

#### SVHCD QUALITY COMMITTEE

#### AGENDA

#### **WEDNESDAY, AUGUST 28, 2024**

#### 5:00 pm Regular Session Held in Person:

**SVH Administrative Conference Room** 

To Participate Via Zoom Videoconferencing use the link below: <a href="https://sonomavalleyhospital-org.zoom.us/j/97100197319">https://sonomavalleyhospital-org.zoom.us/j/97100197319</a>

Meeting ID: 971 0019 7319

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AGENDA ITEM	RECOMM	ENDATION			
In compliance with the Americans with Disabilities Act, if you require special accommodations to attend a District meeting, please contact the Board Clerk, Whitney Reese, at <a href="www.wreese@sonomavalleyhospital.org">wreese@sonomavalleyhospital.org</a> , at least 48 hours prior to the meeting.					
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	Kornblatt Idell				
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.	Kornblatt Idell				
3. CONSENT CALENDAR	Kornblatt Idell	Action			
• Minutes 06.26.24					
4. INPATIENT SERVICES QA/PI	Jane Taylor	Inform			
5. ED QA/PI	Marylou Ehret Jessica Winkler	Inform			
6. PATIENT CARE SERVICES DASHBOARD 2 <sup>ND</sup> QTR.	Jessica Winkler	Inform			
7. QUALITY INDICATOR PERFORMANCE & PLAN	Jessica Winkler	Inform			
8. POLICIES AND PROCEDURES	Jessica Winkler	Inform			
9. ADJOURN	Kornblatt Idell				



#### SONOMA VALLEY HEALTH CARE DISTRICT QUALITY COMMITTEE

Wednesday, June 26, 2024, 5:00 PM

#### **MINUTES**

#### Via Zoom Teleconference

Members Present – In Person	Excused/Not Present	Public/Staff – Via Zoom
Susan Kornblatt Idell	Carl Speizer, MD (excused)	Kylie Cooper, RN BSN CPHQ MBA, Director of Quality and
Howard Eisenstark, MD	Kathy Beebe, RN PhD	Risk Mgmt.
Michael Mainardi, MD	Carol Snyder	Jessica Winkler, DNP, RN, NEA-BC, CCRN-K, CNO
Judy Bjorndal, MD, via zoom	Denise Kalos	Whitney Reese, Board Clerk
	Paul Amara, MD, FACOG	Sabrina Kidd, MD, FACS, FASCRS, CPE, CMO & Colorectal
		Surgeon, via zoom
		Alfred Lugo, CLS, Lab Technical Supervisor
		Nicolaos Hadjiyianni, Laboratory Manager
		Dan Kittleson

AGENDA ITEM	DISCUSSION	ACTION
1. CALL TO ORDER/ANNOUNCEMENTS	Kornblatt Idell	
	Kornblatt Idell called meeting to order at 5:01pm. Bjorndal filled in for Kalos as a voting member to achieve a quorum.	
2. PUBLIC COMMENT SECTION	Kornblatt Idell	
	No public comments	
3. CONSENT CALENDAR	Kornblatt Idell	ACTION
Minutes 05.22.24		

		Motion to approve Mainardi, 2 <sup>nd</sup> by Eisenstark
4. LAB QA/PI	Alfred Lugo Nicolaos Hadjiyianni	INFORM
	Lugo provided an overview of the laboratory's operations, staffing, and challenges. Key points included the current staffing structure, the lab's wide range of services, and ongoing efforts to upgrade outdated analyzers and improve space utilization. He highlighted challenges like staffing difficulties, particularly in attracting full-time employees, and issues with aging equipment. Lugo also discussed recent accomplishments, such as improved communication with the ER and the lab's consistent performance metrics, including low blood contamination rates and effective manual test entries. The presentation emphasized the lab's need for modernization and efficient space management to enhance productivity.	
6. QUALITY INDICATOR PERFORMANCE & PLAN	Cooper	INFORM
	Cooper presented data for May 2024: In May, the hospital reported 0% mortality and no adverse events, with excellent performance in patient safety and medication management. While there were some challenges, including a higher-thantarget blood culture contamination rate and delays in TNK administration for stroke patients, overall sepsis metrics and infection control were strong. The Emergency Department faced high patient volumes, impacting wait times, but patient satisfaction remained high, particularly in Physical Therapy. Issues were noted with appointment scheduling and communication, especially in imaging, which require further attention.	Kylie Cooper presented the Quality department's May 2024 data
7. POLICIES AND PROCEDURES	Cooper	INFORM
	<ul> <li>Cooper presented to the for approval to the Board of Directors:</li> <li>NEW: Hazardous Drug Handling-USP 800</li> <li>NEW: Health Equity-Screening for Social Drivers of Health (SDOH)</li> <li>NEW: Hypoglycemia Protocols</li> </ul>	Cooper presented to committee

8. CLOSED SESSION: a. Calif. Health & Safety Code §32155: Medical Staff Credentialing & Peer Review Report	Kornblatt Idell	ACTION
		Motion to recommend to Board of Directors for approval Eisenstark, 2 <sup>nd</sup> by Mainardi
9. ADJOURN	Kornblatt Idell	
	Meeting adjourned at 5:48 pm	

# Emergency Department Report to the Board Quality

AUGUST 2024

MARYLOU EHRET, MSN, RN OCN

JESSICA WINKLER, DNP, RN, NEA-BC, CCRN

# ED Volume: Jan 23 – July 2024



Average Admits (2024): 8.37% (*n*=536)

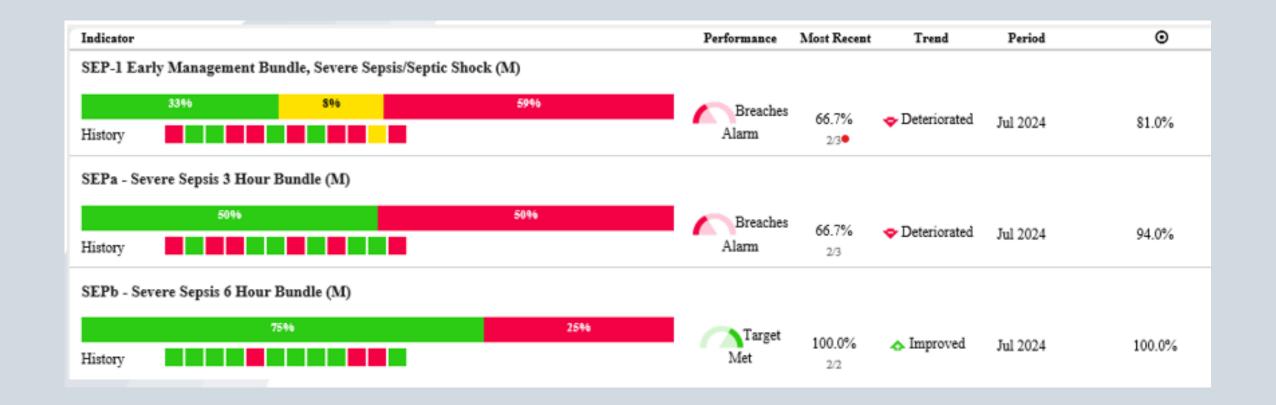
Transfer to Higher Level of Care (HLOC): 9% (*n*=568)

Left Without Being Seen(LWBS): 2% (*n*=226)

Against Medical Advice (AMA): 1% (n=87)



# QAPI: STROKE



# QAPI: Sepsis Bundle

	Jan	Feb	Mar	Apr	May	Jun	Jul
Total Blood Cultures Processed	214	186	210	200	195	221	189
Total Contamination Rate (%)	1.4	3.2	3.8	1.0	4.1	3.2	2.1
Blood Cultures Drawn by ED RN Staff	93	86	113	105	107	126	113
Contaminated Culture Reported	1	5	5	1	7	4	3
ED RN Contamination Rate (percent)	1.1	5.8	4.4	1.0	6.5	3.2	2.7
Blood Culture Drawn by Lab Staff	121	94	96	94	88	93	75
Contaminated Culture Reported	2	1	3	1	1	3	1
Lab Contamination Rate (percent)	1.7	1.1	3.1	1.1	1.1	3.2	1.3

# QAPI: Blood Culture Contamination

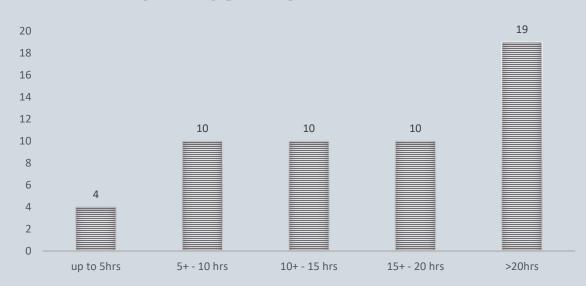
YTD: 26/743: 3.5%

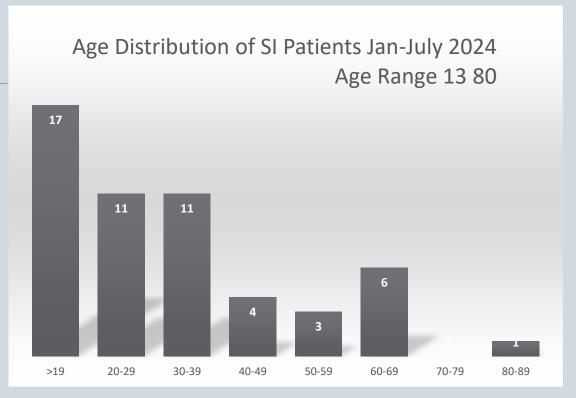
### QAPI: Documenting Observation of High-Risk Patients January — July 2024

53 patients needing continuous observation for safety

Evenly Distributed between Male/Female(24/27, +1)

## LENGTH OF STAY FOR SI PTS JAN - JULY 2024





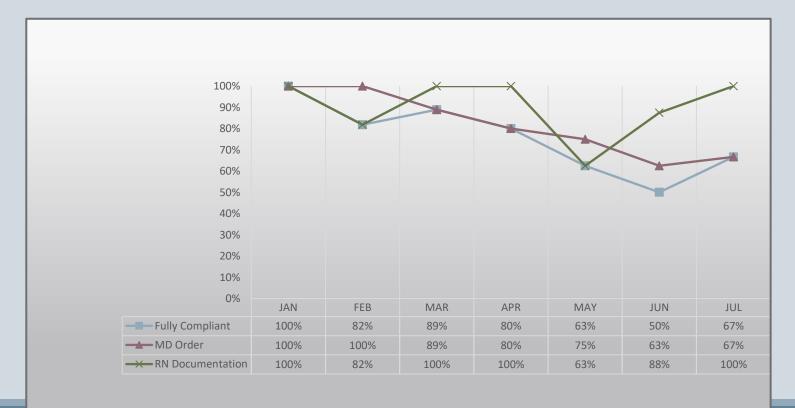
LOS in ED: from 3hrs to 97hrs

# QAPI: Documenting Observation of High-Risk Patients. Jan-July 2024

Recommendations from CIHQ findings. Audit bundle consists of 3 components: MD order, RN finding and utilizing specific flow sheet, documenting every hour or more

	1145	1200	1215
Suicide-Psych Observation	s		
Туре	q 15 min checks	q 15 min checks	Other (Com
Reasons for Observation	Suicide precauti	Suicide precauti	Suicide precauti
Behavior	Compliant	Compliant	Compliant
Affirms Safety	Yes	Yes	Yes
Mental Status	Oriented X3	Oriented X3	Oriented X3
Answers Questions	Yes	Yes	Yes
Activity/Location	In room	In room	In room
RN/Therapist Assessment q2h	Done	Done	Done
RN/Therapist Assess Next Due			
RN/Therapist Only			
Thought Process	Organized	Organized	Organized
Thought Content	Non-psychotic	Non-psychotic	Non-psychotic
Mood	Euthymic	Euthymic	Euthymic





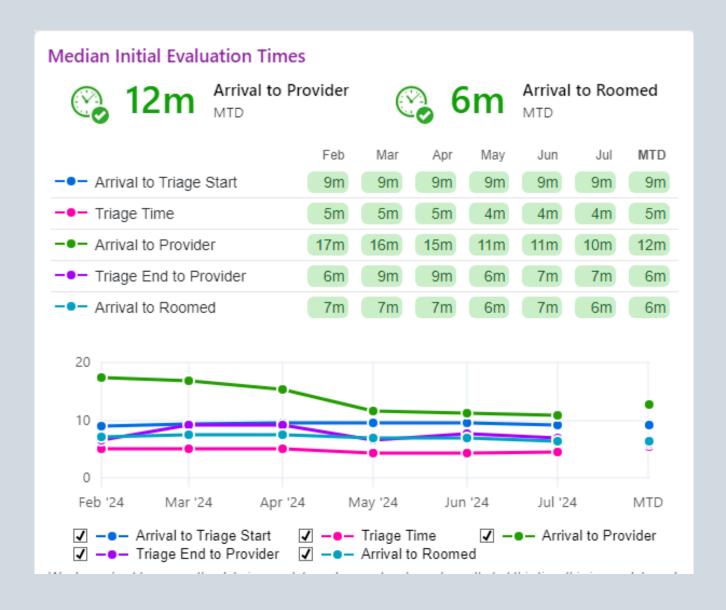
# Process Improvement: Left Without Being Seen – August 2023 – July 2024



Volumes are up. LWBS consistently 1-2%

## Process Improvement: Where We Were Jan 24





# Process Improvement: Where We Are Today August 2024

# What We've Been Doing!

#### Hired Director of Emergency Services: Marylou Ehret

Core staffing – Team building

# Plans for managing census surge

- Defining RN Role primary, resource, triage
- Organized patient flow/location

Telepsych is available and more consistent

Nurse Initiated Order Sets

#### **Nursing Competencies**

- Blood Culture Contamination
- Legal Blood Draw
- PALS Cart
- Precipitous Birth

#### SVFD Engagement:

- IV Pump training
- EMS New Hire orientation
- Combined ACLS Drills with SVFD



# Code Blue Drills

Three days – 2 scenarios

6 Drills

PALS and ACLS

89% of ED Nurses participated

(2 LOA, 2 staff PD were not able to join)



What went well



#### What went well

Team engagement Ride Along

Good collaboration

- Teaching
- Debriefing
- Coordination
- New TeamDynamics

Room preparation
Practice Carts
Lessons Learned...



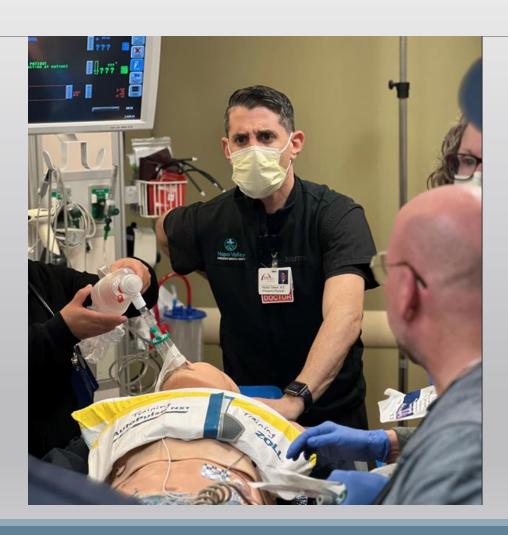
# Proper Prior Planning Prevents Poor Performance

#### PRE-HOSPITAL

EMS Report via radio: Very basic, and not a lot of information

#### ED Tech:

- Gather team immediately
- Notify
   Registration to call overhead



- PRE-ARRIVAL
- Room readiness
- Departmental Prep
- Gather anticipated equipment
- Gather AnticipatedStaff
- Assign/Claim Roles

## Hand- off: A Critical Time

PUMP: Keep CPR going

LISTEN TO EMS REPORT

PLAN together when to transfer and when to change equipment

OBSERVE the patient:

Working IV Sites

Signs of trauma

FAMILY considerations- Support
Other Patients and Privacy





# Next steps

- Planning for next drill dates in the fall
- ■PALS Cart Reorganization Project (DONE)
- Room/Supply Reorganization (Ongoing)
- Competencies & Education
  - EZ IO
  - ET C02 and Pressure Monitoring



Continued Competency and Growth- Team building!



Collaboration with EMS



Participation in The Great Shakeout



Improving throughput

MD Collaboration
Nursing

Collaboration



**Patient Satisfaction** 



**QAPI** 

# Moving Forward

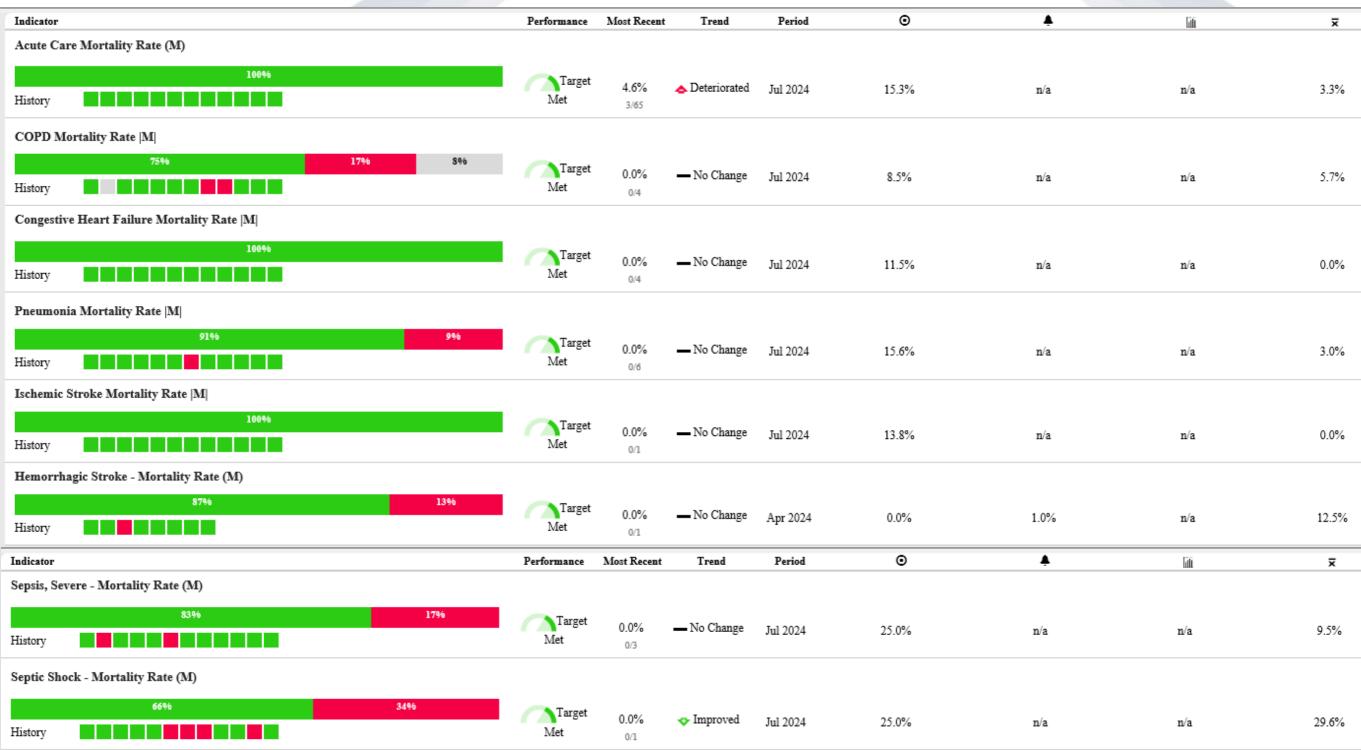
# Quality Indicator Performance & Plan

**Board Quality Presentation August 2024** 

Data For June & July 2024

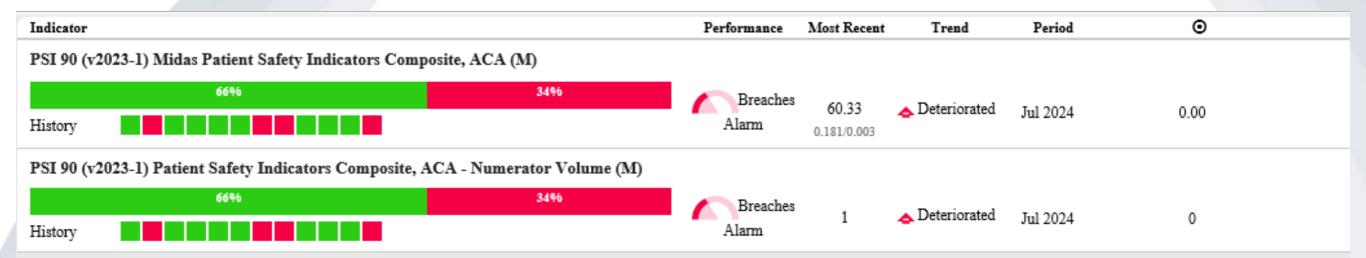


# Mortality



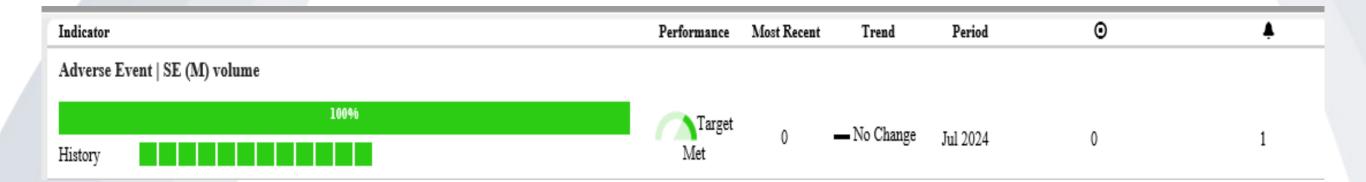


# **AHRQ Patient Safety Indicators**





# **Adverse Events Reporting**





# **Blood Products**

Indicator			Performance	Most Recent	Trend	Period	Θ	
Lab   Tran	sfusion Effectiveness (M)							
	8396	1796	Target	100.0%	— Na Chausa		400.007	00.007
History			Met	4/4	- No Change	Jul 2024	100.0%	99.0%
Lab   Tran	nsfusion Reaction (M)							
	91%	996	Target	0.0%	— Na Changa	T 1 2024	0.00/	1.007
History			Met	0/18	- No Change	Jul 2024	0.0%	1.0%



# Significant Medication Errors and Adverse Drug Reactions

# No Adverse Drug Reactions

Indicate	or		Performance	Most Recent	Trend	Period	0	
Rx-AD	Es-High Risk Med Errors Per 10,000 Doses (M)							
4	100%		Target	0.13	▲ Deteriorated	T 1 2024	1.10	2.00
History			Met	1/75405	_	Jul 2024	1.13	2.00
Rx-Ad	ministration Errors Per 10,000 Doses Dispensed							
	83%	17%	Target	0.80	▲ Deteriorated	T 1 2024	1.00	2.00
History			Met	6/75405	◆ Deteriorated	Jul 2024	1.00	3.00



# **Patient Falls**

Indicato	•	Performance	Most Recent	Trend	Period	0	<b>A</b>	ΔÚ	x
RM AC	CUTE FALL- All (M) per 1000 patient days								
	5896 1796 2596	Breaches	4.35	A Deteriorated	T 10004	2.75	400	,	2.20
History		Alarm	1/230	♠ Deteriorated	Jul 2024	3.75	4.00	n/a	2.39
RM AC	CUTE FALL- WITH INJURY (M) per 1000 patient days								
	9196	Target	0.00	- No Change	T-12024	2.75	400	(-	0.24
History		Met	0/230	- No Change	Jul 2024	3.75	4.00	n/a	0.34



# Readmissions

Indicator	Performance	Most Recent	Trend	Period	Θ	<b>A</b>	idi .	×
30-DV Inpatients - % Readmit to Acute Care within 30 Days (M)								
100%	Target	3.57%	❖ Improved	Jul 2024	15.30%	15.50%	n/a	6.17%
History History	Met	2/56	• •	V 41 2 V 2 V	13.3070	15.5070		0.1770
COPD, CMS Readm - % Readmit within 30 Days, ACA (M)								
58% 25% 17%	Target	0.0%	❖ Improved	Jul 2024	19.5%	20.0%	n/a	10.7%
History	Met	0/4	V	Vui 2024	15.576	20.070	100	10.770
HF, CMS Readm Rdctn - % Readmit within 30 Days, ACA (M)								
75% 25%	Target	0.0%	- No Change	Jul 2024	21.6%	22.0%	n/a	8.3%
History	Met	0/2		Jul 2024	21.076	22.076	Iva	6.576
Hip/Knee, CMS Readm Rdctn - % Readmit within 30 Days, ACA (M)								
5896 4296	Target	n/a		Jul 2024	4.0%	5.0%	n/a	0.0%
History	Undefined	0.40		Jul 2024	4.070	3.076	Iva	0.076
PNA, CMS Readm Rdctn - % Readmit within 30 Days, ACA (M)								
91%	Target	0.0%	- No Change	Jul 2024	16.6%	17.0%	n/a	3.3%
History	Met	0/4		Jul 2024	10.076	17.076	na .	3.376
Sepsis, Severe - % Readmit within 30 Days (M)								
8396 1796	Target	0.0%	- No Change	Jul 2024	12.0%	13.0%	n/a	0.0%
History	Met	0/3		Jul 2024	12.076	13.076	Iva	0.076
Septic Shock - % Readmit within 30 Days (M)								
100%	Target	0.0%	→ Improved	I-1 2024	12 20/	14.09/	<b>33</b> (a	0.30/
History	Met	0.076	V improved	Jul 2024	13.3%	14.0%	n/a	0.2%
						_	JUNUMA	

# **Blood Culture Contamination**

Indicator	Performance	Most Recent	Trend	Period	•	<b>.</b>	
Blood Cultures -Contamination Rate  LAB  (M)							
83% 17%	Target	1.3%	- Improved	T 1 2024	2.00/	4.007	
History	Met	1/75	Improved	Jul 2024	3.0%	4.0%	
Blood Cultures -Total Contamination Rate (M)							
5896 3396 996	Target	2.1%	⋄ Improved	F-1-2024	2.09/	4.007	
History	Met	4/189	₩ Improved	Jul 2024	3.0%	4.0%	
Blood Cultures -Contamination Rate  RN  (M)							
58% 8% 34% 34% SW 34% S	Target	2.7%	❖ Improved	Jul 2024	3.0%	4.0%	
History	Met	3/113	▼ Improved	Jul 2024	3.076	4.076	

Month	RN-Contaminated Culture Reports (num)	Blood Cultures Drawn by RN (den)	Percent	
Jul 2024	3	113	2.7%	
Jun 2024	4	126	3.2%	
May 2024	7	107	6.5%	
Apr 2024	1	105	1.0%	
Mar 2024	5	113	4.4%	
Feb 2024	5	86	5.8%	
Jan 2024	1	93	1.1%	
Dec 2023	3	112	2.7%	
Nov 2023	2	134	1.5%	
Oct 2023	3	122	2.5%	
Sep 2023	1	97	1.0%	
Aug 2023	5	94	5.3%	

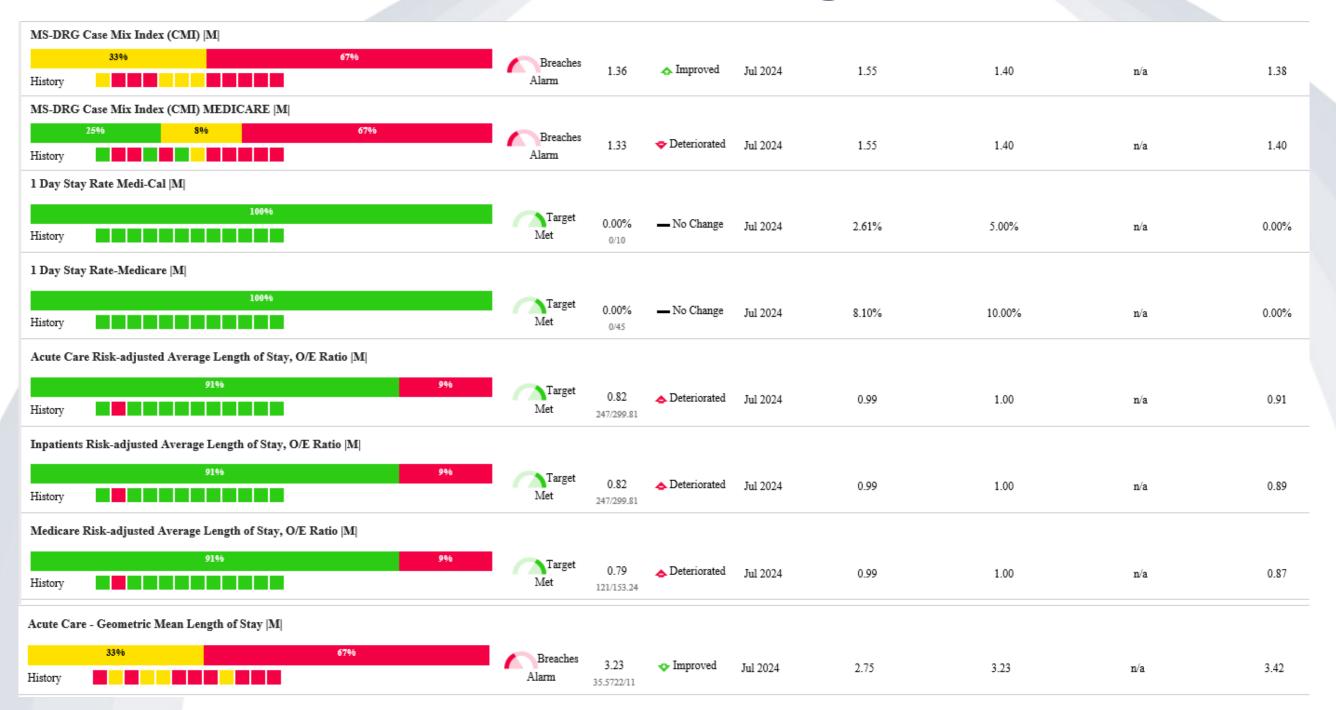


# **CIHQ Stroke Certification Measures**

Indicator	Performance	Most Recent	Trend	Period	•	<b>A</b>	lāli	≖
CDSTK-03 Median- Code Stroke Called  M  elapsed time (mins)								
100%	Target							
History History	Met	2	Improved	Jul 2024	10	11	n/a	4
CDSTK-04 Median- Door to Phys Eval  M  minutes								
100%	Target							
History History	Met	0	Improved	Jul 2024	10	11	n/a	1
CDSTK-05 Median- Door to CT Scanner  M elapsed time (minutes)								
91%	Torget							
History History	Target Met	13	▲ Deteriorated	Jul 2024	25	26	n/a	11
CDSTK-06 Median- Neuro Consult Contacted  M  minutes								
8396	Target							
History History	Met	22	Improved	Jul 2024	30	31	n/a	23
CDSTK-07 Median- CT Read by Radiology  M  minutes								
91% 9%	Target							
History History	Met	24	Improved	Jul 2024	45	46	n/a	26
CDSTK-08 Median- Lab Results Posted  M  minutes								
91% 9%	Target							
History	Met	30	♠ Deteriorated	Jul 2024	45	46	n/a	26
CDSTK-10 Median- Door to EKG Complete  M  minutes								
100%	Target							
History History	Met	29	▲ Deteriorated	Jul 2024	60	61	n/a	30
CDSTK-11 Median-Door to tPA Decision  M  minutes								
91% 9%	Target							
History History	Met	31	Improved	Jul 2024	60	61	n/a	36
CDSTK-12 Median-Door to tPA  M  minutes								
25% 50%	Target							
History History	Undefined	n/a		Jul 2024	60	61	n/a	66
-								

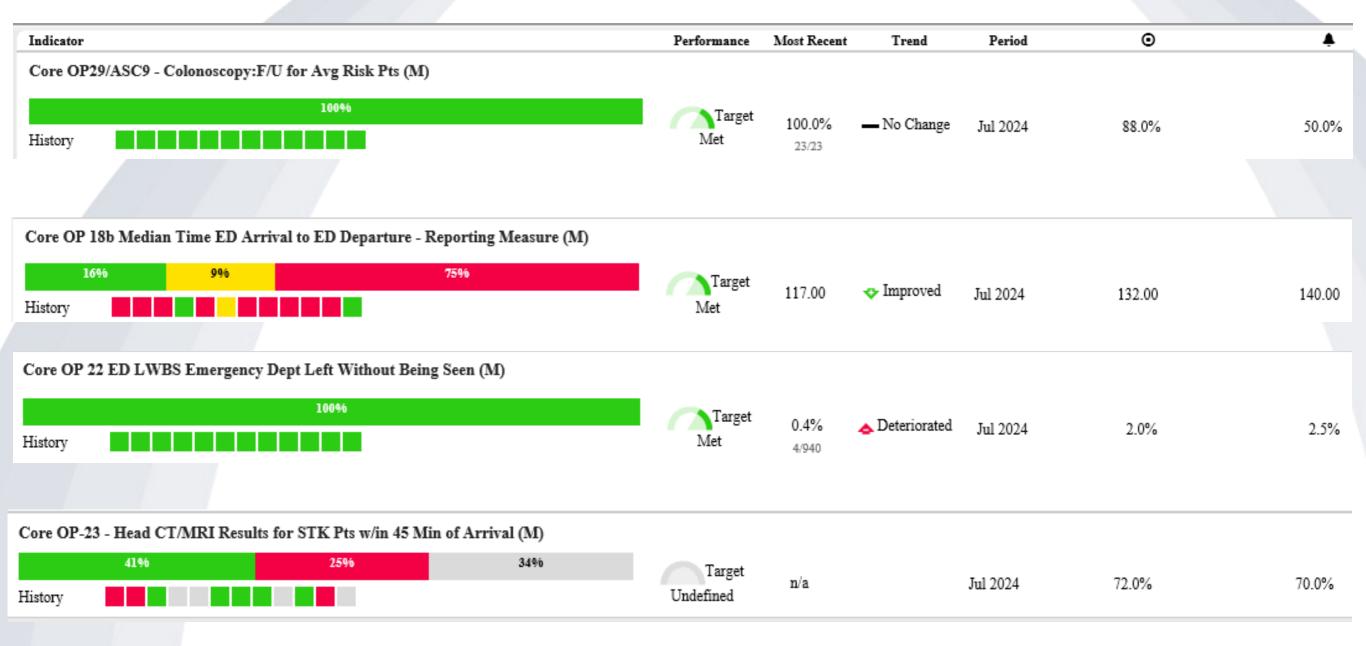


# **Utilization Management**



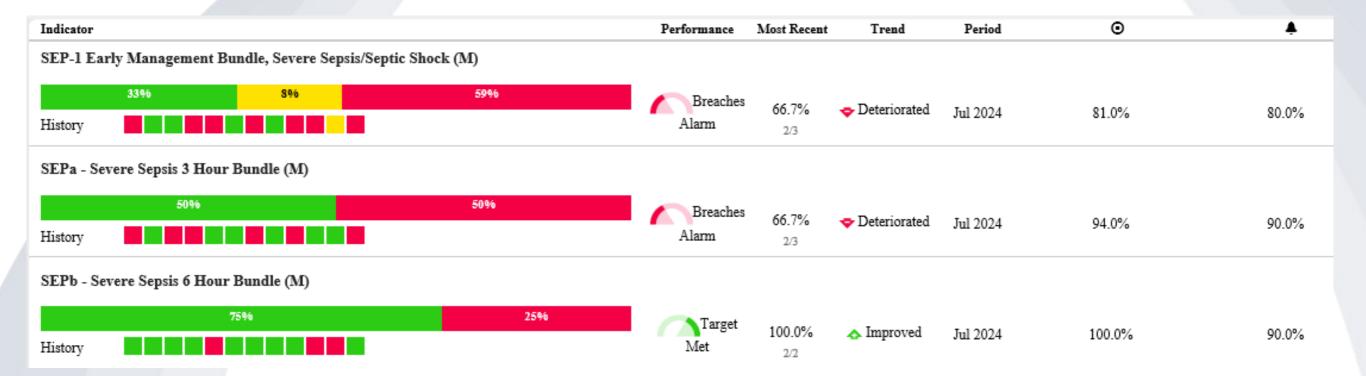


## **Core Measures**





# **Core Measures Sepsis**





# **Infection Prevention**

Indicator		Performance	Most Recent	Trend	Period	Θ	<b>.</b>
C-Survei	illance  HAI-C.DIFF Inpatient infections per 10k pt days  M						
	91%	Target					
History		Met	0	- No Change	Jul 2024	1	1
C-Survei	illance  HAI-CAUTI Inpatient infections per 10k patient days  M						
	91% 9%	Target		N- Ch			
History		Met	0	- No Change	Jul 2024	1	1
C-Survei	illance  HAI-CLABSI Inpatient infections per 10k patient days  M						
	100%	Target		N. (1)			
History		Met	0	- No Change	Jul 2024	1	1
C-Survei	illance  HAI-MRSA Inpatient infections per 10k patient days  M						
	100%	Target		N. (1)			
History		Met	0	- No Change	Jul 2024	1	1
C-Survei	illance  HAI-SSI infections per 10k pt days  M						
	91% 9%	Target		N. Character			
History		Met	0	- No Change	Jul 2024	1	1
A-02   H	and Hygiene Practices Monitored  M						
	83% S96 996	Targe					
History		Met	96% 48/50	♠ Improved	Jul 2024	90%	85%
			T0130				



# CIHQ Corrective Action Plan Monthly Compliance Condition Level Findings



монтн	# of pts	Met bundle	MD Order	RN Doc : flowsheet & q1hr
JAN	7	100%	100%	100%
FEB	9	82%	100%	82%
MAR	9	89%	89%	100%
APR	5	80%	80%	100%
MAY	8	63%	75%	63%
JUN	8	50%	63%	88%
JUL	6	67%	67%	100%



# **Q2 Patient Satisfaction: Inpatient**

**¬PressGaney** 

Generated: 8/19/2024 2:21 PM ET

Service Date Range:4/1/2024 - 6/30/2024

Sonoma Valley Hospital - System (15704)

### Inpatient

Questions	Тор Вох	n	STATE CA Score	All PG Database Score
*Rate hospital 0-10	80.95	42	74.22	71.19
*Recommend the hospital	80.49	41	74.99	70.19
*Comm w/ Nurses Domain Performance	79.07	(43)	79.14	79.74
*Nurses treat with courtesy/respect	93.02	43	85.25	86.40
*Nurses listen carefully to you	76.74	43	76.84	77.31
*Nurses expl in way you understand	67.44	43	75.34	75.50
*Response of Hosp Staff Domain Performance	61.44	(40)	64.11	64.55
*Call button help soon as wanted it	62.16	37	62.83	63.11
*Help toileting soon as you wanted	60.71	28	64.64	65.19
*Comm w/ Doctors Domain Performance	78.57	(43)	80.01	79.85
*Doctors treat with courtesy/respect	90.48	42	85.09	85.96
*Doctors listen carefully to you	73.81	42	78.79	78.35
*Doctors expl in way you understand	71.43	42	76.14	75.25
*Hospital Environment Domain Performance	65.48	(42)	64.30	66.51
*Cleanliness of hospital environment	76.19	42	74.87	73.32
*Quietness of hospital environment	54.76	42	53.72	59.65
*Comm About Medicines Domain Performance	62.93	(29)	62.44	60.98
*Tell you what new medicine was for	75.86	29	75.46	74.63
*Staff describe medicine side effect	50.00	26	49.41	47.29
*Discharge Information Domain Performance	95.91	(38)	88.19	86.85
*Staff talk about help when you left	97.37	38	86.54	85.23
*Info re symptoms/prob to look for	94.44	36	89.81	88.46
*Care Transitions Domain Performance	61.59	(42)	55.23	53.07
*Hosp staff took pref into account	58.97	39	49.49	47.55
*Good understanding managing health	56.10	41	54.43	52.29
*Understood purpose of taking meds	69.70	33	61.73	59.36



\*CAHPS

# Q2 Patient Satisfaction: Frequency Distribution

## **CAHPS Frequency Distribution Response Table**

CAIT 5 Trequericy Distribution Response Tubic					
Questions	Value	%	n		
*Rate hospital 0-10	0-Worst possible	0.00	0		
*Rate hospital 0-10	1	0.00	0		
*Rate hospital 0-10	2	0.00	0		
*Rate hospital 0-10	3	0.00	0		
*Rate hospital 0-10	4	0.00	0		
*Rate hospital 0-10	5	0.00	0		
*Rate hospital 0-10	6	2.38	1		
*Rate hospital 0-10	7	9.52	4		
*Rate hospital 0-10	8)	7.14	3		
*Rate hospital 0-10	<u>9</u>	33.33	14		
*Rate hospital 0-10	10-Best possible	47.62	20		
*Rate hospital 0-10	Total		42		
*Recommend the hospital	Definitely no	0.00	0		
*Recommend the hospital	Probably no	0.00	0		
*Recommend the hospital	Probably yes	(19.51)	8		
*Recommend the hospital	Definitely yes	80.49	33		
*Recommend the hospital	Total		41		



# Q2 Patient Satisfaction: Ambulatory Surgery



Generated: 8/19/2024 2:22 PM ET
Service Date Range: 4/1/2024 - 6/30/2024
Sonoma Valley Hospital - System (15704)

### **Ambulatory Surgery**

Questions	Тор Вох	n	All PG Database Score	State of California Score
*Facility rating 0-10	90.28	72	87.92	86.63
*Recommend the facility	84.51	71	85.05	84.06
*Communication Domain Performance	90.41	72	92.39	90.85
*Provided needed info re procedure	94.44	72	92.78	91.77
*Instructions good re preparation	94.44	72	94.45	93.21
*Procedure info easy to understand	90.28	72	93.91	92.94
*Anesthesia info easy to understand	91.04	67	94.55	92.97
*Anes side effect easy to understand	81.82	66	86.30	83.76
Facility/Personal Trtment Domain Performance	97.43	72	97.10	96.26
*Check-in run smoothly	95.83	72	95.61	94.33
*Facility clean	98.61	72	97.93	97.25
*Clerks and receptionists helpful	98.59	71	96.29	95.16
*Clerks and reception courteous	98.61	72	97.65	96.96
*Staff treat w/ courtesy, respect	97.18	71	98.10	97.56
*Staff ensure you were comfortable	95.77	71	97.00	96.38
Discharge Domain Performance	94.88	72	96.88	96.05
*Written discharge instructions	98.59	71	97.71	97.33
*Instructions regarding recovery	80.56	72	87.92	85.35
*Information re subsequent pain	98.28	58	98.49	98.07
*Information re subsequent nausea	97.73	44	98.59	97.88
*Information re subsequent bleeding	97.83	46	99.05	98.66
*Info on response to infection	96.30	54	99.55	99.33
Nurses Overall	89.95	71	88.82	87.14
Nurses concern for comfort	88.41	69	89.41	87.75
Info nurses gave to prep for proc	90.14	71	88.23	86.60
Nurses response concerns/questions	91.30	69	88.87	87.07
Care Provider Overall	79.50	72	84.09	80.85
CP explanation about proc	80.28	71	84.78	81.84
Info CP shared re how proc went	78.57	70	83.08	78.62
CP response to concerns/questions	84.29	70	86.49	83.75
CP expln why proc important	74.63	67	81.97	79.26
Staff worked together care for you	91.55	71	90.07	88.54



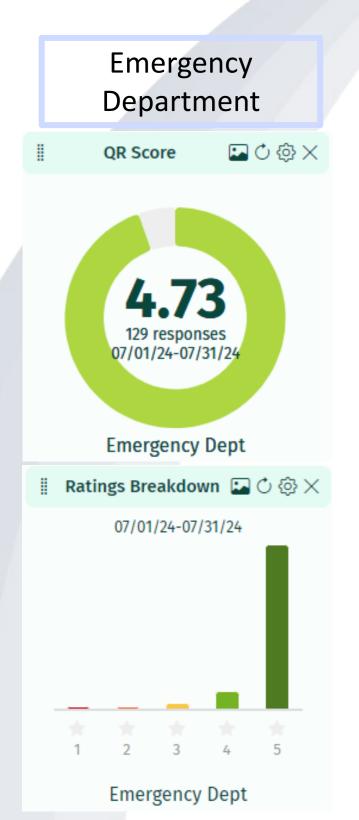
# Q2 Patient Satisfaction: Ambulatory Surgery Frequency Distribution

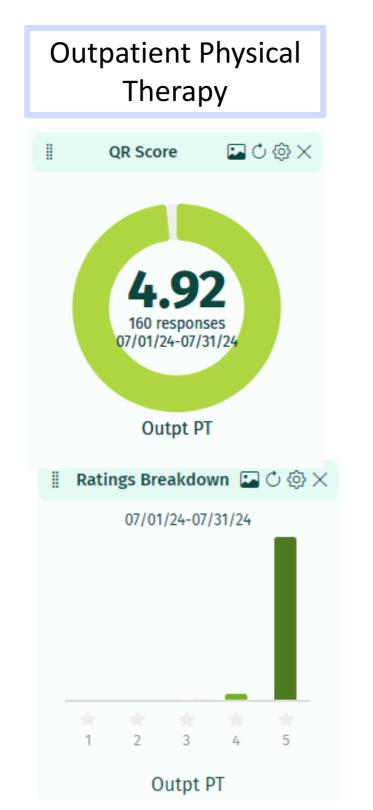
## **CAHPS Frequency Distribution Response Table**

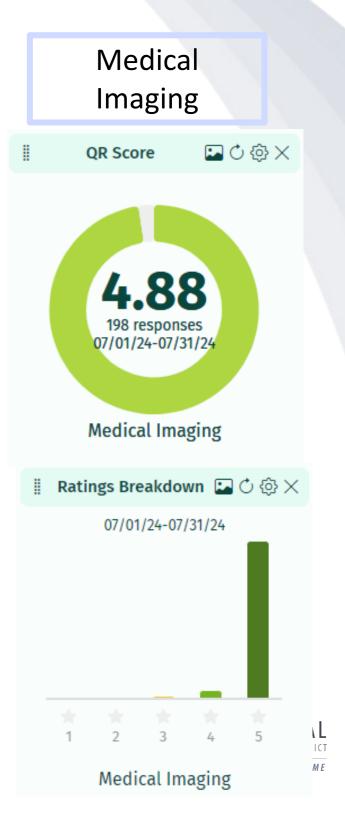
Questions	Value	%	n	
*Facility rating 0-10	0-Worst facility possible	0-Worst facility possible 0.00		
*Facility rating 0-10	1	0.00	0	
*Facility rating 0-10	2	0.00	0	
*Facility rating 0-10	3	0.00	0	
*Facility rating 0-10	4	0.00	0	
*Facility rating 0-10	5	(1.39)	1	
*Facility rating 0-10	6	0.00	0	
*Facility rating 0-10	7	(1.39)	1	
*Facility rating 0-10	8	6.94	(5)	
*Facility rating 0-10	9	(19.44)	14	
*Facility rating 0-10	(10-Best facility possible)	(70.83)	51	
*Facility rating 0-10	Total		72	
*Recommend the facility	Definitely no	0.00	0	
*Recommend the facility	Probably no	(1.41)	1	
*Recommend the facility	(Probably yes)	(14.08)	(10)	
*Recommend the facility	(Definitely yes)	84.51	60	



# Q Reviews: Rate My Hospital July 2024

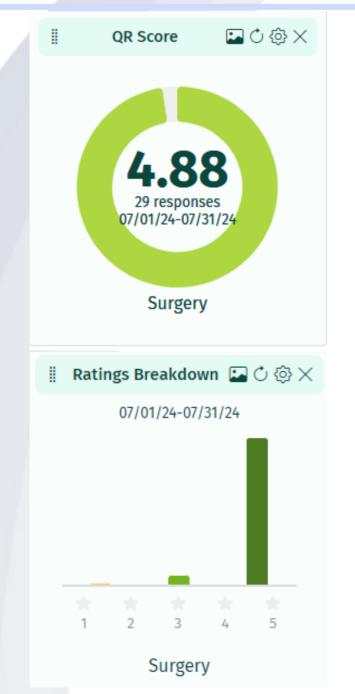


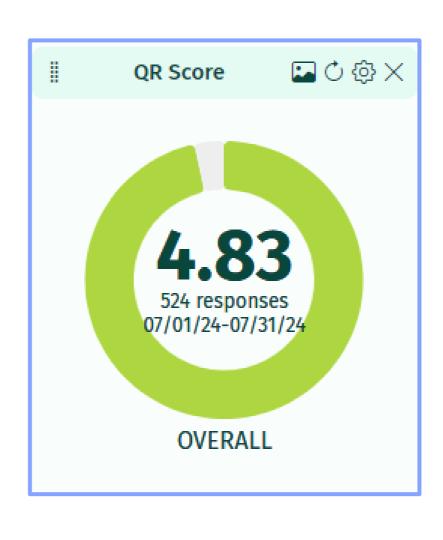




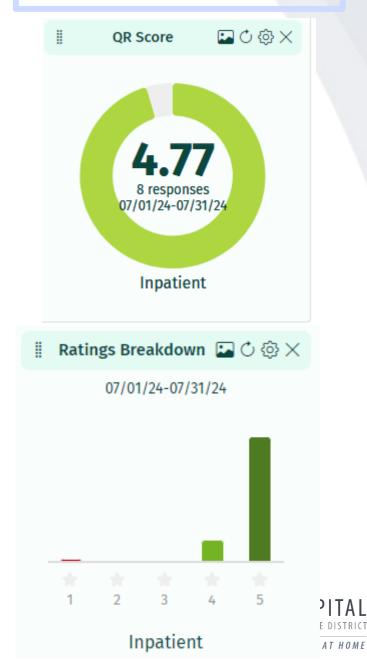
# Q Reviews: Rate My Hospital July 2024

# **Outpatient Surgery**





## **Inpatient Care**



#### **Document Tasks By Committee**

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

Sonoma Valley Hospital

Run by: Reese, Whitney (wreese) Run date: 08/23/2024 4:34 PM

Report Parameters

Filtered by: Document Set: - All Available Document Sets -

Committee: 07 BOD-Quality (P&P Review)

Include Current Tasks: Yes Include Upcoming Tasks: No

Grouped by: Committee

Sorted by: Document Title

Report Statistics

Total Documents: 34

Committee: 07 BOD-Quality (P&P Review)

Committee Members: Finn, Stacey (sfinn), Newman, Cindi (cnewman), Reese, Whitney (wreese)

Current Approval Tasks (due now)

 Document
 Task/Status
 Pending Since
 Days Pending

 Adverse Tissue Reactions
 Pending Approval
 8/15/2024
 8

Surgical Services/OR Dept

Summary Of Changes: Changed References

Moderators: Newman, Cindi (cnewman)
Lead Authors: Cornell, Kelli (kcornell)

ExpertReviewers: Medical Director-Surgical Services

Approvers: Winkler, Jessica (jwinkler) -> 01 P&P Committee - (Committee) -> 03 MS-Surgery Department - (Committee) -> 05 MS-

Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

Allografts and Tissue; Procurement for Surgical Procedures Requiring Pending Approval 8/15/2024 8

Grafting Surgical Services/OR Dept

Summary Of Changes: reviewed no changes, References updated

Moderators: Newman, Cindi (cnewman)
Lead Authors: Cornell, Kelli (kcornell)

ExpertReviewers: Medical Director-Surgical Services

Approvers: Winkler, Jessica (jwinkler) -> 01 P&P Committee - (Committee) -> 03 MS-Surgery Department - (Committee) -> 05 MS-

Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

Aminoglycoside Protocol Pending Approval 7/18/2024 36

Medication Management Policies (MM)

Summary Of Changes: Reviewed, no changes

Moderators: Kutza, Chris (ckutza), Newman, Cindi (cnewman)

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 (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

Assessment and Admission of OR Patients Pending Approval 8/15/2024 8

Surgical Services/OR Dept

Page 1 of 8 HospitalPORTAL

#### **Document Tasks by Committee**

#### Sonoma Valley Hospital

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

Run by: Reese, Whitney (wreese) Run date: 08/23/2024 4:34 PM

**Reviewed, Updated References** Summary Of Changes:

Newman, Cindi (cnewman) Moderators: Cornell, Kelli (kcornell) Lead Authors:

**Medical Director-Surgical Services** ExpertReviewers:

Approvers: Winkler, Jessica (jwinkler) -> 01 P&P Committee - (Committee) -> 03 MS-Surgery Department - (Committee) -> 05 MS-

Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

Attire Surgical in the Operating Room **Pending Approval** 

8/15/2024

8

Surgical Services/OR Dept

**Summary Of Changes:** Reviewed, Added line regarding nail polish, "should be freshly applied and free of chips", it was not previously addressed in

policy. Updated references.

Newman, Cindi (cnewman) Moderators: Lead Authors: Cornell, Kelli (kcornell)

ExpertReviewers: **IP-Infection Preventionist, Medical Director-Surgical Services** 

Winkler, Jessica (jwinkler) -> 01 P&P Committee - (Committee) -> 03 MS-Surgery Department - (Committee) -> 05 MS-Approvers:

Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

7/18/2024 36 Autopsy **Pending Approval** 

Medical Staff Policies (MS)

Summary Of Changes: No changes.

Newman, Cindi (cnewman) Moderators: Lead Authors: Kidd, Sabrina (skidd) ExpertReviewers: Taylor, Jane (jtaylor)

Winkler, Jessica (jwinkler) -> 01 P&P Committee - (Committee) -> 02 MS-Medicine Department - (Committee) -> 05 MS-Approvers:

Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

**Cardiac Rhythm Monitoring Pending Approval** 8/15/2024 8

Patient Care Policy

Removed reference to Spacelabs and exchanged for "electronic monitoring system." Clarified that an ED pt with cardiac **Summary Of Changes:** 

complaints will have a 12 lead EKG per orders, but also be placed on continuous cardiac monitor. Added that a patient on continuous cardiac monitoring must be accompanied by an RN if going off unit for diagnostic testing unless MD orders otherwise. Added documentation requirements on the actual rhythm strip (which is scanned into medical record) as well as

in the EHR. Added updated reference to EBSCO

Moderators: Newman, Cindi (cnewman) Winkler, Jessica (jwinkler) Lead Authors:

**Medical Director-Patient Care Services** ExpertReviewers:

00 Clinical P&P multidisciplinary review, 01 P&P Committee - (Committee) -> 02 MS-Medicine Department - (Committee) -> Approvers:

03 MS-Surgery Department - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) -

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

**Care of Patients Under Legal Restriction Pending Approval** 8/15/2024 8

Patient Care Policy

Reviewed, acronyms fixed. No content changes Summary Of Changes:

Moderators: Newman, Cindi (cnewman) Lead Authors: Taylor, Jane (jtaylor)

00 Clinical P&P multidisciplinary review, Medical Director-Patient Care Services ExpertReviewers:

Winkler, Jessica (jwinkler) -> 01 P&P Committee - (Committee) -> 02 MS-Medicine Department - (Committee) -> 03 MS-Approvers:

Surgery Department - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee)

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

HospitalPORTAL Page 2 of 8

#### **Document Tasks by Committee**

#### Sonoma Valley Hospital

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

Run by: Reese, Whitney (wreese) Run date: 08/23/2024 4:34 PM

Clinical Practice Guidelines Pending Approval 8/15/2024 8

Governance and Leadership Policies

Summary Of Changes: Reviewed. No changes

Moderators: Newman, Cindi (cnewman)
Lead Authors: Kidd, Sabrina (skidd)

ExpertReviewers: Cooper, Kylie (kcooper), Director, QUALITY (QDIR), Kutza, Chris (ckutza), Winkler, Jessica (jwinkler)

Approvers: 01 P&P Committee -> 02 MS-Medicine Department - (Committee) -> 03 MS-Surgery Department - (Committee) -> 04 MS-

Performance Improvement/Pharmacy & Therapeutics Committee - (Committee) -> 05 MS-Medical Executive - (Committee) -

> 07 BOD-Quality (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

Contact Plus Enteric Isolation Precautions Pending Approval 8/15/2024 8

Infection Prevention & Control Policies (IC)

Summary Of Changes: Amended to reflect changes in ordering specimens due to Epic protocols. Removed Paragon ordering instructions. Removed

reference to cohorting patients with same infection. When a patient is receiving antibiotics and he/she has a liquid stool, the RN is authorized to immediately obtain a stool specimen and order C. difficile testing per protocol order. Patients who are taking antibiotics at the time of admission and have loose stool will be placed on precautions and tested. Added to

purpose statement, reference to CDC and CIHQ. Added to provide ppe and education to visitors.

Moderators: Newman, Cindi (cnewman)

Lead Authors: Winkler, Jessica (jwinkler), Montecino, Stephanie (smontecino)

ExpertReviewers: Cooper, Kylie (kcooper), Director, QUALITY (QDIR)

Approvers: Winkler, Jessica (jwinkler) -> 01 P&P Committee - (Committee) -> 04 MS-Performance Improvement/Pharmacy &

Therapeutics Committee - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) -

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

CPOE Order Set Management Pending Approval 8/15/2024 8

Medical Staff Dept

Summary Of Changes: Revised to include new workflow since Epic Implementation (2023)

PROCEDURE

Sonoma Valley Hospital utilizes Epic Community Technologies (CT) as the organization's EHR via a contractual agreement

with Providence Health.

• The Providence Health clinical operations and clinical informatics governance groups are the identified owners of order set clinical content review and approval, wherein physicians, nurses, pharmacists, and/or other clinical staff as needed complete the clinical content review of order sets and establish the frequency of such reviews.

• Periodic review should occur based on the governance group's recommendation but should not exceed 2 years in frequency. The review will be documented for tracking and to provide evidence of review per survey guidelines.

 Testing prior to launch of new or updated order sets is managed by the Providence Health clinical operations and clinical informatics governance groups.

Moderators: Newman, Cindi (cnewman)
Lead Authors: Kidd, Sabrina (skidd)

ExpertReviewers: Kutza, Chris (ckutza), Winkler, Jessica (jwinkler)

Approvers: 00 Clinical P&P multidisciplinary review -> 01 P&P Committee - (Committee) -> 04 MS-Performance Improvement/Pharmacy

& Therapeutics Committee - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) -

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

Dispensing of Medication Pending Approval 7/18/2024 36

Medication Management Policies (MM)

Summary Of Changes: Reviewed, no changes

Moderators: Kutza, Chris (ckutza), Newman, Cindi (cnewman)

Lead Authors: Kutza, Chris (ckutza)

Page 3 of 8 HospitalPORTAL

#### **Document Tasks by Committee**

#### Sonoma Valley Hospital

Run by: Reese, Whitney (wreese)
Listing of currently pending and/or upcoming document tasks grouped by committee.

Run by: Reese, Whitney (wreese)
Run date: 08/23/2024 4:34 PM

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

Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

Infection Control Risk Assessment (ICRA) Pending Approval 7/18/2024 36

Infection Prevention & Control Policies (IC)

Summary Of Changes: Changed the word "Prevention" to "Control" for concordance with acronym: (ICRA) --Infection Control Risk Assessment.

Updated the current risk assessment year to 2024

Moderators: Newman, Cindi (cnewman)

Lead Authors: Montecino, Stephanie (smontecino)

ExpertReviewers: Cooper, Kylie (kcooper), Director, QUALITY (QDIR)

Approvers: Kidd, Sabrina (skidd) -> 01 P&P Committee - (Committee) -> 04 MS-Performance Improvement/Pharmacy & Therapeutics

Committee - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee) -> 09

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

Labeling Medications Pending Approval 7/18/2024 36

Medication Management Policies (MM)

Summary Of Changes: Reviewed, no changes

Moderators: Kutza, Chris (ckutza), Newman, Cindi (cnewman)

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 (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

Licensed Pharmacy Employee Theft or Impairment Pending Approval 7/18/2024 36

Medication Management Policies (MM)

Summary Of Changes: Reviewed, no changes

Moderators: Kutza, Chris (ckutza), Newman, Cindi (cnewman)

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 (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

Look Alike Sound Alike Pending Approval 7/18/2024 36

Medication Management Policies (MM)

Summary Of Changes: Reviewed, no changes

Moderators: Kutza, Chris (ckutza), Newman, Cindi (cnewman)

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 (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

Medication Recalls Pending Approval 7/18/2024 36

Medication Management Policies (MM)

Summary Of Changes: Reviewed, no changes

Moderators: Kutza, Chris (ckutza), Newman, Cindi (cnewman)

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 (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

NEW: MRI Emergency Procedures – Quench and Emergency Stop Pending Approval 8/15/2024 8

Radiology Services Policies (RD)

Page 4 of 8 HospitalPORTAL

Run by: Reese, Whitney (wreese) Run date: 08/23/2024 4:34 PM

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

Summary Of Changes: To Describe the difference between an Emergency Shutdown of the MRI and a Quench.

To Define reasons for both procedures. Safety of staff and emergency responder(s).

Moderators: Newman, Cindi (cnewman)
Lead Authors: Young, Dave (dyoung)

ExpertReviewers: 12-Safety Committee, Cooper, Kylie (kcooper), Director, QUALITY (QDIR), MANAGER, ED (edmanager), Medical Director-

Diagnostic Radiology, Tarca, Joseph (jtarca), Winkler, Jessica (jwinkler)

Approvers: Kuwahara, Dawn (dkuwahara) -> 01 P&P Committee - (Committee) -> 03 MS-Surgery Department - (Committee) -> 05 MS-

Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

NEW: MRI Safety Pending Approval 8/15/2024 8

Diagnostic Services Dept Policies

Summary Of Changes: Added details for new 3T scanner and updated verbiage reflecting two MRI scanners.

Added Definitions for MR zones and MR safe categories reflecting the American College of Radiology accepted terminology.

Added sections on-Implants/Stents Device Screening Orthopedic Implants

Heart Valves and Annuloplasty Rings Unconscious patient screening Heating and Thermal burn prevention

Patient Communication Hearing Protection

**Infection Control and Waste** 

Reporting Requirements for adverse events

Moderators: Newman, Cindi (cnewman)
Lead Authors: Young, Dave (dyoung)

ExpertReviewers: IP-Infection Preventionist, Medical Director-Diagnostic Radiology

Approvers: Kuwahara, Dawn (dkuwahara) -> 01 P&P Committee - (Committee) -> 03 MS-Surgery Department - (Committee) -> 05 MS-

Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

NEW: MRI-Quality Control of Equipment Pending Approval 8/15/2024 8

Radiology Services Policies (RD)

Summary Of Changes: **NEW:** 

Magnetic resonance imaging (MRI) scanners shall have routine quality control (QC) performed to include daily and/or weekly MRI technologist QC, an annual evaluation by a certified medical physicist, and routine preventative maintenance by

a service provider.

Moderators: Newman, Cindi (cnewman)
Lead Authors: Young, Dave (dyoung)

ExpertReviewers: Medical Director-Diagnostic Radiology

Approvers: Kuwahara, Dawn (dkuwahara) -> 01 P&P Committee - (Committee) -> 03 MS-Surgery Department - (Committee) -> 05 MS-

Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

Patient Safety Program Pending Approval 7/18/2024 36

Governance and Leadership Policies

Summary Of Changes: Reviewed no changes

Moderators: Newman, Cindi (cnewman)

Lead Authors: Cooper, Kylie (kcooper), Director, QUALITY (QDIR)

ExpertReviewers: Winkler, Jessica (jwinkler)

Approvers: Kidd, Sabrina (skidd) -> 01 P&P Committee - (Committee) -> 04 MS-Performance Improvement/Pharmacy & Therapeutics

Page 5 of 8 HospitalPORTAL

Run by: Reese, Whitney (wreese)
Listing of currently pending and/or upcoming document tasks grouped by committee.

Run date: 08/23/2024 4:34 PM

Committee - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee) -> 09

BOD-Board of Directors - (Committee)

Patient's Own Medication Procedure Pending Approval 7/18/2024 36

Pharmacy Dept

Summary Of Changes: Reviewed no changes

Moderators: Kutza, Chris (ckutza), Newman, Cindi (cnewman)

Lead Authors: Kutza, Chris (ckutza)

Approvers: Winkler, Jessica (jwinkler) -> 01 P&P Committee - (Committee) -> 04 MS-Performance Improvement/Pharmacy &

Therapeutics Committee - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) -

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

Patient's Rights to Access Protective Services Pending Approval 8/15/2024 8

Patient Rights Policies (PR)

Summary Of Changes: Reviewed, no changes

Moderators: Newman, Cindi (cnewman)

Lead Authors: Cooper, Kylie (kcooper), Director, QUALITY (QDIR)

ExpertReviewers: Kidd, Sabrina (skidd)

Approvers: Winkler, Jessica (jwinkler) -> 01 P&P Committee - (Committee) -> 02 MS-Medicine Department - (Committee) -> 03 MS-

Surgery Department - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee)

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

Piperacillin-Tazobactam Extended Infusion Dosing Pending Approval 7/18/2024 36

Medication Management Policies (MM)

Summary Of Changes: Reviewed, no changes

Moderators: Kutza, Chris (ckutza), Newman, Cindi (cnewman)

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 (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

Rapid Sequence Intubation (RSI) Kit Pending Approval 7/18/2024 36

Medication Management Policies (MM)

Summary Of Changes: Removed section pertaining to retrieving and returning controlled substances from Pyxis

Updated attachment contents list to include ketamine and midazolam, removed atropine, fentanyl, and vecuronium.

Updated Up To Date references used and date accessed

Moderators: Kutza, Chris (ckutza), Newman, Cindi (cnewman)

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 (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

Reporting of Quality Monitoring and Performance Pending Approval 7/18/2024 36

Quality Assessment & Perfomance Imp. Policies (QA)

Summary Of Changes: Reviewed. Grammatical changes. Fixed acronyms

Moderators: Newman, Cindi (cnewman)

Lead Authors: Cooper, Kylie (kcooper), Director, QUALITY (QDIR)

ExpertReviewers: 00 Clinical P&P multidisciplinary review, Newman, Cindi (cnewman)

Approvers: Kidd, Sabrina (skidd) -> 01 P&P Committee - (Committee) -> 04 MS-Performance Improvement/Pharmacy & Therapeutics

Committee - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee) -> 09

Page 6 of 8 HospitalPORTAL

Run by: Reese, Whitney (wreese)
Listing of currently pending and/or upcoming document tasks grouped by committee.

Run date: 08/23/2024 4:34 PM

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

RETIRE: Discharge ED Pending Approval 7/18/2024 36

**Emergency Dept** 

Summary Of Changes: Recommend retiring. It was last revised 2013. It is obsolete and references EHR programs we no longer have (Exit Writer,

Care Glance, etc..). Also, Ebsco has discharge guidance for specific types of patients - such as pediatrics, or inter-facility

transfers.

Moderators: Newman, Cindi (cnewman)

Lead Authors: Winkler, Jessica (jwinkler), MANAGER, ED (edmanager)

Approvers: 00 Clinical P&P multidisciplinary review -> 01 P&P Committee - (Committee) -> 02 MS-Medicine Department - (Committee) -

> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee) -> 09 BOD-Board of Directors -

(Committee)

RETIRE: E-notification in the ED 7010-9 Pending Approval 7/18/2024 36

**Emergency Dept** 

Summary Of Changes: Recommend retiring. Organizationally we strongly encourage staff to enter eNotification reports into Midas and there is an

organizational policy to address this. (# GL8610-144)

Moderators: Newman, Cindi (cnewman)

Lead Authors: Winkler, Jessica (jwinkler), MANAGER, ED (edmanager)

Approvers: 00 Clinical P&P multidisciplinary review -> 01 P&P Committee - (Committee) -> 02 MS-Medicine Department - (Committee) -

> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee) -> 09 BOD-Board of Directors -

(Committee)

RETIRE: Infusion Pump Cleaning, Disinfection and Storage Pending Approval 8/15/2024 8

Patient Care Policy

Summary Of Changes: Recommend retiring this policy. It is outdated. With the new pumps purchased a few years ago, the cleaning process is

changed (pumps are not brought to Central Sterile for cleaning). EVS is trained appropriately on the cleaning process of all

equipment including IV pumps. We no longer supply SNF or OB with IV pumps. We do not rent pumps.

Moderators: Newman, Cindi (cnewman)
Lead Authors: Tarca, Joseph (jtarca)

ExpertReviewers: 00 Clinical P&P multidisciplinary review, Medical Director-Patient Care Services

Approvers: Winkler, Jessica (jwinkler) -> 01 P&P Committee - (Committee) -> 02 MS-Medicine Department - (Committee) -> 03 MS-

Surgery Department - (Committee) -> 05 MS-Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee)

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

RETIRE: Pulmonary Function Screening Brochospasm Evaluation Pending Approval 7/18/2024 36

Respiratory Therapy Dept

Summary Of Changes: Retire- this is a department protocol/procedure, not a hospital policy.

Moderators: Newman, Cindi (cnewman)
Lead Authors: Taylor, Jane (jtaylor)

Approvers: Winkler, Jessica (jwinkler) -> 01 P&P Committee - (Committee) -> 02 MS-Medicine Department - (Committee) -> 05 MS-

Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

Sara Lite Sit-to-Stand Lift Pending Approval 7/18/2024 36

Patient Care Policy

Summary Of Changes: Reviewed- left as is

Moderators: Newman, Cindi (cnewman)
Lead Authors: Gallo, Christopher (cgallo)

Page 7 of 8 HospitalPORTAL

#### Sonoma Valley Hospital

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

Run by: Reese, Whitney (wreese) Run date: 08/23/2024 4:34 PM

ExpertReviewers: 00 Clinical P&P multidisciplinary review, Medical Director-Patient Care Services

Approvers: Winkler, Jessica (jwinkler) -> 01 P&P Committee - (Committee) -> 02 MS-Medicine Department - (Committee) -> 05 MS-

Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

Surge Planning-PharmacyPending Approval7/18/202436

Emergency Preparedness Policies (EP)

Summary Of Changes: Reviewed, no changes

Moderators: Newman, Cindi (cnewman)
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 (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

Virtual Radiology ServicesPending Approval8/15/20248

Diagnostic Services Dept Policies

Summary Of Changes: Updated hours of teleradiology coverage.

Updated escalation timelines if report isn't available within expected timeframes.

Updated current process steps for staff.

Moderators: Newman, Cindi (cnewman)
Lead Authors: Young, Dave (dyoung)

ExpertReviewers: Medical Director-Diagnostic Radiology

Approvers: Kuwahara, Dawn (dkuwahara) -> 01 P&P Committee - (Committee) -> 03 MS-Surgery Department - (Committee) -> 05 MS-

Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

Withdrawal of Life Sustaining Treatment Pending Approval 8/15/2024 8

Patient Rights Policies (PR)

Summary Of Changes: No changes

Moderators: Newman, Cindi (cnewman)
Lead Authors: Kidd, Sabrina (skidd)

ExpertReviewers: Cooper, Kylie (kcooper), Director, QUALITY (QDIR), Winkler, Jessica (jwinkler)

Approvers: 01 P&P Committee -> 02 MS-Medicine Department - (Committee) -> 03 MS-Surgery Department - (Committee) -> 05 MS-

Medical Executive - (Committee) -> 07 BOD-Quality (P&P Review) - (Committee) -> 09 BOD-Board of Directors - (Committee)

Page 8 of 8 HospitalPORTAL



DEPARTMENT: Medical Imaging EFFECTIVE:

REVIEW/REVISED:

#### **NEW POLICY**

To replace the legacy policy: MRI Safety

WHY:

Substantially changed to include best practices and updates for technology

OWNER:

Chief Ancillary Officer

**AUTHORS/REVIEWERS:** 

Director of Diagnostic Services Radiology Medical Director Board Quality Committee

**APPROVALS:** 

Policy & Procedure Team: Surgery Committee: Medical Executive Committee: The Board of Directors:



DEPARTMENT: Medical Imaging EFFECTIVE:

REVIEW/REVISED:

#### **PURPOSE:**

This policy is designed to provide a safe environment for patients, visitors and staff working in the MRI magnetic environment. The field near the magnet is strong enough to attract ferromagnetic objects with great force. These objects can become projectiles and cause severe injury, death or damage to the MRI equipment.

#### **POLICY:**

All MRI technologists will be trained in magnet safety. MRI personnel are responsible for screening all patients, family members, visitors or other staff members for ferromagnetic materials before entering the MRI scan room. MRI personnel are responsible for checking all equipment that enters the MRI room to make sure it is MRI safe or conditional.

#### **DEFINITIONS:**

**Zone I:** Accessible areas by the general public outside MR environment (public waiting room, hospital grounds, public hallways).

**Zone II:** Area before Zone III where individuals are accompanied by MR personnel.

**Zone III:** Restricted area before Zone IV that is controlled by MR personnel (control room).

**Zone IV:** Area controlled MR technologist. This is a potentially hazardous area with the presence of very strong magnetic fields. (MR Scan Room).

**MRI Safe:** items, components or material that do not pose any known hazards in MRI environments. Non-conducting, non-metallic and non-magnetic items (silicone, plastic, glass, etc.)

**MR Conditional:** items, components or material that pose no known hazards in a specified MRI environment with specified conditions of use.

**MR Unsafe:** items, components or materials that pose a potential or realistic risk or hazard in the MRI environment. These objects are considered to be a contraindication for an MR procedure and/or the individual to enter the MR environment.

#### PROCEDURE:

- \*\* The MRI magnetic field is on at all times, 24 hours a day, 7 days a week\*\*
- 1. Access to MR Zones 3 and 4 is for authorized personnel trained in magnetic safety.
- 2. All patients, family members, visitors and other personnel must be screened for ferromagnetic materials prior to entering the MRI Zones 3 and 4 by trained personnel. This screening will occur at multiple points for patients having MRI exams to ensure safety.



DEPARTMENT: Medical Imaging EFFECTIVE:

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#### **Outpatients:**

- At the time of the initial scheduling, the individual requesting the MRI exam is to provide
  clinical information pertinent to the exam. This information is sought to identify if the
  patient has a pacemaker, intracranial aneurysm clips, neurostimulators, retained metal in
  the eye or other implanted metallic objects that may be a contraindication due to the MRI
  radiofrequency or the presence of a strong magnetic field.
- Cardiac pacemakers or defibrillators are an absolute contraindication for MRI and are not allowed in the MRI Zone 4.
- If a patient has worked around metal and has the possibility of retained metal in their eyes, a pre-MRI orbit x-ray is done prior to patient being brought to the MRI trailer and is the responsibility of the MRI technologist scanning the patient to check to make sure this is completed prior to scanning patient.
- On the day the patient arrives for the MRI scan, they are requested to complete a patient screening and history form. The screening questionnaire helps determine if the individual has any of the various implants, materials, or devices that are contraindicated for the MRI procedure. The MRI technologist and / or radiologist review the screening form for completeness and will discuss any concerns with the patient prior to scanning.
- Patients are instructed to arrive in comfortable clothing without metal. However, if needed, the patient is taken to the dressing room and asked to remove street clothes and given a gown. Any person undergoing an MRI exam must remove all metallic attire (antimicrobial, moisture wicking, silver or copper-lined athletic attire or accessories), personal belongings and devices (i.e. watches, jewelry, clothing with snaps, hooks or zippers, etc.).
  - While SVH closely adheres to American College of Radiology guidelines regarding patient attire during their MRI exam, final decisions will be at the radiologist and MRI technologist discretion on a case-by-case basis.
- Prior to entering the MRI Zone 3, the patient is again questioned by the technologist regarding ferromagnetic materials.
- Any visitor or person accompanying a patient (family member, sitter, nurse) shall be screened like a patient and should remove watches, credit cards, keys, jewelry or any other loose objects as they can become projectiles in the magnetic field.
- Radiologists will not prescribe sedation or monitor sedated patients in the MRI trailer. If
  the patient can care for themselves while sedated (small amounts of valium, etc) and
  their respiratory functions are not compromised, then the patient may be scanned. If the
  patient cannot care for themselves, or if their respiratory system is compromised due to
  sedation, they will not be scanned.

#### **Inpatients and Emergency Department patients:**

• All inpatients scheduled for MRI exams should be verbally and visually screened prior to being transported to the MRI trailer. This is done to check for possible



DEPARTMENT: Medical Imaging EFFECTIVE:

REVIEW/REVISED:

contraindications and to determine if the patient is able to cooperate for the exam. If there are any questions about the ability of the patient to cooperate for the exam, the MRI technologist will consult with the radiologist.

- If an inpatient is unable to supply screening information due to their condition, a family member who knows the patient well should be contacted to answer questions. If no family member is available, the radiologist shall be notified and a screening skull and Chest x-ray shall be performed. Additional x-rays can be ordered if needed to clear the patient for the MRI exam.
- All inpatients shall be screened again when they arrive in the MRI Zone 3. Patients should be checked to be sure that they are not wearing any clothing that contains metal (snaps on patient gowns). ECG patches should be removed as they can heat during exam and replaced with MRI approved patches and leads. Metallic drug delivery patches must be removed with physician approval.
  - A handheld magnet will be used to screen for metal on or around the patients prior to bringing them into Zone 4, the scan room.
- Oxygen tanks are highly magnetic and should never be brought into Zone 4, the scan room! There are non-ferrous aluminum oxygen tanks available for MRI purposes located in MRI and the Imaging Department. These aluminum tanks are MR conditional and approved to use for patients requiring oxygen during their exams. These tanks are clearly labeled for MRI use and are in a white O2 tank cart.
  - Oxygen tanks will be tested by a MRI technologist with a handheld magnet prior to entering MR Zone 4.
- No medication pumps, monitoring devices, gurneys, wheelchairs or other patient devices are allowed in the scan room unless approved by the MRI technologist or radiologist. Use MR safe or compatible equipment only.
- Sedated and monitored patients are not permitted in the MRI scan room unless all persons and equipment are noted to be free of ferrous material (nurses, respiratory therapists, ventilators, cardiac monitors, IV pumps). All equipment and personnel prior to proceeding shall be checked for magnetism by the MRI technologist.

#### **CODE BLUE or RAPID RESPONSE:**

- Recognize and confirm cardiac and / or respiratory arrest or patient is in distress.
- MRI personnel will initiate Code Blue and Rapid Response procedures by dialing 5555, stating Code Blue or Rapid Response and the appropriate MRI scanner.
- Remove patient from MRI scan room. MRI technologists and assisting staff will initiate CPR outside MRI Zone 4 in a magnetically safe location. When other personnel arrive, begin transporting patient to the Emergency Department. The Code team will assume control of the code during transportation to the Emergency Department.
- Crash carts and other emergency equipment containing ferromagnetic material must not be brought into the scanning room Zone 4.



DEPARTMENT: Medical Imaging EFFECTIVE:

REVIEW/REVISED:

• In accordance with the State of California regulations, a Code Blue drill will be held in the mobile MRI van at least one time each year.

#### **IMPLANTS and DEVICE SCREENING**

- Implants and devices are evolving rapidly and must be thoroughly investigated if
  potential patients or individuals who will enter the magnetic environment indicate their
  presence.
- If the individual knows or has documentation as to the specific manufacturer and type of device, then the following steps are implemented:
   Look up the item by the manufacturer in the current Reference Manual for Magnetic Resonance Safety, Implants, and Devices by Frank G. Shellock, Ph.D. or on the web site: <a href="http://www.mrisafety.com">http://www.mrisafety.com</a>
- If the device or object is not listed there or has not been tested at the field that the
  patient is subjected to, then contact the manufacturer for documentation that the device
  is MRI safe, and the magnetic field strength(s) and conditions for safety. If this
  information is not available on the manufacturer's website, the manufacturer must be
  contacted directly and written documentation regarding the device must be faxed to the
  department.
- A Radiologist must be consulted about the safety of any device in question. For any device of unknown type or manufacture, the radiologist will make any decision to proceed with MRI based on the information provided by the ordering caregiver. If a potential contraindication is found on screening, and a decision is made to proceed with the MRI exam, resolution of this finding must be documented on the Patient Safety form or in a note and retained in the health record. If the safety of a device is unknown, the manufacturer must be contacted to provide a letter or written safety statement. If a medical device is investigated and it is determined the patient must not be imaged while the device is in place, the contraindication must be documented in the medical record. Likewise, complications resulting from MRI of a device must also be documented.

#### Coronary Artery Stent Guidelines:

A patient with a with coronary artery stent (including a drug-eluting, non-drug eluting or bare metal version), including situations where there are two or more stents or two or more overlapping stents, may undergo MRI using the following guidelines:

- 3-Tesla or less
- No restriction for the spatial gradient magnetic field
- Whole body averaged specific absorption rate (SAR) of 2-W/kg (i.e., operating in the Normal Operating Mode for the MR system)
- Maximum imaging time, 15 minutes per pulse sequence (multiple pulse sequences per patient are allowed)
  - o <a href="http://www.mrisafety.com/SafetyInformation-view.php?editid1=352">http://www.mrisafety.com/SafetyInformation-view.php?editid1=352</a>



DEPARTMENT: Medical Imaging EFFECTIVE:

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#### **Passive Orthopedic Implants Guidelines:**

A patient with a passive, internal orthopedic implant may undergo MRI using the following guidelines:

- 3-Tesla or less, including horizontal and vertical field MR system
- No restriction for the spatial gradient magnetic field
- For a passive, internal orthopedic implant located inside of the area of the transmitted RF energy, use a whole-body averaged specific absorption rate (SAR) of 2-W/kg (i.e., operating the MR system in the Normal Operating Mode)
- For a passive, internal orthopedic implant located entirely *outside* of the area of the transmitted RF energy, there is no restriction for the RF energy.
- Maximum imaging time, 15 minutes per pulse sequence (multiple pulse sequences are allowed)

**Exclusions:** Orthopedic implants that are excluded from these guidelines include external fixation systems, external cervical fixation systems (e.g., halo vests), traction devices, magnetically-controlled or programmable implants (e.g., PRECISE System, MAGEC System), bone fusion stimulation systems, prosthetic limbs, and prostheses with microprocessors.

https://www.mrisafety.com/SafetyInformation\_view.php?editid1=368

#### **Heart Valves and Annuloplasty Ring Guidelines:**

MRI at 3-Tesla and Heart Valve Prostheses and Annuloplasty Rings. Findings obtained at 3-Tesla for various heart valve prostheses and annuloplasty rings that underwent testing indicated that certain implants exhibit relatively minor magnetic field interactions. Similar to heart valve prostheses and annuloplasty rings tested at 1.5-Tesla, because the actual attractive forces exerted on these implants are deemed minimal compared to the force exerted by the beating heart, MR procedures at 3-Tesla are not considered to be hazardous for patients or individuals that have these devices. To date, for the heart valves that have been tested, MRI-related heating has not been shown to reach substantial levels.

o <a href="https://www.mrisafety.com/SafetyInformation\_view.php?editid1=179">https://www.mrisafety.com/SafetyInformation\_view.php?editid1=179</a>

## Below is a partial list of items that should not be brought into the MRI Zone 4 scanning room (unless clearly labeled MR safe or MR conditional). Lists are not exhaustive:

- O2 tanks ( use only aluminum, non-ferrous tanks with non-ferrous regulators and attachments, clearly labeled for MRI)
- Gurneys (there is one MRI safe table/gurney kept in the Imaging department for use in transporting or transferring the patient.
- Wheelchairs
- IV poles
- IV and pain pumps
- Crash carts



DEPARTMENT: Medical Imaging EFFECTIVE:

REVIEW/REVISED:

- Monitors
- Stethoscopes
- Mayo stands
- Clipboards
- Pens
- Paper clips
- Scissors
- Hemostats
- Pagers / telephones
- Chairs
- Tables
- Patient charts
- Keys
- Aerosol cans of disinfectant
- Buckets and mops
- Floor buffers
- Hammers, screwdrivers, drills, etc.
- Flashlights
- Fans
- CD or tape players
- Cameras

#### Below is a list of medical or surgical items that may be contraindicated for MRI Zone 4:

#### ABSOLUTELY CONTRAINDICATED

- Pacemaker, cardiac defibrillators and stimulators
- 3m Cochlear implants

#### More than likely contraindicated

- Intra-cranial aneurysm clips
- Retained metal in the eyes
- Eye prosthesis-unless removed
- Neurostimulators
- Biostimulators
- Tissue expanders
- Swan-Ganz catheter
- Implanted Insulin pump

#### Possibly contraindicated or effect scan quality



DEPARTMENT: Medical Imaging EFFECTIVE:

REVIEW/REVISED:

- Detached retinal surgery tacks
- Stapedectomy
- Hip prosthesis
- Orthopedic pins, screws, plates
- Intravascular stents or devices
- Vascular access ports
- Heart valves
- Dental devices and materials
- Penile implants
- Ontological implants
- Bullets, pellets and shrapnel
- Abdominal surgical clips
- Hearing aids
- Intraventricular shunt
- Dentures
- Diaphragm / IUD / pessary (a device worn in the vagina to support the uterus, remedy a malposition, or prevent conception)
- Wire mesh

#### PREVENTION of EXCESSIVE HEATING and THERMAL BURNS during MRI IMAGING

- Prepare the patient for the MR procedure by ensuring that there are no unnecessary
  metallic objects contacting the patient's skin (e.g., drug delivery patches with metallic
  components, jewelry, necklaces, bracelets, key chains, antimicrobial, moisture wicking,
  or metallic lined clothing or accessories, etc.).
- Prepare the patient for the MR procedure by using insulation material (i.e., appropriate padding) to prevent skin-to-skin contact points and the formation of "closed loops" from touching body parts.
- Insulating material (minimum recommended thickness, 1-cm) should be placed between the patient's skin and transmit RF coil that is used for the MR procedure (alternatively, the transmit RF coil itself should be padded).
- Use only electrically conductive devices, equipment, accessories (e.g., ECG leads, electrodes, etc.), and materials that have been thoroughly tested and determined to be safe conditional for MR procedures.
- Carefully follow specific MR safety criteria and recommendations for implants made from electrically conductive materials (e.g., bone fusion stimulators, neurostimulation systems, cardiac pacemakers, cochlear implants, etc.).
- Before using electrical equipment, check the integrity of the insulation and/or housing of all components including surface RF coils, monitoring leads, cables, and wires.
   Preventive maintenance will be practiced routinely for such equipment.



DEPARTMENT: Medical Imaging EFFECTIVE:

REVIEW/REVISED:

• Remove all non-essential electrically conductive materials from the MR system (i.e., unused surface RF coils, ECG leads, EEG leads, cables, wires, etc.).

- Keep electrically conductive materials that must remain in the MR system from directly contacting the patient by placing thermal and/or electrical insulation between the conductive material and the patient.
- Keep electrically conductive materials that must remain within the body transmit RF coil
  or other transmit RF coil of the MR system from forming conductive loops.
- Position electrically conductive materials to prevent "cross points". A cross point is the
  point where a cable crosses another cable, where a cable loops across itself, or where a
  cable touches either the patient or sides of the transmit RF coil more than once. Even
  the close proximity of conductive materials with each other should be avoided because
  cables and transmit RF coils can capacitively couple (without any contact or crossover)
  when placed close together.
- Position electrically conductive materials to exit down the center of the MR system (i.e., not along the side of the MR system or close to the transmit RF body coil or other transmit RF coil).
- Do not position electrically conductive materials across an external metallic prosthesis (e.g., external fixation device, cervical fixation device, etc.) or similar device that is in direct contact with the patient.
- Allow only properly trained individuals to operate devices (e.g., monitoring equipment) in the MR environment.
- Follow all manufacturer instructions for the proper operation and maintenance of physiologic monitoring or other similar electronic equipment intended for use during MR procedures.
- Electrical devices that do not appear to be operating properly during the MR procedure will be removed from the patient immediately.
- Closely monitor the patient during the MR procedure. If the patient reports sensations of heating or other unusual sensation, discontinue the MR procedure immediately and perform a thorough assessment of the situation.
- RF surface coil decoupling failures can cause localized RF power deposition levels to reach excessive levels. The MR system operator will recognize such a failure as a set of concentric semicircles in the tissue on the associated MR image or as an unusual amount of image non-uniformity related to the position of the transmit RF coil.

#### **UNCONSCIOUS or UNRESPONSIVE PATIENT SCREENING**

• If no reliable patient metal exposure history can be obtained, frontal radiography of the Skull, Chest and Abdomen to exclude metallic foreign objects is required (if recently obtained radiographs or CT studies of such areas are not available). Consultation with a Radiologist is required in these situations to determine the exact course of action.

#### **PATIENT COMMUNICATION**



DEPARTMENT: Medical Imaging EFFECTIVE:

REVIEW/REVISED:

 All Patients that are undergoing an MRI examination are in constant visual and verbal communication during MRI exams.

Patients are also provided with the MRI call ball and instructed on how to use it. Once
the call ball is squeezed, an alarm will sound in the MRI control room. The MRI scan will
be stopped and the MRI Technologist will respond to the alarm and address any
concerns.

#### **HEARING PROTECTION**

Patients or others in the scan room during an MRI examination will be urged to use ear
plugs and/or headphones that are supplied for use during an MRI study. Use of ear
plugs is encouraged since some patients may find the noise level unacceptable, and the
noise level may affect hearing.

#### INFECTION CONTROL and WASTE

- The MRI Department complies with Institution Infection prevention policies.
- MRI maintains a clean environment for patients, personnel and visitors which will prevent and reduce disease transmission.
- All MRI equipment is cleaned with a hospital-approved disinfectant or per manufacturer's recommendations. All employees follow standard precautions when handling contaminated or dirty medical equipment.
- The MRI Department ensures appropriate collection, storage and disposal of all medical waste and recyclables, in accordance with all applicable state regulations and ensures areas are clean and odor-free.
  - Only MRI technologists clean MR Zone 4. If occasional deep cleaning is needed the MRI technologist will supervise and assist any personnel involved in the cleaning.
  - Trash and linen collection or other tasks like supply stocking will only be done by an MRI technologist in Zone 4. Trash and dirty linens will be brought from Zone 4 to Zone 3 for general collection and disposal.

#### REPORTING REQUIREMENTS

- All adverse events, MR safety incidents, or "near incidents" that occur in the MR site
  must be documented in the Hospital's Safety Reporting System.
- The incidents must be reported to the Diagnostic Services Director, Imaging Services Medical Director, the MR Safety Officer in a timely manner via e-mail or phone call within 12 hours of occurrence).
- An MRI physicist can be consulted if necessary.



DEPARTMENT: Medical Imaging EFFECTIVE:

REVIEW/REVISED:

• The person involved and/or most knowledgeable about the event will complete an online incident report in a timely manner, or by end-of-shift.

#### **REFERENCES**

Magnetic Resonance-Bioeffects, Safety and patient Management: Second Edition-(Frank G. Shellock) Lippincott-Raven, 2022

Pocket Guide to MR procedures and metallic objects: Update 2001-(Frank G. Shellock), Lippincott Williams & Wilkins, 2001.

www.mrisafety.com

www.Kanal.upmc.edu/mrsafety.html

#### OWNER:

**Chief Ancillary Officer** 

#### **AUTHORS/REVIEWERS:**

Director of Diagnostic Services Radiology Medical Director Board Quality Committee

#### **APPROVALS:**

Policy & Procedure Team: Surgery Committee: Medical Executive Committee: The Board of Directors:



Stop

Page 1 of 5

DEPARTMENT: Organizational EFFECTIVE:

**REVISED:** 

#### **NEW POLICY**

#### WHY:

- Describe the difference between an *Emergency Shutdown* of the MRI and a *Quench*.
- Define reasons for both procedures.
- Safety of staff and emergency responder(s).

#### OWNER:

Chief Ancillary Officer

#### **AUTHORS/REVIEWERS:**

Director of Diagnostic Services
Medical Director of Radiology
Chief Ancillary Officer
Safety Officer/Safety Committee
Director of Quality & Risk Management
Emergency Management Coordinator
Board Quality Committee

#### **APPROVALS:**

Policy & Procedure Team: Surgery Committee: Medical Executive Committee: The Board of Directors:



SUBJECT: MRI Emergency Procedures – Quench and Emergency

Stop

Page 2 of 5

POLICY: RD8610-2405

**DEPARTMENT: Organizational** 

**EFFECTIVE:** 

**REVISED:** 

#### **PURPOSE:**

To provide guidelines for proper action in the event of an emergency shutdown or quench is needed or if it occurs unintentionally.

#### **DEFINITIONS:**

**Quench** - the process whereby there is a sudden loss of temperature in the magnet coils to absolute zero so that they cease to be super conducting and become resistive, thus eliminating the magnetic field. This results in helium escaping from the cryogen bath extremely rapidly. It may happen accidentally or can be manually instigated in the case of an emergency.

Quenching could be either unintentional/spontaneous or intentional/controlled. The most common causes of unintentional quenches are equipment malfunctions, improper filling of the cryogen tank, contaminants inside the cryostat and extreme magnetic or vibrational disturbances (such as those accompanying an earthquake). An intentional quench ("Magnet Stop" or "Quench" button is depressed) should only be performed under certain life-threatening situations, such as magnetic field life threatening event, or an un-contained fire in the scanner room.

**Emergency Power Stop** – The Emergency Stop button turns off all incoming electrical power to the magnet power distribution unit (PDU) but **the magnetic field is still up/active**. Shutting off power to the PDU may be required for life threatening situations, such as fire or flood. **Pressing the Emergency Stop button does not initiate a quench.** 

#### POLICY:

The "Magnet Stop" or "Quench" button should only be used under the following conditions (Intentional Quench):

- 1. Forces due to the magnetic field causing the patient or personnel injury.
- 2. Fire or other unexpected occurrences demanding immediate action and entry into Zone IV (magnet room) by emergency personnel or responders.
- 3. Any other situation that would require immediate relief from the forces of the magnetic field.

In the event a ferromagnetic object is attracted by the scanner and attached to it without causing any harm **DO NOT** try to pull the object away from the scanner as during this process there is risk for injuring yourself, others in the room, and damaging the scanner itself. Note that objects attracted to the side of the magnet may turn around on themselves during the removal process and end up lodging inside the bore, again potentially hurting someone.

Do not touch a quenched magnet. Under certain conditions an electrical potential of >1,000 volts could exist on the surface of the magnet.



Stop

Page 3 of 5

DEPARTMENT: Organizational EFFECTIVE:

**REVISED:** 

Quenching may cause severe and irreparable damage to the superconducting coils (magnet). A quench results in several days of downtime, and significant financial burden. It should only be activated in true emergencies:

- 1. It is a life-or-death situation in which a person is pinned to the magnet by a ferromagnetic object and there is possibility of loss of life or limb.
- 2. There is a fire that cannot be contained using the non-magnetic "conditional" fire extinguisher and requires the assistance of the fire department.

#### A quench is **NOT** necessary:

- 1. For an isolated projectile in the magnet, without patient risk; the service engineer should be contacted.
- 2. In an emergency event such as a Code Blue or fire if the patient can be removed safely.

Spontaneous quench is exceedingly rare. This type of quench is normally caused by a system failure. Normally associated with the shutdown of the cold head or chiller devices.

Each magnet is equipped with Emergency Stop buttons. These are the plain red buttons located in the scan room, control room, and are **not** under plastic. Shutting the power off may be required for situations such as:

- 1. Fire in the computer room.
- 2. Fire, sparks, loud noises emanating from the scanner room.
- 3. Flooding or sprinkler system goes off.
- 4. Catastrophic equipment failure.

#### PROCEDURE:

The process of a quench cannot be stopped.

MRI Staff Workflow – Intentional / Controlled Quench

- 1. Never attempt to test the Quench button.
- 2. Respond to audible warnings, i.e. O2 sensor.
- 3. Call 5555 code Triage to the MRI (back or front).
- 4. Remove the patient from the scanner room quickly and carefully. Remain calm and reassure the patient.
- 5. Close all doors when leaving the area.
- 6. The quench button is to be pressed by Level Two MR personnel. After hours, when the MRI unit is closed, a fire captain can initiate the quench after contacting the vendors service hotline and/or Level Two MR personnel to guide subsequent actions.
  - a. Please note that upon a quench it can take 1-2 minutes for the magnet field to dissipate.
- 7. Evacuate patient and personnel to safe location.



Stop

Page 4 of 5

DEPARTMENT: Organizational

**EFFECTIVE:** 

**REVISED:** 

8. Collaborate and assist with instructions to responding people, i.e. Facilities, Clinical Engineering, Sonoma Fire Department, Nurse Supervisor, MRSO.

- 9. Notify department leadership.
- 10. Call service provider to service the magnet.
- 11. Complete an online occurrence/incident report (eNotification).

MRI Staff Workflow – Unintentional / Spontaneous Quench

- 1. Respond to audible warnings, i.e. O2 sensor.
- 2. Call 5555 code Triage to the MRI (back or front).
- 3. If there is a patient in the scanner room, remove the patient quickly and carefully. Remain calm and reassure the patient.
- 4. Close all doors when leaving the area.
- 5. Evacuate patient and personnel to safe location.
- 6. Collaborate and assist with instructions to responding people, i.e. Facilities, Clinical Engineering, Sonoma Fire Department, Nurse Supervisor, MRSO.
- 7. Notify department leadership.
- 8. Call service provider to service the magnet.
- 9. Complete an online occurrence/incident report (eNotification).

#### **Cryogen Safety**

MR systems with a superconductive magnet must be equipped with a quench pipe that is vented to the outside of the facility. Nitrogen and helium are odorless, non-flammable and non-poisonous. When these gases evaporate, they form a cold mist with helium rising and nitrogen descending to the ground. They can be harmful due to displacement or dilution of oxygen in the air. If helium "clouds" or "fog" are present around or above the MR scanner, there is risk of asphyxiation and frostbite.

All helium may not be dissipated during a quench so no ferrous material, including rescue equipment, should be allowed in the magnet room (Zone 4) until proper clearance is given.

Please note that upon a quench it can take 1-2 minutes for the magnet field to dissipate.

In the event of a system quench, all personnel and patients must be evacuated from the MR scan room as quickly as safely feasible. Site access must also be restricted to all individuals until the arrival of MR equipment service personnel.

The appearance of white "clouds" or "fog" around or above the MR scanner is a possible sign of cryogen gases escaping the MRI system. If this is seen evacuation of the MR room is necessary and investigation and clearance by MR equipment service personnel is necessary.

MRI personnel will monitor the helium level and pressure daily whenever MRI services are performed.



Stop

Page 5 of 5

DEPARTMENT: Organizational EFFECTIVE:

**REVISED:** 

#### **REFERENCES:**

American College of Radiology Manual on MRI Safety (draft): 2024
ACR Guidance Document on MR Safe Practices: 2013
Siemens Healthineers. (2016, February 24) Operator Manual – MR System and Coils
Syngo MR XA60. Siemens Healthineers. https://www.siemens-healthineers.com/

#### OWNER:

Chief Ancillary Officer

#### **AUTHORS/REVIEWERS:**

Director of Diagnostic Services
Medical Director of Radiology
Chief Ancillary Officer
Safety Officer/Safety Committee
Director of Quality & Risk Management
Emergency Management Coordinator
Board Quality Committee

#### **APPROVALS:**

Policy & Procedure Team: Surgery Committee: Medical Executive Committee: The Board of Directors:



SUBJECT: MRI – Quality Control of Equipment POLICY: RD8610-2405

Page 1 of 3

DEPARTMENT: Organizational EFFECTIVE:

**REVISED:** 

#### **NEW POLICY**

#### WHY:

To ensure the Magnetic Resonance Imaging (MRI) equipment is operating in a safe manner for both the patient and operator(s) and is producing high quality images.

#### **OWNER:**

**Chief Ancillary Officer** 

#### **AUTHORS/REVIEWERS:**

Chief Ancillary Officer
Director of Diagnostic Services
Radiology Medical Director
Board Quality Committee



SUBJECT: MRI – Quality Control of Equipment POLICY: RD8610-2405

Page 2 of 3

DEPARTMENT: Organizational EFFECTIVE:

**REVISED:** 

#### **PURPOSE:**

To ensure the Magnetic Resonance Imaging (MRI) equipment is operating in a safe manner for both the patient and operator(s) and is producing high quality images.

#### **POLICY:**

Magnetic resonance imaging (MRI) scanners shall have routine quality control (QC) performed to include daily and/or weekly MRI technologist QC, an annual evaluation by a certified medical physicist, and routine preventative maintenance by a service provider.

#### PROCEDURE:

- A. QC by the MRI technologist will be performed in accordance with manufacturers guidelines.
- B. An annual evaluation by a certified medical physicist will be performed in accordance with the American College of Radiology MRI Quality Control Manual and Center for Improvement in Healthcare Quality (CIHQ) requirements. A report will be prepared to summarize the results of the evaluation and any corrective action needed. The evaluation will include at a minimum the following tests.
  - a. Image uniformity for all clinically used volume RF coils
  - b. Signal-to-noise for all clinically used RF coils
  - c. Slice thickness accuracy
  - d. Slice positioning and alignment accuracy
  - e. High contrast resolution
  - f. Low contrast resolution
  - g. Geometric accuracy
  - h. Magnetic field homogeneity
  - i. Artifact evaluation
- C. Regular preventative maintenance will be performed by a trained service provider.
- D. Documentation of all QC activities will be maintained.

#### **REFERENCES:**

American College of Radiology, 2015 Magnetic Resonance Imaging Quality Control Manual CIHQ Accreditation Standard & Requirement(s), RD-1,E and RD-4,B



SUBJECT: MRI – Quality Control of Equipment POLICY: RD8610-2405

Page 3 of 3

DEPARTMENT: Organizational EFFECTIVE:

**REVISED:** 

Siemens Healthineers. (2016, February 24) Operator Manual – MR System and Coils Syngo MR XA60. Siemens Healthineers. https://www.siemens-healthineers.com/

#### **OWNER:**

Chief Ancillary Officer

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Director of Diagnostic Services Radiology Medical Director Board Quality Committee

#### **APPROVALS:**

Policy & Procedure Team: Surgery Committee: Medical Executive Committee: The Board of Directors: