administers the medication to the patient.*
  - This includes the use of barcode medication administration (BCMA) technology that involves the process of verification by scanning the barcode on the medication and the patient identification wristband, providing enhanced patient safety.
- The process also includes the use of standard administration times, equipment modifications (such as tubing and administration sets), automated Smart Pump technology, and independent double checks (IDC) prior to medication administration as essential features to decrease adverse medication-related events.

## 9. Education

- *This includes education campaigns and programs targeted to any clinician involved in the medication use process.*
  - This also includes tools intended to provide the clinician with medication-related information, such as UpToDate/Lexi-Comp, Micromedex, and other resources. This also includes education for directed at the patient.

## 10. Monitoring

- *The process to monitor a particular step in the medication use process.*
  - This includes patient-specific monitoring, such as a response to a medication or pharmacokinetic drug dosing effects. This includes audits, rounds, as well as proactive, concurrent, and retrospective surveillance. Also included is the process of monitoring adverse drug events (medication errors and adverse drug reactions) and monitoring high alert or other medications with known potential for harm. In addition, this includes specialists hired to review safety information on a local and national level.

## 11. Use

- *This encompasses all other practices, systems and procedures in the medication use process, including HIPPA (Health Insurance Portability and Accountability Act of 1996).*
  - This includes processes for handling chemotherapy or biohazard agents. This includes medication use evaluations, Core Measures, Root Cause Analysis (RCA), Failure-Mode-Effects Analysis (FMEA), and surveys. This may also include computerized tools to review usage and document reasons for medication use. In addition, this involves the review of proper “uses” of medications, such those with off-label indications.

**MERP CROSSWALK 2023-2024**

Medication-Related Error Category (H&S 1339,63 (d)) <u>PE1</u>	Responsible Parties	Date of Initiation	% Compliance Annual Review <u>PE2</u>	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PEZ</u>	Technology Implementation to Reduce Errors <u>PE4</u>
<b>PRESCRIBING</b> Hypertonic Sodium Chloride Guidelines & Procedure for Treatment of Hyponatremia (Replaces March 2021 guidelines) Policy STAT 13807182	Medication Safety, P&T & MEC Clinical Informatics Pharmacy Education	Jan 20, 2023	100%	Revised guidelines, added procedure; added mandatory sodium checks; Provides evidence-based guidelines for treatment of acute and chronic hyponatremia	Treatment of Hyponatremia: Acute Hyponatremia guidelines, using hypertonic NaCl 3% 50 mL & 100 mL bolus over 10 min Chronic Hyponatremia guidelines, using either bolus or continuous infusion, with mandatory pre-built sodium checks establishing standards for safer use of IV hypertonic sodium chloride solutions	ISMP <a href="https://www.ismp.org/resources/prevent-errors-during-emergency-use-hypertonic-sodium-chloride-solutions">https://www.ismp.org/resources/prevent-errors-during-emergency-use-hypertonic-sodium-chloride-solutions</a>  Various research articles	EHR – Meditech Drug Dictionary, Order Strings, Order Sets; HealthStream – Education for Pharmacists
Surgical Prophylaxis Antibiotic Order Set Review & Update	ASP, P&T, MEC, Clinical Informatics, Order Set Committee Peri-Op Services Procedural Areas	Jan 20, 2023	TBD	Many cefazolin and vancomycin pre-op doses were subtherapeutic in existing order sets	Updated Pre-Op cefazolin and vancomycin pre-op doses in order sets; removed post-op dosing as per IDSA Guidelines	ASHP, IDSA  <a href="https://www.ashp.org/pharmacy-practice/policy-positions-and-guidelines/browse-by-document-type/therapeutic-guidelines?loginreturnUrl=SSOcheckOnly">https://www.ashp.org/pharmacy-practice/policy-positions-and-guidelines/browse-by-document-type/therapeutic-guidelines?loginreturnUrl=SSOcheckOnly</a>	EHR – Meditech Standing Order Sets

Medication-Related Error Category (H&S 1339,63 (d)) <u>PE1</u>				Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PEZ</u>	Technology Implementation to Reduce Errors <u>PE4</u>
	Pharmacy				ABX regimens were updated based on IDSA guidelines		
Surgical Prophylaxis Antibiotic Order Set Review & Update – Post-Op Vascular Order Set Antibiotic Changes	ASP, P&T, MEC Clinical Informatics Order Set Committee Peri-Op Services Pharmacy	Jun 6, 2023	100%	Discontinue previous prophylaxis and treatment antibiotics except Cefazolin Prophylaxis and Vancomycin Prophylaxis; Pharmacists may renally adjust dosage, as appropriate	Updated Pre-Op cefazolin and vancomycin pre-op doses in order sets; removed post-op dosing as per IDSA Guidelines ABX regimens were updated based on IDSA guidelines	ASHP, IDSA <a href="https://www.ashp.org/pharmacy-practice/policy-positions-and-guidelines/browse-by-document-type/therapeutic-guidelines?loginreturnUrl=SSOCheckOnly">https://www.ashp.org/pharmacy-practice/policy-positions-and-guidelines/browse-by-document-type/therapeutic-guidelines?loginreturnUrl=SSOCheckOnly</a>	EHR – Meditech Standing Order Set
New Kg-Only Scales ordered for the Emergency Department (3 infant; 2 adult)	Medication Safety, P&T Emergency Department Pharmacy	Jan 20, 2023	100%	History of pound vs Kg weight-based dosing discrepancies causing medication errors in pediatric (primary) and adult patients received weight-based dosing orders	Kg-ONLY Scales to prevent pound vs Kg weight-based dosing discrepancies; Emergency Department implemented double verification of weight for pediatric patients less than 13 years old (Infant Kg-only scales arrived Jan 2023; Adult Kg-only Scales arrived Feb 2023)	ISMP (Best Practice #3) <a href="https://www.ismp.org/tmsbp/faq3">https://www.ismp.org/tmsbp/faq3</a>	HER - Meditech (Weight-based medication orders programmed in metric units)

Medication-Related Error Category (H&S 1339.63 (d))	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors	Change in Procedures/systems by utilizing analysis to reduce errors	External Medication Related Error Alerts to Modify Current Process	Technology Implementation to Reduce Errors
<b>PE1</b>			<b>PE2</b>	<b>PE3</b>	<b>PE5 &amp; PE6</b>	<b>PEZ</b>	<b>PE4</b>
Formulary Approval: Pneumococcal Conjugate Vaccine (20-valent) (Prevnar 20)	ASP, P&T Clinical Informatics Pharmacy Education	Apr 26, 2023	100%	Replacement for older pneumococcal polysaccharide vaccine (23-Valent)	Current best practice guidelines by ACIP/CDC.	ACIP/CDC <a href="https://www.cdc.gov/vaccines/vpd/pneumo/hcp/recommendations.html">https://www.cdc.gov/vaccines/vpd/pneumo/hcp/recommendations.html</a>	EHR - Meditech
Formulary Approval: Tenecteplase (TNKase) Injection to replace Alteplase (TPA) Injection for treatment of acute ischemic stroke	P&T Clinical Informatics Pharmacy Education	Mar 23, 2023	100%	Replace alteplase (60 minute infusion) with TNKase (5 second infusion)	Improve door-to-needle time (DTNT) for treatment acute ischemic stroke; Advantages include: More fibrin-specific and more resistant to degradation; faster administration	<a href="https://www.ahajournals.org/doi/10.1161/SVIN.121.000102">https://www.ahajournals.org/doi/10.1161/SVIN.121.000102</a>	EHR- Meditech
Formulary Approval: Rizatriptan Orally Disintegrating Tablet	P&T Clinical Informatics Pharmacy Education	Mar 23, 2023	100%	45% more bioavailable than oral sumatriptan tablets	N/A	<a href="https://pubmed.ncbi.nlm.nih.gov/12463279/#:~:text=Rizatriptan%2010%20mg%20was%20generally,%20and%201.10%20in%20Nwo">https://pubmed.ncbi.nlm.nih.gov/12463279/#:~:text=Rizatriptan%2010%20mg%20was%20generally,%20and%201.10%20in%20Nwo</a>	EHR - Meditech
Formulary Approval: Teclistamab (Tecvayli) Solution, Subcutaneous	P&T Clinical Informatics Pharmacy Education	Mar 23, 2023	100%	Treatment of multiple myeloma, relapsed, refractory	Available only through REMS, due to risk of CRS and ICANS	CMS <a href="https://mearis.cms.gov/public/publications/ntap/NTP221017MFYGL">https://mearis.cms.gov/public/publications/ntap/NTP221017MFYGL</a>	EHR – Meditech Order Sets
Formulary Approval: Nicotine Lozenge, 2 mg	P&T Clinical Informatics Pharmacy Education	May 25, 2023	100%	Different dosage form Smoking cessation aid	N/A	N/A	EHR- Meditech
Formulary Approval: Afibercept (Eylea)	P&T Clinical Informatics Pharmacy Education	May 25, 2023	100%	FDA-approved for Intravitreal Injection – diabetic macular	N/A	N/A	EHR- Meditech

Medication-Related Error Category (H&S 1339.63 (d))	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors	Change in Procedures/systems by utilizing analysis to reduce errors	External Medication Related Error Alerts to Modify Current Process	Technology Implementation to Reduce Errors
<u>PE1</u>			<u>PE2</u>	<u>PE3</u>	<u>PE5 &amp; PE6</u>	<u>PE7</u>	<u>PE4</u>
Ophthalmic, Solution Prefilled Syringe 2 mg/0.05 mL (Use in Surgery)	Pharmacy			edema; diabetic retinopathy; Age-related macular degeneration; macular edema following retinal vein occlusion			
Formulary Approval: Enfortumab vedotin (Padcev), Solution 20 mg, 30 mg Outpatient Use	P&T Clinical Informatics Pharmacy	May 25, 2023	100%	Treatment of locally advanced or metastatic urothelial cancer	N/A	N/A	EHR-Medittech
Antibiotic Stewardship; Pharmacy Protocols: Updated Piperacillin/Tazobactam Extended-Infusion Protocol/Adults	ASP, P&T, MEC Pharmacy Clinical Informatics Education	Jan 20, 2023	100%	Evaluated protocol and determined a larger loading dose would provide higher serum antibiotic levels	Updated Piperacillin-Tazobactam Pharmacy Protocol – change in loading dose to assure early therapeutic blood levels	IDSA	EHR – Meditech Order Sets; HealthStream Education for Pharmacists
Antibiotic Stewardship: Pharmacy Protocols: New Meropenem Extended-Infusion Protocol/Adults	ASP, P&T, MEC Pharmacy Clinical Informatics	Jan 20, 2023	100%	Maximizes time-dependent bactericidal activity and improve the probability of target serum antibiotic level attainment	Previously Meropenem only administered over 30 minutes; new protocol, given over 3 hours provides better antimicrobial coverage	IDSA	EHR – Meditech Order Sets; HealthStream Education for Pharmacists
Antibiotic Stewardship:	ASP, P&T, MEC Pharmacy	Feb 2023	100%	Updated restricted antimicrobial list	Establishes List of selected antibiotics to be	IDSA ASHP	EHR - Meditech

Medication-Related Error Category (H&S 1339.63 (d)) <u>PE1</u>	Updated Restricted Antimicrobial List	Clinical Informatics	Date of Initiation	% Compliance Annual Review <u>PE2</u>	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PEZ</u>	Technology Implementation to Reduce Errors <u>PE4</u>
Approved: Pharmacists may automatically discontinue dietary supplement orders		P&T Pharmacy	Jan 20, 2023	100%	Pharmacist may automatically discontinue dietary supplement orders, such as echinacea	prescribed by ID only; ID & Pulmonology only to prevent inappropriate use of selected antimicrobial agents	<a href="https://www.fda.gov/consumers/consumer-updates/mixing-medications-and-dietary-supplements-can-endanger-your-health">https://www.fda.gov/consumers/consumer-updates/mixing-medications-and-dietary-supplements-can-endanger-your-health</a>	N/A
Standardization of NICU Concentrated IV Dextrose Solutions		NICU Multidisciplinary Committee Medication Safety P&T Clinical Informatics Pharmacy Education	Jun 7, 2023	100%	Change to D12.5W, D15W, D20W in 250 mL with heparin concentration of 0.5 Unit/mL	Reduce alligation calculation errors; Provide standardization of solutions as described for treatment of neonatal hypoglycemia	N/A	EHR - Meditech

Medication-Related Error Category (H&S 1339.63 (d)) <u>PE1</u>	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PEZ</u>	Technology Implementation to Reduce Errors <u>PE4</u>
Development of CRS/ICANS Management Order Set	Medication Safety P&T Clinical Informatics Pharmacy Education	Jun 16, 2023	100%	Addition of CRS/ICANS Management Order Set to Inpatient Teclistamab Orders	72% of patients experienced CRS/3% of patients experienced ICANS (MajesTEC-1 trial) following dose 1, step-up dose 2, or the initial treatment dose	<a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10062534/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10062534/</a> Mayo Clinic mSMART: Mayo Stratification for Myeloma and Risk-Adapted Therapy – Management of Teclistamab Cytokine Release Syndrome (CRS) and Immune Cell Associated Neurotoxicity Syndrome (ICANS)	EHR – Meditech Order Set
Pharmacist Code Blue Response Box Contents Addition	Medication Safety P&T Pharmacy	Jun 16, 2023	100%	Addition of Regular Insulin 100 Unit/3 mL vial (and insulin syringes)	Reduce delay in treatment of Hyperkalemia/P EA arrest	<a href="https://cpr.heart.org/en/resuscitation-science/cpr-and-ecg-guidelines/algorithms">https://cpr.heart.org/en/resuscitation-science/cpr-and-ecg-guidelines/algorithms</a>	Kitchick - Pharmacy
Formulary Removal: Temazepam Capsule, Oral, 30 mg	P&T Clinical Informatics Pharmacy	Mar 23, 2023	100%	Rare utilization; shorter benzodiazepines and other hypnotics available	Increased risk of cognitive impairment, delirium, falls, fractures in older adults (BEERS Criteria)	American Geriatrics Society 2023 updated Beers Criteria <a href="https://agsjournals.onlinelibrary.wiley.com/doi/full/10.1111/jgs.18372">https://agsjournals.onlinelibrary.wiley.com/doi/full/10.1111/jgs.18372</a>	EHR - Meditech
Formulary Removal: Insulin Human Isophane/Insulin Regular (NovoLIN) 70/30 100 Unit/mL 10 mL	P&T Clinical Informatics Pharmacy	Mar 23, 2023	100%	Formulary contains other alternatives	Streamlining insulin formulary choices may reduce opportunity for medication errors	<a href="https://www.ismp.org/resources/clinical-reminder-about-safe-use-insulin-vials">https://www.ismp.org/resources/clinical-reminder-about-safe-use-insulin-vials</a>	EHR – Meditech
Formulary Removal: Ammonia Inhalant	P&T Clinical Informatics Pharmacy	Mar 23, 2023	100%	Not currently available	CARES Act – Category II – now deemed to be “new drugs” and require new drug application in order to	<a href="https://www.ashp.org/drug-shortages/current-shortages/drug-shortage-detail.aspx?id=738&amp;loginreturnUrl=SSOCheckOnly">https://www.ashp.org/drug-shortages/current-shortages/drug-shortage-detail.aspx?id=738&amp;loginreturnUrl=SSOCheckOnly</a>	EHR - Meditech

Medication-Related Error Category (H&S 1339,63 (d)) <u>PE1</u>	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PEZ</u>	Technology Implementation to Reduce Errors <u>PE4</u>
Formulary Removal: Clevidipine (Cleviprex) Emulsion, IV, 0.5 mg/mL 50 mL	P&T Clinical Informatics Pharmacy	May 25, 2023	100%	No utilization	continue to be marketed, unless FDA deems otherwise Removal approved by the four (4) intensivists; Adverse effects include: hypertriglyceridemia; cardiovascular effects	N/A	EHR - Meditech
<b>PRESCRIPTION ORDER COMMUNICATION</b>							
Creation of Interface between Meditech Formulary and Omnicell CPM	Clinical Informatics Pharmacy	Mar/Apr 2023	100%	Transition from Pyxis to Omnicell: Improvement in communication	Improved communication between EHR (Meditech) and new Drug Dispensing Cabinets (Omnicell)	N/A	EHR- Meditech; ADM - Omnicell
Review of Medication Override List	Medication Safety Pharmacy, Nursing, Physicians	Jun 2023	Ongoing review	Only emergency medications to prevent immediate harm to patient should be overrideable	Annual review	ISMP, TJC, Board of Pharmacy <a href="https://www.ismp.org/resources/over-top-risky-overuse-adc-overrides-removal-drugs-without-order-and-use-non-profiled">https://www.ismp.org/resources/over-top-risky-overuse-adc-overrides-removal-drugs-without-order-and-use-non-profiled</a> <a href="https://www.ismp.org/resources/guidelines-safe-use-automated-dispensing-cabinets">https://www.ismp.org/resources/guidelines-safe-use-automated-dispensing-cabinets</a> <a href="https://academic.oup.com/ajhp/article-abstract/75/9/e172/5102097?redirectedFrom=fulltext">https://academic.oup.com/ajhp/article-abstract/75/9/e172/5102097?redirectedFrom=fulltext</a>	EHR – Meditech; ADM - Omnicell
<b>PRODUCT LABELING</b>							
Update of Look-Alike Drug Names with Tall Man (Mixed Case) Letters	Clinical Informatics Pharmacy	Feb 20, 2023	100%	Updated drug name pairs or larger groupings with recommender, bolded uppercase letters	Goal is to help draw attention to the dissimilarities in	ISMP (January 26, 2023) FDA (Name Differentiation Project – 2001) <a href="https://www.ismp.org/recommendations/tall-man-letters-list">https://www.ismp.org/recommendations/tall-man-letters-list</a>	EHR – Meditech; ADM - Omnicell

Medication-Related Error Category (H&S 1339,63 (d)) <u>PE1</u>	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PE7</u>	Technology Implementation to Reduce Errors <u>PE4</u>
Hypertonic Sodium Chloride 3% Labeling	Pharmacy Clinical Informatics	Jan 20, 2023	100%	Revised order set: followed ISMP's labeling recommendations	the look-alike drug names ISMP: Prevent Errors During Emergency Use of Hypertonic Sodium Chloride Solutions- Update nomenclature in order entry systems (HYPERTONIC-3%; CONCENTRATED -23.4%); Never refer to hypertonic or concentrated sodium chloride as "saline"	ISMP (November 4, 2021) <a href="https://www.ismp.org/resources/prevent-errors-during-emergency-use-hypertonic-sodium-chloride-solutions">https://www.ismp.org/resources/prevent-errors-during-emergency-use-hypertonic-sodium-chloride-solutions</a> Various research articles	EHR – Meditech Drug Dictionary, Order Strings, Order Sets
Antibiotic Stewardship; Pharmacy Protocols: Updated Piperacillin/Tazobactam Extended-Infusion Protocol/Adults – Revision of Labels reflecting updated dosing information	ASP, P&T, MEC Pharmacy Clinical Informatics Education	Jan 20, 2023	100%	Label updated reflecting the larger loading dose	Build specific extended-infusion protocol loading dose information	IDSA	EHR – Meditech Order Set
Antibiotic Stewardship: Pharmacy Protocols:	ASP, P&T, MEC Pharmacy	Jan 20, 2023	100%	Specific label build reflecting new protocol	New label build to guide the nurse to properly	IDSA	EHR – Meditech Order Set

Medication-Related Error Category (H&S 1339,63 (d)) <u>PE1</u>	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PEZ</u>	Technology Implementation to Reduce Errors <u>PE4</u>
New Meropenem Extended-Infusion Protocol/Adults	Clinical Informatics Education				administer the medication		
<b>PACKAGING AND NOMENCLATURE</b>							
Update of Look-Alike Drug Names with Tall Man (Mixed Case) Letters	Clinical Informatics Pharmacy	Feb 20, 2023	100%	Updated drug name pairs or larger groupings with recommender, bolded uppercase letters	Goal is to help draw attention to the dissimilarities in the look-alike drug names	FDA (Name Differentiation Project – 2001) <a href="https://www.ismp.org/recommendations/all-man-letters-list">https://www.ismp.org/recommendations/all-man-letters-list</a>  ISMP (January 26, 2023)	EHR – Meditech; ADM - Omnicell
Hypertonic Sodium Chloride 3% Nomenclature	Clinical Informatics Pharmacy	Jan 20, 2023	100%	Need to update nomenclature in order to include "Hypertonic" for 3% NaCl injection and "Concentrated" for 23.4% NaCl injection for further differentiation. Never refer to Hypertonic or Concentrated Na Cl as "Saline"	Followed ISMP's Recommendations to differentiate the concentrated forms of NaCl; Also, ordered specific, large-size, "HIGH ALERT" auxiliary labels, to be placed where Hypertonic NaCl is stored in the Pharmacy Electronic Storage Bins; this product will be scanned when pulled from this specific bin; the patient-specific label must also be scanned upon retrieval from this specific bin.	ISMP (November 4, 2021)  <a href="https://www.ismp.org/resources/prevent-errors-during-emergency-use-hypertonic-sodium-chloride-solutions">https://www.ismp.org/resources/prevent-errors-during-emergency-use-hypertonic-sodium-chloride-solutions</a>  Various research articles	EHR – Meditech Drug Dictionary, Order Strings, Order Sets; Also: Distinctive Labeling in Pharmacy Electronic Storage Bins (Omnicell)

Medication-Related Error Category (H&S 1339.63 (d)) <u>PE1</u>	Responsible Parties	Date of Initiation	% Compliance Annual Review <u>PE2</u>	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PEZ</u>	Technology Implementation to Reduce Errors <u>PE4</u>
<b>COMPOUNDING</b> Hospital Inpatient Sterile Clean Room Suite	Pharmacy, Facilities, External Vendor (CERTS)	May 2023	Ongoing review	Continued process improvement, Microbial sampling has presented a challenge. Both air and surface sampling take place. 1,000 liters of air and 12 different surfaces are tested. Required to have less than 10 CFUs grow on plates. If more than 10 CFUs are present, an action plan to change the compounding process must be created.	Independent certification every 6 months of Primary Engineering Control (PEC – LFH, BSC) and Secondary Engineering Control (SEC). Independent surveyors monitor the air quality of the clean rooms; Particulate count must be less than 352,000 particles per measurement. The integrity of the HEPA filters is also tested.	USP, CDPH, TJC, CA-BOP, ASHP	N/A
Hospital Inpatient Sterile Clean Room Suite	Pharmacy, Facilities, External Vendor (CERTS)	2021 2022 2023	Ongoing review	More examples of ongoing changes for adherence to USP 797	Replaced HEPA filters; Removed excessive stock & supplies; Purchased air sampler for QA; Collaborated with chief microbiologist/Lead Clinical Lab Scientist; Updated media fill practice;	USP, CDPH, TJC, CA-BOP, ASHP	Air Sampler

Medication-Related Error Category (H&S 1339.63 (d)) <u>PE1</u>	Responsible Parties	Date of Initiation	% Compliance Annual Review <u>PE2</u>	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PEZ</u>	Technology Implementation to Reduce Errors <u>PE4</u>
					Replaced certification company to CERTS. (2021). Created a position to oversee USP 797 monitoring and training of employees. (2022) Acquired new incubators to comply with revised 797 regulations. (2023)		
<b>DISPENSING</b>							
Approved: Pharmacists may automatically discontinue dietary supplement orders	P&T Pharmacy	Jan 20, 2023	100%	Pharmacist may automatically discontinue dietary supplement orders, such as echinacea.	If nutritional supplements such as multivitamins, individual vitamins or minerals are ordered, pharmacists may substitute with a formulary equivalent; May reduce drug-disease	<a href="https://www.fda.gov/consumers/consumer-updates/mixing-medications-and-dietary-supplements-can-endanger-your-health">https://www.fda.gov/consumers/consumer-updates/mixing-medications-and-dietary-supplements-can-endanger-your-health</a>	N/A
Automated Drug Delivery System (ADDS) – Hospital wide transition from Pyxis to	Pharmacy Clinical Informatics Omnicell	Jan 9, 2023	100%	Improvement in providing more medications to the point of care. Omnicell offers increased	The purpose of this transition is to improve availability of medications to	ISMP <a href="https://www.ismp.org/resources/follow-ismp-guidelines-safeguard-design-and-use-automated-dispensing-cabinets-adcs">https://www.ismp.org/resources/follow-ismp-guidelines-safeguard-design-and-use-automated-dispensing-cabinets-adcs</a> <a href="https://www.ismp.org/resources/guidelines-safe-use-automated-dispensing-cabinets">https://www.ismp.org/resources/guidelines-safe-use-automated-dispensing-cabinets</a>	Omnicell Meditech

Medication-Related Error Category (H&S 1339.63 (d)) <u>PE1</u>	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PEZ</u>	Technology Implementation to Reduce Errors <u>PE4</u>
Omnicell ADDS; Omnicell Central Pharmacy Manager (CPM).				storage capacity and more efficient inventory monitoring.	the point of care. Prior to using Omnicell products, 85% of doses are dispensed by a machine. The goal of this transition is to push this number to 95%		
Automated Drug Delivery System (ADDS) – Omnicell Central Pharmacy Manager (CPM).	Pharmacy Omnicell	Jan 9, 2023	100%	Need for easier inventory monitoring.	Ongoing ADDS medication inventory optimization	ISMP <a href="https://www.ismp.org/resources/follow-ismp-guidelines-safeguard-design-and-use-automated-dispensing-cabinets-adcs">https://www.ismp.org/resources/follow-ismp-guidelines-safeguard-design-and-use-automated-dispensing-cabinets-adcs</a> <a href="https://www.ismp.org/resources/guidelines-safe-use-automated-dispensing-cabinets">https://www.ismp.org/resources/guidelines-safe-use-automated-dispensing-cabinets</a>	Omnicell Meditech
<b>DISTRIBUTION</b>							
Automated Drug Delivery System (ADDS) – Omnicell Central Pharmacy Manager (CPM).	Pharmacy Omnicell Nursing	Jan 9, 2023	Ongoing review	Medication ordered not available in ADIM	Improved availability of medications to point of care.	ISMP <a href="https://www.ismp.org/resources/follow-ismp-guidelines-safeguard-design-and-use-automated-dispensing-cabinets-adcs">https://www.ismp.org/resources/follow-ismp-guidelines-safeguard-design-and-use-automated-dispensing-cabinets-adcs</a> <a href="https://www.ismp.org/resources/guidelines-safe-use-automated-dispensing-cabinets">https://www.ismp.org/resources/guidelines-safe-use-automated-dispensing-cabinets</a>	Omnicell Meditech
Hypertonic NaCl 3% Solution Concentrated NaCl Solution	Pharmacy	Ongoing	100%	High Alert Medication	Only the Pharmacy Department may purchase and dispense hypertonic and concentrated NaCl solution products	ISMP <a href="https://www.ismp.org/resources/prevent-errors-during-emergency-use-hypertonic-sodium-chloride-solutions">https://www.ismp.org/resources/prevent-errors-during-emergency-use-hypertonic-sodium-chloride-solutions</a>	N/A
<b>ADMINISTRATION</b>							
Tenecteplase (TNKase) to replace alteplase (TPA) for treatment of	Pharmacy Clinical Informatics Education Nursing	Mar 23, 2023	100%	Need to improve door-to-needle time of 60 minutes or less	Faster administration (single bolus over 5 seconds), compared to	<a href="https://www.heart.org/en/professional/quality-improvement/target-stroke/learn-more-about-target-stroke#:~:text=The%20benefits%20of%20rPA%20in,are%20treated%20within%20this%20window.">https://www.heart.org/en/professional/quality-improvement/target-stroke/learn-more-about-target-stroke#:~:text=The%20benefits%20of%20rPA%20in,are%20treated%20within%20this%20window.</a> Various research articles	Alaris Smart Pump; EHR - Meditech

Medication-Related Error Category (H&S 1339.63 (d))	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors	Change in Procedures/systems by utilizing analysis to reduce errors	External Medication Related Error Alerts to Modify Current Process	Technology Implementation to Reduce Errors
<u>PE1</u>			<u>PE2</u>	<u>PE3</u>	<u>PE5 &amp; PE6</u>	<u>PEZ</u>	<u>PE4</u>
acute ischemic stroke.					alteplase (over 60 minutes)		
Smart Pump (Alaris) Update: Added Argatroban to MedSurg Location	Pharmacy Clinical Informatics Education Nursing	Jan 16, 2023	100%	Argatroban not allowed to be administered in Med Surg Areas	Added argatroban to Med Surg Location per location with same details as other locations	N/A	Alaris Smart Pump; EHR - Meditech
Smart Pump (Alaris) Update: Added new formulary item, Andexanet alpha (Andexxa) – Critical Care Only	Pharmacy Clinical Informatics Education Nursing	Mar 6, 2023	100%	New formulary item; Need safety guardrails	Added Andexanet alpha to Critical Care Only; High Dose Bolus and Infusion; Low Dose Bolus and Infusion	<a href="https://www.andexxa.com/">https://www.andexxa.com/</a>	Alaris Smart Pump EHR - Meditech
Smart Pump (Alaris) Update: Added Meropenem 3-Hour Infusion Therapy Protocol	Pharmacy Clinical Informatics Education Nursing	Mar 20, 2023	100%	New Meropenem Pharmacy Dosing Protocol; Need safety guardrails	Added Meropenem Pharmacy Dosing Protocol; Bolus and Maintenance doses	N/A	Alaris Smart Pump EHR - Meditech
Smart Pump (Alaris) Update: Hypertonic Sodium Chloride Administration	P&T, MEC Pharmacy Clinical Informatics	Mar 20, 2023	100%	Revised Hypertonic NaCl Guidelines/Procedure; Need to update safety guardrails for 3% NaCl bolus 50 mL (over 10 min) and 3% NaCl bolus 100 mL (over 10 minutes)	Procedure indicates type and frequency of patient monitoring required during administration Alaris Smart Pump Alerts and proper pump programming guidance Continue practice of	ISMP <a href="https://www.ismp.org/resources/prevent-errors-during-emergency-use-hypertonic-sodium-chloride-solutions">https://www.ismp.org/resources/prevent-errors-during-emergency-use-hypertonic-sodium-chloride-solutions</a>	Alaris Smart Pump EHR - Meditech

Medication-Related Error Category (H&S 1339,63 (d)) <u>PE1</u>									External Medication Related Error Alerts to Modify Current Process <u>PE7</u>	Technology Implementation to Reduce Errors <u>PE4</u>
Smart Pump (Alaris) Update: Acetylcysteine Gram/mL to mg/mL to Critical Care, Infusion Center, and Progressive Care Locations	Pharmacy Clinical Informatics Education Nursing	Apr 7, 2023	100%	Need for more specific dosing units for Loading dose, 2 <sup>nd</sup> and 3 <sup>rd</sup> doses	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	barcode scanning of the patient/drug as well as independent double-check	N/A	Alaris Smart Pump EHR - Meditech	
Smart Pump (Alaris) Update: New formulary item, Added Avelumab (Bavencio) to Infusion Center	Pharmacy Clinical Informatics Education Nursing	Apr 16, 2023	100%	New formulary item; Need safety guardrails		Added mg/mL – 1 hour default infusion	<a href="https://www.bavencio.com/hcp">https://www.bavencio.com/hcp</a>	Alaris Smart Pump EHR - Meditech		
Smart Pump (Alaris) Update: Changed "Ketamine LD Infusion" to Ketamine LowDose Inf"	Pharmacy Clinical Informatics Education Nursing	May 21, 2023	100%	Confusion with the abbreviation, "LD" (loading dose or low dose?),	Changed from "LD" to "LowDose Inf; improvement in descriptor.	N/A		Alaris Smart Pump EHR - Meditech		
ISMP's Best Practice 18: Maximize the use of barcode verification prior to medication and vaccine administration by	Medication Safety Nursing Pharmacy Clinical Informatics	First Quarter, 2023	New initiative	Need to expand use of barcoding in some procedural areas and in Surgery/OR	Administration Leader assigned to lead this improvement	ISIMP	<a href="https://www.ismp.org/resources/three-new-best-practices-2022-2023-targeted-medication-safety-best-practices-hospitals">https://www.ismp.org/resources/three-new-best-practices-2022-2023-targeted-medication-safety-best-practices-hospitals</a>	EHR - Meditech		

Medication-Related Error Category (H&S 1339,63 (d)) <u>PE1</u>	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PE7</u>	Technology Implementation to Reduce Errors <u>PE4</u>
expanding use beyond inpatient care areas. ISMP's New Best Practice 19: Layer numerous strategies throughout the medication-use process to improve safety with high-alert medications	Pharmacy Clinical Informatics	First Quarter, 2023	100%	Proactive practice	Limit the use of independent double-checks to select high-alert medications with the greatest risk for error (chemotherapy, opioid infusions, IV insulin, IV heparin infusions)	ISMP <a href="https://www.ismp.org/resources/three-new-best-practices-2022-2023-targeted-medication-safety-best-practices-hospitals">https://www.ismp.org/resources/three-new-best-practices-2022-2023-targeted-medication-safety-best-practices-hospitals</a>	EHR - Meditech
<b>EDUCATION</b>							
Creation of Inpatient Pharmacist Training Manual (on-line and printed)	Pharmacy	2022-2023 (updated in real time)	100%	Proactive practice; Need for consistency in training as well as providing point of reference for all employees	Ongoing, live Inpatient Pharmacist Training Manual - Online and Printable Manual constantly being updated to provide current information about Pharmacy Operations and Clinical Services (163 pages as of Feb 15, 2023)	N/A	N/A
Antibiotic Stewardship: Extended-Infusion Beta-Lactam	ASP Pharmacy P&T Education	Jan 20, 2023	100%	Proactive training for uniform practice of updated Piperacillin/Tazobactam	Pharmacists Training: Pharmacists assigned a	Various research articles	EHR - Meditech HealthStream

Medication-Related Error Category (H&S 1339,63 (d)) <u>PE1</u>	Responsible Parties	Date of Initiation	% Compliance Annual Review <u>PE2</u>	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PEZ</u>	Technology Implementation to Reduce Errors <u>PE4</u>
Protocols for Adults (Updated Piperacillin/Tazobactam and new Meropenem)	Nursing Physicians			m (change in loading dose) and new Meropenem Extended-Infusion Pharmacy Protocols)	HealthStream PowerPoint education module, which includes test questions (Feb 16, 2023). Nursing Training: Nursing education via Win Tips as well as nursing huddles (P&T Jan 20, 2023). Physician Training: education via detailed email from Medical Staff Office (P&T Jan 20, 2023)		Alaris Smart Pump
Antibiotic Stewardship: Antimicrobial Stewardship HealthStream PowerPoint Education Module for New Employees	Pharmacy Education Nursing	May 10, 2023	100%	Original PowerPoint Education Module was revised in Sep 2022; Again revised on May 10, 2023	Change in name from "Antimicrobial Stewardship" to "Antibiotic Stewardship," as well as other updates.	CDC, TIC <a href="https://www.cdc.gov/antibiotic-use/core-elements/index.html">https://www.cdc.gov/antibiotic-use/core-elements/index.html</a> <a href="https://www.jointcommission.org/resources/patient-safety-topics/infection-prevention-and-control/antibiotic-stewardship/">https://www.jointcommission.org/resources/patient-safety-topics/infection-prevention-and-control/antibiotic-stewardship/</a>	HealthStream
Medication Safety: Correction of Hyponatremia Guidelines and Procedure	Medication Safety P&T, MEC Pharmacy Clinical Informatics	Jan 10, 2023	100%	Proactive training for completely updated Guidelines and Procedure	Pharmacists Training: Pharmacists assigned a HealthStream PowerPoint education	ISMP <a href="https://www.ismp.org/resources/prevent-errors-during-emergency-use-hypertonic-sodium-chloride-solutions">https://www.ismp.org/resources/prevent-errors-during-emergency-use-hypertonic-sodium-chloride-solutions</a> Various research articles	EHR – Meditech; HealthStream Alaris Smart Pump

<p>Medication-Related Error Category (H&amp;S 1339.63 (d))</p> <p><u>PE1</u></p>	<p>Responsible Parties</p>	<p>Date of Initiation</p>	<p>% Compliance Annual Review</p> <p><u>PE2</u></p>	<p>Weaknesses or deficiencies are noted to achieve the reduction of medication errors</p> <p><u>PE3</u></p>	<p>Change in Procedures/systems by utilizing analysis to reduce errors</p> <p><u>PE5 &amp; PE6</u></p>	<p>External Medication Related Error Alerts to Modify Current Process</p> <p><u>PEZ</u></p>	<p>Technology Implementation to Reduce Errors</p> <p><u>PE4</u></p>
					<p>module, which includes test questions. (Nursing Education Department's historical files list Mar 10, 2023 for HealthStream).          Physician Training: Hands-on training for affective physician groups (ED, Intensivists, Hospitalists) – underway (Jun 2023).          Nursing Training: To be performed after physician training completed.</p>		
<p>ISMP: External Medication-Related Error Alerts – Tall Man Lettering</p>	<p>Pharmacy Clinical Informatics</p>	<p>Feb 20, 2023</p>	<p>100%</p>	<p>Improve Lettering, using Tall Man (mixed case) letters for medication identification</p>	<p>Update Look-Alike drug names with Tall Man Mixed Case) letters (completed by IT Pharmacist on Feb 20, 2023)</p>	<p>ISMP</p> <p><a href="https://www.ismp.org/recommendations/tall-man-letters-list">https://www.ismp.org/recommendations/tall-man-letters-list</a></p>	<p>EHR - Meditech</p>
<p>ISMP: External Medication-Related Error Alerts –</p>	<p>Pharmacy Clinical Informatics</p>	<p>Jan 10, 2023</p>	<p>100%</p>	<p>Need to emphasize various modalities needed to prevent errors during use of</p>	<p>Updated information using hospital computer</p>	<p>ISMP</p> <p><a href="https://www.ismp.org/resources/prevent-errors-during-emergency-use-hypertonic-sodium-chloride-solutions">https://www.ismp.org/resources/prevent-errors-during-emergency-use-hypertonic-sodium-chloride-solutions</a></p>	<p>EHR - Meditech</p>

<p>Medication-Related Error Category (H&amp;S 1339,63 (d))</p> <p><u>PE1</u></p>	<p>Responsible Parties</p>	<p>Date of Initiation</p>	<p>% Compliance Annual Review</p> <p><u>PE2</u></p>	<p>Weaknesses or deficiencies are noted to achieve the reduction of medication errors</p> <p><u>PE3</u></p>	<p>Change in Procedures/systems by utilizing analysis to reduce errors</p> <p><u>PE5 &amp; PE6</u></p>	<p>External Medication Related Error Alerts to Modify Current Process</p> <p><u>PEZ</u></p>	<p>Technology Implementation to Reduce Errors</p> <p><u>PE4</u></p>
<p>Hypertonic Sodium Chloride Solutions</p>				<p>hypertonic sodium chloride solutions</p>	<p>system (Meditech) as well as education of physicians, nurses, pharmacists</p>		
<p><b>MONITORING</b></p>							
<p>Medication Safety: Hypertonic Sodium Chloride 3% Solutions (Procedure approved for mandatory labs)</p>	<p>Medication Safety P&amp;T, MEC Pharmacy Clinical Informatics</p>	<p>Jan 20, 2023</p>	<p>100%</p>	<p>Need to build-in sodium checks, other labs, within the hypertonic sodium chloride orders</p>	<p>For patients receiving hypertonic sodium chloride, monitor serum sodium levels at baseline and at least every 6 hours, as well as renal function studies for signs of acute kidney injury and unwanted acidosis. Monitor patient for possible side effects of hypertonic NaCl (e.g., rebound elevated ICP, renal impairment, subarachnoid hemorrhage, high natriuresis, high urinary water losses, hyperchloremic</p>	<p>ISMP</p> <p><a href="https://www.ismp.org/resources/prevent-errors-during-emergency-use-hypertonic-sodium-chloride-solutions">https://www.ismp.org/resources/prevent-errors-during-emergency-use-hypertonic-sodium-chloride-solutions</a></p> <p>Various research articles</p>	<p>EHR- Meditech</p>

Medication-Related Error Category (H&S 1339,63 (d)) <u>PE1</u>									External Medication Related Error Alerts to Modify Current Process <u>PEZ</u>	Technology Implementation to Reduce Errors <u>PE4</u>
Bar Code Medication Administration (BCMS)	Medication Safety Quality & Patient Safety Pharmacy Nursing, Clinical Informatics	1 <sup>st</sup> Quarter 2023	Ongoing review	Without BCMS, it can potentially lead to an error	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	% Compliance Annual Review <u>PE2</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	acidosis, masking of diabetes insipidus) Identify units, individuals and drugs that do not use BCMA; share outlier information with leadership.	IDSA, TJC, Board of Pharmacy	EHR – Meditech ADM – Omnicell
Medication Overrides	Medication Safety Quality & Patient Safety Pharmacy Nursing, Clinical Informatics	1 <sup>st</sup> Quarter 2023	Ongoing review	Monitor number of orders, average verification time, and override percentage	Monitor for appropriateness (e.g., a delay in therapy would harm a patient), Optimize use of ADS (ADCs); require a medication order. Follow guidelines by ISMP.		Monitor for appropriateness of use	ISMP, TJC, Board of Pharmacy <a href="https://www.ismp.org/resources/over-top-risky-overuse-adc-overrides-removal-drugs-without-order-and-use-non-profiled">https://www.ismp.org/resources/over-top-risky-overuse-adc-overrides-removal-drugs-without-order-and-use-non-profiled</a> <a href="https://www.ismp.org/resources/guidelines-safe-use-automated-dispensing-cabinets">https://www.ismp.org/resources/guidelines-safe-use-automated-dispensing-cabinets</a>	EHR – Meditech Omnicell	
Smart Pump Analysis (Alaris)	Medication Safety Quality & Patient Safety Pharmacy Nursing, Clinical Informatics	1 <sup>st</sup> Quarter 2023	Ongoing review	Monitor total guardrails infusions; total guardrails alerts; total potential cost avoided from severe harms averted; total "good catches"	Monitor for appropriateness of use		Monitor for appropriateness of use	ISMP <a href="https://www.ismp.org/guidelines/safe-implementation-and-use-smart-pumps">https://www.ismp.org/guidelines/safe-implementation-and-use-smart-pumps</a> <a href="https://www.ismp.org/resources/safety-considerations-challenges-when-using-smart-infusion-pumps">https://www.ismp.org/resources/safety-considerations-challenges-when-using-smart-infusion-pumps</a>	EHR – Meditech Omnicell Smart Pump (Alaris)	
Pharmacy Clinical Interventions	Medication Safety	1 <sup>st</sup> Quarter 2023	Ongoing review	Pharmacists often make significant interventions improving patient care	Share analysis data with staff; encourage staff to document			N/A	EHR – Meditech	

Medication-Related Error Category (H&S 1339,63 (d)) <u>PE1</u>	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PEZ</u>	Technology Implementation to Reduce Errors <u>PE4</u>
	Quality & Patient Safety Pharmacy Nursing, Clinical Informatics			but sometimes do not document these interventions.	clinical interventions		
Medication Error Review (Converge)	Medication Safety Quality & Patient Safety Pharmacy Nursing, Clinical Informatics	Ongoing	Ongoing review	Review medication error reports in real time	Share information with staff as appropriate; proactively devise practices for improvement	ISMP <a href="https://www.ismp.org/error-reporting-programs">https://www.ismp.org/error-reporting-programs</a> <a href="https://psnet.ahrq.gov/primer/medication-errors-and-adverse-drug-events">https://psnet.ahrq.gov/primer/medication-errors-and-adverse-drug-events</a> Various publications	EHR – Meditech Converge Reporting System
Adverse Drug Reaction Review (Converge)	Medication Safety Quality & Patient Safety Pharmacy Nursing, Clinical Informatics	Ongoing	Ongoing review	Review adverse drug reaction reports in real time	Proactively monitor for possible improvements in reporting and treating	ASHP, ISMP <a href="https://psnet.ahrq.gov/primer/medication-errors-and-adverse-drug-events">https://psnet.ahrq.gov/primer/medication-errors-and-adverse-drug-events</a> Various publications	EHR– Meditech Converge Reporting System
<b>USE</b>							
Order Sets Containing Proton Pump Inhibitors (PPIs)	ASP, P&T Pharmacy Clinical Informatics	1 <sup>st</sup> Quarter 2023	100%	Proton Pump Inhibitor (PPI) therapy is a potentially modifiable risk factor for recurrent Clostridioides difficile infection (CDI)	Reviewed order sets containing PPI orders; removed thirty (30) PPI orders; kept the PPI orders for less than 10 order sets	<a href="https://www.clinicalmicrobiologyandinfection.com/article/S1198-743X(21)00035-5/fulltext">https://www.clinicalmicrobiologyandinfection.com/article/S1198-743X(21)00035-5/fulltext</a> <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8102963/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8102963/</a> <a href="https://www.fda.gov/drugs/drug-safety-and-availability/fda-drug-safety-communication-clostridium-difficile-associated-diarrhea-can-be-associated-stomach">https://www.fda.gov/drugs/drug-safety-and-availability/fda-drug-safety-communication-clostridium-difficile-associated-diarrhea-can-be-associated-stomach</a> Various publications	EHR – Meditech
Metric-Only Scales Ordered for the	P&T & MEC Medication Safety	Feb 2023	100%	Prompted by medication error reports of dosing	Kg-ONLY Scales to prevent pound vs Kg	ISMP (Best Practice #3) <a href="https://www.ismp.org/tmsbp/faq3">https://www.ismp.org/tmsbp/faq3</a>	EHR - Meditech

Medication-Related Error Category (H&S 1339,63 (d)) <u>PE1</u>	Emergency Department	Quality and Safety P&T ED Pharmacy	Date of Initiation	% Compliance Annual Review <u>PE2</u>	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PEZ</u>	Technology Implementation to Reduce Errors <u>PE4</u>
					errors of using pounds instead of kilograms in pediatric (primary) and adult weight-based doses	Weight-based dosing discrepancies; Emergency Department implemented double verification of weight for pediatric patients less than 13 years old (Infant Kg-only scales arrived Jan 2023; Adult Kg-only Scales arrived Feb 2023)		
Medication Error Reduction Prevention (MERP) Policy Revision	Medication Safety Committee MEC Pharmacy	Medication Safety Committee MEC Pharmacy	Jun 2023	N/A	Previous MERP Policy in need of review	Updated MERP Policy	ISMP <a href="https://www.ismp.org/resources/california-medication-error-reduction-plan-time-regulators-and-accreditors-adopt-similar">https://www.ismp.org/resources/california-medication-error-reduction-plan-time-regulators-and-accreditors-adopt-similar</a> Various references	N/A
Medication Use Evaluation (MUE) - Flumazenil	Medication Safety Committee	Medication Safety Committee	June 2023	N/A	Need to evaluate rescue medications/appropriateness of use of benzodiazepines	Proactively monitor for possible improvements	ASHP Guidelines on Medication-Use Evaluation Am J Health-Syst Pharm. 2021;78:168-175	EHR - Meditech
Medication Use Evaluation (MUE) - Naloxone	Medication Safety Committee	Medication Safety Committee	June 2023	N/A	Need to evaluate rescue medications/appropriateness of use of opioids	Proactively monitor for possible improvements	ASHP Guidelines on Medication-Use Evaluation Am J Health-Syst Pharm. 2021;78:168-175	EHR - Meditech
Medication Use Evaluation (MUE) - Sugammadex	Medication Safety Committee	Medication Safety Committee	June 2023	N/A	Need to evaluate rescue medications/appropriateness of use of	Proactively monitor for possible improvements	ASHP Guidelines on Medication-Use Evaluation Am J Health-Syst Pharm. 2021;78:168-175	EHR - Meditech

Medication-Related Error Category (H&S 1339,63 (d)) <u>PE1</u>	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PE7</u>	Technology Implementation to Reduce Errors <u>PE4</u>
Medication Use Evaluation (MUE) – Transdermal Fentanyl Patches	Medication Safety Committee	June 2023	N/A	neuromuscular blockers Need to evaluate appropriateness of indication of prescribing	Proactively monitor for possible improvements	ASHP Guidelines on Medication-Use Evaluation Am J Health-Syst Pharm. 2021;78:168-175	EHR - Meditech

### MERP CROSSWALK 2022-2023

Medication-Related Error Category (H&S 1339,63 (d)) <u>PE1</u>	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PE7</u>	Technology Implementation to Reduce Errors <u>PE4</u>
<b>PRESCRIBING</b> Hypertonic Saline Rate	P&T & MEC	March 2021	100%	-outdated guidelines for maximum rate of administration	-updated guidelines to increase maximum infusion rate		

Medication-Related Error Category (H&S 1339,63 (d))	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors	Change in Procedures/systems by utilizing analysis to reduce errors	External Medication Related Error Alerts to Modify Current Process	Technology Implementation to Reduce Errors
<u>PE1</u> Surgical Prophylaxis Antibiotic Review & Update	P&T, ASP, Clinical Informatics Peri-OP Services	July 2021	<u>PE2</u> TBD	<u>PE3</u> ABX selection and dosing require a routine review to meet the latest IDSA Guidelines	<u>PE5 &amp; PE6</u> ABX regimens were updated based on the IDSA guidelines	<u>PE7</u> IDSA	<u>PE4</u> EHR – Meditech Standing Order set
CRRT Order Set Review and Change	Critical Care, Dialysis Service, Informatics, Pharmacy	Sept 2021	100%	Due to the changes in the device, close review of the order set to identify unsafe orders	Heparin infusion process was reviewed and a new process was put in place to use a syringe for titration	TJC,	EHR – Meditech Standing Order set
Total Plasma Exchange Order Set	Critical Care, Dialysis Service, Informatics, Pharmacy	Sept 2021	100%	Due to the changes in the device, close review of the order set to identify unsafe orders	Electrolyte replacement orders modified to meet USP 797 requirements.	TJC,	EHR – Meditech Standing Order set
Correction of Hyponatremia Guidelines, including use of Hypertonic Sodium Chloride	P&T & MEC Pharmacy Clinical Informatics	1 <sup>st</sup> Quarter 2023		Provides evidence-based guidelines for treatment of acute and chronic hyponatremia	Treatment of Hyponatremia Guidelines Updated, describing recommendations for acute and chronic hyponatremia	ISMP 11/4/21	EHR – Meditech Order Strings
Intravenous Administration of Hypertonic Sodium Chloride Solutions in Adult Populations Procedure	P&T & MEC Pharmacy	1 <sup>st</sup> Quarter 2023		Provides requirements for frequent sodium checks and other safety features	Establishes standards that assure safe use of IV hypertonic sodium chloride solutions	ISMP 11/4/21	EHR – Meditech
Surgical Prophylaxis Antibiotic Review/Update	P&T & MEC ASP Pharmacy Clinical Informatics	First Quarter 2023		ABX selection, dosages, and timing of doses reflect current IDSA guidelines	Surgical Prophylaxis Antibiotic Order Sets updated, employing evidence-based antibiotic choices, dosages, and timing of doses when applicable	ASHP, IDSA	EHR – Meditech Order Sets
Pharmacy Protocols: Updated Piperacillin/Tazobactam Extended-Infusion Protocol/Adults	P&T & MEC ASP Pharmacy Clinical Informatics	1 <sup>st</sup> Quarter 2023		Evaluated protocol and determined a larger loading dose would provide higher serum antibiotic levels	Updated Piperacillin-Tazobactam Pharmacy Protocol – change in loading dose to assure early therapeutic blood levels	IDSA	EHR – Meditech Order Sets
Pharmacy Protocols: New Meropenem Extended-Infusion Protocol/Adults	P&T & MEC ASP Pharmacy Clinical Informatics	1 <sup>st</sup> Quarter 2023			Previously Meropenem only administered over 30 minutes; new protocol, given over 3 hours provides better antimicrobial coverage	IDSA	EHR – Meditech Order Sets
Antimicrobial Stewardship: Updated Restricted Antimicrobial List	P&T & MEC ASP Pharmacy Clinical Informatics	Feb 2023			Establishes List of selected antibiotics to be prescribed by ID only; ID & Pulmonology only to prevent inappropriate use of selected antimicrobial agents	IDSA ASHP	
Metric-Only Scales Ordered for the Emergency Department	P&T & MEC Medication Safety Quality and Safety	Feb 2023			Prevent inaccurate weights in the ED (Kg vs Pounds) for weight-based medication dosing in infants/pediatrics/adults	ISMP Best Practice #3	

Medication-Related Error Category (H&S 1339,63 (d)) <u>PE1</u>	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PE7</u>	Technology Implementation to Reduce Errors <u>PE4</u>
	ED Pharmacy		<u>PE2</u>				
<b>PRESCRIPTION ORDER COMMUNICATION</b>							
Profilinone and Kcentra	Pharmacy	1 <sup>st</sup> quarter 2020	100%	Search term "PCC" was linking to Profilinone only and not Kcentra	Deleted the search term "PCC" and educated providers and pharmacists	ISMP	Meditech
PACU/Anesthesia Orders in Meditech	Anesthesia, Nursing, Pharmacy	June 2021	100%	Anesthesia orders for different HER system	All Anesthesia Orders are now entered in Meditech that prevents override and BCMA	ISMP	EHR & BCMA
Review of Medication Override List	Pharmacy, Nursing, Physicians	Jan 2022	100%	Only emergency medications to prevent immediate harm to patient should be overridable	Over 10 non emergent medications have been removed from override list	ISMP, TJC	EHR and ADM
<b>PRODUCT LABELING</b>							
Infusion Center Label	Pharmacy	March 2021	100%	Wrong pharmacy information	Pharmacy information was updated in DoseEdge label for outpatient infusion	Board of Pharmacy Regulation compliance	-Dose edge label printer change
Alteplase Labeling Hospital Pharmacy Sterile Compound Labeling	See Administration Pharmacy	3 <sup>rd</sup> Quarter 2021	100%	Incomplete Labeling that did not include the route of Administration	Dose-Edge-Meditech reprogramed to show the route of administration on the label	BOP	Dose Edge- EHR
Hypertonic Sodium Chloride Labeling	Pharmacy Clinical Informatics	4 <sup>th</sup> Quarter 2022			ISMP- Prevent Errors During Emergency Use of Hypertonic Sodium Chloride Solutions-Update nomenclature in order entry systems (HYPERTONIC-3%; CONCENTRATED-23.4%); Never refer to hypertonic or concentrated sodium chloride as "saline"	ISMP 11/4/21	EHR - Meditech
<b>PACKAGING AND NOMENCLATURE</b>							
Tall man Lettering	Pharmacy	2 <sup>nd</sup> Quarter 2020	100%	Similar sounding drugs	Similar sounding drug names were given tall man lettering: hydroCHLORothiazide, hydrOXYzine, hydroxychlorOQUINE	ISMP	Meditech
Thyrogen 1.1 mg	Pharmacy	1 <sup>st</sup> quarter 2021	100%	Thyrogen was labeled 1.1 mg vial according to old FDA prescribing information	Changed to Thyrogen 0.9 mg vial according to new FDA prescribing information	FDA	Meditech

Medication-Related Error Category (H&S 1339,63 (d))	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors	Change in Procedures/systems by utilizing analysis to reduce errors	External Medication Related Error Alerts to Modify Current Process	Technology Implementation to Reduce Errors
<u>PE1</u>				<u>PE3</u>	<u>PE5 &amp; PE6</u>	<u>PE7</u>	<u>PE4</u>
Update Look-Alike Drug Names with Tall Man (mixed case) Letters – ISMP update	Pharmacy	1 <sup>st</sup> Quarter 2023	<u>PE2</u>	Help draw attention to dissimilarities in look-alike drug names	New Update from ISMP (1/26/23) – Updated list of Look-Alike Drug Names with Tall Man Letters	ISMP 1/26/23	Meditech
<b>COMPOUNDING</b>							
Outpatient Infusion Sterile Room Pressure	Pharmacy	1 <sup>st</sup> Quarter 2021	100%	Negative room pressure was too low	Turned off one hood to create appropriate pressure	Board of Pharmacy	Sterile Room Engineering
Hospital Sterile Compounding Area update and renovation	Pharmacy, Facilities, External Vendor	3 <sup>rd</sup> Quarter 2021	100%	Outdated equipment in Sterile Compounding Area	New HEPA Filters were installed, removed storage out of the sterile compounding area and replaced outdated laminate fixtures. New cleaning procedures	USP, CDPH, TJC, CA-BOP	n/a
<b>DISPENSING</b>							
RSI & Reaction Kit Dispensing	Pharmacy	3 <sup>rd</sup> Quarter 2021	100%	These kits look very similar but with different drug contents.	RSI Kit Drug List form uses colored paper and the Reaction Kit remains white for color differentiation.	TJC, ISMP	n/a
<b>DISTRIBUTION</b>							
Pyxis inventory optimization	Pharmacy and nursing	1 <sup>st</sup> quarter 2021	86%	Medication ordered not available in ADM	Weekly and daily review of medication order not stocked report and optimizing inventory		Pyxis and Meditech
Malignant Hyperthermia Cart	Nursing, Materials Management, Pharmacy, Peri-Op, Education	4 <sup>th</sup> Quarter 2021	100%	Mixing of multiple vials of Dantrolene poses risk for errors	Changed vials to Ryanodex – 250mg Dantrolene to only mix 2 vials	TJC, ISMP	n/a
Automated Medication Dispensing Cabinet Transition and Implementation: Pyxis to Omnicell – within Pharmacy and House wide	Pharmacy Clinical Informatics	4 <sup>th</sup> Quarter 2022			Transition from Pyxis to Omnicell CPM: Central Pharmacy Manager CSM: Controlled Substance Manager Automated Medication Dispensing Cabinets	ISMP 2/7/19	Omnicell
<b>ADMINISTRATION</b>							
Alteplase infusion for stroke	Pharmacy Informatics/Education/Nursing	4 <sup>th</sup> quarter 2020	100%	Alteplase infusion rate error	-Reprogram pump library -Change Labeling – no rate for titration -Program Meditech to provide Alaris entries for each step		Meditech, Alaris
PACU Medication Review by RX and BCMA	Pharmacy, CI, Nursing	4 <sup>th</sup> Quarter 2020	TBD	PACU medication oversight by RX needed improvement	Pharmacy oversight of PACU orders, implementation of BCMA	ISMP, TJC, BOP	EHR, BCMA
IV Insulin	Nursing, Education, Pharmacy, Informatics	4 <sup>th</sup> Quarter 2021	TBD	IV Insulin order didn't prompt double nurse check that can result in dosing errors	<ul style="list-style-type: none"> <li>EHR to require nursing double check before administration</li> <li>Designated syringe and needle for IV insulin</li> </ul>	ISMP, TJC,	HER, BCMA

Medication-Related Error Category (H&S 1339,63 (d))	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors	Change in Procedures/systems by utilizing analysis to reduce errors	External Medication Related Error Alerts to Modify Current Process	Technology Implementation to Reduce Errors
<u>PE1</u> Insulin Infusion Titration Software Upgrade	Pharmacy, Critical Care, Information Technology, Informatics	1 <sup>st</sup> Quarter 2022	<u>PE2</u> TBD	<u>PE3</u> The lack of software upgrade participation could result in less than optimal therapeutics	<u>PE5 &amp; PE6</u> <ul style="list-style-type: none"> <li>Working with the Vendor, we are upgrading the software to the latest version</li> <li>Will inquire L&amp;D to utilize the software for Insulin Infusion</li> </ul>	<u>PE7</u> ISMP, TJC	EndoTool, Meditech
Hypertonic Sodium Chloride Administration	P&T & MEC Pharmacy Clinical Informatics	1 <sup>st</sup> Quarter 2023			Procedure indicates type and frequency of patient monitoring required during administration Alaris Smart Pump Alerts and proper pump programming guidance Continue practice of barcode scanning of the patient/drug as well as independent double-check	ISMP 11/4/21	Alaris Smart Pump EHR - Meditech
<b>EDUCATION</b>							
Alteplase Infusion for Stroke	Pharmacy Informatics/ Education	4 <sup>th</sup> Quarter 2020					Meditech and Alaris
Lidocaine for Pain Education	Education, Pharmacy, Nursing & Palliative Care	4 <sup>th</sup> Quarter 2020	TBD	Lidocaine infusion for pain is different than other indicated use that requires close monitoring	P&P written, order set created in HER, reprogrammed guardrail in infusion pump and education is provided to nursing and pharmacy	ISMP	EHR, IV Infusion Pump
Malignant Hyperthermia Cart	Nursing, Materials Management, Pharmacy, Peri-Op, Education	4 <sup>th</sup> Quarter 2021	100%	Mixing of multiple vials of Dantrolene poses risk for errors	Changed vials to Ryanodex – 250mg Dantrolene to only mix 2 vials	TJC, ISMP	n/a
Low Dose Ketamine Education	Education, Pharmacy, Nursing	December 2021	100%	Education provided to staff involved with infusion for a new protocol	New protocol for additional therapeutic agent for acute and chronic pain	Various research articles	EHR, Smart Pump
Bivalirudin per Pharmacy Dosing	Pharmacy	March 2022	100%	Treatment of HIT for hepatically compromised patients	New protocol for pharmacy to manage dosing	Various research articles	EHR, Smart Pump
Zosyn Pharmacy Protocol-Adults (revised extended-infusion protocol)	Pharmacy Clinical Informatics	1 <sup>st</sup> Quarter 2023			HealthStream – eLearning Mandatory Pharmacist Education Module (Change in loading dose)	Various research articles	EHR-Meditech Alaris Smart Pump
Meropenem Pharmacy Protocol-Adults (new extended-infusion protocol)	Pharmacy Clinical Informatics	1 <sup>st</sup> Quarter 2023			HealthStream – eLearning Mandatory Pharmacist Education Module	Various research articles	EHR-Meditech Alaris Smart Pump
Creation of Inpatient Pharmacist Training Manual	Pharmacy	3 <sup>rd</sup> Quarter 2022			Online and Printable Manual constantly being updated to provide current		

Medication-Related Error Category (H&S 1339,63 (d))	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors	Change in Procedures/systems by utilizing analysis to reduce errors	External Medication Related Error Alerts to Modify Current Process	Technology Implementation to Reduce Errors
<u>PE1</u>			<u>PE2</u>	<u>PE3</u>	<u>PE5 &amp; PE6</u>	<u>PE7</u>	<u>PE4</u>
<b>MONITORING</b>							
Vancomycin Monitoring	Pharmacy and Nursing	4 <sup>th</sup> quarter 2019	ongoing	Vancomycin was given when trough was over 20	EHR code to read vancomycin level to alert MAR when too high	ASHP, IDSA	Meditech
Medication Override	Pharmacy, Nursing, Quality, Informatics	4 <sup>th</sup> Quarter 2021	1%	Medication Override List should be routinely reviewed for appropriateness	<ul style="list-style-type: none"> <li>Start tracking override by units and medications</li> <li>Annual review of the list for addition and deletion</li> </ul>	IDSA, TJC, BOP	Meditech, Pyxis
Bar Code Medication Administration	Pharmacy Nursing, Quality, Informatics	3 <sup>rd</sup> Quarter 2021	95%	Without BCMS, it can potentially lead to an error	Identify units, individuals and drugs that do not use BCMA	IDSA, TJC, BOP	Meditech, Pyxis
Blood Glucose: Hyperglycemia and Hypoglycemia based on the new CMS reporting criteria for 2023	Clinical Informatics, Glycemic Committee, Med Safety	4 <sup>th</sup> quarter 2022	-	Difficult data collection criteria	New report built by clinical informatics to accurately report hypo and hyperglycemia	CMS	Meditech
<b>USE</b>							
Veltassa® (patiromer)	Pharmacy	4 <sup>th</sup> Quarter 2019	Ongoing	Frequent use of Veltassa® (patiromer) for acute hyperkalemia	Added the alert popup: "Not for emergent use"		Meditech
TPN Premix	Pharmacy and Dietitian	1 <sup>st</sup> quarter 2021	Ongoing	Customized TPN causing delays in treatment	Added more TPN premix into the formulary		Meditech
Nateglinide and Repaglinide	Pharmacy	1 <sup>st</sup> quarter 2021	Complete	Expensive drugs in the formulary with lack of use causing increase in drug cost and taking spaces in the inventory	Deleted Nateglinide 120 mg and Repaglinide 1 mg and 2 mg from the formulary due to lack of use over the past several months. Nateglinide 60 mg and Repaglinide 0.5 mg were kept in the formulary.		Meditech
Haldol IVPB	Pharmacy	1 <sup>st</sup> Quarter 2021	Complete	Haldol IV drip was ordered by MD	Deleted Haldol IV drips from the EHR order string dictionary		Meditech
Lidocaine for Pain (completed)	Education, Pharmacy, Nursing & Palliative Care	4 <sup>th</sup> Quarter 2020	TBD	Lidocaine infusion for pain is different than other indicated use that requires close monitoring	P&P written, order set created in EHR, reprogrammed guardrail in infusion pump and education is provided to nursing and pharmacy	ISMP	EHR, IV Infusion Pump
Low Dose Ketamine Infusion for Pain (completed)	Education, Pharmacy, Nursing & Palliative Care	1 <sup>st</sup> Quarter 2022	TBD	Ketamine infusion for pain is different than	P&P written, order set to be created in EHR, programmed guardrail in infusion pump	ISMP	EHR, IV Infusion Pump

Medication-Related Error Category (H&S 1339,63 (d)) <u>PE1</u>	Responsible Parties	Date of Initiation	% Compliance Annual Review <u>PE2</u>	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PE7</u>	Technology Implementation to Reduce Errors <u>PE4</u>
				other indicated use that requires close monitoring	and education will be provided to nursing and pharmacy		

**Previous MERP Crosswalk Data**

**MERP CROSSWALK 2021-2022**

Medication-Related Error Category (H&S 1339,63 (d))	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors	Change in Procedures/systems by utilizing analysis to reduce errors	External Medication Related Error Alerts to Modify Current Process	Technology Implementation to Reduce Errors
PE1			PE2	PE3	PE5 & PEG	PE7	PE4
<b>PRESCRIBING</b>							
Hypertonic Saline Rate	P&T & MEC	March 2021	100%	-outdated guidelines for maximum rate of administration	-updated guidelines to increase maximum infusion rate		
Surgical Prophylaxis Antibiotic Review & Update	P&T, ASP, Clinical Informatics Peri-OP Services	July 2021	TBD	ABX selection and dosing require a routine review to meet the latest IDSA Guidelines	ABX regimens were updated based on the IDSA guidelines	IDSA	EHR – Meditech Standing Order set
CRRT Order Set Review and Change	Critical Care, Dialysis Service, Informatics, Pharmacy	Sept 2021	100%	Due to the changes in the device, close review of the order set to identify unsafe orders	Heparin infusion process was reviewed and a new process was put in place to use a syringe for titration	TJC,	EHR – Meditech Standing Order set
Total Plasma Exchange Order Set	Critical Care, Dialysis Service, Informatics, Pharmacy	Sept 2021	100%	Due to the changes in the device, close review of the order set to identify unsafe orders	Electrolyte replacement orders modified to meet USP 797 requirements.	TJC,	EHR – Meditech Standing Order set
<b>PRESCRIPTION ORDER COMMUNICATION</b>							
Profiline and Kcentra	Pharmacy	1 <sup>st</sup> quarter 2020	100%	Search term "PCC" was linking to Profiline only and not Kcentra	Deleted the search term "PCC" and educated providers and pharmacists	ISMP	Meditech
PACU/Anesthesia Orders in Meditech	Anesthesia, Nursing, Pharmacy	June 2021	100%	Medication orders for Anesthesia were in a different HER system	All Anesthesia Orders are now entered in Meditech that prevents override and BCMA	ISMP	EHR & BCMA
Review of Medication Override List	Pharmacy, Nursing, Physicians	Jan 2022	100%	Only emergency medications to prevent immediate harm to patient should be overrideable	Over 10 non emergent medications have been removed from override list	ISMP, TJC	EHR and ADM
<b>PRODUCT LABELING</b>							
Infusion Center Label	Pharmacy	March 2021	100%	Wrong pharmacy information	Pharmacy information was updated in DoseEdge label for outpatient infusion	Board of Pharmacy Regulation compliance	-Dose edge label printer change
Alteplase Labeling Hospital Pharmacy Sterile Compound Labeling	See Administration Pharmacy	3 <sup>rd</sup> Quarter 2021	100%	Incomplete Labeling that did not include the route of Administration	Dose-Edge-Meditech reprogrammed to show the route of administration on the label	BOP	Dose Edge- EHR

Medication-Related Error Category (H&S 1339,63 (d))	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors	Change in Procedures/systems by utilizing analysis to reduce errors	External Medication Related Error Alerts to Modify Current Process	Technology Implementation to Reduce Errors
<u>PE1</u>			<u>PE2</u>	<u>PE3</u>	<u>PE5 &amp; PE6</u>	<u>PE7</u>	<u>PE4</u>
Hypertonic Sodium Chloride Labeling	Pharmacy Clinical Informatics	4 <sup>th</sup> Quarter 2022			ISMP: Prevent Errors During Emergency Use of Hypertonic Sodium Chloride Solutions- Update nomenclature in order entry systems (HYPERTONIC-3%; CONCENTRATED-23.4%); Never refer to hypertonic or concentrated sodium chloride as "saline"	ISMP 11/4/21	EHR - Meditech
<b>PACKAGING AND NOMENCLATURE</b>							
Tall man Lettering	Pharmacy	2 <sup>nd</sup> Quarter 2020	100%	Similar sounding drugs	Similar sounding drug names were given tall man lettering: hydroCHLOROthiazide, hydroOXYzine, hydroxychloroQUINE	ISMP	Meditech
Thyrogen 1.1 mg	Pharmacy	1 <sup>st</sup> quarter 2021	100%	Thyrogen was labeled 1.1 mg vial according to old FDA prescribing information	Changed to Thyrogen 0.9 mg vial according to new FDA prescribing information	FDA	Meditech
<b>COMPOUNDING</b>							
Outpatient Infusion Sterile Room Pressure	Pharmacy	1 <sup>st</sup> Quarter 2021	100%	Negative room pressure was too low	Turned off one hood to create appropriate pressure	Board of Pharmacy	Sterile Room Engineering
Hospital Sterile Compounding Area update and renovation	Pharmacy, Facilities, External Vendor	3 <sup>rd</sup> Quarter 2021	100%	Outdated equipment in Sterile Compounding Area	New HEPA Filters were installed, removed storage out of the sterile compounding area and replaced outdated laminate fixtures. New cleaning procedures	USP, CDPH, TJC, CA-BOP	n/a
<b>DISPENSING</b>							
RSI & Reaction Kit Dispensing	Pharmacy	3 <sup>rd</sup> Quarter 2021	100%	These kits look very similar but with different drug contents.	RSI Kit Drug List form uses colored paper and the Reaction Kit remains white for color differentiation.	TJC, ISMP	n/a
<b>DISTRIBUTION</b>							
Pyxis inventory optimization	Pharmacy and nursing	1 <sup>st</sup> quarter 2021	86%	Medication ordered not available in ADM	Weekly and daily review of medication order not stocked report and optimizing inventory		Pyxis and Meditech
Malignant Hyperthermia Cart	Nursing, Materials Management, Pharmacy, Peri-Op, Education	4 <sup>th</sup> Quarter 2021	100%	Mixing of multiple vials of Dantrolene poses risk for errors	Changed vials to Ryanodex – 250mg Dantrolene to only mix 2 vials	TJC, ISMP	n/a
Automated Medication Dispensing Cabinet Transition and Implementation: Pyxis to Omnicell – within Pharmacy and House wide	Pharmacy Clinical Informatics	4 <sup>th</sup> Quarter 2022			Transition from Pyxis to Omnicell CPM: Central Pharmacy Manager CSM: Controlled Substance Manager Automated Medication Dispensing Cabinets	ISMP 2/7/19	Omnicell
<b>ADMINISTRATION</b>							

Medication-Related Error Category (H&S 1339,63 (d)) <u>PE1</u>	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PEG</u>	External Medication Related Error Alerts to Modify Current Process <u>PE7</u>	Technology Implementation to Reduce Errors <u>PE4</u>
Alteplase Infusion for stroke	Pharmacy Informatics/Education/Nursing	4 <sup>th</sup> quarter 2020	100%	Alteplase infusion rate error	-Reprogram pump library -Change Labeling – no rate for titration -Program Meditech to provide Alaris entries for each step	<u>PE7</u>	Meditech, Alaris
PACU Medication Review by RX and BCMA	Pharmacy, CI, Nursing	4 <sup>th</sup> Quarter 2020	TBD	PACU medication oversight by RX needed improvement	Pharmacy oversight of PACU orders, implementation of BCMA	ISMP, TJC, BOP	EHR, BCMA
IV Insulin	Nursing, Education, Pharmacy, Informatics	4 <sup>th</sup> Quarter 2021	TBD	IV Insulin order didn't prompt double nurse check that can result in dosing errors	<ul style="list-style-type: none"> <li>EHR to require nursing double check before administration</li> <li>Designated syringe and needle for IV insulin</li> </ul>	ISMP, TJC, HER, BCMA	HER, BCMA
Insulin Infusion Titration Software Upgrade	Pharmacy, Critical Care, Information Technology, Informatics	1 <sup>st</sup> Quarter 2022	TBD	The lack of software upgrade participation could result in less than optimal therapeutics	<ul style="list-style-type: none"> <li>Working with the Vendor, we are upgrading the software to the latest version</li> <li>Will inquire L&amp;D to utilize the software for Insulin Infusion</li> </ul>	ISMP, TJC	EndoTool, Meditech
<b>EDUCATION</b>							
Alteplase Infusion for Stroke	Pharmacy Informatics/ Education	4 <sup>th</sup> Quarter 2020					Meditech and Alaris
Lidocaine for Pain Education	Education, Pharmacy, Nursing & Palliative Care	4 <sup>th</sup> Quarter 2020	TBD	Lidocaine infusion for pain is different than other indicated use that requires close monitoring	P&P written, order set created in HER, reprogrammed guardrail in infusion pump and education is provided to nursing and pharmacy	ISMP	EHR, IV Infusion Pump
Malignant Hyperthermia Cart	Nursing, Materials Management, Pharmacy, Peri-Op, Education	4 <sup>th</sup> Quarter 2021	100%	Mixing of multiple vials of Dantrolene poses risk for errors	Changed vials to Ryanodex – 250mg Dantrolene to only mix 2 vials	TJC, ISMP	n/a
Low Dose Ketamine Education	Education, Pharmacy, Nursing	December 2021	100%	Education provided to staff involved with infusion for a new protocol	New protocol for additional therapeutic agent for acute and chronic pain	Various research articles	EHR, Smart Pump
Bivalirudin per Pharmacy Dosing	Pharmacy	March 2022	100%	Treatment of HIT for hepatically compromised patients	New protocol for pharmacy to manage dosing	Various research articles	EHR, Smart Pump
<b>MONITORING</b>							
Vancomycin Monitoring	Pharmacy and Nursing	4 <sup>th</sup> quarter 2019	ongoing	Vancomycin was given when trough was over 20	EHR code to read vancomycin level to alert MAR when too high	ASHP, IDSA	Meditech

Medication-Related Error Category (H&S 1339,63 (d))	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors	Change in Procedures/systems by utilizing analysis to reduce errors	External Medication Related Error Alerts to Modify Current Process	Technology Implementation to Reduce Errors
<u>PE1</u>				<u>PE3</u>	<u>PE5 &amp; PE6</u>	<u>PE7</u>	<u>PE4</u>
Medication Override	Pharmacy, Nursing, Quality, Informatics	4 <sup>th</sup> Quarter 2021	1%	Medication Override List should be routinely reviewed for appropriateness	<ul style="list-style-type: none"> <li>Start tracking override by units and medications</li> <li>Annual review of the list for addition and deletion</li> </ul>	IDSA, TJC, BOP	Meditech, Pyxis
Bar Code Medication Administration	Pharmacy Nursing, Quality, Informatics	3 <sup>rd</sup> Quarter 2021	95%	Without BCMS, it can potentially lead to an error	<ul style="list-style-type: none"> <li>Identify units, individuals and drugs that do not use BCMA</li> </ul>	IDSA, TJC, BOP	Meditech, Pyxis
Blood Glucose: Hyperglycemia and Hypoglycemia based on the new CMS reporting criteria for 2023	Clinical Informatics, Glycemic Committee, Med Safety	4 <sup>th</sup> quarter 2022	-	Difficult data collection criteria	<ul style="list-style-type: none"> <li>New report built by clinical informatics to accurately report hypo and hyperglycemia</li> </ul>	CMS	Meditech
<b>USE</b>							
Veltassa® (patiomer)	Pharmacy	4 <sup>th</sup> Quarter 2019	Ongoing	Frequent use of Veltassa® (patiomer) for acute hyperkalemia	Added the alert popup: "Not for emergent use"		Meditech
TPN Premix	Pharmacy and Dietitian	1 <sup>st</sup> quarter 2021	Ongoing	Frequent use of Customized TPN causing delays in treatment	Added more TPN premix into the formulary		Meditech
Nateglinide and Repaglinide	Pharmacy	1 <sup>st</sup> quarter 2021	Complete	Expensive drugs in the formulary with lack of use causing increase in drug cost and taking spaces in the inventory	Deleted Nateglinide 120 mg and Repaglinide 1 mg and 2 mg from the formulary due to lack of use over the past several months.		Meditech
Haldol IVPB	Pharmacy	1 <sup>st</sup> Quarter 2021	Complete	Haldol IV drip was ordered by MD	Deleted Haldol IV drips from the EHR order string dictionary		Meditech
Lidocaine for Pain (completed)	Education, Pharmacy, Nursing & Palliative Care	4 <sup>th</sup> Quarter 2020	TBD	Lidocaine infusion for pain is different than other indicated use that requires close monitoring	P&P written, order set created in EHR, reprogrammed guardrail in infusion pump and education is provided to nursing and pharmacy	ISMP	EHR, IV Infusion Pump
Low Dose Ketamine Infusion for Pain (completed)	Education, Pharmacy, Nursing & Palliative Care	1 <sup>st</sup> Quarter 2022	TBD	Ketamine infusion for pain is different than other indicated use that requires close monitoring	P&P written, order set to be created in EHR, reprogrammed guardrail in infusion pump and education will be provided to nursing and pharmacy	ISMP	EHR, IV Infusion Pump

<i>REVIEWED</i> <i>BY:</i>	Medication Safety: March 2021, October 2021, December 2021, March 202 Pharmacy & Therapeutics: Medical Executive Committee:
<i>REVISED and</i> <i>AUGMENTE</i> <i>D BY:</i>	Director of Pharmacy: March 2021, May 2021, August 2021, October 2021, December 2021, March 2022
<i>APPROVED</i> <i>BY:</i>	Medication Safety: March 2021, October 2021 P & T Committee: Medical Executive Committee:
<i>NEXT REVIEW: As needed</i>	<i>REVIEWED:</i>
	<i>REVISED:</i>

**MERP CROSSWALK 2021-2022**

Medication-Related Error Category (H&S 1339.63 (d))	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors	Change in Procedures/systems by utilizing analysis to reduce errors	External Medication Related Error Alerts to Modify Current Process	Technology Implementation to Reduce Errors
<u>PE1</u>			<u>PE2</u>	<u>PE3</u>	<u>PE5 &amp; PE6</u>	<u>PE7</u>	<u>PE4</u>
<b>1. PRESCRIBING</b>							
Hypertonic Saline Rate	P & T & MEC	March 2021	100%	-outdated guidelines for maximum rate of administration	-updated guidelines to increase maximum infusion rate		
Surgical Prophylaxis Antibiotic Review & Update	P&T, ASP, Clinical Informatics Peri-OP Services	July 2021	TBD	ABX selection and dosing require a routine review to meet the latest IDSA Guidelines	ABX regimens were updated based on the IDSA guidelines	IDSA	EHR – Meditech Standing Order set
CRRT Order Set Review and Change	Critical Care, Dialysis Service, Informatics, Pharmacy	Sept 2021	100%	Due to the changes in the device, close review of the order set to identify unsafe orders	Heparin infusion process was reviewed and a new process was put in place to use a syringe for titration	TJC,	EHR – Meditech Standing Order set
Total Plasma Exchange Order Set	Critical Care, Dialysis Service, Informatics, Pharmacy	Sept 2021	100%	Due to the changes in the device, close review of the order set to identify unsafe orders	Electrolyte replacement orders modified to meet USP 797 requirements.	TJC,	EHR – Meditech Standing Order set
<b>2. PRESCRIPTION/ORDER COMMUNICATION</b>							
Profilnine and Kcentra	Pharmacy	1 <sup>st</sup> Quarter 2020	100%	Search term “PCC” was linking to Profilnine only and not Kcentra	Deleted the search term “PCC” and educated providers and pharmacists	ISMP	Meditech
PACU/Anesthesia Orders in Meditech	Anesthesia, Nursing, Pharmacy	June 2021	100%	Medication orders for Anesthesia were in a different HER system	All Anesthesia Orders are now entered in Meditech that prevents override and BCMA	ISMP	EHR & BCMA
Review of Medication Override List	Pharmacy, Nursing, Physicians	Jan 2022	100%	Only emergency medications to prevent immediate harm to patient should be over-ridable	Over 10 non emergent medications have been removed from override list	ISMP, TJC	EHR and ADM
<b>3. PRODUCT LABELING</b>							
Infusion Center Label	Pharmacy	March 2021	100%	Wrong pharmacy information	Pharmacy information was updated in DoseEdge label for outpatient infusion	Board of Pharmacy Regulation compliance	-Dose edge label printer change
Alteplase Labeling Hospital Pharmacy Sterile Compound Labeling	See Administration Pharmacy	3 <sup>rd</sup> Quarter 2021	100%	Incomplete Labeling that did not include the route of Administration	Dose-Edge-Meditech reprogrammed to show the route of administration on the label	BOP	Dose Edge- EHR
<b>4. PACKAGING AND NOMENCLATURE</b>							
Tallman Lettering	Pharmacy	2 <sup>nd</sup> Quarter 2020	100%	Similar sounding drugs	Similar sounding drug names were given Tall Man lettering: hydroCHLOROthiazide, hydroXYZine,	ISMP	Meditech

Medication-Related Error Category (H&S 1339,63 (d))	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors	Change in Procedures/systems by utilizing analysis to reduce errors	External Medication Related Error Alerts to Modify Current Process	Technology Implementation to Reduce Errors
<u>PE1</u>			<u>PE2</u>	<u>PE3</u>	<u>PE5 &amp; PE6</u>	<u>PE7</u>	<u>PE4</u>
Thyrogen 1.1 mg	Pharmacy	1 <sup>st</sup> Quarter 2021	100%	Thyrogen was labeled 1.1 mg vial according to old FDA prescribing information	Changed to Thyrogen 0.9 mg vial according to new FDA prescribing information	FDA	Meditech
<b>5. COMPOUNDING</b>							
Outpatient Infusion Sterile Room Pressure	Pharmacy	1 <sup>st</sup> Quarter 2021	100%	Negative room pressure was too low	Turned off one hood to create appropriate pressure	Board of Pharmacy	Sterile Room Engineering
Hospital Sterile Compounding Area update and renovation	Pharmacy, Facilities, External Vendor	3 <sup>rd</sup> Quarter 2021	100%	Outdated equipment in Sterile Compounding Area	New HEPA Filters were installed, removed storage out of the sterile compounding area and replaced outdated laminate fixtures. New cleaning procedures	USP, CDPH, TJC, CA-BOP	n/a
<b>6. DISPENSING</b>							
RSI & Reaction Kit Dispensing	Pharmacy	3 <sup>rd</sup> Quarter 2021	100%	These kits look very similar but with different drug contents.	RSI Kit Drug List form uses colored paper and the Reaction Kit remains white for color differentiation.	TJC, ISMP	n/a
<b>7. DISTRIBUTION</b>							
Pyxis inventory optimization	Pharmacy and nursing	1 <sup>st</sup> Quarter 2021	86%	Medication ordered not available in ADM	Weekly and daily review of medication order not stocked report and optimizing inventory		Pyxis and Meditech
Malignant Hyperthermia Cart	Nursing, Materials Management, Pharmacy, Peri-Op, Education	4 <sup>th</sup> Quarter 2021	100%	Mixing of multiple vials of Dantrolene poses risk for errors	Changed vials to Ryanodex – 250mg Dantrolene to only mix 2 vials	TJC, ISMP	n/a
<b>8. ADMINISTRATION</b>							
Alteplase Infusion for stroke	Pharmacy Informatics/Education/Nursing	4 <sup>th</sup> quarter 2020	100%	Alteplase infusion rate error	-Reprogram pump library -Change Labeling – no rate for titration -Program Meditech to provide Alaris entries for each step		Meditech, Alaris
PACU Medication Review by RX and BCMA	Pharmacy, CI, Nursing	4 <sup>th</sup> Quarter 2020	TBD	PACU medication oversight by RX needed improvement	Pharmacy oversight of PACU orders, implementation of BCMA	ISMP, TJC, BOP	EHR, BCMA
IV Insulin	Nursing, Education, Pharmacy, Informatics	4 <sup>th</sup> Quarter 2021	TBD	IV Insulin order didn't prompt double nurse check that can result in dosing errors	<ul style="list-style-type: none"> <li>EHR to require nursing double check before administration</li> <li>Designated syringe and needle for IV insulin</li> </ul>	ISMP, TJC,	HER, BCMA
Insulin Infusion Titration Software Upgrade	Pharmacy, Critical Care, Information Technology, Informatics	1 <sup>st</sup> Quarter 2022	TBD	The lack of software upgrade participation could result in less than optimal therapeutics	<ul style="list-style-type: none"> <li>Working with the Vendor, we are upgrading the software to the latest version</li> <li>Will inquire L&amp;D to utilize the software for Insulin Infusion</li> </ul>	ISMP, TJC	Endo Tool, Meditech
<b>9. EDUCATION</b>							

Medication-Related Error Category (H&S 1339,63 (d))	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors	Change in Procedures/systems by utilizing analysis to reduce errors	External Medication Related Error Alerts to Modify Current Process	Technology Implementation to Reduce Errors
<b>PE1</b> Alteplase Infusion for Stroke	Pharmacy Informatics/ Education	4 <sup>th</sup> Quarter 2020	<b>PE2</b>	<b>PE3</b>	<b>PE5 &amp; PE6</b>	<b>PE7</b>	<b>PE4</b> Meditech and Alaris
Lidocaine for Pain Education	Education, Pharmacy, Nursing & Palliative Care	4 <sup>th</sup> Quarter 2020	TBD	Lidocaine infusion for pain is different than other indicated use that requires close monitoring	P&P written, order set created in HER, reprogrammed guardrail in infusion pump and education is provided to nursing and pharmacy	ISMP	EHR, IV Infusion Pump
Malignant Hyperthermia Cart	Nursing, Materials Management, Pharmacy, Peri-Op, Education	4 <sup>th</sup> Quarter 2021	100%	Mixing of multiple vials of Dantrolene poses risk for errors	Changed vials to Ryanodex – 2.50mg Dantrolene to only mix 2 vials	TJC, ISMP	n/a
Low Dose Ketamine Education	Education, Pharmacy, Nursing	December 2021	100%	Education provided to staff involved with infusion for a new protocol	New protocol for additional therapeutic agent for acute and chronic pain	Various research articles	EHR, Smart Pump
Bivalirudin per Pharmacy Dosing	Pharmacy	March 2022	100%	Treatment of HIT for heparinically compromised patients	New protocol for pharmacy to manage dosing	Various research articles	EHR, Smart Pump
<b>10. MONITORING</b>							
Vancomycin Monitoring	Pharmacy and Nursing	4 <sup>th</sup> quarter 2019	ongoing	Vancomycin was given when trough was over 20	EHR code to read vancomycin level to alert MAR when too high	ASHP, IDSA	Meditech
Medication Override	Pharmacy, Nursing, Quality, Informatics	4 <sup>th</sup> Quarter 2021	1%	Medication Override List should be routinely reviewed for appropriateness	<ul style="list-style-type: none"> <li>Start tracking override by units and medications</li> <li>Annual review of the list for addition and deletion</li> </ul>	IDSA, TJC, BOP	Meditech, Pyxis
Bar Code Medication Administration	Pharmacy Nursing, Quality, Informatics	3 <sup>rd</sup> Quarter 2021	95%	Without BCMs, it can potentially lead to an error	Identify units, individuals and drugs that do not use BCMA	IDSA, TJC, BOP	Meditech, Pyxis
Blood Glucose: Hypoglycemia and Hyperglycemia based on the new CMS reporting criteria for 2023	Clinical Informatics, Glycemic Committee, Med Safety	4 <sup>th</sup> quarter 2022	-	Difficult data collection criteria	New report built by clinical informatics to accurately report hypo and hyperglycemia	CMS	Meditech
<b>11. USE</b>							
Vellassa	Pharmacy	4 <sup>th</sup> Quarter 2019	Ongoing	Frequent use of Vellassa for acute hyperkalemia	Added the alert popup: "Not for emergent use"		Meditech
TPN Premix	Pharmacy and Dietitian	1 <sup>st</sup> quarter 2021	Ongoing	Customized TPN causing delays in treatment	Added more TPN premix into the formulary		Meditech
Nateglinide and Repaglinide	Pharmacy	1 <sup>st</sup> quarter 2021	Complete	Expensive drugs in the formulary with lack of use causing increase in drug cost and taking spaces in the inventory	Deleted Nateglinide 120 mg and Repaglinide 1 mg and 2 mg from the formulary due to lack of use over the past several months. Nateglinide 60 mg and Repaglinide 0.5 mg were kept in the formulary.		Meditech
Haldol IVPB	Pharmacy	1 <sup>st</sup> Quarter 2021	Complete	Haldol IV drip was ordered by MD	Deleted Haldol IV drips from the EHR order string dictionary		Meditech

Medication-Related Error Category (H&S 1339,63 (d)) <u>PE1</u>	Responsible Parties	Date of Initiation	% Compliance Annual Review <u>PE2</u>	Weaknesses or deficiencies are noted to achieve the reduction of medication errors <u>PE3</u>	Change in Procedures/systems by utilizing analysis to reduce errors <u>PE5 &amp; PE6</u>	External Medication Related Error Alerts to Modify Current Process <u>PE7</u>	Technology Implementation to Reduce Errors <u>PE4</u>
Lidocaine for Pain (completed)	Education, Pharmacy, Nursing & Palliative Care	4 <sup>th</sup> Quarter 2020	TBD	Lidocaine infusion for pain is different than other indicated use that requires close monitoring	P&P written, order set created in EHR, reprogrammed guardrail in infusion pump and education is provided to nursing and pharmacy	ISMP	EHR, IV Infusion Pump
Low Dose Ketamine Infusion for Pain (completed)	Education, Pharmacy, Nursing & Palliative Care	1 <sup>st</sup> Quarter 2022	TBD	Ketamine infusion for pain is different than other indicated use that requires close monitoring	P&P written, order set to be created in EHR, reprogrammed guardrail in infusion pump and education will be provided to nursing and pharmacy	ISMP	EHR, IV Infusion Pump

MERP CROSSWALK 2020

Medication-Related Error Category (HKS 1339.63 (d))	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors	Change in Procedures/systems by utilizing analysis to reduce errors	External Medication Related Error Alerts to Modify Current Process	Technology Implementation to Reduce Errors
PE1	PE2	PE3	PE4	PE5 & PE6	PEZ	PE4	
<p><b>1. PRESCRIBING</b></p> <p>Evaluation of new drugs added to formulary and overall formulary management</p>			<p>Annual Formulary Review completed December 2018 and presented to P&amp;T</p>				
<p>Medications prescribed are on the approved formulary list.</p> <p>Implement computerized physician order entry.</p> <p>Minimize and eliminate symbols and abbreviations that have been known to be open to misinterpretation and/or are known to result in medication errors.</p> <p>Prescribers avoid use of trailing zeros e.g., 20.0 mg, and to always use a zero before a decimal point e.g., 0.5 mg</p> <p>Use of pre-primed physician orders improves legibility of orders</p>		<p>Implemented between Feb - June 2012.</p>	<p>Complete and Ongoing</p>				
<p>Easy access to drug information while prescribing medications</p>			<p>Target Date May 2011 Complete and ongoing</p>				
<p>Clinician has access to laboratory data when making decisions regarding prescribing.</p>			<p>Target Date Feb 2013 Complete and ongoing</p>				
<p>Monitoring of all Anticoagulation Medications (NPSG 3a)</p>			<p>Target Date December 2009 Ongoing</p>				

Medication-Related Error Category (H&S 1339.63 (d))	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies noted to achieve the reduction of medication errors	Change in Procedures/systems by utilizing analysis to reduce errors	External Medication Related Error Alerts to Modify Current Process	Technology Implementation to Reduce Errors
<u>PE1</u>			<u>PE2</u>	<u>PE3</u>	<u>PE5 &amp; PE6</u>	<u>PEZ</u>	<u>PE4</u>
Reconciliation of Medications (NPSG 8a & b)			<p>Target Date 2<sup>nd</sup> Quarter 2013 2<sup>nd</sup> Quarter 2014</p> <p>Monitoring reported in the Quarterly Medication Use Report</p>		<p>Medications are reconciled at the following clinical transitions: Admission, Out of ICU, Postop, 30 day LOS, and at Discharge for inpatient units. Opportunities for improvement have been identified in the admission and discharge process and are in the process of being developed. Dr First is planned to be implemented in 2013 which is intended to improve our ability to gather accurate medication lists on admission and to facilitate e-prescribing on discharge. Prescribing for non-controlled substances implemented in June, 2014. Two week pilot project with Pharmacist in ED completed in September 2013. Pilot project planned for December 2013 for dedicated nurse to take admission histories in ED along with observer to document time and motion and barriers to collecting accurate medication history information. Pharmacist educated and required to review medication history along with admission orders.</p> <p>LEAPFROG Data: Pharmacy to audit quality of Medication Reconciliation beginning 2<sup>nd</sup> quarter 2018</p>		
Develop pharmacy based dosing protocols			<p>Target Date TPN protocol 2009, revised 2010 Leprudin and Argatroban Jan 2010 Renal Dosing Program March 2010, Pip/azo 2013 Vancomycin April 2014 Heparin Nov 2014 IV to PO October 2016</p> <p>Ongoing</p>		<p>The pharmacy has multiple drug dosing protocols that have been in place for over 20 years. The dietitian/pharmacist based TPN protocol has been developed this year. (2009) Education for dietitians, pharmacists, physicians and nursing. The physician may write orders for total or partial management of TPN by the team.</p> <p>Leprudin and Argatroban protocols approved January 10 P&amp;T Renal Dosing program approved March 2010 P&amp;T Pipracillin/Tazobactam extended infusion protocol 2013. Vancomycin dosing protocol revised in April 2014 utilizing ClinCalc (trademark). Heparin dosing protocol revised in November 2014. IV to PO policy approved by P&amp;T October 2016.</p>		
Policy on "range" orders under review.			<p>Target Date February 2012</p> <p>Complete</p>		<p>Procedure included in the Medication Use Policy, CPM 272 CPM 272 revised to prohibit range orders and require physicians to include clarification of therapeutic duplication. This policy change was built in to the preprinted order sets in 2011, and was implemented in CPOE in 2012</p>		
Implement revised policy on "Hold" orders			<p>Target Date 2012 2014</p> <p>Complete</p>		<p>Require that "Hold" orders include parameters for number of doses or days that the medication will be held. If parameters are not included, the medication will be discontinued. Revised procedure has been included in the Medication Use Policy, 272, and implemented in August 2004. Process was handwritten for Physicians in CPOE in February of 2012 and for Pharmacist order entry in October of 2012.</p> <p>Hold order no longer allowed in order entry by pharmacists as of 2014.</p>		
"Automatic Stop Order" policy			<p>Target Date 2012</p> <p>Complete</p>		<p>Orders will be reviewed and rewritten for patients with a length of stay of 30 days or longer, upon change in level of care and postoperatively. Procedure is included in the CPM 2848. Policy updated in Nov 2012 to reflect changes in CPOE in 2012</p>		
Guidelines/parameters for critical care medications that are titrated			<p>Target Date November 2013</p> <p>Complete</p>		<p>Multiple IV infusion medications have physician orders to titrate to prescribed parameters. In order to provide uniform practice amongst the clinical staff, a chart has been developed to provide guidelines with dose adjustment increments for each of these medications. Medication Use Policy CPM 272 Titration Guidelines have been built into CPOE as of February 2012. Requirement for RASS scores incorporated into propofol infusion titration orders. November 2013. Incorporated into dexmedetomidine orders in January 2014.</p>		
Strategies for improvement of medications that Look alike and Sound alike			<p>Target Date July 2013 and ongoing</p> <p>LASA updated list approved by P&amp;T September 2013 ongoing</p>		<p>The policy for LASA (Look alike-Sound alike) medications is reviewed annually. The 2012 review by the Medication Safety Team, reviewed current ISMP literature and other LASA information, and the last 4 quarters of Medication Errors related to LASA meds. 9 medications have been added to the list.</p> <p>These lists are posted on the Pyxis machines. Multiple methodologies are utilized to identify these medications: Tallman lettering, Pyxis alerts, stock separation in Pyxis and the pharmacy, and stickers. In the pharmacy the majority of medications are stored in vertical carousels and are placed according to frequency of use as opposed to alphabetical order, thus reducing the risk of look-alike sound alike confusion. Light bars on the Vertical Carousels assist the pharmacy employee to pick the correct bin. WinRho and RhoGam identified as LASA orders. WinRho is dispensed by the pharmacy. RhoGam is dispensed by the blood bank. An entry in medication CPOE was added for RhoGam which reflected to the blood bank order to prevent physicians from mistakenly selecting WinRho (same generic name) when attempting to order RhoGam.</p> <p>The last update to the LASA medication list was reviewed and approved by P&amp;T in December 2018.</p>		

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<u>PE1</u>			<u>PE2</u>	<u>PE3</u>	<u>PE5 &amp; PE6</u>	<u>PE7</u>	<u>PE4</u>
Orders for PRN medications require an indication			Target Date 2012 Complete		Medication Use Policy – CPM 272, supports the requirement that PRN orders must have an indication written by the prescriber. Meditech upgrade requires physicians or pharmacists to enter a prn indication when entering an order.		
Identify physicians with poor handwriting and develop methods to improve their penmanship			Target Date Feb 2012 Complete		CPOE implemented which reduces the opportunity for bad handwriting to result in a medication error.		
Establish a weight based dosing for pediatric and neonatal patients.			Target Date July 2011 2017 Ongoing		Pediatric weight based dosing added to CPM 272 Medication Use Policy. Defines requirement for weight based dosing and reference guidelines. Weight based dosing built into Physician order sets and into CPOE. Pediatric dosing calculator developed and implemented into SharePoint. Allows custom dosing to match the Broselow tape but also includes that are not on the tape. Approved by Pharmacy and Therapeutics in June, 2014. A NICU-specific Emergency Drugs Calculator was developed and approved by P&T. This was added to the Meditech Global Hyperlinks in August 2016 to allow for easy access for NICU staff.  In 2015, Informatics began updating weight-based dosing sets for pediatric patients to incorporate maximum allowable doses. Maximum doses are being updated on a rolling basis with full implementation by 2017.  Audit of insulin dosing in 2014 revealed that nursing staff were miscalculating IV insulin drip doses. Endo Tool was implemented in October 2015 which simplifies the dose determination (compared to paper protocol) and also individualized dosing to the patient's unique response to improve control and avoid both hypoglycemia and hyperglycemia. Endo Tool dosing has been incorporated into all insulin-drip containing order sets.  Aggressive dosing recommendations and frequency of blood glucose checks were brought to the attention of the Medication Safety Committee and Glycemic Control Task Force in July of 2016. Changes to EndoTool settings to "moderate" bolus multipliers and less stringent requirements for every 2 hours blood glucose checks were implemented in August of 2016. Incidence of hypoglycemia has remained low following the changes.		
IV insulin dosing using computerized software			Target Date October 2015 August 2016 Complete		Audit of insulin dosing in 2014 revealed that nursing staff were miscalculating IV insulin drip doses. Endo Tool was implemented in October 2015 which simplifies the dose determination (compared to paper protocol) and also individualized dosing to the patient's unique response to improve control and avoid both hypoglycemia and hyperglycemia. Endo Tool dosing has been incorporated into all insulin-drip containing order sets.  Aggressive dosing recommendations and frequency of blood glucose checks were brought to the attention of the Medication Safety Committee and Glycemic Control Task Force in July of 2016. Changes to EndoTool settings to "moderate" bolus multipliers and less stringent requirements for every 2 hours blood glucose checks were implemented in August of 2016. Incidence of hypoglycemia has remained low following the changes.		
Simplifying order entry of basal-bolus insulin regimens			Target Date 1 <sup>st</sup> Quarter 2015 May 2016 Complete		Order sets were developed and implemented February 2015 to simplify the CPOE ordering of complex basal-bolus insulin regimens to align with ADA practice recommendations. Pharmacists required to monitor patients on the new basal-bolus order sets daily. Order sets currently undergoing review to see if they can be simplified further with planned implementation in 1 <sup>st</sup> quarter 2016.  The basal-bolus sets were simplified further due to provider feedback and an observed increased incidence of hypoglycemia noted with the weight-based sets. Dosing recommendations for basal and bolus insulin regimens have been added to the new order set without pre-calculated doses. Hospital correctional scale insulins have been standardized to less aggressive dosing and to eliminate dosing variance at SVMH. Bolus meal-time insulin administration times were changed to coincide with meal delivery and nurses were trained to give with the first bite of the meal and to hold if the meal is skipped. All correctional scale insulins must be ordered with the new order set, and insulins have been standardized to include only insulin glargine (basal) and insulin Lispro (bolus and correctional insulins). Hypoglycemia has been reduced while maintaining average BG values within 140-180 mg/dL.		
Maximizing utilization of Computer Decision Support alerts			Target Date May 2017 Complete		Clinical Informatics working with Pharmacy and physician champion to develop alerts for drugs contraindicated in pregnancy. Planned implementation with Meditech 6.15 upgrade in May 2017.		
Improving pain control for total hip/knee replacement patients			Ongoing		A pain-control specialist was brought in to conduct a CIE program "Updates in Pain Management" for SVMH pharmacists, physicians, and nursing in August 2016. Pain management learning modules provided by Comprehensive Pharmacy Services were assigned and completed by Clinical Pharmacists in September 2016. In an effort to improve patients' pain control, in December 2016 pharmacy began meeting weekly with the Orthopedic Nurse Navigator to provide post-op pain regimen recommendations for total hip/knee replacement patients with opioid histories.		
Antibiotic indication documentation			Target Date 2018 Completed		To align with best practice guideline recommendations, beginning in 1 <sup>st</sup> quarter 2018 certain antibiotics are required to have a documented indication at the point of order entry. Evaluation of this procedure and consideration for expanding the antibiotic list will follow.		
Improving chemotherapy prescribing			Target Date 4 <sup>th</sup> Quarter 2017 In progress		Meditech Oncology module build began in 4 <sup>th</sup> quarter 2017 and is projected to finish in 1 <sup>st</sup> quarter 2018. The program will enhance the safety of chemotherapy ordering by aligning CPOE order sets		

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<u>PE1</u>			<u>PE2</u>	<u>PE3</u>	<u>PE5 &amp; PE6</u>	<u>PEZ</u>	<u>PE4</u>
Removal of insulin regular sliding scale		2019			with NCCN guidelines and unifying the documentation/ordering systems used by the outpatient cancer clinic and SVMH.		
Monitoring of oral glycemic medications		2019			Removal of insulin regular sliding scale will leave only insulin Lispro sliding scale available for ordering to avoid confusion and standardize sliding scale therapies.		
Labr & Delivery Group B Strep order set		2019			As a recommendation from the Glycemic Committee, alerts for patients on oral hypoglycemic medications are built in Medined and will be monitored by pharmacists for appropriateness. Updated the L&D Group B Strep Prophylaxis Order Set to reflect current ACOG standards for Ampicillin as the drug of choice instead of Penicillin G. Penicillin doses are not available in MiniBag Plus system and require sterile compounding by the pharmacy; however Ampicillin standard doses for loading and maintenance are ready to use via the mini-bag plus system. This change eliminates manpower, labor, and materials costs to prepare Penicillin White Ampicillin bags are pre-mixed and ready to use.		
<b>2. PRESCRIPTION ORDER COMMUNICATION</b>							
Limit the use of verbal orders for medications; accepted only in emergent/urgent situations			Target Date November 2012 Ongoing		"Verbal orders are acceptable in emergency situations or during procedures only per the Medication Use Policy CPM 272 Use of verbal orders, telephone orders, CPOE orders and Written orders are being tracked by IPAC to determine if there are abuses of the use of telephone orders and verbal orders.		
Assure that telephone orders are authenticated by the prescriber as soon as possible			Target Date February 2012 Ongoing		Policy requires that the physician co-signs their telephone or verbal orders within 48 hours. (Medical Staff Rules and Regs). Physicians can use e-signature to sign verbal and telephone orders which has improved this process		
Improved communication of physician orders via transmission using scanner technology (Pyxis Connect)			Target Date August 2013 October 2015 Complete		The purpose of this technology is to improve legibility of orders, turnaround time and error reduction. Implemented Pyxis Connect and subsequent ongoing monitor of timeliness of order entry. Pyxis Connect is used mostly for pre-operative and chemotherapy orders as the majority of Prescription Order Communication occurs via CPOE. Medication error data indicates that errors due to Prescription Order Communication have decreased since the implementation of CPOE. Nursing – Pharmacy communication for missing doses and schedule changes has been incorporated into Meditech to reduce the risk of legibility issues. Pyxis Connect service discontinued October 2015 due to incompatibility with newer versions of Windows. CPOE has been emphasized since the discontinuation. Faxed orders evaluated and presented to Clinical Decision Support Committee for review.		
Develop a process for initiation and maintenance of pre-printed physician orders			Target Date February 2013 Ongoing		A new committee has been formed, the Clinical Decision Support Committee, which oversees content of the electronic order sets and insures that corresponding paper order sets are available for printing during downtime as appropriate. Provision system implemented in 2015 to streamline order set development as well as ensure real-time updates between paper (dawn-time) and CPOE sets		
Elements of an order are established in policy. Unclear or ambiguous orders are clarified			Complete		Medication Use Policy CPM 272 identifies elements required for a valid medication order. The policy also states when the physician should be contacted for clarification and defines who calls... the nurse or pharmacist.		
Improvement in communication of NEW orders for clinical staff			Target Date March 2009 Complete		Implementation of the Status Board has allowed the notification of NEW / CHANGES in medication orders once pharmacy files the order. This shows NMO (new medication order) on the nurses' Status Board next to patient name.		
Electronic notification between nursing and pharmacy regarding order entry accuracy			Target Date August 2011 Ongoing		eMAR implementation provides a new communication tool for nursing to notify pharmacy of order entry discrepancies. The process of nurse "verification/acknowledgement" of a medication order, allows electronic notification of discrepancies via the 'reject' function.		
Pharmacist Order Entry accuracy is analyzed			Target Date February 2012 Ongoing		Pharmacist role with CPOE has changed to be primarily one of order verification versus order entry. Medication errors for Both Physicians, Nurses, and pharmacists are analyzed to determine opportunities for system improvements. Problem prone processes such as anticoagulation and fentanyl transdermal patch orders are supplied to determine order entry/verification accuracy and compliance with hospital policies and guidelines.		
ED Orders instituted on floor without Pharmacy verification			Target Date September 2012 Ongoing		CPOE Orders intended for ED use only were continued by admitting physicians via the managed transfer process resulting in orders which were inappropriate for inpatient use being continued and not reviewed by a pharmacist. The solution implemented was to not allow the continuation of ED medication orders by admitting physicians. Educate the physicians and nursing staff about the change in process, and to run a daily report in the pharmacy to identify any medication orders on inpatients with an emergency department physician name associated with it. Any such orders identified would be clarified by the pharmacist reviewing the report.		

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<u>PE1</u>			<u>PE2</u>	<u>PE3</u>	<u>PE5 &amp; PE6</u>	<u>PE7</u>	<u>PE4</u>
<b>3. PRODUCT LABELING</b>							
Medications bar codes are included in product labeling			Target Date April 2009 Complete		Pharmacy provides all medications with bar code technology. Products utilize manufacturer's barcodes. If not available or not scannable, the pharmacy creates an in-house bar code number, packages with product NDC number as barcode or medications packaged in the Talyst packaging.		
Increased safety of medication identification for clinicians			Target Date April 2009 Complete		The newly implemented eMAR shows the medications' generic and trade names		
Increase safety with labeled pre-filled saline flush syringes			Target Date June 2008 Complete		The hospital implemented the use of pre-filled saline flush syringes. This improves safety by avoiding potential use of unlabeled syringes		
Controlled medications with documentation of waste required needs to be drawn up into a syringe and must have proper labeling			Target Date Aug 2010 Complete		Change product from ampule to vial, which allows the nurse to waste medication at the Pyxis machine and then take syringe to bedside to scan. (Feintany) Feintany syringes no longer regularly available. Controlled substance policy changed to require nurse / anesthesiologist to maintain possession of the manufacturer's vial up to the time of narcotic waste.		
All medications are properly labeled when mixed by pharmacy or prepared outside of pharmacy			Target Date October 2007 Complete		Medication Use Policy – CPM 272 defines requirements for labels. Policy – Label on/off the sterile field defines the process for labeling medications that are poured into sterile containers on the sterile surgical field. (NPSG 3D)		
Improperly labeled medications have an increased risk of administration errors.			New labels added as needed Complete		<ul style="list-style-type: none"> <li>All IV medications have a patient specific label attached</li> <li>Special auxiliary labels for medications include: High Alert, High Alert-Co-Signature required, High Alert Insulin for IV Infusions, Look Alike-Sound Alike, ORAL MED, Concentrated Electrolytes, Chemotherapy, Hazardous Medications, Paralyzing Agent, check dose, KCL added</li> <li>IV medications compounded by the hospital pharmacy have a "Compounded Medication" sticker attached</li> <li>Concentrations of medication is clearly marked on medication or IV labels</li> </ul>		
Medications requiring multiple vials for a dose			Target Date November 2012 Complete		Pharmacy staff will bundle multiple medications together. If possible, the medications will be combined in the same container to reduce omission errors. Additional special directions are added to the label with asterisks.		
KiCheck™ may exchange system			Target Date December 2014 Complete		A fixes RFID chip to each component of anesthesia tray, code cart exchange tray, and emergency kits. Automates first drug to expire label and ensures correct contents of required medications in each tray. Report system is able to keep track of meds expiring in kits deployed throughout the hospital as well as keep records of lot numbers in case of drug recalls.		
Use of multiple measuring systems increase risk of errors			Target Date Weight 1 <sup>st</sup> Q 2011 Pending		The metric system is the approved unit of measure. BMV Team has recommended that all weights be recorded ONLY in Kg's		
Capital Equipment request submitted for Codones printer systems for Pyxis and Resin carts and Main OR and OB PACU's			Target Date December 2014 Pending		Will allow anesthesiologists access to preprinted labels for syringes used in the administration of anesthesia. Provides label with drug name (generic and trade), expiration date, and anesthesiologist's initials. Ensures full compliance with labeling requirements.		
Risks associated with use of oral medications in syringes for NICU and pediatric patients			Target Date January 2009 Complete		All oral medications are dispensed in Colored Oral syringes, and label with ORAL MED special label.		
Information on New medications added to Formulary is important to improve patient safety during medication administration			Target Date August 2011 Complete		The Formulary Policy includes statement that when new medications are added to the Formulary, there will be pertinent information on the eMAR for nursing to assist in monitoring the patient. Currently the following types of information are added to the eMAR and available at the point of administration: black Box Warnings, Look-alike Sound alike warnings, and any special administration or monitoring instructions. Additional information is available at the Pyxis machine ( Lexicomp) and on all PC's on Clinical units ( Micromedex)		
Improved labeling and tracking of compounded intravenous medications			Target Date 3 <sup>rd</sup> quarter 2017 Complete		Starting in 4 <sup>th</sup> quarter 2017, lot numbers and manufacturers were added to IV drug DoseEdge labels. This will enhance the tracking and tracing of compounded products to ease the identification of patients if a product issue were to arise.		
<b>4. PACKAGING AND NOMENCLATURE</b>							
<b>5. COMPOUNDING</b>							
The pharmacy will compound or admit all sterile medications except in an emergency or when not feasible (i.e., short stability).			Complete		Medications should be prepared in an environment where there is adequate light, free from distractions, and with clean hands and a clean work surface. Annual competency training on aseptic technique will be provided for staff that prepares sterile admixtures. This process does not include		

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Improved Safety in Chemotherapy Preparation			2013 Ongoing		reconstitution of products for immediate administration by nursing or physicians. Medication Use Policy, #272. Comprehensive process for review of chemo orders including implementing the assignment of a designated clinical pharmacist for the oncology unit each day, annual competency and certification program for pharmacy technicians and pharmacists, standardized worksheets with double check by 2 pharmacists, pharmacist check of technician medication set up, final check by pharmacist, and request for 3 days advance notice to permit adequate safe review of orders and preparation as well as assuring availability of the medication. Dose Edge implemented November 2014 which enhances the safety of chemotherapy preparation. Hazardous agents will only be compoundable in the BSC, requires an in-line verification of medications (prior to injection into the IV bag) as well as a final verification, and reduces risk for contamination by minimizing entry and exit into the buffer room. Oncology Lean Kaizen done in October of 2013 to identify opportunities to improve the outpatient chemotherapy process. Decentralized pharmacist staffed on oncology floor beginning in October of 2013 to facilitate communication between pharmacists, nursing and physicians. Chemotherapy order sets being developed in cooperation with oncology physician group. Oncologist's office required to fax protocol being used as well as chemotherapy orders. In October 2015, SVMH pharmacists were granted access to OncoEMR system that SVMC Cancer Clinic employs, allowing access to patient's most current lab values, clinic progress notes, as well as cancer treatment history. SharePoint system was implemented in June 2015 to facilitate the coordination between the clinic and nursing, scheduling, and pharmacy departments for new chemotherapy orders. Epassheld Closed System Transfer devices implemented September 2015 to increase the safety of hazardous drug compounding. Daily pharmacy "chemo huddle" implemented in May 2015 to address clinical, scheduling, and stocking issues. This has been expanded in September 2016 to include participation from the Salinas Valley Memorial Cancer Care Clinic as well as management from the hospital outpatient infusion center. Meditech Oncology module purchased with planned implementation in 3 <sup>rd</sup> Quarter 2017. ECG Management Consultants have been hired to conduct an evaluation of SVMH's oncology services. The consultants will be on-site in January 2017 and will provide performance improvement recommendations to enhance the global program. The injectable medications used by NICU have been reviewed and standard concentrations developed to reduce the risk of compounding errors. <ul style="list-style-type: none"> <li>A compounding table used for preparation of stock solutions for IV medications –</li> <li>This is available on the Pharmacy Shared drive.</li> <li>Standard concentrations for the oral medications have been updated.</li> <li>Standardized excel spread sheets for emergency drugs were developed and available on the computers in NICU and the pharmacy.</li> <li>Standardized preparation techniques using worksheets</li> <li>Standard double signature; two Pharmacists check technicians work and all calculations</li> <li>Assigned pharmacist daily to review NICU profiles and orders</li> </ul> Physicians often write titration orders for critical care medications drips. The physicians provide parameters such as heart rate, blood pressure, or RASS score to maintain the patient. This document has been developed to assist the nurse in choosing the dose adjustments to increase or decrease infusions by. The titration parameters are now programmed in CPOE as well. Pharmacy procurement policy states that only USP grade ingredients are purchased for use Pharmacy staff compounding sterile products will maintain competency according ASHP guidelines. This includes yearly Sterile Compounding Competency and successful aseptic technique verification (PATT II) A second pharmacist check on all routinely prepared pediatric IV solutions will be required. Eliminates error-prone proxy checks such as the "syringe-pull back method." Pictures are taken for every step of the IV compounding process to verify accuracy. Forces users to scan barcodes to verify the correct ingredients are used. Log is kept to keep track of lot numbers and expiration dates which		
Standardization of Concentrations of NICU medications			December 2009 Continue to add new medications as they are introduced				
Standardization of Concentrations for Critical Care IV solutions			Feb 2012 Complete Complete				
Assure quality products are used in compounding			Feb 2011 Complete				
Assure competency of personnel preparing aseptic compounds			November 2010 Complete November 2014 Complete				
Pediatric IV solutions safety							
DoseEdge IV compounding system							

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			December 2018 In progress		would assist in the event of product recalls. High alert, pediatric doses, and chemotherapy require independent double checks from 2 pharmacists.		
Use of approved products for medication reconstitution			June 2016 Complete		DoseEdge upgrade planned December 2018. A medication risk assessment in January 2016 revealed that nurses were using saline flushes on the units to reconstitute medications. Pharmacy has worked with Education to instruct nurses to only using approved diluents for medication reconstitution. Floor stocks of normal saline and sterile water for injection have been made readily available on the nursing units.		
Ensuring safety while compounding hazardous drugs			December 2016, December 2017 In Progress		Hazardous drug list reviewed and updated at December 2016 P&T and subsequently at the December 2017 P&T meeting. A gap analysis has been conducted to identify areas for improvement to align with USP <800> recommendations. A new hazardous drug handling policy was approved in 2017 to bring SYMH within compliance of USP <800>.		
Standardized infusion drip concentrations per ASHP recommendations			Target Date December 2018 Ongoing		Started the process of standardizing infusion drip concentrations per ASHP recommendations. Changes made as of December 2018 included drip infusions for vasopressin, norepinephrine, and isoproterenol.		
<b>6. DISPENSING</b>							
Pharmacist review of orders prior to administration improves medication safety			Target Date 2012 Ongoing		Medications are reviewed prior to administration in all inpatient areas. Urgent/ Emergent situations are exempt. Pyxis machines are "profiled" except for procedural areas where there is a LIP present. ED added to profile in 2010.		
Improve Pyxis restocking procedures			Target Date 2012 Complete		Continue to monitor Pyxis misfire errors. Addition of Talyst Carousel and Auto-Cool technology to add additional points of barcoding prior to loading in the Pyxis. Add medications to LASA list based on Pyxis fill error reports.		
Detailed monitoring of medications withdrawn from Pyxis machines using the OVERRIDE function			Target Date Review of Pyxis Override list performed in 2016. Pyxis Override Reconciliation report started 3 <sup>rd</sup> Qtr 2012 Pyxis Override Trending since 2010. Complete and Ongoing Monitor		Medications should be reviewed by a pharmacist prior to administration by any licensed practitioner when a LIP is not present. The Pyxis Tech will monitor OVERRIDE transactions using the Pandora data system. The Meditech/Pyxis profile will be checked to assure that a physicians' order is present. If no order is found, a note is sent to the manager of the unit for review, and response required. The lead pharmacist will also record a Pemic report for a med administration without an order. The lists of unit specific OVERRIDE medications are reviewed periodically. List of override medications for ED approved May 2010, List of unit specific override medications for test of Pyxis machines reviewed November 2010. Last review of override medications was presented and approved by P&T December 2016.		
Dosing medication errors are reduced when meds are dispensed in the smallest unit of use/ready to use form			Target Date 2012 Complete		Medications are dispensed/stocked in the smallest unit of use available. Liquid medications are purchased or repackaged into unit dose quantities as feasible.		
High risk medications are identified and special restrictions are implemented.			Target Date 2012 Complete		Concentrated electrolytes have been removed from stock on nursing units. Exception is concentrated KCl in the OR for heart cases and NaCl for dialysis, where they have auxiliary warning labels denoting "Concentrated Electrolytes." Neuromuscular blocking agents have "Paralytic" warning labels, and LASA meds have Look alike Sound alike labels. In addition, High Alert medications identified in the Medication Use policy have HIGH ALERT labels. Many of these medications required independent double signatures prior to administration		
All medications are dispensed with a bar code to allow bedside medication verification (BMV)			Target Date April 2009 Complete		The pharmacy will dispense all medications with a scannable bar code. Multiple methods are utilized to accomplish this. See detailed information in Product labeling section		
Floor stock medications are limited to emergency carts.			Target Date March 2009 Complete		Medications available on the nursing units (not in Pyxis) are limited to those emergency meds maintained in the Crash Carts and other defined emergency kits such as RSI kits. Exception- Dialysis.		
High risk medications are identified and special restrictions are implemented.			2012 2016 Complete		Concentrated electrolytes have been removed from stock on nursing units. Exception is concentrated KCl in the OR for heart cases and NaCl for dialysis, where they have auxiliary warning labels denoting "Concentrated Electrolytes." Neuromuscular blocking agents have clearly visible "Paralytic" warnings on the packaging, and LASA meds have Look alike Sound alike labels. In addition, High Alert medications identified in the Medication Use policy have HIGH ALERT labels. Many of these medications required independent double signatures prior to administration.		

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Concentrated NaCl for dialysis has been removed from order sets and the vials are no longer stocked on the dialysis rooms as of 2016.							
Insulin Lispro, glargine, and regular insulin (ED) dispensing from Pyxis		2019			Changed patient specific whole vial and pen dispensing of insulin Lispro and glargine to loading in Pyxis. This was a recommendation from the Missing Medications Taskforce to decrease waste, save cost, and decrease missing medications and delay in administration. The Emergency Department subsequently requested to have regular insulin vials loaded in Pyxis to decrease waste.		
IV Push antibiotics		2017			During the IV fluid shortage in 4Q 2017- 1Q 2018 as a result of Hurricane Maria, we had to manage our IV fluid bags of all sizes. One of the major initiatives implemented was converting common antibiotics from infusion to IV push. Antibiotics converted to IV push included cefazolin, cefoxitin, ceftriaxone, cefepime, meropenem, and aztreonam.		
Inhaler to nebulizer dosing conversion		2019			In collaboration with Respiratory Therapy, P&T approved the automatic conversion of all inhalers to nebulizer solutions as method of choice for all respiratory treatments. Respiratory therapists administer all nebulized doses and provide education on all discharge inhaler therapies; this ensures proper medication documentation and billing and promotes proper inhaler techniques. Additionally, this decreases inhaler waste and drug costs.		
<b>7. DISTRIBUTION</b>							
Pyxis optimization			Target Date December 2018 Ongoing (projected completion Feb 2018) 2019 in Progress		Initiated Pyxis optimization with regards to assessment of standard stock, optimal par levels, stock outs, and more.		
Segregation of neuromuscular blocking agents			2016		Medication risk assessment in 2016 showed inconsistent practices with pharmacy segregation of neuromuscular blocking agents in alignment with ISMP safety recommendations. All neuromuscular blocking agents loaded in approved units are now placed in lidded containers with "High Alert" and "WARNING: Paralyzing Agent" labels affixed.		
Unit dose distribution practices improve medication safety			Target Date 2012 Complete and ongoing		The hospital pharmacy fully supports the concept of unit dose dispensing including repackaging of unit dose tablets, repackaging Patient's Own Medications into Patient Specific Unit Dose, repackaging of liquids when feasible into unit dose.		
Implementation of Pyxis Anesthesia system			Target Date 2nd qtr 2010 Ongoing		Implementation of Pyxis Anesthesia Machines in the OR for anesthesiologist access to medications. Providing increased security of medications and improved control of inventory and accountability of controlled substances. 100% of controlled substances removed from the OR Pyxis Anesthesia machines are reconciled with the PICIS Medication Administration record and discrepancies are reported to the Anesthesia department as well as to the Pharmacy and Therapeutics Committee.		
Medications are stored in a secure manner.			Target Date October 2008 Complete		Access to medications was reviewed by a Task Force. Locks were placed on refrigerators, Med Cabinets, and In/Out boxes on the nursing units. High Alert and LASA medications have been identified by Medication Safety Team, and are stored with alerts identifying them as such.		
Removal of medications no longer prescribed			Target Date June 2009 Complete		Pharmacy technicians round several times a day and review unit inventories (patient cassettes and medication refrigerators) for medications that have been discontinued, or if patients are discharged or transferred. Nurses are responsible to return discharged or discontinued medications to the Pharmacy Out bin, or to the Pharmacy through the pneumatic tube system. RCRA disposal bins placed in the central pharmacy and in the Oncology unit.		
Pyxis ES upgrade			September 2016 Complete		SVMH's Pyxis machines were upgraded from the 3500 series to the current ES system. The new Pyxis machines and user interfaces were designed to streamline the medication removal process and improve throughput, alert nurses of patient allergies at the console-level, notify providers if a medication is pulled "too soon" in relation to a previous dose, streamline the narcotic waste and removal process, and to reduce missing medication requests through real-time inventory tracking.		
<b>8. ADMINISTRATION</b>							
Medications with High Risk for error will be identified as High Alert medications. Some of these medications will require an independent double check upon administration.			Target Date 2013  December 2018 ongoing		The Medication Safety Team has reviewed the list of High Alert medications. With the implementation of eMAR/BMV, some changes have been made to the list. The Team acknowledged that there is still a need for some medications to remain on the High Alert list, however they do not require an independent double-check/signature. This list is reviewed annually by the Medication Safety Team and Pharmacy & Therapeutics Committee per the recommendations of ISMP and current evidence. 2010 <sup>1</sup> evaluation has separated the High alert table into 3 sections: adults, pediatrics, and neonatal medications. This process will be reexamined as we move to Meditech C/S 6.05 in 2011 List of High alert medications placed on all Pyxis machines, July 2013. Identification of LASA with elargine (Lantus) vials and regular insulin vials was identified through Hypoglycemia ADE reduction effort. Medication Safety Team recommended switch to pens for Lantus only to differentiate the long		

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PE1			PE2	PE3	PE5 & PE6	PEZ	PE4
Implement electronic charting (eMAR) for medication administration, and implement bar coding bedside technology			Target Date House wide completion by May 2010 Complete		acting insulin from the short acting insulin and prevent the doses from being confused when given simultaneously. With this change nurses were educated on the absolute prohibition against sharing Lantus pens even with different syringes. Win Tips were sent out reinforcing this education and the CDC "one pen –one patient" posters were posted to further reinforce the program.		
Implementation of Bedside Medication Verification (BMV)			Target Date 2013 Complete And ongoing monitoring		Last update to High Alert Medications list presented to and approved by P&T December 2018.		
Evaluate medication resources available to the nurse			Target Date Risk reduction plan complete (8/04) Complete		Following the implementation of eMAR/BMV in the in-patient units, metrics were developed to monitor nursing compliance to scanning processes. Data is collected to review the patient arm band scanning and medication scanning percentages. All eMAR/BMV scan rates in 2013 exceeded 93% A multidisciplinary team is being formed, using the ICU as a pilot unit , to determine methods to increase the medication barcode scanning percentage to above 95% hospital –wide.		
Access to laboratory data is readily available to the clinician during administration			Target Date February 2012 Complete and ongoing		The nurse will only administer medications for which he/she has basic knowledge. This requirement is included in the Medication Use Policy, and was implemented in August 2004. Micromedex added to computer server, allowing access throughout the facility. Pyxis med stations have Lexicomp for drug reference.		
Medications will be administered using established standard times			Target Date 2013 In progress		Laboratory results are available to the nurse with the eMAR/BMV process. Informatics multidisciplinary team determines what lab data crosses to eMAR upon administration. Clinical panels have been implemented which organize pertinent lab values by disease state ( e.g. diabetes) and allow for graphing to recognize trends, coordination of lab values, vital signs and other clinical data with drug administration.		
Establish guidelines for self-administration by patient/caregiver and restrictions on medications that can be left at the bedside for self-administration			Target Date Risk reduction plan complete (8/04) Complete		This will decrease unnecessary variability in the medication administration process and reduce therefore reduce the potential medication errors. Revisions have been made to meet changes in CMS requirements. The Medication Safety Team has reviewed and revised the Standard Times with the implementation of eMAR. The Medication Administration Time policy will be reviewed in 2013 to assure compliance with recent CMS revision of Timeliness of Medication Administration requirements.		
Multiple tubing for medications can be a risk. Reduce similarities by using distinctive administration sets.			Target Date January 2009 Complete		Will decrease errors due to self-administration of medications and improves safety and control of medication left at the bedside for self-administration. This requirement is included in the Medication Use Policy, Section 3.4.10, and was implemented in August 2004. SVMH doesn't allow self-administration, except those medications listed in the policy. Self-administration restricted to the Sleep Center and Cardiac Rehabilitation unit. Med Use policy updated to reflect these two cave outs.		
Uniform use of oral syringes for pediatric and/or neonatal oral medications			Target Date March 2009 Complete		The hospital has implemented the use of special oral feeding tubes with orange stripes. Epitural tubing has yellow strip and has NO ports.		
Improvement in medication administration processes with the eMAR implementation			Target Date July 2009 Complete		Implemented the use of amber oral syringes for ALL pediatric/neonatal medications		
Utilization of Smart Pump technology to improve safety of IV infusions.			Target Date November 2013 April 2015 for Alaris upgrade, February 2016 for Alaris Viewer, 1 <sup>st</sup> Quarter 2017 for new CQI reporting Ongoing		The eMAR/BMV implementation team reviewed the processes for nursing related to medication administration. Medication "sanctuaries" have been developed in many of the units. The Pyxis machines, refrigerators and locked medication cabinets have been relocated to one area or room. Smart pumps were upgraded to a newer software version in 2010 with the following improvements: addition of oncology medications with Guardrails dose protection, addition of the intermittent Guardrails for use with piggyback and syringe medications, CQI data collected and analyzed to determine most common causes of alerts. As a result of the analysis hard stops were put in place for heparin infusions and a separate profile was created for high dose PCA infusions as opposed to those for opiate naive patients. In 2012 the Alaris Guardrails database was revised and an additional 15 Hard Max limits were added based on recommendations of Alaris- San Diego Patient Safety Collaborative and analysis of SVMH Alaris CQI data. Replacement of Alaris Pump CPU's as well as addition of End-Tidal CO2 modules ( better monitoring of opiate containing PCA's and Epidural infusions) and Alaris Viewer (real-time viewing of patient and drug specific infusion monitoring including drug, concentration, rate, volume remaining, barcode identification of nurse, medication and pump, guardrail use and override status).		

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Improvement of medication safety during Pediatric and Neonatal codes			Target Date 2010 Complete		In 2016, Carefusion updated their CQI data collection suite with more robust reporting functions. Pharmacy and Nursing Education plan to attend COI training sessions in January 2017. Enhanced reports to be presented for 1 <sup>st</sup> Quarter 2017 data at the Medication Safety Team meeting. Two pharmacists will attend Pediatric and NICU codes so that all medications doses and calculations can be double checked. When only one pharmacist is on duty the pharmacist will double check doses with an RN.		
Duplicate "PRN" indications			October 2017 Complete		Nursing education and Medication Use policy updated to provide guidance when medications are ordered with duplicate PRN indications. In the event that two orders exist for the same PRN indication, the nurse will default to use the oral route first. If oral is contraindicated, then a parenteral form will be administered per MD order.		
Stroke- alteplase protocol					Previously, the bolus was administered via a separate syringe, and the infusion in a separate bottle and required more complex Alaris programming steps. In an effort to reduce door to needle time for stroke patients, nurses are now administering alteplase bolus and infusion from the same bottle. Alaris Guardrails have been updated to simplify the steps to run alteplase-Stroke protocol.		
PCA documentation in Meditech					Nurses will be able to document PCA administration in the electronic health record (Meditech) in lieu of paper documentation. Testing is currently underway. Documentation will also be viewable to other disciplines including pharmacy.		
<b>9. EDUCATION</b>							
Medication Education			Target Date 2012 Ongoing		Medication education and med error reduction strategies are completed through the following modalities: <ul style="list-style-type: none"> <li>Clinical Nurse Educators</li> <li>Med Safety Team</li> <li>Med Safety Tip Sheets</li> <li>Annual Med Competencies</li> <li>Chemo Certification</li> <li>Micromedex Drug Sheets</li> <li>Care Notes</li> </ul>		
Implement comprehensive training on medication error identification, mitigation and reporting			Target Date Risk reduction plan complete (9/04) Ongoing		The Medication Safety Team will be educated about the principles of medication error reduction. Information will be incorporated into new employee nursing orientation as well as annual training. Discussions at MST re: selected med errors.		
Communicate alerts on "look-alike, sound-alike" and high alert drugs			Target Date Risk reduction plan complete (10/04) 3 <sup>rd</sup> Qtr 2007 Ongoing		LASA list of "look-alike, sound-alike" drugs will be developed and information communicated to caregivers. List of medications is reviewed annually. Lists are available at the Pyxis machines. Tall Man lettering used. Pyxis alerts, stock separated in Pyxis machines and pharmacy inventory. Stickers utilized. Policy written. High alert list posted on each Pyxis machine		
Whenever possible, patients should participate in ensuring medication safety.			Target Date Risk reduction plan complete (8/04) Complete		Patients and families will receive information about the medications being administered during the course of treatment and upon discharge. This requirement is included in the Medication Use Policy, Section 3.10, and was implemented in August 2004.		
Patients will be educated on the proper use of metered-dose inhalers (MDIs)			Target Date Risk reduction plan complete (6/04) Complete		The Respiratory Therapist will educate the patient in on the proper use of metered-dose inhalers while administering the first dose. RT and Nursing will collaborate on additional educational needs of the patient. The nurse will administer all subsequent MDI doses. This requirement is included in the Medication Use Policy, and was implemented in August 2004.		
Improving education for providers			December 2015 Complete		In December of 2015, the Medical Executive Committee in collaboration with Hospital Administration expanded SYMH's subscription services to include UpToDate Anywhere to facilitate ongoing physician education. UpToDate Anywhere allows physicians to view UpToDate inside or outside the institution while concurrently obtaining CME.		
Providing medication education to clinicians, patients, and their families			Target Date March 2015 August 2016 Complete and Ongoing		In 2015, Salinas Valley Memorial Healthcare System initiated the annual Patient Safety Fair to provide education to clinicians, non-clinical staff, patients, and their families with regard to pertinent safety education topics. Pharmacy's presentation in 2015 involved Opioid Safety. Pharmacy's presentation in 2016 involved Antibiotic Stewardship.		
Improving occurrence reporting			Target Date October 2016		The Verge Occurrence Reporting system was updated in early 2016, and it was noted that reported events were lower than usual. Improvements were made to the system in October 2016 to improve		

Medication-Related Error Category (H&S 1339.63 (d))	Responsible Parties	Date of Initiation	% Compliance Annual Review	Weaknesses or deficiencies are noted to achieve the reduction of medication errors	Change in Procedures/systems by utilizing analysis to reduce errors	External Medication Related Error Alerts to Modify Current Process	Technology Implementation to Reduce Errors
<u>PE1</u>			<u>PE2</u> Complete	<u>PE3</u>	<u>PE5 &amp; PE6</u> the end-user experience. Education campaigns were conducted, including a booth presentation at the 2016 Patient Safety Fair. Reported occurrences have since returned to baseline averages. In collaboration with the Transitions of Care team, the pharmacy department hired a Transitions of Care Pharmacy Coordinator to facilitate discharge counseling and oversee the transitions of care from a medication safety perspective. Construct clinical newsletter to broadcast medication shortages, ASP performance, Nebulizer conversion, Medication error and ADR reporting to medical, pharmacy, and nursing staff	<u>PEZ</u>	<u>PE4</u>
<b>10. MONITORING</b> Begin use of trigger drugs to identify adverse drug reactions e.g., naloxone, flumazenil, epinephrine, etc.			Target Date Implemented 4Q 07 Ongoing		Pyxis entries have been edited for nursing to help identify trigger medications. Pharmacists began reviewing these events and reporting through the ADR reporting process.		
Include reporting and analysis of potential and actual ("near miss") medication errors.			Target Date November 2013 Complete Quarterly Analysis		<ul style="list-style-type: none"> <li>• Perinetic Incident Reporting software program implemented.</li> <li>• Provisions include prompt reporting and review of medication errors, patient notification and record-keeping requirements</li> <li>• Detailed analysis of serious med errors (level E to I) <ul style="list-style-type: none"> <li>o An electronic form and process was implemented to analyze root cause and immediately implement corrective action</li> </ul> </li> <li>• Error reporting is encouraged and is non-punitive</li> <li>• Culture of Safety Report Survey done in 2013. Action plan pending</li> </ul>		
Use of protocols for drugs with narrow therapeutic index			Target Date November 2013 Ongoing		Pharmacists provide protocol dosing for several medications with narrow therapeutic index. Heparin, Warfarin, aminoglycosides, vancomycin, enoxaparin, argatroban		
Ensure that essential patient information is available to the caregiver			Target Date Risk reduction Plan complete (10/04) Complete		Revise patient demographic information to add required fields for pregnancy and lactation status.		
The patient care provider will monitor and assess the effect of medications on the patient.			Target Date Risk reduction plan complete (8/04) Aug 07 Complete		The effects of medications on patients are monitored to assess effectiveness of medication therapy and minimize the occurrence of adverse events. Pain medications are reassessed 30 minutes after administration and are documented in Meditech.		
Decentralized pharmacist on the nursing units			Target Date 2014 Complete		Pharmacists monitor drug regimens, dosing, therapeutic duplicates, adverse drug reactions, and medication reconciliation. ICU/SICU established 1 <sup>st</sup> QTR 2007 Oncology/ST established 1 <sup>st</sup> QTR 2008 Decentralized Pharmacist program required to be limited to ICU pharmacist 3 days per week due to drop in hospital census and staffing requirements. Pharmacists decentralized to oncology unit and 3 <sup>rd</sup> floor Med Surg unit in October of 2013. Decentralized ICU pharmacist shift increased to 7 days per week in October 2014.		
Develop process for proactively monitoring controlled substances for potential diversion			Target Date 2013 1 <sup>st</sup> Quarter 2017 Complete And Ongoing		Implementation of the Anomalous Report by Pandora, which provides user and location specific information on controlled substance use. Pharmacy management reviews the reports monthly and sends to the unit managers for review and response. Controlled Substance discrepancy rates by Nursing Unit started in 3 <sup>rd</sup> Quarter 2012 to identify Units and individuals involved in significant numbers of discrepancies. Since implementation and distribution of Controlled Substance discrepancy tracking by unit the number of controlled substance discrepancies generated in the Pyxis system has decreased by 40%.		
Implementation of Black Box Warning Policy			Target Date 2012 Monitor		Provide safe medication monitoring parameters for medications with Black Box Warnings. Policy and Procedure developed and approved by Pharmacy & Therapeutic Committee. Monitoring of FDA reports and update policy as needed. Black Box warnings are included at the point of prescribing with CPOE and at the point of administration with Pyxis CDC warnings. Last Black Box Warnings update presented to and approved by P&T December 2018.		
Implementation of Fentanyl Patch protocol to comply with Black Box Warnings			Target Date 2013 Ongoing		Pharmacists required to assess opiate history of patients with orders for fentanyl patches prior to dispensing, as well as indication for use. Assessment must be documented as a clinical intervention. Daily report will be reviewed by Lead Pharmacist to assure that all fentanyl patch patients have		

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<u>PE1</u>			<u>PE2</u>	<u>PE3</u>	<u>PE5 &amp; PE6</u>	<u>PEZ</u>	<u>PE4</u>
Implement change in pharmacy ordering PTT's in conditional status (pending) so that nurses can identify actual time of heparin rate changes and PTT can be drawn at appropriate time.			Target Date 2013 Ongoing		Problem identified with Meditech 6.05 implementation due to process change of pharmacist's rather than nurse entering PTT orders for heparin protocols. There was sometimes a lag time between when a rate change order was ordered by the pharmacist and when the drip rate was changed. Subsequent PTT's ordered by the pharmacist did not reflect the expected time between rate change and PTT resulting in misinterpretation of labs. The change allowed the RN to suspend the lab order based on the actual time the heparin rate was changed. Continuing problem with heparin drips not having rate adjusted or discontinued when ordered. Consideration of Alerts Viewer to allow Pharmacy remote real-time access to drug, dose, rate and guardrail status of all IV drugs. Consideration of Shift by shift heparin drip rounding by charge nurse.		
Improving monitoring of medication doses in patients with changing clinical conditions			Target Date March 2016 Complete		Pertinent real-time lab results that can affect drug dosing decisions were added to Pharmacist work queues in 2015. In March 2016, abnormal GFR and serum creatinine values were added to the pharmacy Meditech Status Board to alert pharmacists to investigate potential dose adjustments. Pharmacy began to report Antimicrobial Stewardship activities and data to P&T in 2016. As of March 2016, all patients on antibiotics are flagged on the Pharmacy Status Board with added emphasis placed on broad-spectrum antimicrobials and agents with provider restrictions. Pharmacy began rounding twice weekly with Infectious Disease specialist to review antimicrobial orders hospital-wide for appropriateness. ID physician also participates in ICU multidisciplinary rounds twice weekly to provide feedback on antimicrobial use. Didactic education has been provided through Medical Grand Rounds, in-services to hospitalist group and pharmacy, as well as the 2016 Patient Safety Fair.		
Improving appropriate antimicrobial usage			Target Date May 2017 and Ongoing		To align with CDC best practice recommendations, Clinical Informatics is currently developing Meditech functionality for providers to document antibiotic indications as well as automatically-generated alerts for antibiotic reevaluations ("time-outs"). The goal is to implement these in May 2017 with the Meditech 6.1.5 upgrade.		
Approval of Medication Safety Pharmacist position			Target Date 2018 Complete		To aid in the identification of gaps in SVMH's current medication safety program and to drive the program forward, a medication safety specialist position has been approved.		
Vancomycin, Aminoglycoside, TPN, procainamide pharmacy protocols revised			Target Date December 2018 Complete		Revisions of vancomycin, aminoglycosides, and TPN pharmacy dosing protocols have all been updated and revised. Procainamide dosing protocol has been archived due to lack of use.		
Medined Clinical Decision Support Implementation			Target Date December 2018 Ongoing		Initiated the use of Medined, a clinical decision support system to help pharmacists track clinical changes in real time. Training started in December 2018, with subsequent implementation for pharmacist calculations/dose adjustments		
Display Creatinine Clearance on EMR header		2018			eGFR appearing on patient header while nearly all medication protocols require adjustment based on the Creatinine Clearance; worked with Laboratory department to display CrCl back on to the header for pharmacist calculations/dose adjustments		
Vancomycin, Aminoglycoside, TPN, Anticoagulation, Procainamide pharmacy protocols revised		2019			Revisions of vancomycin, aminoglycosides, and TPN pharmacy dosing protocols have all been updated and revised. Anticoagulation policy revised to include direct oral anticoagulant agents and reversal agents. Procainamide dosing protocol has been archived due to lack of use.		
Daily ICU rounds		2019			Pharmacists previously attended ICU rounds previously occurred on Monday, Wednesday and Fridays. Currently, pharmacists attend ICU rounds Monday through Friday to increase patient monitoring and communication with the interdisciplinary team.		
Ortho Pain Management		2017			Joint Program initiative to address low pain management scores in our Ortho joint program. Multidisciplinary team including pharmacy reviewed the ortho admission and follow patient through the transitions of care to improve pain scores. March 2017 67%, April 50%, June 2018 86%, July 100%.		
Narcotic Audit		2019			A risk based audit was performed to access assurance that processes and controls are in place to prevent diversion of controlled substances. Audit revealed no diversion risks with current program		
<u>PE1</u>							



*EXTENDED CLOSED SESSION*  
*(if necessary)*

*(VICTOR REY, JR.)*

# *ADJOURNMENT*