

### SVHCD QUALITY COMMITTEE AGENDA

#### WEDNESDAY, JANUARY 27, 2021

5:00 p.m. Regular Session

#### TO BE HELD VIA ZOOM VIDEOCONFERENCE

To Participate Via Zoom Videoconferencing use the link below:

 $\frac{https://sonomavalleyhospital-}{org.zoom.us/j/92697642290?pwd=MXlERGJpTmt2VlluMk10K3lsL1} \\ \underline{FNdz09}$ 

and Enter the **Meeting ID: 926 9764 2290** 

Passcode: 204848

To Participate via Telephone only, dial: 1-669-900-9128 or 1-669-219-2599 and Enter the Meeting ID: 926 9764 2290

Passcode: 204848

AGENDA ITEM	RECOMM	IENDATION
In compliance with the Americans with Disabilities Act, if you require special accommodations to attend a District meeting, please contact the District Clerk, Vivian Woodall, at <a href="www.wwoodall@sonomavalleyhospital.org">www.www.www.www.www.www.www.www.www.ww</a>		
MISSION STATEMENT The mission of the SVHCD is to maintain, improve, and restore the health of everyone in our community.		
1. CALL TO ORDER/ANNOUNCEMENTS	Mainardi	
2. PUBLIC COMMENT SECTION  At this time, members of the public may comment on any item not appearing on the agenda. It is recommended that you keep your comments to three minutes or less.  Under State Law, matters presented under this item cannot be discussed or acted upon by the Committee at this time. For items appearing on the agenda, the public will be invited to make comments at the time the item comes up for Committee consideration.	Mainardi	
3. CONSENT CALENDAR  • Minutes 11.18.20	Mainardi	Action
4. PALLIATIVE CARE PROJECT PRESENTATION	Winkler	Inform
5. PRIME GRANT REPORT	Lovejoy	Inform
6. QUALITY INDICATOR PERFORMANCE AND PLAN FOR DECEMBER 2020	Jones	Inform
7. POLICIES AND PROCEDURES	Jones	Action
8. CLOSED SESSION: a. Calif. Health & Safety Code §32155: Medical Staff Credentialing & Peer Review Report		
9. REPORT OF CLOSED SESSION	Mainardi	Action
10. ADJOURN	Mainardi	



### SONOMA VALLEY HEALTH CARE DISTRICT QUALITY COMMITTEE

November 18, 2020 5:00 PM

#### **MINUTES**

Via Zoom Teleconference

Members Present	Members Present cont.	Excused	Public/Staff
Jane Hirsch via Zoom	Howard Eisenstark, MD via Zoom	Cathy Webber	Sabrina Kidd, MD, CMO, via Zoom
Susan Idell via Zoom	Michael Mainardi, MD via Zoom		Danielle Jones, RN, Chief Quality
Ingrid Sheets via Zoom			Officer via Zoom
Carol Snyder via Zoom			Mark Kobe, Chief Nursing Officer
Andrew Solomon, MD via			via Zoom
Zoom			Dr. Judith Bjorndahl via Zoom

Leah Heinrich, Infection Preventionist via Zoom

AGENDA ITEM	DISCUSSION	ACTION
1. CALL TO ORDER/ANNOUNCEMENTS	Hirsch	
	Called to order at 5:00 p.m. Ms. Hirsch thanked the group for their excellence and competence and the improvements that have been and continue to be made to the Committee.	
2. PUBLIC COMMENT	Hirsch	
	None	
3. CONSENT CALENDAR	Hirsch	Action
• QC Minutes, 09.23.20		<b>MOTION:</b> by Eisenstark to approve, 2 <sup>nd</sup> by Idell. All in favor.
4. INTRODUCE NEW INFECTION PREVENTIONIST	Jones	Inform
	Ms. Hirsch and Ms. Jones welcomed the hospital's new Infection Preventionist, Leah Heinrich, who provided a brief background, including serving on the State's Ebola Taskforce, and seven years working in epidemiology in public health. She plans to focus on increasing rounding, providing education, monitoring PPE, and assessing sterile processing.	

AGENDA ITEM	DISCUSSION	ACTION
5. QUALITY ASSURANCE PERFORMANCE IMPROVEMENT PROGRAM REVIEW 2019	Jones	Inform
	Ms. Jones presented the Quality Assurance/Performance Improvement Program for 2019. Leaders had presented posters displayed around the hospital which the public was invited to view. The Administrative Team worked through several rounds of 100 day projects using PDSA (plan, do, study, act). She then reviewed each of the posters.  Ms. Jones thanked Ms. Hirsch for her leadership on the Quality Committee.	Ms. Idell asked about an outcome analysis of the last 5 years of projects and whether they are still in place and working. It will be much easier to track projects from 2019 on in this new poster format.  Also add to monthly agenda review of small projects.
6. COVID-19 UPDATE	Kidd	Inform
	Dr. Kidd indicated the country as a whole, and unfortunately the Bay Area as well, is out of control with regard to COVID. Many counties are going back to purple level. There has been a rise in hospitalizations and ICU visits. It is still difficult getting supplies for testing. SVH is sending tests to UCSF and turnaround times are 3-4 days again. New PAPR hoods have arrived. The hospital is actively preparing for vaccine dissemination, with the first shipment the second week of December. Her hope is to have all frontline hospital staff vaccinated. Both approved vaccines require two doses. Only Santa Rosa Memorial and soon the County will have deep freezers for the Pfizer vaccine, so we have to pick them up and use them quickly. Storage and administration are going to be a challenge.	
	SVH is also working on monoclonal antibody treatment – received a small allocation, but there has not been any demand for it yet. It is administered like an outpatient infusion and may be a slight benefit for high risk people not yet sick. She indicated that she agreed with current County numbers based on her clinical observations.  SVH is still on stroke divert, which means ambulance traffic	
	is diverted. The neurologist still evaluates stroke patients who come in.	
7. ADJOURN	Hirsch	
	6:00 pm	

### Palliative Care

A PROJECT TO INCREASE PALLIATIVE CARE UTILIZATION

JESSICA WINKLER, RN, MSN, CCRN-K

### Project

- Doctor of Nursing Practice (DNP)
  - ► Thomas Edison State University
- Practice Focused Scholarly Project
  - ▶ Needs Assessment
  - ► Literature Review
  - ▶ Project Charter
  - ▶ Project Plan

### Why Palliative Care?

- Interdisciplinary Team Rounds
- What Palliative Care Aims To Do
  - For any patient with life-limiting illness, at any stage
  - Focus on patient needs, symptom management and relief
  - Provides emotional and social support
  - Focus on improving Quality of Life
- What This Can Lead To
  - Reduced ED repeat visits and hospital readmissions
  - Better overall patient outcomes

### What Do We Do Now?

- ► Identify Resources
  - ▶ By The Bay Health
- ► Educate our team
  - ▶ Palliative Practitioners from BTBH to teach
- ► Implement Nursing Policy/Procedure
  - Create nurse-driven protocol to initiate referral
- Identify Patient Needs
  - ▶ Implement Nursing Assessment of Palliative Care Needs

### Nursing Assessment for Palliative Care Needs

- LACE Score
  - Assessment of Risk of Readmission
  - Completed by Case
     Management and
     reported on rounds
- Surprise Question
  - Quantifies a Provider's instinct
- Physical Symptoms
  - As reported by the patient
- Emotional Concerns
- Goals of Care

Scoring system also hints at severity of need

	Score	
	1	
		Most/All
Never	Sometimes	the time
0	1	2
0	1	2
0	1	2
0	1	2
		Most/All
Never	Sometimes	the time
	0 0	0 1 0 1 0 1 0 1

Understanding: How often would you say you feel:

Low interest or find joy in your usual activities

· Concern about being dependent, or a burden on friends or family

Like you can't have discussions about your goals of health with your family

You cannot stop worrying

	ananig. Now often would you say you feel.			the time	
•	Overwhelmed about your diagnosis, or medical treatment	0	1	2	
•	Confused about your medical care and what to expect	0	1	2	
•	Uncomfortable asking questions about your care	0	1	2	
•	That you need more help from different providers, like DR, RN, PT, SW etc)	0	1	2	
•	Like you need more information about other community resources	0	1	2	

Total score in each column: 0

Overall Score Total\*

<sup>\*</sup>Score of 12 or more indicates this patient may benefit from a Palliative Care Consult. Please initiate

### Timeline

- ▶ 2020 Q4
  - Project Development, details, plan
- ▶ 2021 Q1
  - ► Staff Education
  - Refine details
- ▶ 2021 Q2
  - ▶ Final Approvals
  - ► Integrate into EMR
- ▶ 2021 Q3
  - ▶ In-service team and Go-Live!
- ▶ 2021 Q4
  - ▶ Track compliance, data collection
  - Report Findings

# PRIME Grant Final Report Leslie Lovejoy RN, Ph.D. Grant and Project Manager



### **Background**

- Centers for Medicare and Medicaid developed a funding process for incentivizing innovation and best practice standardization of healthcare delivery systems.
- These "demonstration projects" consisted of targeted projects with multiple metrics per project.
- Overall goal of all the projects is to improve the delivery of healthcare services in Primary Care, Emergency Department care and Inpatient care. The focus was on supporting the Triple Aim: Quality Outcomes, Affordability and Improving the Patient Experience.
- Public Hospitals began participating in these years ago and are now required to do most of the projects during the five- year term. District Hospitals were invited to participate for the first time in 2013.



### **Our Project**

- Project 2.2 Coordination of Care
- Goal: To improve the transition of care from the hospital setting to home and to the next provider of services.
- Why this project?
- Early surveillance of re-admissions and follow-up phone calls indicated that patients did not understand why they were in the hospital, couldn't understand their discharge instructions, were overwhelmed with all the paper, did not always make the medication changes as instructed, and did not follow-up with their primary care provider after discharge.
- It was felt that we could do better



### Population and Reporting Periods

- For reporting the patient population included:
  - \* Patients 18 years of age and older
  - \* Insured with: Partnership, Medi-Cal as either primary or secondary insurance (e.g. includes Medicare/Medi-Cal or Medicare/Partnership)
- Reporting Periods
  - \* DY12 Final (Baseline)July 2016- June 2017
  - \* DY13 Mid Year: Calendar Jan-December 2017
  - \* DY13 Final: Fiscal July 2017- June2018
  - \* DY14 Mid Year: Calendar Jan- December 2018
  - \* DY14 Final: Fiscal July 2018- June 2019
  - \* DY15 Mid Year: Calendar Jan-December 2019
  - \* DY 15 Final: Fiscal- July 2019- June 2020



### **Measuring Success**

#### Metrics

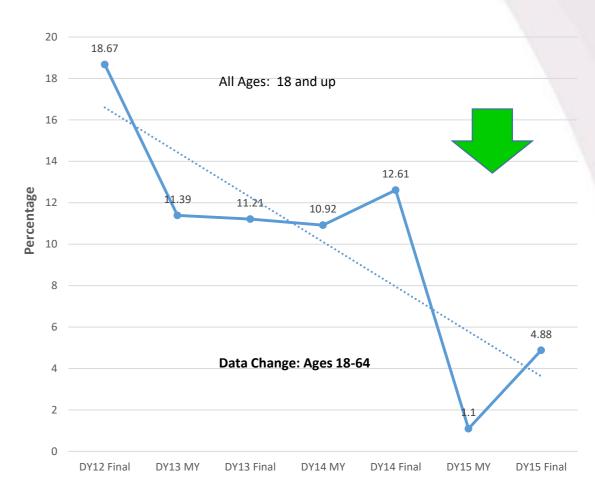
- \* DHCS-All Cause Readmission Rate
- \* H-CAHPS: Care Transitions:
  Understanding Your Care When you Left The Hospital
- \* Reconciled Medication List Received at Discharge
- \* Timely Transition of Transition Record to Next Provider
- \* Medication Reconciliation within 30 days of Discharge

**Performance Expectation**: meet national benchmarks or demonstrate improvement in each metric by 10% per reporting period.

### Readmissions

- \* At the end of DY14, CMS changed the age range from 21 years or older to an age range of 18 to 64. This reduced our readmission significantly, but the change may be artificial due to the average age of our patients.
- \* Trained two volunteer health coaches and added a Community Case Manager to complete follow-up phone calls for the grant population over 45 days post discharge as needed.
- \* Adopted the Institute for Healthcare Improvement Readmissions interview into the followup phone call process.
- \* Community Case Manager also managed patients who returned to the ED after an acute hospital stay and managed ED high utilizers.
- \* Incorporated social needs questions in the LACE tool and reported score > 10 to Hospitalist for advance care planning





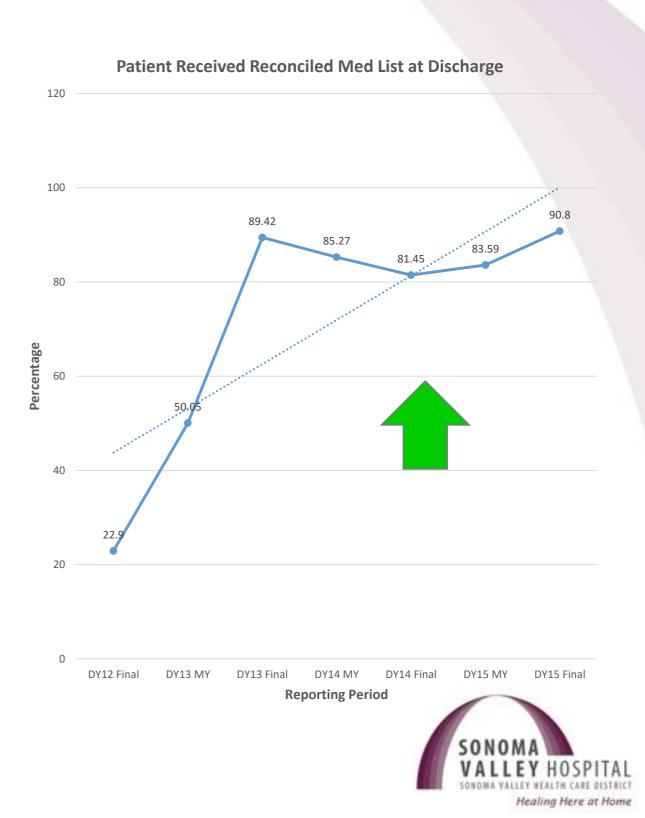
**Reporting Period** 



### Patient receives a Reconciled Medication List at the time of discharge

- \* Updated the Medication Reconciliation Med List to include National Quality Forum (NQF) best practices for headings to make it easier for the patient/family to read.
- \* Provided education to the medical staff on the steps for completing a medication reconciliation so that it prints correctly on the Discharge Instructions.
- \* Educated the Nursing team on what a completed medication reconciliation list should look like on the Discharge Instructions.
- \* Developed a complete Transition Record, revised the nursing section of the Discharge Instructions and developed one-page Self Management Education documents for top Diagnoses and/or comorbidities.

  Spanish/English



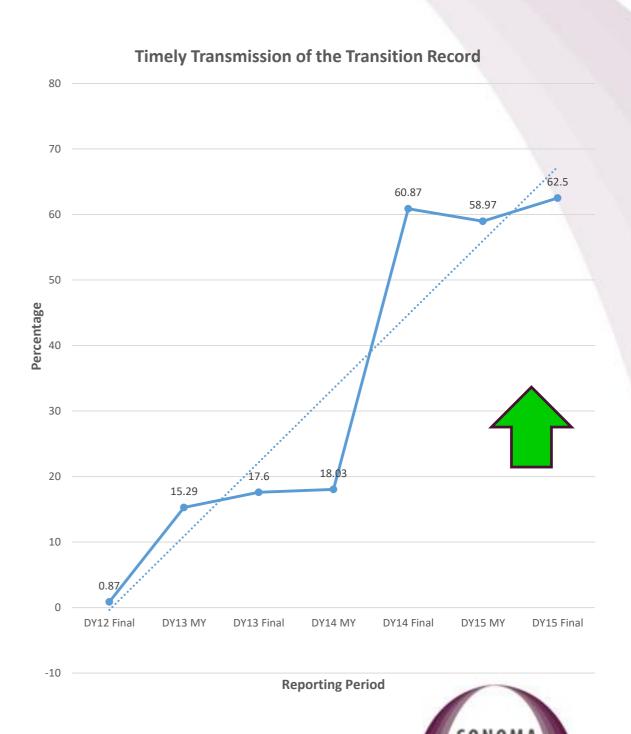
### **Transition Record cont.**

- \* Worked with Andrea to simplify the nursing discharge instructions so that only meaningful and easy to understand information was on the document.
- \* Improved the process of scheduling office visits after discharge.
- \* Developed the MY Plan which provided additional best practice information to the patient and the next provider and included the patient's stated health goals and/or what matters most to them. English/Spanish versions.
- \* Tested the headings for medication reconciliation and for nursing discharge instructions with a group of patients and our volunteer coaches to make sure they were easy to understand.



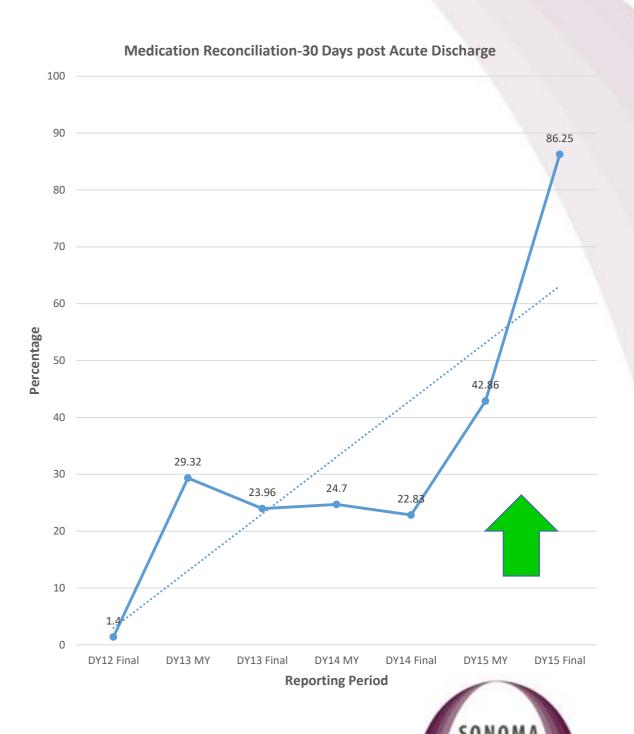
### The Transition Record was faxed to the PCP within 24 hours of discharge

- \* Worked with Admitting, Case
  Management and Nursing team to accurately
  identify the primary care provider and update the
  face sheet.
- \* PI project led by Jessica Winkler and Unit Clerks to develop and implement a check list process and faxing workflow.
- \* Process now standardized and new Unit Clerks receive training as part of their orientation.
- \* DY14MY Medical staff revised the time frame requirement for a Discharge Summary completion from within 48 hours to requiring completion on the day of discharge.



### Medication Reconciliation within 30-days post Acute discharge

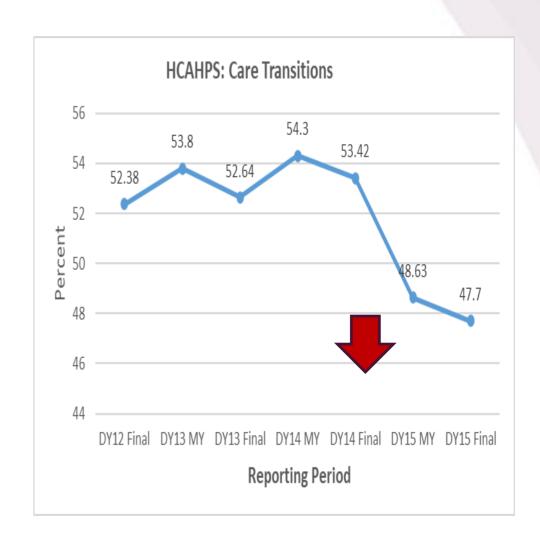
- \* We developed a MOU with Sonoma Valley Community Health Center to provide data for this metric.
- \* Developed a data reporting format with all the required elements and identified a point person at the clinic to manage the reporting process.
- \* Worked with the clinic's IT person to ensure that the physicians see the prompt in their electronic record to document medication reconciliation.
- \* Provided data to help them identify and continue to improve their processes.



### H-CAPS: Understanding your care when you left the hospital

- Aggregate score comprised of three questions:
  - \* Understanding their medications
  - \* Knowing what signs and symptoms to watch out for and how to respond
  - \* The hospital took their needs and preferences into account when planning their care.

- \* We added Pharmacy review of medications on the day of discharge.
- \* We implemented "What matters most" at the time of admission.
- \* Case Managers ask patient about their needs and concerns.
- \* Nursing team went over signs and symptoms during the discharge process.





### H-CAHPS cont.

### Challenges:

- \* We were using both phone and paper surveys during this project for awhile: CMS mode adjusts phone surveys to reduce "halo effect";
- \* CMS then decided to use all HCAHPS survey data regardless of the original population definition;
- \* Difficulty getting consistency with the care team in identifying what matters most and addressing them; and
- \* The hospitals provided feedback on the difficulty with the "needs and preferences" question due to its subjectivity. No-one did well on this.



### **Financials**

Year	Gross	Matching Fee	Net
2016	1,500,000.00	750,000.00	750,000.00
2017	1,500,000.00	750,000.00	750,000.00
2018	1,450,000.00	725,000.00	575,000.00*
2019	1,350,000.00	202,500.00	202,500.00**
2020	621,000.00***	321,000.00	461,000.00****

<sup>\*150,000</sup> pay for performance take back (discharge summary issue & 30-day med rec. mainly)

\$472,500 pay for performance take back.

\*\*\* Due to COVID, CMS did not fund the full amount in DY15; they opted to use some aggregate of all the DMPH's performance to fund 2020 reporting base on 2019 performance;

\*\*\*\* We recouped 149,000.00 from 2019 performance due to Jessica's PI project on timely transmission

Total Dollars Earned: \$2,738,500/ 3,500,000 originally approved funding/actual funding 3,210,500 (472,000 difference)

<sup>\*\*</sup> Major performance issues in this period regarding medication reconciliation, timely transition, and 30- day medication reconciliation. We failed to improve performance by 10% or to meet/exceed benchmarks.

### **Summary & Next Steps**

- Did we meet our goal with for this project? Absolutely
  We improved the transition of care record, implemented evidence based best practices and improved the handoff to the next provider.
- Opportunities and gaps include:
  - \* Readmissions for patient with substance abuse or behavioral health issues became very apparent. (CA Bridge Grant project)
  - \* Advance Care Planning and Palliative Care needs (Hospitalist Group)
  - \* Quirky medical record processes that make medication reconciliation challenging.
  - \* Maintaining the progress we have made and continuing to recognize and improve performance gaps.

### Questions?



### Quality Indicator Performance & Plan

January 2021

Data for December 2020



### **MORTALITY**



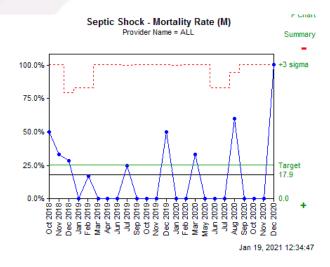
### Scorecard Summary Mortality

Quality > A	Quality > Autopsies Mortalities							
<b>△</b> •	Acute Care Mortality Rate (M)	7.7%	15.3%		Dec 2020			
<b>A</b> -	Congestive Heart Failure Mortality Rate  M	0.0%	11.5%	<del>\</del>	Dec 2020			
<b>A</b> -	COPD Mortality Rate  M	0.0%	8.5%	<del>\</del>	Dec 2020			
<b>A</b> –	Stroke Mortality Rate  M	0.0%	13.8%	₩	Nov 2020			
<b>A</b> -	Pneumonia Mortality Rate  M	0.0%	15.6%		Dec 2020			
Quality > P	Quality > Process of Care > Sepsis Care							
<b>A</b> –	Sepsis, Severe - Mortality Rate (M)	0.0%	25.0%	<del>\</del>	Dec 2020			
<b>△</b>	Septic Shock - Mortality Rate (M)	100.0%	25.0%		Dec 2020			



### **Septic Shock Mortality Rate**

Period	Numerator	Denominator	Percent
Dec 2020	3	3	100.0%
Nov 2020	0	3	0.0%
Oct 2020	0	2	0.0%
Sep 2020	0	1	0.0%
Aug 2020	3	5	60.0%
Jul 2020	0	6	0.0%
Jun 2020	0	6	0.0%
May 2020	0	2	0.0%
Mar 2020	1	3	33.3%
Feb 2020	0	3	0.0%
Jan 2020	0	4	0.0%



Case Review





- Three mortalities
  - One admitted for comfort care only
  - Two had multiple comorbidities
    - All received appropriate care

Mortality rate septic shock inpatient encounters



### PREVENTABLE HARM EVENTS



### Scorecard Summary AHRQ Patient Safety Indicators

Quality >	Patient Safety > AHRQ Patient Safety Indicators_PSI				
<u> </u>	PSI 02 (v2019) Death in Low-mortality DRGs - Per 1000 ACA (M)	0.00	0.21		Dec 2020
<u> </u>	PSI 03 (v2019) Pressure Ulcer - Per 1000 ACA (M)	0.00	0.51	❖	Dec 2020
	PSI 04 (v2019) Death in Surgical IP w/Ser Comp, Overall - Per 1000 ACA (M)	n/a	146.36		Dec 2020
<u> </u>	PSI 05 (v2019) Retained Surgical Item/Device Fragment - Per 1000 ACA (M)	0.00	0.00		Dec 2020
<u> </u>	SPSI 06 (v2019) Iatrogenic Pneumothorax - Per 1000 ACA (M)	0.00	0.21		Dec 2020
<u> </u>	SPSI 07 (v2019) Central Venous Catheter-related BSI - Per 1000 ACA (M)	0.00	0.12		Dec 2020
<u> </u>	PSI 08 (v2019) In Hospital Fall with Hip Fracture - Per 1000 ACA (M)	0.00	0.08		Dec 2020
<u> </u>	PSI 09 (v2019) Perioperative Hemorrhage or Hematoma - Per 1000 ACA (M)	0.00	2.29		Dec 2020
<u> </u>	PSI 10 (v2019) Postop Acute Kidney Injury Requiring Dialysis - Per 1000 ACA (M)	0.00	0.73		Dec 2020
<u> </u>	SPSI 11 (v2019) Postoperative Respiratory Failure - Per 1000 ACA (M)	0.00	5.53		Dec 2020
<u> </u>	PSI 12 (v2019) Perioperative Pulmonary Embolism or DVT - Per 1000 ACA (M)	0.00	3.45		Dec 2020
<u> </u>	PSI 13 (v2019) Postoperative Sepsis - Per 1000 ACA (M)	0.00	4.05	₩	Dec 2020
<u> </u>	PSI 14 (v2019) Postoperative Wound Dehiscence - Per 1000 ACA (M)	0.00	0.69		Dec 2020
<u> </u>	PSI 15 (v2019) Accidental Puncture or Laceration - Per 1000 ACA (M)	0.00	1.06		Dec 2020
<u> </u>	PSI 90 (v2019) Midas Patient Safety Indicators Composite, ACA (M)	0.00	1.00	₩.	Dec 2020

The Patient Safety Indicators (PSIs) provide information on potentially avoidable safety events that represent opportunities for improvement in the delivery of care.



## Scorecard Summary Patient Falls Preventable Harm

Status	Indicator	Current Value	Target	SPC Alert	Updated		
Quality > Pa	Quality > Patient Safety > Falls						
<b>A</b> -	RM ACUTE FALL- NO INJURY (M) per 1000 patient days	0.00	3.75		Dec 2020		
<b>A</b> -	RM ACUTE FALL- WITH INJURY (M) per 1000 patient days	0.00	3.75		Dec 2020		
<b>A</b> -	Falls with injury % of all Acute falls  M	0.0%	0.0%		Dec 2020		



### **READMISSION**



### Scorecard Summary Readmissions

Quality >	Readmissions				
<b>△</b> •	30-DV Inpatients - % Readmit to Acute Care within 30 Days (M)	6.8%	15.3%		Dec 2020
<b>A</b> -	COPD, CMS Readm Rdctn - % Readmit within 30 Days, ACA (M)	0.0%	19.5%		Dec 2020
<b>△</b> •	** HF, CMS Readm Rdctn - % Readmit within 30 Days, ACA (M)	20.0%	21.6%		Dec 2020
	Hip/Knee, CMS Readm Rdctn - % Readmit within 30 Days, ACA (M)	n/a	4.0%		Dec 2020
<b>A</b> -	PNA, CMS Readm Rdctn - % Readmit within 30 Days, ACA (M)	0.0%	16.6%	₩.	Dec 2020
<b>^</b>	Sepsis, Severe - % Readmit within 30 Days (M)	0.2%	12.0%		Dec 2020
<b>→</b>	Septic Shock - % Readmit within 30 Days (M)	0.0%	13.3%		Nov 2020

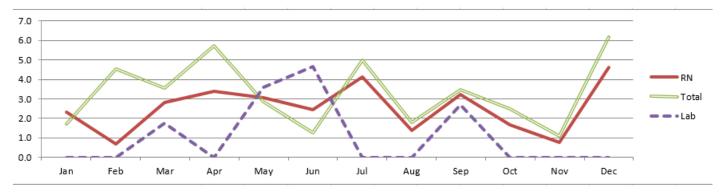


### **BLOOD CULTURE CONTAMINATION**



### **Blood Culture Contamination**

Blood Culture Report - Monthly for 2020												
brood culture report Monenly for 2020	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total Blood Cultures Processed	130	147	142	118	98	122	146	145	124	119	134	173
True Postive Cultures	6	11	7	11	8	8	8	8	4	6	16	14
True Postive Culture Rate (percent)	4.6	7.5	4.9	9.3	8.2	6.6	5.5	5.5	3.2	5.0	11.9	8.1
Total Contamination Cultures	3	1	4	4	3	3	6	2	4	2	1	8
Total Contamination Rate (percent)	2.3	0.7	2.8	3.4	3.1	2.5	4.1	1.4	3.2	1.7	0.7	4.6
Acceptable Contamination Rate ≤3.0%	Yes	Yes	Yes	No	No	Yes	No	Yes	No	Yes	Yes	No
Blood Cultures Drawn by RN Staff	59	66	85	70	70	79	120	112	87	81	93	130
Contaminated Culture Reported	1	3	3	4	2	1	6	2	3	2	1	8
RN Contamination Rate (percent)	1.7	4.5	3.5	5.7	2.9	1.3	5.0	1.8	3.4	2.5	1.1	6.2
Acceptable Contamination Rate ≤3.0%*	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes	Yes	No
Blood Culture Drawn by Lab Staff	88	64	57	48	28	43	26	32	37	38	41	43
Contaminated Culture Reported	0	0	1	0	1	2	0	0	1	0	0	0
Lab Contamination Rate (percent)	0	0	1.8	0.0	3.6	4.7	0.0	0.0	2.7	0.0	0.0	0.0
Acceptable Contamination Rate ≤3.0%	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes





### **UTILIZATION MANAGEMENT**



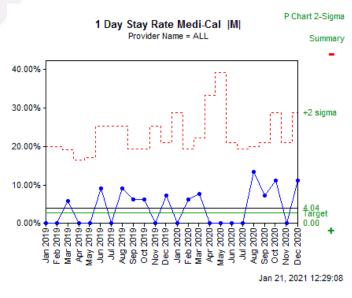
# **Utilization Management**

Finance > Utillization Management							
<b>△</b> •	1 Day Stay Rate-Medicare  M	Ð	7.89%	8.10%		Dec 2020	
<b>^</b>	🏜 1 Day Stay Rate Medi-Cal  M					Dec 2020	
<b>^</b>	Acute Care Risk-adjusted Average Length of Stay O/E Ratio  M		0.93	0.79		Dec 2020	
<b>A</b> –	InterQual Criteria Status Not Met: Admission  M vol	Ð	0	2		Dec 2020	
<b>A</b> -	InterQual Criteria Status Not Met: Continued Stay  M  vol	€	0	0	₩.	Dec 2020	



## One day stay MediCal

Period	R-ENC- 1 Day Stay Medi-Cal rate (numerator)	R-ENC- 1 Day Stay Medi-Cal rate (denominator)	Percent				
Dec 2020	1	9	11.11%				
Nov 2020	0	14	0.00%				
Oct 2020	1	9	11.11%				
Sep 2020	1	14	7.14%				
Aug 2020	2	15	13.33%				
Jul 2020	0	16	0.00%				
Jun 2020	0	14	0.00%				
May 2020	0	5	0.00%				
Apr 2020	0	6	0.00%				
Mar 2020	1	13	7.69%				
Feb 2020	1	16	6.25%				
Jan 2020	0	9	0.00%				



### Case Review

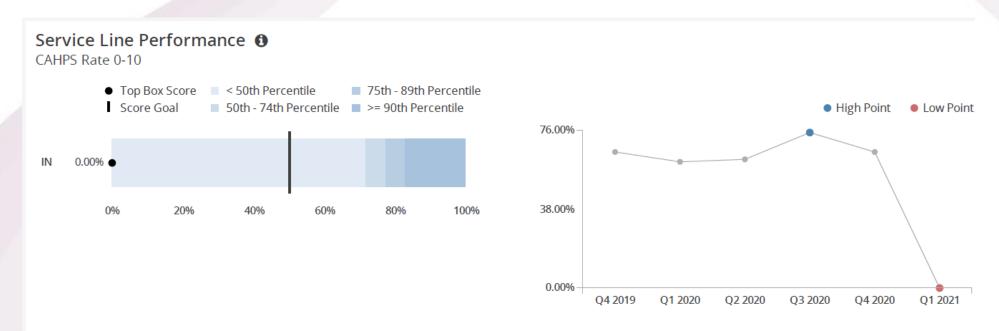
- December 2020
- 1 encounter
  - Patient asked to leave within 24 hours of admission



### **HUMAN EXPERIENCE**



### **Inpatient Patient Satisfaction**



n	2
Top Box Score	0.00%
Score Goal	50.00%
Percentile Rank	1

Time Period	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021
n	32	46	29	28	32	2
Top Box Score	65.63%	60.87%	62.07%	75.00%	65.63%	0.00%
Percentile Rank	21	11	14	65	23	1

Dashboard Name: Performance Overview| System Name: Sonoma Valley Hospital - System | System ID: 15704| Service Line: Inpatient | Measure: CAHPS Rate 0-10 | Metric: Top Box Score | Date Type: Received Date | Time Frame: Quarter To Date | Peer Group: All PG Database | Priority Index - Survey Type: CAHPS | Priority Index View: External | Phone Calibration: Applied | CMS Reportable Responses: Applied | Skip Logic: Applied | Current Benchmarking Period: 10/01/2020 - 12/31/2020 | Fiscal Start Month: 01 | Download Date & Time: Jan 14, 2021 10:27 pm EST



### **Surgery Patient Satisfaction**

#### Service Line Performance 6

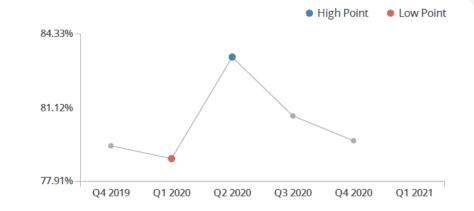
CAHPS Rate 0-10

■ 75th - 89th Percentile

Score Goal

■ 50th - 74th Percentile ■ >= 90th Percentile

No Data Available

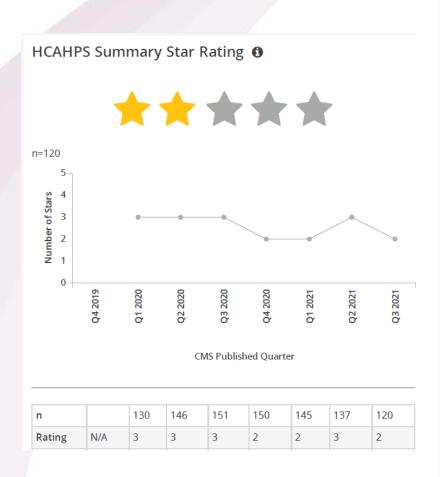


Time Period	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021
n	112	128	54	52	64	
Top Box Score	79.46%	78.91%	83.33%	80.77%	79.69%	N/A
Percentile Rank	14	11	25	15	12	N/A

Dashboard Name: Performance Overview | System Name: Sonoma Valley Hospital - System | System ID: 15704 | Service Line: Ambulatory Surgery | Measure: CAHPS Rate 0-10 | Metric: Top Box Score | Date Type: Received Date | Time Frame: Quarter To Date | Peer Group: All PG Database | Priority Index - Survey Type: CAHPS | Priority Index View: External | Phone Calibration: Applied | CMS Reportable Responses: Not Applied | Skip Logic: Not Applied | Current Benchmarking Period: 10/01/2020 - 12/31/2020 | Fiscal Start Month: 01 | Download Date & Time: Jan 14, 2021 10:13 pm EST



### **CMS Star Rating**



**HCAHPS Measure Star Ratings** Sorted by Star Rating (High to Low)

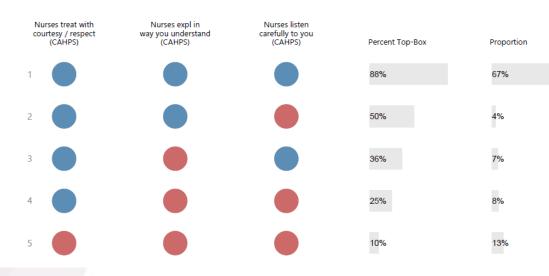
Measure Type	Measure Name	n	Star Rating
	Response of Hosp Staff	114	****
	Comm w/ Nurses	120	****
Domain	Discharge Information	112	****
Domain	Comm w/ Doctors	118	****
	Comm About Medicines	71	****
	Care Transitions	120	****
	Quietness of hospital environment	118	****
Question	Cleanliness of hospital environment	120	****
	Rate hospital 0-10	118	****
	Recommend the hospital	118	****



## **Experience Key Drivers**

Key Driver Summary – Sonoma Valley Hospital

Decision Paths: Rate hospital 0-10 (CAHPS)



### Projects

- Partnered with Hospitalists to prioritize communication with physicians as PI metric
- Partnered with Pharmacy to develop and implement 1:1 discharge medication education by pharmacists
- Begin partnership with Patient Care unit and support service departments to develop patient experience project focused on communication





#### **Quality Committee Agenda**

The Committee monitors the quality assurance and improvement activities of Sonoma Valley Hospital's entities to enhance the quality of care provided throughout the hospital or medical center system and encourage a consistent standard of care. Monitored activities include but are not limited to:

- a. Quality Performance Indicator Set
  - i. Mortality
  - ii. Preventable Harm Events
  - iii. Healthcare Acquired Infections
  - iv. Medication Events
  - v. Never Events
  - vi. Core Measures
  - vii. Readmissions
  - viii. Utilization Review
- b. Patient Experience
- c. Accreditation & Regulatory Standards
- d. Quality Assurance Performance Improvement
- e. Culture of Safety
- f. Risk Event Reports
- g. Policies & Procedures
- h. Patient Care Contracts

Listing of currently pending and/or upcoming document tasks grouped by committee.

Sonoma Valley Hospital

Run by: Woodall, Vivian (vwoodall) Run date: 01/21/2021 1:03 PM

Report Parameters

Filtered by: Document Set: all applicable

Committee: 07 BOD-Quality Committee of the Board

Include Current Tasks: Yes Include Upcoming Tasks: No

Grouped by: Committee

Sorted by: Document Name, Document Location

Report Statistics

Total Documents: 22

Committee: 07 BOD-Quality Committee of the Board

Committee Members: Woodall, Vivian (vwoodall)

**Current Approval Tasks (due now)** 

 Document
 Task/Status
 Pending Since
 Days Pending

 Antimicrobial Stewardship
 Pending Approval
 12/11/2020
 41

Medication Management Policies (MM)

Summary Of Changes: Removed antimicrobial cycling and combination therapy sections from interventions and strategies section per

antimicrobial stewardship committee recommendations, as these are not commonly used strategies any longer.

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Kutza, Chris (ckutza)

Approvers: Kutza, Chris (ckutza) -> 01 P&P Committee - (Committee) -> 04 MS-Performance Improvement/Pharmacy & Therapeutics

Committee - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality Committee of the Board -

(Committee) -> 09 BOD-Board of Directors - (Committee)

Blood and Body Fluid Spills Pending Approval 1/4/2021 17

Infection Prevention & Control Policies (IC)

Summary Of Changes: Reviewed, no changes

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Heinrich, Leah (Iheinrich)

Approvers: Jones, Danielle (djones) -> 01 P&P Committee - (Committee) -> 04 MS-Performance Improvement/Pharmacy & Therapeutics

Committee - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality Committee of the Board -

(Committee) -> 09 BOD-Board of Directors - (Committee)

California Department of Public Health (CDPH) and Sonoma County Pending Approval 12/3/2020 49

Board of Supervisors- Notification to Governance and Leadership Policies

Summary Of Changes: Change of personnel title

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)
Lead Authors: Jones, Danielle (djones), OHara, Lisa (lohara)

Approvers: Jones, Danielle (djones) -> 01 P&P Committee - (Committee) -> 07 BOD-Quality Committee of the Board - (Committee) -> 09

**BOD-Board of Directors - (Committee)** 

Cleaning in Materials Management Pending Approval 1/7/2021 14

Materials Management Dept

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Sonoma Valley Hospital

Run by: Woodall, Vivian (vwoodall) Run date: 01/21/2021 1:03 PM

Listing of currently pending and/or upcoming document tasks grouped by committee.

Summary Of Changes: 1/6/21 - Reviewed. No Changes.

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Dugger, James (jdugger)

Approvers: 01 P&P Committee -> 07 BOD-Quality Committee of the Board - (Committee) -> 09 BOD-Board of Directors - (Committee)

Construction or Renovation Projects, Infection Control Pending Approval 1/4/2021 17

Infection Prevention & Control Policies (IC)

Summary Of Changes: Reviewed, no changes

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Heinrich, Leah (Iheinrich)

Approvers: Jones, Danielle (djones) -> 01 P&P Committee - (Committee) -> 04 MS-Performance Improvement/Pharmacy & Therapeutics

Committee - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality Committee of the Board -

(Committee) -> 09 BOD-Board of Directors - (Committee)

Contract Administration, Patient Care Services Pending Approval 1/7/2021 14

Governance and Leadership Policies

Summary Of Changes: Personnel title changes

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)
Lead Authors: Jones, Danielle (djones), OHara, Lisa (lohara)

Approvers: Jones, Danielle (djones) -> 01 P&P Committee - (Committee) -> 07 BOD-Quality Committee of the Board - (Committee) -> 09

**BOD-Board of Directors - (Committee)** 

COVID-19 Surge Planning-Pharmacy Pending Approval 1/4/2021 17

Emergency Preparedness Policies (EP)

Summary Of Changes: New Policy

Purpose:

To establish a procedure for managing medication supply during a patient surge due to COVID-19 pandemic.

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Kutza, Chris (ckutza)

Approvers: 01 P&P Committee -> 04 MS-Performance Improvement/Pharmacy & Therapeutics Committee - (Committee) -> 05 MS-

Medical Executive - (Committee) -> 07 BOD-Quality Committee of the Board - (Committee) -> 09 BOD-Board of Directors -

(Committee)

Equipment Inspection Pending Approval 1/7/2021 14

Materials Management Dept

Summary Of Changes: Review 12/30/20 - No Changes

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Dugger, James (jdugger)

Approvers: 01 P&P Committee -> 07 BOD-Quality Committee of the Board - (Committee) -> 09 BOD-Board of Directors - (Committee)

Handling of Sharps Pending Approval 1/7/2021 14

Materials Management Dept

Summary Of Changes: Reviewed 12/30/20 - No Changes

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Dugger, James (jdugger)

Approvers: 01 P&P Committee -> 07 BOD-Quality Committee of the Board - (Committee) -> 09 BOD-Board of Directors - (Committee)

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Sonoma Valley Hospital

Run by: Woodall, Vivian (vwoodall) Run date: 01/21/2021 1:03 PM

Listing of currently pending and/or upcoming document tasks grouped by committee.

Hazardous SubstancesPending Approval1/7/202114

Materials Management Dept

Summary Of Changes: Recommendation to retire as redundant

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Dugger, James (jdugger)

Approvers: 01 P&P Committee -> 07 BOD-Quality Committee of the Board - (Committee) -> 09 BOD-Board of Directors - (Committee)

Inspection of Nursing Units and Medication Storage Areas Pending Approval 1/4/2021 17

Medication Management Policies (MM)

Summary Of Changes: Removed embedded unit inspection form from body of policy and made it an attachment

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Kutza, Chris (ckutza)

Approvers: Kutza, Chris (ckutza) -> 01 P&P Committee - (Committee) -> 04 MS-Performance Improvement/Pharmacy & Therapeutics

Committee - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality Committee of the Board -

(Committee) -> 09 BOD-Board of Directors - (Committee)

Moderate Sedation AN8610-102 Pending Approval 9/21/2020 122

Anesthesia Services Policies (AN)

Summary Of Changes: Added EtCO2, added propofol, distinguish between moderate and deep sedation, corrected typos

Updated reference

Why: Appendix A & B last reviewed 2013. EtCO2 is a best practice standard, propofol not included

Condition of CIHQ survey.

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Clark, Janine (jclark)

Approvers: MS-Chair of Surgery -> 01 P&P Committee - (Committee) -> 02 MS-Medicine Department - (Committee) -> 03 MS-Surgery

Department - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality Committee of the Board -

(Committee) -> 09 BOD-Board of Directors - (Committee)

Pharmaceutical Representatives MM8610-159 Pending Approval 1/4/2021 17

Medication Management Policies (MM)

Summary Of Changes: Updated website and access date for phrma code on interactions with healthcare professionals

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Kutza, Chris (ckutza)

Approvers: Kutza, Chris (ckutza) -> 01 P&P Committee - (Committee) -> 04 MS-Performance Improvement/Pharmacy & Therapeutics

Committee - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality Committee of the Board -

(Committee) -> 09 BOD-Board of Directors - (Committee)

Phone Tree Pending Approval 1/13/2021 8

Materials Management Dept

Summary Of Changes: 1/13/21 - Reviewed. No Changes at this time.

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Dugger, James (jdugger)

Approvers: 01 P&P Committee -> 07 BOD-Quality Committee of the Board - (Committee) -> 09 BOD-Board of Directors - (Committee)

Product Failure Pending Approval 1/7/2021 14

Materials Management Dept

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Sonoma Valley Hospital

Run by: Woodall, Vivian (vwoodall) Run date: 01/21/2021 1:03 PM

Listing of currently pending and/or upcoming document tasks grouped by committee.

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Dugger, James (jdugger)

Approvers: 01 P&P Committee -> 07 BOD-Quality Committee of the Board - (Committee) -> 09 BOD-Board of Directors - (Committee)

Rapid Sequence Intubation (RSI) Kit MM8610-161 Pending Approval 1/4/2021 17

Medication Management Policies (MM)

Summary Of Changes: Changed embedded contents list to be an attachment.

Changed number of kits to 4.
Added rocuronium to contents list.

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Kutza, Chris (ckutza)

Approvers: Kutza, Chris (ckutza) -> 01 P&P Committee - (Committee) -> 04 MS-Performance Improvement/Pharmacy & Therapeutics

Committee - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality Committee of the Board -

(Committee) -> 09 BOD-Board of Directors - (Committee)

Receiving Procedures Pending Approval 1/7/2021 14

Materials Management Dept

Summary Of Changes: 1/6/21 Reviewed.

Changes - 7. Adjusted this section to reflect New Electronic work flow. Paragon Materials Management tracks users who received product (no need to initial) and Paragon keeps purchases orders open(Partial Received) with backorders to be able to track more easily. These changes were part of our previous paperless effort that we institute a few years ago.

8. Deleted Section 8. as it is redundant due to changes to 7.

9. Deleted Section 9. because this is now automated in Paragon and there is no need to send a physical copy of a purchase order to Accounting. We also no long keep physical purchase orders on hand unless it is Capital. Paragon acts as a repository for purchase orders and tracks name of Buyer, etc.

10. Section 10. is now Section 8.

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Dugger, James (jdugger)

Approvers: 01 P&P Committee -> 07 BOD-Quality Committee of the Board - (Committee) -> 09 BOD-Board of Directors - (Committee)

Renal Dosing-Pharmacy Protocol Pending Approval 1/4/2021 17

Medication Management Policies (MM)

Summary Of Changes: New policy defining process pharmacists are to follow when automatically adjusting dosing of medications that are listed in

the policy per patient renal function. Only medications listed in the policy may be automatically adjusted, and prescribers

may opt out by indicating such in the original order.

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Kutza, Chris (ckutza)

Approvers: Kutza, Chris (ckutza) -> 01 P&P Committee - (Committee) -> 04 MS-Performance Improvement/Pharmacy & Therapeutics

Committee - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality Committee of the Board -

(Committee) -> 09 BOD-Board of Directors - (Committee)

Rotation of Stock Pending Approval 1/7/2021 14

Materials Management Dept

Summary Of Changes: 1/5/21 - Removed "Senior" from Senior Buyer because that position no longer exists.

No other changes.

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Dugger, James (jdugger)

Approvers: 01 P&P Committee -> 07 BOD-Quality Committee of the Board - (Committee) -> 09 BOD-Board of Directors - (Committee)

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#### Sonoma Valley Hospital

Listing of currently pending and/or upcoming document tasks grouped by committee.

Run by: Woodall, Vivian (vwoodall) Run date: 01/21/2021 1:03 PM

Security in Materials Management Pending Approval 1/7/2021 14

Materials Management Dept

Summary Of Changes: 1/5/2021 - Reviewed. No Changes.

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Dugger, James (jdugger)

Approvers: 01 P&P Committee -> 07 BOD-Quality Committee of the Board - (Committee) -> 09 BOD-Board of Directors - (Committee)

 Sterile Compounding MM8610-117
 Pending Approval
 1/4/2021
 17

Medication Management Policies (MM)

Summary Of Changes: Added wording regarding immediate use sterile compounding as required by Board of Pharmacy per CCR 1751.8(e)

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)

Lead Authors: Kutza, Chris (ckutza)

Approvers: Kutza, Chris (ckutza) -> 01 P&P Committee - (Committee) -> 04 MS-Performance Improvement/Pharmacy & Therapeutics

Committee - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality Committee of the Board -

(Committee) -> 09 BOD-Board of Directors - (Committee)

Unusual Occurrence Report to Governmental Agencies Pending Approval 1/7/2021 14

Governance and Leadership Policies

Summary Of Changes: Change of personnel titles

Moderators: Newman, Cindi (cnewman), Tierney, Pat (ptierney)
Lead Authors: Jones, Danielle (djones), OHara, Lisa (lohara)

Approvers: Jones, Danielle (djones) -> 01 P&P Committee - (Committee) -> 07 BOD-Quality Committee of the Board - (Committee) -> 09

**BOD-Board of Directors - (Committee)** 

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PROCEDURE: COVID-19 Surge Planning-Pharmacy

PAGE 1 OF 1

DEPARTMENT: Pharmacy EFFECTIVE: 9/2020

APPROVED BY: Director of Pharmacy REVISED:

#### Purpose:

To establish a procedure for managing medication supply during a patient surge due to COVID-19 pandemic.

#### Procedure:

- When the COVID-19 hospital surge plan is enacted, the pharmacy department will maintain a running daily tally of key medications with calculation of days on hand.
  - A list of medications to monitor supply will be determined using guidance from Sonoma Valley Hospital incident command and nationally recognized guidelines.
    - Examples include ASHP, CDC, CDPH, HRSA
  - At a minimum, the list will include medications used for critical care sedation, paralytics, and remdesivir.
- Medication suppliers will be contacted to ensure a plan is in place to order what is needed and to enact disaster recovery plans as applicable.
  - o Primary wholesaler: AmerisourceBergen
  - 503b outsourced compounders: QuVa, Leiters, US Compounding
  - Direct accounts with individual manufacturers: Baxter, ICU Medical, Besse, Bracco, Pfizer, Sanofi
- The goal inventory on hand will be a 5 day supply of formulary medications based on historical utilization.
  - Other medications may have their days' supply goal temporarily increased based on current availability/shortages, patient census, and input from the pharmacist in charge and hospital incident command.
- In the event that a key medication is not available due to supply chain issues, alternatives will be determined based on discussions between the pharmacist in charge (of designee), medical staff, and hospital incident command.

#### References:

**CDPH AFL 20-69** 

ASHP Patient Surge Management during a Pandemic Toolkit 05.21.2020 Sonoma Valley Hospital-AmerisourceBergen Disaster Recovery Plan 2016



SUBJECT: Renal Dosing-Pharmacy Protocol POLICY #MM8610-

PAGE 1 OF 2

DEPARTMENT: Pharmacy EFFECTIVE:

APPROVED BY: REVISED:

#### Purpose:

To provide guidelines for safe and cost effective dose adjustment per pharmacy for adult patients on selected medications based on renal function.

#### Policy:

Approved medications ordered on adult patients at Sonoma Valley Hospital will have their dose and/or frequency automatically adjusted to account for the patient's current kidney function. Dosing will be routinely evaluated and re-adjusted as patient kidney function changes during their hospital stay.

#### **Definitions:**

• CrCL: Creatinine Clearance

• eGFR: Estimated glomerular filtration rate

• SCr: Serum Creatinine

ABW: Actual Body Weight

• IBW: Ideal Body Weight

AdjBW: Adjusted Body Weight

BSA: Body Surface Area

#### Protocol exclusions:

- Prescribers may opt out of this protocol by noting on electronic orders: NO RENAL ADJUSTMENT PER PROTOCOL.
- Pediatric patients aged <18 years are excluded.
- One time orders or loading doses excluded.
- Any medication not listed in the approved Renal Dosing Protocol Table (Attachment A) is excluded.

#### Procedure:

- When an order is placed for a medication covered under this protocol, the pharmacist
  will automatically apply applicable renal dose adjustments per pharmacy protocol as
  defined in the guidelines in the Renal Dosing Adjustment Table (Attachment A).
- If an adjustment is required, the pharmacist will modify the order in the medical record "per protocol" and will place a comment on the order that renal adjustment per protocol has occurred.
  - The note will include the original ordered regimen and the new regimen placed per protocol.
- Patients will be monitored on a daily basis and further adjustments made as needed.
- Creatinine Clearance (CrCL) will be calculated using the Cockroft-Gault Equation.



SUBJECT: Renal Dosing-Pharmacy Protocol POLICY #MM8610-

PAGE 2 OF 2

DEPARTMENT: Pharmacy EFFECTIVE:

APPROVED BY: REVISED:

• Estimated glomerular filtration rate (eGFR) will be calculated using the MDRD equation.

SCr will be rounded up to 0.8 mL/dL for patients ≥65 years old with Scr < 0.8 mg/dL.</li>

• Patient weight used for calculations:

Weight (kg)	ABW if ABW≤IBW	IBW if ABW>IBW and ≤120% IBW	AdjBW If ABW >120% IBW

#### **Calculations:**

#### **Cockroft-Gault Equation:**

 $CrCL (mL/min) = [(140-age) \times weight (kg) / SCr (mg/dL) \times 72] \times (0.85 \text{ for females})$ 

MDRD equation: (modified for use with standardized serum creatinine values)	$GFR = mL/min per 1.73m^2$			
eGFR = 175 x (Standardized SCr) $^{-1.154}$ x (age) $^{-0.203}$ x (0.742 if	Age = years			
female) x (1.212 if African American)	SCr = mg/dL			
Note: For excessively overweight or underweight patients multiply eGFR by patient's Body Surface				
Area (BSA), then divide by 1.73 to calculate adjusted GFR.				

#### Ideal Body Weight (IBW) Equation:

Males: IBW (kg) = 50 kg + 2.3 kg for each inch over 5 feet Females: IBW (kg) = 45.5 kg + 2.3 kg for each inch over 5 feet

#### Adjusted Body Weight (AdjBW) Equation:

 $AdjBW (kg) = IBW + 0.4 \times (ABW - IBW)$ 

#### References:

- 1. UpToDate (accessed (4/2020)
- 2. Micromedex (accessed (4/2020)
- 3. Cockcroft, D.W. and M.H. Gault. Prediction of creatinine clearance from serum creatinine. Nephron. 1976. 16(1):31-41.
- 4. Levey AS, Coresh J, Greene T, Stevens LA, Zhang YL, Hendriksen S, et al. Using standardized serum creatinine values in the modification of diet in renal disease study equation for estimating glomerular filtration rate. Ann Intern Med. 2006;145(4):247–54.
- Redal-Baigorri B, Rasmussen K, Goya Heaf J. Indexing Glomerular Filtration Rate to Body Surface Area: Clinical Consequences. Journal of Clinical Laboratory Analysis 2014; 28: 83-90.

Attachments: Attachment A: Renal Dosing Adjustment Table