Contra Costa
Regional Medical Center
& Health Centers
A Division of Contra Costa Health Services

To: Joint Conference Committee Members

From: Supervisor John Gioia – District I
Supervisor Diane Burgis – District III

By: Samir Shah MD, Chief Executive Officer
Contra Costa Regional Medical Center

Date: May 2, 2022

Subject: Meeting Notice
Joint Conference Committee

Due to the Shelter-in-Place Order, this meeting will not be held in person. You can access the meeting remotely by using the information on page 3 of this agenda.

JOINT CONFERENCE COMMITTEE

VIA ZOOM WEBINAR-Instructions on Page Three of This Agenda

AGENDA

May 2, 2022, from 1:00 – 2:00 pm

AGENDA ITEM	RECOMMENDATION
I. **CALL TO ORDER and INTRODUCTIONS** Meeting Chair- Supervisor John Gioia, District I	Inform
II. **APPROVAL OF MINUTES** – March 7, 2022 Supervisor Gioia	Inform/Action
III. **PUBLIC COMMENT** Supervisor Gioia *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 two minutes or less. Under State law, matters presented under this item cannot be discussed or acted upon by the Board 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 Board consideration.*	Inform
V. **ADMINISTRATIVE UPDATE** Samir B. Shah, MD, Chief Executive Officer/Chief Medical Officer A. Covid Update Sergio Urcuyo, M.D., Hospital Medical Director B. Measure X C. Appointment Unit Update D. QIP Update Nooshin Abtahi, QIP Lead	Inform

AGENDA ITEM	RECOMMENDATION
VI. **MEDICAL STAFF UPDATE** Kristin Moeller, M.D., Medical Staff President A. Patient Care Policies for CCRMC/HCs, includes - Policies, MEC approved, postponed from March 7 meeting (Attachment A) - Policies, MEC approved for May 2 meeting (Attachment B)	Inform/Consent
VII. **SAFETY AND QUALITY UPDATES** Courtney Beach, M.D., Chief, Hospital Medicine A. PSPIC/Quality Update B. Annual Medical Error Reduction Plan Shideh Ataii, Director, Pharmacy Services	Inform Inform/Consent
VIII. **ADJOURN**	Inform
IX. **NEXT MEETING**: Monday, June 27, 2022	

Joint Conference Committee observes Ralph M. Brown Act open meeting law procedures. Reasonable accommodations will be provided for persons with disabilities planning to attend. Contact the staff person listed below at least 72 hours before the meeting. Any disclosable public records related to an open session item on a regular meeting agenda and distributed by the County to a majority of members of the Joint Conference Committee prior to that meeting are available for public inspection at 2500 Alhambra Avenue during normal business hours. Public comment may also be submitted via electronic mail at least one full workday prior to the published meeting time. For information contact Karin Stryker – karin.stryker@cchealth.org, 925-234-1909.

Zoom Webinar

Meeting Instructions

Please click the link below to join the webinar:

https://cccounty-us.zoom.us/j/81374486051?pwd=eFBWTXVFcUNlcTBFUjdoMWFtWVNIZz09
Passcode: 694471

Or Telephone:

Dial:

USA 214 765 0478 US Toll

USA 888 278 0254 US Toll-free

Conference code: 154228

Or an H.323/SIP room system:

H.323: 162.255.37.11 (US West) or 162.255.36.11 (US East)

Meeting ID: 813 7448 6051

Passcode: 694471

SIP: 81374486051@zoomcrc.com

Passcode: 694471

Contra Costa
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JOINT CONFERENCE COMMITTEE

MINUTES

March 7, 2022, from 1:00 – 2:00 pm

Due to the Shelter-in-Place Order, this meeting will not be held in person.

VOTING MEMBERS PRESENT: Supervisor John Gioia, District I; Dr. Courtney Beach, Chair, Hospital Medicine; Supervisor Diane Burgis, District 3; Katherine Goheen; Ashley Porteous NON-VOTING MEMBERS PRESENT: Samir Shah MD, Chief Executive Officer/Chief Medical Officer; Kristin Moeller MD, Medical Staff President; Anna Roth, R.N. NON-VOTING MEMBERS ABSENT: None. GUESTS PRESENT: Jaspreet Benepal RN, Chief Nursing Officer; Sergio Urcuyo MD, Hospital Medical Director; Karin Stryker, Director, Safety and Performance Improvement; David Runt, Chief Operations Officer. Helena Martey, Director of Ambulatory Care; Ira-Beda Sabio, Director of Inpatient Nursing; Gabriela Sullivan MD, Ambulatory and Specialty Medical Director; Rajiv Pramanik, Chief Medical Informatics Officer; William Walker, Director of Health Services; Nancy Hendra, Director of Infection Prevention and Control Program; Kimberly McCarl, Communications Officer; Enrique Henriquez, Chief of Security; Roberto Vargas, Director, Safety and Performance Improvement

AGENDA ITEM	RECOMMENDATION
I. **CALL TO ORDER and INTRODUCTIONS** Meeting Chair- Supervisor John Gioia, District I	***Inform***
II. **APPROVAL OF MINUTES** – December 13, 2021 Supervisor Gioia ***In open session, voting members of Contra Costa Regional Medical Center Joint Conference Committee voted to accept the December 13, 2021, Joint Conference Committee minutes***	***Motion:*** ***By Moeller*** ***Seconded by Gioia*** ***Ayes:*** ***Burgis, Goheen, Porteous*** ***Absent: None*** ***Abstain: None***
III. **PUBLIC COMMENT** Supervisor Gioia ***No public comment***	***Inform***
IV. GOVERNANCE Kristin Moeller, M.D., Medical Staff President **A.** Governing Authority Bylaws Draft ***The 2022 governing bylaws were presented after County Council review. The primary change was adding the CNO as a non-voting member of JCC. The bylaws were approved as presented.*** **B.** Announce Medical Staff Representatives to the Joint Conference Committee for 2022 – Dr. Katherine Goheen and Dr. Ashley Porteous	***Inform***

Dr. Ashley Porteous and Dr. Katherine Goheen were presented as the medical staff representatives for the current period. Dr. Courtney Beach and Dr. Andrea Sandler were thanked for their service in 2020 and 2021.	
AGENDA ITEM	**RECOMMENDATION**
V. ADMINISTRATIVE UPDATE Samir B. Shah, MD, Chief Executive Officer/Chief Medical Officer A. Measure X ***Dr. Shah noted that the Measure X-related construction projects were approved by the Board of Supervisors earlier this year. Public Works is currently assisting CCRMC in its search for a construction management firm through a Request for Qualifications. Six qualified companies have been evaluated to date. It was noted that these Measure X projects include PES expansion, an Interventional Radiology suite, a new Medical Clinic Office building, and a Parking Structure.*** B. Covid Update ***CCRMC continues to experience lower Covid admissions, which trends with the regional and state data. There are still some staff experiencing illness. We are moving away from emergency management mode to chronic management with known triggers. We will have a clearly laid out plan that works to normalize COVID into our standard workflows.*** C. Materials Management Value Stream Map event ***Dr. Shah announced that CCRMC was undergoing a Value Stream Mapping event in our Materials Management department. CCRMC has had significant and continuous issues with materials, procurement, vendor payment, order assembly, and interactions with the various departments involved with the purchasing or contracting process. A series of rapid improvement events will be held very soon after the mapping concludes this week.***	***Inform***
VI. MEDICAL STAFF UPDATE Kristin Moeller, M.D., Medical Staff President A. Patient Care Policies for CCRMC/HCs ***Supervisor Gioia reported that when he cut and pasted the link provided on the agenda, it did not allow access to the policies. Karin Stryker will send the policies with the agenda for following meetings. These policies presented today will be moved to the May 2022 meeting for inform and consent.***	***Inform/Consent***
VII. SAFETY AND QUALITY UPDATES Courtney Beach M.D., Hospital Medical Director A. PSPIC/Quality Update ***Dr. Beach noted the following successes:*** • ***HCAHPS scores for hospital cleanliness are higher than target*** • ***Zero patient harm index for medication errors*** • ***We continue to be on target for falls prevention*** • ***Goals met for CLABSI, CAUTI, and MRSA bacteremia*** • ***Received Leapfrog grade: B*** • ***Medication error rate from March 2020 shows we continue to meet the TJC goal for 0 harm related to medication errors.***	***Inform***

Noted areas for improvement: • ***Speak up for Safety – encourages safety event (SERS) reporting. Found in past years that SERS reporting increases when we roll out the Culture of Safety surveys.*** • ***Further multidisciplinary work ongoing projects, SERS and corrective action plans. Trying to bring in additional physician involvement in all these projects*** • ***Increase education and advertising in rapid response training*** ***We are planning a Culture of Safety survey this spring. Expecting site visits by CDPH and TJC.***	
VIII. **ADJOURN to Professional Affairs Committee** ***There is no PAC meeting this time. Karin Stryker will repost a corrected agenda to reflect that there is no PAC meeting.***	***Inform***
IX. **NEXT MEETING**: Monday, May 2, 2022	
Minutes approved by Chair: Supervisor John Gioia, District I _____ _____ **Supervisor John Gioia** **Date** ***Minutes by Shanazz Ahmad***	

CONTRA COSTA
HEALTH SERVICES

Quality Incentive Program Update May 2020

Nooshin Abtahi, MHA
Health Services Administrator
QIP Lead

Quality Incentive Pool (QIP)

- New Quality Incentive Project (QIP) has been built upon prior value-based initiatives, PRIME and QIP, which ended in December 2020.
- QIP PY4 started in January 2021 and is approved by CMS for three years, PY4-6, Jan 1, 2021, to Dec 31, 2023
- We are required to have 40 quality metrics from both inpatient and outpatient settings
- The selected measures evaluate the performance of different aspects of the health care delivery system, including preventative care, acute and chronic disease management, behavioral health, maternal health, patient safety, care transition, and proper utilization

QIP Funding

- DHCS will determine the funding amount after the end of the measurement year based on the number of unduplicated managed care beneficiaries with at least one service at the public health entity

- The total allocated budget for the QIP PY4 statewide is $1.8 billion, and based on the prior allocation history; we predict the CCHS's share will be about $100 million

- We are set to realize all the allocated fund for 2021

QIP PY4 Achievements

- 2021 was a challenging year for population health improvement activities due to performance decline in 2020, frequent COVID surges, staff shortage, competing priorities, massive backlog, and patients' hesitancy to come for in-person visits
- Despite all challenges, multidisciplinary teams in CCRMC achieved notable improvement using both traditional and innovative methodologies in reaching out to the patients and delivering the required services
- Based on the unofficial, preliminary data shared by the Safety Net Institute, CCRMC was the best performing health entity in 2021
- We achieved the performance target for all 40 measures and overperformed in 18 measures

QIP PY4 Achievements

- Improved the performance rate for Child and Adolescent well Care Visits (3-21 years old) by 11.5% in the total population and 14.5% in African American population and reduced the disparity gap between the total and African American population from 10% to 6%

- Significant improvement in Diabetes Eye Exam (4.3 percentage increase), Diabetes HBA1c Control (4.8 percentage increase), and Hypertension Control (1.6 percentage increase)

- Significant increase in cancer screening services in 2021:
  - ✓ 4000 Breast Cancer Screening (2000 in 2020)
  - ✓ 6300 Cervical Cancer Screening (3300 in 2020)
  - ✓ 8000 Colorectal Cancer Screening (5400 in 2020)

Because of the significant improvement in the calendar year 2021, CCRMC started the PY5 with a strong base and is on the path to realize all the QIP PY5 funding

MERP PLAN FOR THE YEAR 2022

PRESCRIBING

- **New Processes:**
  - Pharmacy to explore using a Bayesian program within Vigilanz® to dose vancomycin based on AUC/MIC monitoring.
  - Implement new antibiotic order set, assess utilization and promote use.
  - Pharmacy to work with ccLink IT to optimize the high potency pain medication order set section with oral opiate medications to ensure safe and appropriate use.
  - Pharmacy to begin working with ccLink IT to optimize antidote orders in ccLink to promote safe, correct and effective use.

- **Continue the following:**
  - Continue all Pharmacy Monitors in ccLink and Vigilanz®: DDI checks, clinical conditions, lab monitors and reviewing therapeutic appropriateness, etc. Monitors will be optimized as needed.
  - Continue all processes under the Antimicrobial Stewardship Program (ASP).
  - Continue reviewing all order sets on a multidisciplinary note in ccLink as opportunities for improvement are identified, and work on new order sets as needed with the multidisciplinary trio team.
  - Continue reviewing external resources (ex: ISMP newsletters and self-assessments, FDA alerts, etc.), to analyze current practice at CCRMC and improve processes according to the most recent guidelines and literature.
  - Continue to optimize insulin prescribing through ongoing provider education. Continue the physician oversight process and provide physician education when needed. Continue to optimize order sets and panels involving insulin to further prevent hypoglycemic events.
  - ADC access:
    - Continue to monitor and trend medication overrides and provide feedback to the end users.
    - Continue to monitor ADC access to ensure that unauthorized personnel (i.e. upon departure or termination of employment of nursing/anesthesiology/pharmacy staff, etc.) are removed from the system upon leaving to prevent unauthorized access to medications.
  - Continue to utilize the rescue medication report as an educational tool for medical staff.
  - Multimodal pain management strategies to continue to be optimized via various means as a part of ERAS (early recovery after surgery).
  - Opioid stewardship committee to continue meeting quarterly to ensure appropriate use of opiates.

PRESCRIPTION ORDER COMMUNICATION

- **New Processes:**
  - New Process for vancomycin trough monitoring: BPA to alert nursing if a vancomycin trough is due within 2 hours of a vancomycin dose in addition to the robust process already in place.

- **Continue the following:**
  - Continue reviewing all order sets on a multidisciplinary note in ccLink as opportunities for improvement are identified, and work on new order sets as needed with the multidisciplinary trio team.
  - Continue the Transitions of Care (TC) Program to 1) Minimize medication transcribing errors upon admission and discharge with effective communication with "High Risk" patients (as defined by CCRMC) and to retail pharmacies and 2) Ensure medication understanding and adherence by educating patients.
  - Multimodal pain management strategies to continue to be optimized via various means as a part of ERAS (early recovery after surgery).
  - Opioid stewardship committee to continue meeting quarterly to ensure appropriate use of opiates through various means (i.e. order set modification, education, etc.)
  - Continue monitoring for duplications in therapy and optimize order sets/order panels as needed to ensure effective prescription order communication of PRN medications.
  - Continue to create guidelines and order-sets pertaining to COVID-19 related treatments to ensure safe and appropriate use of the medications.
  - Pharmacy to work with ccLink IT to optimize medication orders to prevent any prescription order communication errors (ex: atropine order)

PRODUCT LABELING, PACKAGING AND NOMENCLATURE

- **New Processes:**
  - Medication bins for Sulfa**SALA**zine and sulfa**DIAZINE** to be physically separated in the pharmacy in the pharmacy to prevent any medication errors. Pharmacy to also update LASA list at CCRMC to include Sulfa**SALA**zine – sulfa**DIAZINE.**

- **Continue the following:**
  - In the face of drug shortages, appropriate assessment of products available to be conducted and information relayed to the appropriate disciplines (pharmacy staff, nursing staff, medical staff, etc.). Appropriate changes to be made in the electronic health record to avoid transcribing errors, order set errors and medication order errors.
  - Pharmacy and nursing to continue assessing compliance with accurate labeling per nursing of IV solutions retrieved from Medline carts, along with MDVs expiration labeling.
  - Continue reviewing external resources to analyze current practice at CCRMC and improve processes according to the most recent guidelines and literature.
  - Continue Kit Check labeling and barcoding to optimize PAR levels of medications in anesthesia workstations in the OR and crash carts.
  - Continue barcoding upon dispensation and administration.
  - Continue to create guidelines, processes and master formulas for COVID-19 therapies (ex: remdesivir, monoclonal antibodies) to ensure safe use of these medications that when under EUA, may have labelling deficiencies.
  - Continue monitoring MDV expiration labeling.

COMPOUNDING

- **New Processes:**
  - Physical remodeling of the inpatient compounding environment to be completed.

- **Continue the following:**
  - Continue to review and assess USP 797 for adequate compliance per CCRMC policy in accordance with the CA State Board of Pharmacy.
  - Continue to review and assess USP 800 & NIOSH guidelines.
  - Continue end-product testing to assure integrity and sterility of compounding environment.
  - Continue sending samples of purchased goods from compounding pharmacies and CCRMC compounded products to a tertiary lab to assure sterility and potency via random sampling.
  - Continue usage of barcoding technology in the inpatient and outpatient IV sterile compounding environments.
  - CCRMC master formula is reviewed and updated on a routine basis.
  - Continue auditing IV room medication compounding within the monthly Pharmacy Dispensing Audit by pharmacy.
  - Continue IV admixture training for nursing staff, and extensive IV competency training for pharmacists and technicians on an annual basis.
  - Continue extensive monitoring for compounding under the CA State Board of Pharmacy requirements for annual licensure (Primary and secondary engineering controls, staff competency, air sampling, Dynalab® check for potency and endotoxins)

DISPENSING

- **New Processes:**
  - Implementation of "Dispense tracking," to allow nursing and pharmacy to track the medications from the time of verification to the unit.
  - Implement barcode scanning in the willow ambulatory environment in MIP.
  - Pediatric medications already require dual pharmacist verification in ccLink. Going forward in 2022, pharmacy will also require 2 pharmacists initials on the medication label to minimize any medication errors in this high-risk environment from pharmacy's end.

- **Continue the following:**
  - Continue monitoring all dispensing areas of Pharmacy Dept.
  - Continue monitoring the KPI report for pharmacy turn-around-time for order verification.
  - Continue reviewing external resources to analyze current practice at CCRMC and improve processes according to the most recent guidelines and literature.
  - Opioid stewardship committee to continue meeting quarterly to ensure appropriate use of opiates.
  - Continue barcode scanning of medications dispensed (IV medications since inception of EPIC, PO cart fill and first dose medications initiated in 2018).
  - Continue all processes under the Antimicrobial Stewardship Program (ASP) to validate for appropriateness.

DISTRIBUTION

- **New Processes:**
  - "Dispense tracking" to be implemented to track the medications from the time of verification to the floor.
  - Omnicell XT conversion to be completed. XT upgrade ensures patient data security, has metal locking bins (higher security for narcotics), and Omnidispensers rather than coils which will cause less jams and is more space efficient/higher capacity.
  - Receive recall data from EXP in addition to current processes (via California BOP emails, cardinal, etc.)
  - Efforts for optimization of Omnicell medication stocking to minimize unit dose cart fill volume including:
    - review of the Omnicell "Active Medication Orders without stocked items," report to determine commonly used medications to add to Omnicell
    - Weekly report to be run and sent to pharmacist for assessment of loading medications into unit Omnicell, depending on space
  - Implement Bluesight program to enhance control substance monitoring

- **Continue the following:**
  - Controlled Substances: continued monitoring of controlled substance transactions and documentation processes in the Nursing and Anesthesiology departments by Pharmacy department for quality assurance.
  - Continue to monitor and trend medication overrides and provide feedback to the end users.
  - Continue performing Malignant Hyperthermia (MH) mock codes to ensure proper use of MH cart.
  - Continue detailed daily review of D50 usage via in-basket message to clinical pharmacy dept. (assess for appropriateness of events).
  - Continue Kit Check labeling and barcoding to ensure adequate PAR levels of medications in anesthesia workstations in the OR and crash carts.
  - Pharmacy to continue reviewing the Omnicell Par vs. usage report for proper inventory management.
  - Continue to monitor ADC access to ensure that unauthorized personnel (i.e. upon departure or termination of employment of nursing/anesthesiology/pharmacy staff, etc.) are removed from the system to prevent unauthorized access to medications.
  - Continue reviewing external resources to analyze current practice at CCRMC and improve processes according to the most recent guidelines and literature.
  - Pharmacy to continue assessing compliance with accurate expiration labeling of MDVs by nursing.
  - Ongoing pharmacy staff education to ensure accurate filling of Omnicell.

MERP PLAN FOR THE YEAR 2022

ADMINISTRATION

- **New Processes:**
  - "Dispense tracking," to be implemented to allow nursing and pharmacy to track medications from the time of verification to the unit.
  - Alaris infusion pumps to be updated so that they alarm for unclamped secondary infusions (a feature previously unavailable) to reduce missed dose errors due to line being clamped (historically a top contributor to missed doses at CCRMC)
  - Terminology on Alaris pump to be updated from "basic Infusion" to "No-Guardrails-Basic Infusion," to be more descriptive and eliminate errors where nurse picks basic infusion erroneously."
  - 2 nurses to begin confirming that CADD pump in infusion clinic is running and then have patient stay for 5-10 minutes to ensure that pump is infusing medication appropriately prior to discharge home.

- **Continue the following:**
  - Controlled Substances: continued monitoring of controlled substance transactions and documentation processes in the Nursing and Anesthesiology departments by Pharmacy department for quality assurance.
  - Continue evaluating Alaris Pump infusion knowledge portal and CQI reports and use this for nursing education and modification of drug library.
  - Continue assessment of in-basket messages sent to pharmacy by the nursing department and improve system as necessary.
  - Continue to monitor and trend medication overrides and provide feedback to the end users.
  - Continue reviewing external resources to analyze current practice at CCRMC and improve processes accordingly.
  - Continue to optimize nursing workflow in ccLink in relation to medication management based on routine review of medication errors and MSC feedback.
  - Continue to in-service nursing staff as needed.
  - Continue to monitor barcoding compliance in the nursing environment to achieve the goal of greater than 95% compliance.
  - Continue to review and assess USP 800 & NIOSH guidelines.
  - Multimodal pain management strategies to continue to be optimized via various means as a part of ERAS (early recovery after surgery).
  - Continue to increase awareness and educate staff to prevent missed doses (ex: ensure lines are unclamped).
  - Continue to create guidelines and order-sets pertaining to COVID-19 with administration instructions and nursing communications to ensure safe and appropriate administration of the medications.
  - The heparin taskforce will continue working to resolve issues surrounding heparin infusion
  - Continue monitoring and reporting QA usage data for Alaris and CADD pumps.

MONITORING

- **New Processes:**
  - Pharmacy to explore using a Bayesian program within Vigilanz® to dose vancomycin based on AUC/MIC monitoring.
  - Pharmacy took over the Ambulatory Anticoagulation Clinic previously run by nursing in October 2021.
  - Monitoring efforts for optimization of Omnicell medication stocking to minimize unit dose cart fill volume including:
    - review of the Omnicell "Active Medication Orders without stocked items," report to determine commonly used medications to add to Omnicell
    - Weekly report to be run and sent to pharmacist for assessment of loading medications into unit Omnicell, depending on space
  - Implement Bluesight program to enhance control substance monitoring

- **Continue the following:**
  - Continue all Pharmacy Monitors, including but not limited to DDI checks, clinical conditions, lab monitors and checking for therapeutic appropriateness via data mining software and various EPIC reports [i.e. crystal, dashboard, system lists]). Monitors will be optimized as needed.
    - Monitors in the inpatient setting: vancomycin, heparin infusion, insulin, psychiatric medications, etc.
    - Monitors in the ambulatory setting: Diabetes Care Management Clinic, ESA Clinic, Transitions in care services, etc.
  - Continue reviewing external resources to analyze current practice at CCRMC and improve processes according to the most recent guidelines and literature.
  - Continue all processes under the Antimicrobial Stewardship Program (ASP).
  - Continue monitoring of ADEs (ADRs and medication errors) retrospectively to assess for appropriateness of medication use and monitoring.
  - Continue retrospective review of different systems, reports and processes (ex: rescue medication report, medication error report, ADC utilization report, etc.) for appropriateness of medication use and monitoring from different disciplines (medical staff, nursing, pharmacy, etc.), and implement educational plans for medication monitoring as needed.
  - Continue the physician oversight process for all hypoglycemic events (BG < 50 mg/dl) for patients on insulin at CCRMC to ensure that appropriate actions are taken, and education provided when needed.
  - Optimize all order sets according to available and most recent guidelines.
  - Controlled Substances: continued monitoring of controlled substance transactions and documentation processes in the Nursing and Anesthesiology departments by Pharmacy department for quality assurance.
  - Continue to create guidelines and order-sets pertaining to COVID-19 related treatments to ensure safe and appropriate monitoring of the medications.
  - The heparin taskforce will continue working to resolve issues surrounding heparin infusion
  - Continue extensive monitoring for compounding under the CA State Board of Pharmacy requirements for annual licensure (Primary and secondary engineering controls, staff competency, air sampling, Dynalab® check for potency and endotoxins)

EDUCATION

- **New Processes:**
  - Implement new antibiotic order set, assess utilization and promote use.
  - Implement pharmaceutical waste management compliance monitoring in the inpatient setting which includes a full report of any deficiencies found along with a plan of correction.

- **Continue the following:**
  - Continue all Pharmacy Monitors, including but not limited to DDI checks, clinical conditions, lab monitors and checking for therapeutic appropriateness via data mining software and various EPIC reports [i.e. crystal, dashboard, system lists]). Monitors will be optimized as needed.
    - Monitors in the inpatient setting: vancomycin, heparin infusion, insulin, psychiatric medications, etc.
    - Monitors in the ambulatory setting: Diabetes Care Management Clinic, ESA Clinic, Transitions in care services, etc.
  - Continue reviewing external resources to analyze current practice at CCRMC and improve processes accordingly by optimizing operations and educating staff.
  - Continue to in-service nursing staff as needed.
  - Malignant Hyperthermia: Continue Mock MH drills, collaborating with the Professional Development Dept.
  - Continue formal new pharmacist training and competency assessment for participation in the ASP program, DCM, and ESA Clinics, and all clinical processes upon hire.
  - Continue competency assessments for new pharmacists and pharmacy technicians during orientation.
  - IV competency training (Critical Point) is completed by pharmacists and technicians
  - IV competency training for nursing staff.
  - Continue the Transitions of Care (TC) Program and provide education to patients to promote safe medication use.
  - Continue retrospective review of different systems, reports and processes (ex: rescue medication report, medication error report, ADC utilization report, etc.) for appropriateness of medication use and monitoring from different disciplines (medical staff, nursing, pharmacy, etc.), and implement educational plans for medication monitoring as needed.
  - Continue evaluating Alaris Pump infusion knowledge portal and CQI reports and use this for nursing education and modification of drug library.
  - Continue evaluating CADD pump CQI reports and use this information for education and modification of drug library.
  - Continue to optimize educational efforts to ensure safe and appropriate prescribing and administration of insulin at CCRMC.
  - Provide further education to nursing to address the issues surrounding heparin infusion administration.
  - Continue pharmaceutical waste management compliance monitoring in the ambulatory setting which includes a full report of any deficiencies found along with a plan of correction.

USE

- **New Processes:**
  - "Dispense tracking" to be implemented to allow nursing and pharmacy to track the medications from the time of verification to the floor.
  - Implement new antibiotic order set, assess utilization and promote use.
  - Explore barcode scanning in the willow ambulatory environment in MIP.
  - Pharmacy to work with ccLink IT to optimize the high potency pain medication order set section with oral opiate medications to ensure safe and appropriate use.
  - Implement Bluesight program to enhance control substance monitoring

- **Continue the following:**
  - Controlled Substances: continued monitoring of controlled substance transactions and documentation processes in the Nursing and Anesthesiology departments by pharmacy department for quality assurance.
  - Continue evaluating Alaris Pump infusion knowledge portal and CQI reports and use this for nursing education and modification of drug library.
  - Continue evaluating CADD pump CQI reports and use this information for education and modification of drug library.
  - Continue reviewing external resources to analyze current practice at CCRMC and improve processes accordingly by optimizing operations and educating staff.
  - Malignant Hyperthermia: Continue Mock MH drills, collaborating with the Professional Development Dept.
  - Continue pharmacy monitors/programs, including but not limited to anticoagulants, high alert medications, therapeutic drug monitoring, antimicrobial stewardship program (in conjunction with ID physician), transitions of care services, DCM Clinic, ESA Clinic etc.
  - Continue assessment of in-basket messages sent to pharmacy by the nursing department and improve system as necessary.
  - Continue Kit Check labeling and barcoding to ensure adequate PAR levels of medications in anesthesia workstations in the OR and crash carts.
  - The heparin taskforce will continue working to resolve issues surrounding heparin infusion

TECHNOLOGY

- **New Processes:**
  - "Dispense tracking" to be implemented to track the medications from the time of verification to the floor.
  - Explore barcode scanning in the willow ambulatory environment in MIP.
  - Pharmacy to explore using a Bayesian program within Vigilanz® to dose vancomycin based on AUC/MIC monitoring.
  - Implement new antibiotic order set, assess utilization and promote use.
  - Pharmacy to work with ccLink IT to optimize the high potency pain medication order set section with oral opiate medications to ensure safe and appropriate use.
  - Pharmacy to begin working with ccLink IT to optimize antidote orders in ccLink to promote safe, correct and effective use.
  - Alaris infusion pumps to be updated so that they alarm for unclamped secondary infusions (a feature previously unavailable) to reduce missed dose errors due to line being clamped (historically a top contributor to missed doses at CCRMC)
  - Terminology on Alaris pump to be updated from "basic Infusion" to "No-Guardrails-Basic Infusion," to be more descriptive and eliminate errors where nurse picks basic infusion erroneously."
  - Omnicell XT conversion to be completed. XT upgrade ensures patient data security, has metal locking bins (higher security for narcotics), and Omnidispensers rather than coils which will cause less jams and is more space efficient/higher capacity.
  - Implement Bluesight program to enhance control substance monitoring
  - Implement Key Solutions Program to optimize tracking for Investigational Drugs
  - Efforts for optimization of Omnicell medication stocking to minimize unit dose cart fill volume including:
    - review of the Omnicell "Active Medication Orders without stocked items," report to determine commonly used medications to add to Omnicell
    - Weekly report to be run and sent to pharmacist for assessment of loading medications into unit Omnicell, depending on space

- **Continue the following:**
  - Continue evaluating Alaris pump infusion knowledge portal and CQI reports and use this for nursing education and modification of drug library.
  - Continue evaluating CADD pump CQI reports and use this for education and modification of drug library.
  - Continue barcoding scanning upon dispensation and administration.
  - Continue on reviewing all order sets on a multidisciplinary note in ccLink as opportunities for improvement are identified, and work on new order sets as needed.
  - Continue to improve and enhance technological tools (i.e. ccLink, Alaris) as a result of medication error trending and analysis.
  - Continue with all processes under the Antimicrobial Stewardship Program (ASP).
  - Continue Kit Check labeling and barcoding to ensure adequate PAR levels of medications in anesthesia workstations in the OR and crash carts.
  - Pharmacy to continue reviewing the Omnicell par vs. usage report for proper inventory management.
  - Continue to promote safe and appropriate use of insulin via technology (i.e. order set optimization, BPA alerts, in basket messages, etc.)
  - Multimodal pain management strategies to be optimized via various means (order set/ EHR updates, formulary additions, etc.) as a part of ERAS (early recovery after surgery)
  - Continue pharmacy monitors/programs with the utilization of technological tools such as system lists and dashboard reports via EPIC as well as data mining software (i.e. Vigilanz®).
  - Continue monitoring of ADEs (ADRs and medication errors) retrospectively with utilization of technological tools.
  - The heparin taskforce will continue working to resolve issues surrounding heparin infusion calculator.

TRANSITIONS IN CARE

- **New Processes:**
  - Implementation of "Dispense tracking," to allow nursing and pharmacy to track the medications from the time of verification to the unit.

- **Continue the following:**
  - Continue the Transitions of Care (TC) Program and provide education to patients to promote safe medication use, including admission medication reconciliation for "High Risk," patients as defined by CCRMC. Admission medication reconciliation for "High risk," patients was initiated in December 2018.
  - Continue to provide necessary medications with appropriate quantity for homeless patients.
  - Continue to educate nurses during nursing orientation that medications must be transferred with patient from one unit to the next.

Medication Error Data Analysis, 2021 Annual Report

Committee Name: Medication Safety Committee
Meeting Date: Feb 18, 2022
Preparation Date: January 2022

Issue Name: Medication Error Data Analysis, Annual Summary	Presenter: Pharmacy

Situation: Medication Error Report, Summary

Background: Beginning in 2010, CCRMC began categorizing medication errors into one of eleven different categories. Those categories (known as 'Elements') were defined by the California Department of Public Health (CDPH). In June 2012, these elements were redefined and expanded into twelve different "Event Categories." The event categories are as follows:

1. Prescribing	4. Compounding	7. Administration of Medication	10. Use
2. Prescription Order Communication	5. Dispensing	8. Monitoring	11. Technology
3. Product Labeling, Packaging and Nomenclature	6. Distribution	9. Education	12. Transitions in Care

These event categories and subcategories have been programmed into SERS (Safety Event Reporting System).

Once medication events have been categorized into one of the above event categories, they are assessed for severity level (per NCC MERP scale) as follows:

Level A	Circumstances or events that have the capacity to cause error
Level B	An error occurred but the error did not reach the patient
Level C	An error occurred that reached the patient but did not cause patient harm
Level D	An error occurred that reached the patient and required monitoring to confirm that it resulted in no harm to the patient and/or required intervention to preclude harm
Level E	An error occurred that may have contributed to or resulted in temporary harm to the patient and required intervention
Level F	An error occurred that may have contributed to or resulted in temporary harm to the patient and required initial or prolonged hospitalization
Level G	An error occurred that may have contributed to or resulted in permanent patient harm
Level H	An error occurred that required intervention necessary to sustain life
Level I	An error occurred that may have contributed to or resulted in the patient's death

This report highlights the medication error trends that occurred in 2021, along with the etiologies of the error trends and system improvements made as a result of the errors. The specifics of these trends will be presented by run charts.

Data Source:

Medication errors are voluntarily reported by staff who become aware of errors using the SERS reporting system. The pharmacy department uses various methods including ccLink reports, clinical monitors, automated dispensing cabinet audits, and other fact-finding strategies to detect medication errors and enter them in SERS. *Pharmacy department promotes transparency and awareness in the organization and uses SERS as an approach to identify areas for improvement so that strategies could be implemented to correct these issues. Pharmacy department generates the most SERS of the organization in order to support this methodology for improvement.* Reports are reviewed, referred for further input, and analyzed by the Medication Safety Advocates. The medication error review process is multi-disciplinary, with at least one physician present at all times, and 100% of all errors are reviewed. Data is tabulated and trended monthly and annually.

Data Highlights and Totals:

- There were 498 medication related SERS reported in 2021, compared to 508 in 2020, 879 in 2019 and 1,115 in 2018. When looking at the percent of errors reported (# of errors/ # of doses dispensed), there was a 0.05% error rate in 2021, vs. 0.05% in 2020 and 0.07% in 2019. The decrease in percent error rate can in large part be attributed to the reduction in controlled substance discrepancies since 2019 to 2020 and 2021. The decrease is as a result of the ongoing efforts by Pharmacy, Nursing and Anesthesiology to minimize controlled substance discrepancies (technological enhancements, education, etc.) along with oversight from the Opioid Stewardship Program Committee. It is important to note that 100% of controlled substance discrepancies are investigated and resolved.
- The median harm index previously dropped to 0% in March of 2020 and has remained stable at 0% through 2021. The organization promotes transparency and encourages staff to report medication errors, including near miss medication events. The majority of errors reported did NOT result in harm. Specifically, in 2021, 99.2% of errors reported did NOT result in harm.
- Pharmacy leadership continues to promote reporting of medication events for system and process improvement reasons. There was a total of 1,235 near miss medication events in 2021 (297 events reported via SERS and while not discussed in this annual SERS report, 938 near misses captured via the Alaris pump), vs 1,287 near miss medication events in 2020 (4% reduction), and 1861 events in 2019 (33.6% reduction). The decrease in near miss errors in 2021 compared to 2020 and 2019 is as a result of the intense education, monitoring and process changes implemented.
- Medication errors by drug class: Controlled substances and antimicrobials have persistently been the top medication classes involved in medication errors at CCRMC since 2010.
    - There were 250 medication errors with controlled substances in 2021, a 55% reduction since 2018. (229 in 2020, 449 in 2019 and 558 in 2018). The large number of SERS are generated due to the controlled substance discrepancy monitoring program by pharmacy, which utilizes SERS as a method to report and resolve discrepancies. This decline is due to the ongoing efforts by Pharmacy, Nursing and Anesthesiology to minimize controlled substance discrepancies at CCRMC via technological enhancements and education, along with oversight from the Opioid Stewardship Program Committee.
        - The reduction in controlled substance discrepancies is due to the ongoing monitoring and reporting of controlled substance discrepancies on a daily basis by pharmacy. In 2020, CCRMC was recognized in the Cal Hospital Opioid Care Honor Roll as one of the 25 hospitals ranked in the "superior performance." Going forward in 2022, pharmacy will continue to monitor and report-controlled substance discrepancies. The multidisciplinary Opioid Stewardship Committee will continue to meet on a quarterly note to review guidelines and regulations and optimize pain management strategies at CCRMC.
    - There were 42 medication errors involving antimicrobials in 2021 – a 26% reduction compared to 2020, 44% reduction compared to 2019 and a 58% reduction since 2018 (57 in 2020, 75 in 2019 and 101 in 2018). 42/42(100%) of errors did not cause harm (Level D and lower).
        - The top error type involved missed doses.
            - Missed doses due to clamp errors or incorrect tubing connections: 7 errors in 2021 vs. 8 errors in 2020,14 errors in 2019 and 15 errors in 2018 – a 13% reduction since 2020, 50% reduction since 2019 and 58% since 2018. There are several processes in place from previous years that have contributed to the downtrend of clamp errors and maintaining a low number of errors (i.e., monthly feedback provided from Pharmacy to Nursing leadership, Nursing Program Managers and the Department of Quality, audits by pharmacy and nursing, education by the professional development department, alert in Alaris pump, etc.). Going forward in 2022, the Alaris infusion pumps will be updates to alarm for unclamped secondary infusions which was a previously unavailable feature. This is planned to go live in the beginning of 2022.
            - 6 missed/delayed doses were due to incorrect verification of antimicrobial medication, 5 of 6 were from Rxe-source pharmacists (remote After-hours pharmacy). Following each of these events, education was provided to the pharmacists involved through monthly meetings with the Rxe-source director.
        - The second most common error type involved vancomycin trough monitoring. There were 4 errors in 2021 vs. 8 errors in 2020, 9 errors in 2019, and 15 errors in 2018 – a 50% reduction since 2020, 56% reduction since 2019 and 73% since 2018. The reduction can be attributed to ongoing staff education. Towards the end of 2021, a BPA was created by ccLink per pharmacy's request to alert nurses of any vancomycin trough due within 2 hours of the vancomycin dose due time. This BPA is in addition to the robust process already in place which includes: 1)sign & held vancomycin trough order 2) MAR communication note by pharmacy to nursing 3) MAR flowsheet hard stop question to nursing about if a vancomycin trough is due. Pharmacy is also in the process of exploring the possible launch of AUC/MIC monitoring for select indications utilizing Bayesian software through data mining software (i.e., Vigilanz) in 2022 to further optimize vancomycin drug monitoring.

- "High Alert," Medication Error trends are as follows:
  - The number of high-alert medication errors decreased from 95 errors from 2018 → 74 errors in 2019→ 56 errors in 2020→ 44 errors in 2021 (a 21% reduction from 2020, a 41% reduction from 2019 and a 53% reduction from 2018.) The median harm index (Level E and higher events) for 4 of the 5 high alert categories has been 0 since Q1 2015, meaning that none of the errors contributed to patient harm (anticoagulants, chemotherapeutics, fentanyl patch and PCAs). While insulin's median harm index has been at 2 errors per month since Q1 2018 (due to increased vigilance and reporting by pharmacy), the percent rate of severe hypoglycemia (BG ≤ 50 mg/dl) has declined from 3.5% in 2017 to 2.2% in 2018 and further down to 1.2% since February 2019.

  - Insulin errors: There were 22 errors involving insulin in 2021, vs. 20 errors in 2020, 34 errors in 2019 and 43 errors in 2018. Despite slight increase from 2020 to 2021, there was an overall 49% reduction from 2018 and a decline in median from 9 errors per quarter to 5 errors per quarter starting in Q2, 2020. The reduction can mainly be attributed to the 82% decline in errors involving inappropriate management of patients on SubQ insulin from 2018 to 2021 and the 63% decline in MDV labeling errors from 2019 to 2021. In 2021, the main error types surrounding insulin were IV insulin drip management and MDV labelling errors followed by inappropriate management of patients on SubQ insulin. There were 3 delays in initiating the insulin drip in the ED prior to transfer to the unit. The NPM was informed of these errors and staff was educated. There were also 3 errors surrounding IV to SubQ conversion (2 cases in which the insulin drip was not stopped per protocol by the nurse upon conversion to SubQ insulin and 1 inappropriate IV to SubQ dose conversion by the provider). Education was provided in all cases. Additionally, the IV to SubQ conversion instructions are available for providers in the SubQ insulin order sets, and pharmacy continues to monitor insulin drips on a daily basis. Of the errors surrounding SubQ insulin, 3 were inappropriate management of patients on SubQ insulin. Education was provided in all cases, and process changes were implemented via order set optimizations. Overall, the inappropriate management of patients on SubQ insulin has decreased by 82% since 2018. In 2018, a multi-disciplinary task force was created and began meeting regularly to address the issues surrounding SubQ insulin management. Several optimizations have been made in ccLink since then, along with education and increased awareness among staff. A daily physician oversight process was also implemented in 2019, resulting in all cases of severe hypoglycemia being reviewed by a physician to ensure the appropriate steps were taken to prevent any further hypoglycemic events and to communicate any additional actions needed to the primary team. Education was also optimized and provided to medical staff via. E. Learning. In 2021, the standalone regular IV insulin order was removed so that it is only available through the order sets and panels which include safety guards for prevention and management of hypoglycemia. The pre-op order sets were also updated to include a pre-checked dextrose containing fluid order for diabetic patients. Going forward in 2022, pharmacy will continue to interpret and report data and the Insulin taskforce will continue to review the data and optimizes processes as needed.
  - Anticoagulant errors: There were 15 errors involving anticoagulants in 2021, vs. 18 errors in 2020, 24 errors in 2019 and 32 errors in 2018. There was a 17% reduction in errors from 2020 to 2021, a 38% reduction in errors from 2019 to 2021 and a 53% reduction from 2018 to 2021. The majority of errors since 2017 have involved heparin infusion errors (ex: missed or delayed aPTT result, rate not adjusted in a timely manner, wrong rate, etc.). In 2017, a multi-disciplinary task force was initiated to address the issues surrounding heparin infusion. In 2018, several improvement actions took place. In July 2019, a heparin calculator went live in ccLink. While errors from 2017 and 2018 decreased (heparin rate not being adjusted in a timely manner, lab timing errors by lab and nursing), the heparin calculator introduced a new set of errors involving the misuse and inconsistent use of the heparin calculator by nursing staff. The heparin calculator works well when used correctly. However, due to technological limitations, use of the heparin calculator is not mandatory in ccLink which has led to inconsistent and incorrect use of the calculator. Currently the heparin calculator is "required" for the initial administration but not for subsequent titrations due to limitations of ccLink. Additionally, in 2021 a new error peaked which involved repeat STAT aPTT not being ordered per protocol by nursing for a supratherapeutic aPTT > 120 seconds. This redundant STAT aPTT is used as a preventative measure to rule out any errors of sampling from the line running heparin as an essential safety measure from the medication safety perspective. Education was provided in all cases. Additionally, the heparin task force began meeting again towards the end of 2020 to update the heparin calculator tip sheet and to reinforce education for nursing staff. In January 2021, dual sign off was added to all heparin administrations, previously was only available for 'Initial Infusion'. In April 2021, the heparin calculator text was updated to make each section "initial dose" and "subsequent titrations" stand out more. In order to prevent errors of calculator misuse/unuse, the nursing staff in 3D/3E (where the majority of errors occurred) began using a bedside heparin infusion worksheet to assist with titrations and began huddling during the shift when patients are actively on heparin to remind nurses to use the heparin calculator for all heparin titrations. The heparin task force will continue to work to minimize heparin infusion errors via education of staff and process changes when appropriate. Additionally in October 2021, the ambulatory anticoagulation clinic was taken over by pharmacy (previously a nursing run clinic).
  - Chemotherapeutic errors: There were 4 errors reported in 2021, vs. 14 in 2020, 8 in 2019 and 13 in 2018. In 2021, 50% (2 out of 4 errors) involved errors with the CADD pump (1 errors due to battery depletion despite extra batteries given to patient along with patient education, 1 due to the pump leaking- After thorough investigation of the cause of leak, it was

found that the tubing may have also been the culprit of the leak).There was a 67% reduction in errors from 2020 to 2021. This is due to purchasing a new smart pump (CADD Solis) in October 2020 to replace the old CADD pumps which contributed to the majority of chemotherapy errors in 2020. Infusion clinic went live with the new pumps in October 2020. The infusion nursing staff continue to send extra batteries home with the patients along with an instruction sheet on how to switch the batteries out. Pharmacy will continue to monitor for CADD pump errors.

- Fentanyl patch errors: There were 0 fentanyl patch errors reported in 2021, vs. 1 in 2020, 0 in 2019 and 3 in 2018. Several efforts are in place to ensure safe use of fentanyl patch at CCRMC, including a thorough initial screening for appropriateness by the clinical pharmacy department along with a daily clinical monitor and patient education. Additionally, in 2020 pharmacy made the fentanyl patch require dual pharmacist independent verification as an extra step to ensure safe use of fentanyl patch. As a result, in 2021, there were 0 fentanyl patch errors. Going forward in 2022, staff will continue to be vigilant to ensure safe and appropriate use of fentanyl patch at CCRMC.
- PCA errors: There were 3 errors involving PCA in 2021, compared to 3 errors in 2020, 6 errors in 2019 and 7 in 2018. There was a 57% decrease in PCA errors from 2018 to 2021. None of the errors resulted in patient harm (Level D or higher). Education was provided to staff involved in all cases.
- NOTE: We have observed a decrease or steady median in all cited above compared to prior years.

- MERP Element Trends for 2021: All the MERP element medians remained stable or declined in 2021, with the exception of "Administration," which increased slightly.
  - Administration: In 2021, there was an increase in median administration errors per month from 12 to 14 starting in July 2021, however previously there was a reduction from 30.5 errors per month to 18.5 errors per month from November 2020 -February 2021, and a further decrease down to 12 from March 2021- June 2021. The top error types that peaked were override errors and missed dose errors. While these errors were the top error types, they had overall reductions since 2019 by 56% for overrides and 29% for missed doses due to ongoing efforts by the organization. There was a slight increase in missed doses from 2020 (25 missed doses) to 2021 (36 missed doses). This likely contributed to the increase in median from 12 to 14 errors per month starting in July 2021. Additionally, there was an increase in errors involving acetaminophen scheduled order dose being administered too soon after a x1 dose. In regards to missed doses, the majority were due to the nurse being busy/ distracted and forgetting to administer dose, but no trend was noted (64% increase from 2020 to 2021). This increase may likely be because in 2020 the hospital census was lower. In 2021, the census increased and at the same time the number of COVID patients tripled which caused nurses to be busier are more overwhelmed. The second highest cause of missed doses was due to medication line being clamped. Education was provided in all cases. There are also several processes in place from previous years that have contributed to the downtrend of clamp errors. Going forward in 2022, the Alaris infusion pumps will be updates to alarm for unclamped secondary infusions which was a previously unavailable feature. This is planned to go live in the beginning of 2022. In regards to acetaminophen doses being administered too soon, a BPA is in the process of being created per the request of pharmacy to alert nursing if a dose was previously given within the last 3 hours. Going forward, pharmacy will continue to monitor, and trend missed doses and overrides.
  - Prescribing: The median number of prescribing errors per month decreased from 7 errors per month to 2 errors per month starting in December 2019 (a 71% reduction). This is as a result of the improvements seen in reducing the number of overrides (90% reduction since 2018) and reducing duplications in therapy (77% reduction since 2019) via order set changes and order panel creation. In 2021, the top error types involved SubQ insulin management and medications prescribed and given too soon after a dose had already been given (40% involved acetaminophen). In 2021, pre-procedure order sets were optimized to include a prechecked dextrose containing fluid for diabetic patients and the standalone IV insulin order was removed so that it is only available via order panels and order sets. For medication prescribed and given too soon, a BPA is in the process of being created per pharmacy's request to alert nurses of previous administration of acetaminophen within the last 3 hours.
  - Prescription Order Communication: Looking back at 2021, there was a decrease in median from 1 error per month to 0 errors per month starting August 2020 through 2021. The top error type in previous years was due to missed doses as a result of a communication error. However, there was a 100% improvement from2018 and 2020 to 2021. In 2021, the 2 main error types were communication orders resulting in delayed restarting of titratable drips after a procedure and medication being ordered incorrectly, resulting in an unintentional dose being administered. There was no harm to any of the patients as a result of these errors. Going forward in 2022, pharmacy will continue to monitor prescription order communication errors for any trends and act accordingly.
  - Product Labeling, Packaging, and Nomenclature: Looking back at 2021, the median number of errors per month decreased from 2.5 to 0 starting in September 2020. There was a 53% reduction in MDV expiration labeling errors by nursing from 2019 to 2021 as a result of several optimizations previously made (pharmacy providing a list of Omnicell MDVs on each nursing unit, nursing cycle counts each shift, 28-day calendar tool provided by pharmacy to nursing and nursing education).
  - Compounding: The median number of compounding errors remained stable at 0 errors per month in 2021. In 2021, there were 2 errors in which nurses compounded the medication in the wrong fluid outside of pharmacy hours. All IV

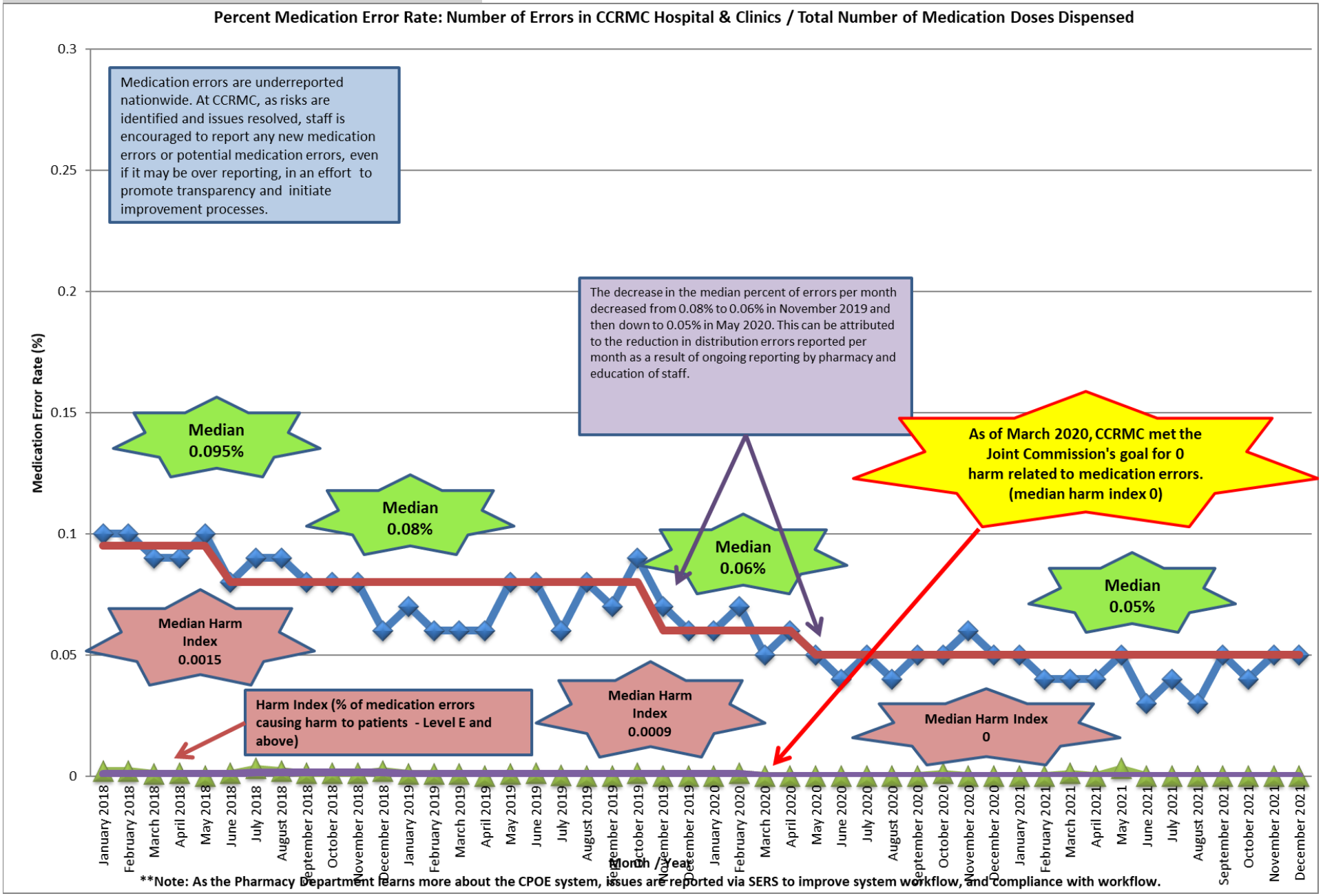
orders specify what fluid the medication is compounded in as part of the order. Also, the drug compatibility chart is available to all nursing staff. In both cases, the fluid used was compatible with the medication being admixed. Pharmacy reached out to NPM to educate staff and will continue to work with nursing leadership to prevent compounding errors. Additionally, pharmacy continues to conduct IV training for nursing staff on an annual basis.

- Dispensing: The median number of errors per month decreased from 3.5 to 1.5 errors starting in December 2020. There was a 64% decrease in wrong dose/strength/formulation/medication being dispensed from 2018 to 2021 and a 63% reduction in dispensing delays from 2018 to 2021. The reduction in median can be attributed to the optimization of barcode scanning in the pharmacy department that occurred in 2018 (expanded to include first dose and cart-fill non-IV medication- IV medications have been barcode scanned since inception of ccLink) The pharmacy department will continue to utilize barcode scanning and explore expansion of barcode scanning to the Willow ambulatory environment in 2022.
- Distribution: There was a decrease in median from 34.5 to 21 errors per month starting in January 2020. This can in large part be attributed to 1) the 55% reduction in controlled substance discrepancies from 2018 to 2021 due to the ongoing monitoring and reporting of controlled substance discrepancies on a daily basis by pharmacy, 2) the 44% decrease in Omnicell issues from 2020 to 2021 and #3) the 27% decrease in MDV labeling errors from 2020 to 2021 as a result of several optimizations previously made. Going forward in 2022, The Omnicells will be upgraded from G4 to XT (allows for better patient data security, higher narcotic security with metal locking bins rather than plastic, and Omnidispensers instead of coils which will cause less jams and are more space efficient/ increase capacity).
- Use: There was a decrease in the median errors per month from 34.5 to 21 starting in January 2020. There was an overall 55% decrease in controlled substance discrepancies since 2018 due to the ongoing monitoring and reporting of controlled substance discrepancies on a daily basis by pharmacy.
- Monitoring: Looking back at 2021, the median number of errors per month decreased from 2 to 0 starting in April 2020 through 2021. There was a 33% reduction in number of vancomycin trough errors from 2020 to 2021 as a result of ongoing education. Additionally, to further reduce vancomycin trough errors, a BPA was created at the end of 2021 to alert nurses of a trough order within 2 hours of the vancomycin due time. In 2021, there was an increase in heparin infusion errors (see the "High Alert- Anticoagulants" section for further details of errors and actions taken).
- Education: Looking back in 2021, the median number of errors per month decreased from 7.5 to 3.5 starting in March 2020 and increased to 5.5 in September 2020. The majority of education errors are also classified under the other elements that apply to the error and are further discussed and trended under those elements. The top error types in 2021 included delays in therapy and failure to monitor (heparin drip errors). Education was provided in all cases. See the "High Alert- Anticoagulation" section for further details regarding heparin drip errors and actions taken. Going forward in 2022, pharmacy will continue to work with nursing leadership and the Professional Development Department to promote ongoing education to prevent delays in therapy and heparin drip errors.
- Technology: Looking back at 2021, the median number of errors per month decreased from 2 to 1 starting in November 2020. In 2021, there was an 60% reduction in errors involving Omnicell and 43% reduction in IV pump issues since 2020. In 2021, there was a 71% decrease in CADD pump malfunctioning errors from 7 in 2020 to 2 in 2021 in infusion clinic. In October 2020, new smart CADD Solis pumps were purchased for infusion clinic and went live. Pharmacy will continue to trend CADD pump data and report findings to the Medication Safety Committee. Additionally, going forward in 2022, the Omnicells will be upgraded from G4 to XT (allows for better patient data security, higher narcotic security with metal locking bins rather than plastic, and Omnidispensers instead of coils which will cause less jams and are more space efficient/ increase capacity). Pharmacy will continue to trend and monitor technological errors.
- Transitions of Care: Looking back at 2021, the total number of errors involving transitions of care decreased from 2 in 2020 to 1 2021. The was a 50% reduction in errors involving patient transfer within the hospital from one unit to the next from 2020 to 2021. In 2020, pharmacy and nursing focused on educating staff which contributed to the decline in errors reported. Simultaneously, in 2020, pharmacy explored utilizing a dispense tracking system to help with locating missing doses that have already been dispensed. In 2021, the necessary equipment was purchased and going forward in 2022, the pharmacy department will plan to work with ccLink IT to pilot the dispense tracking system when it is fully functional.

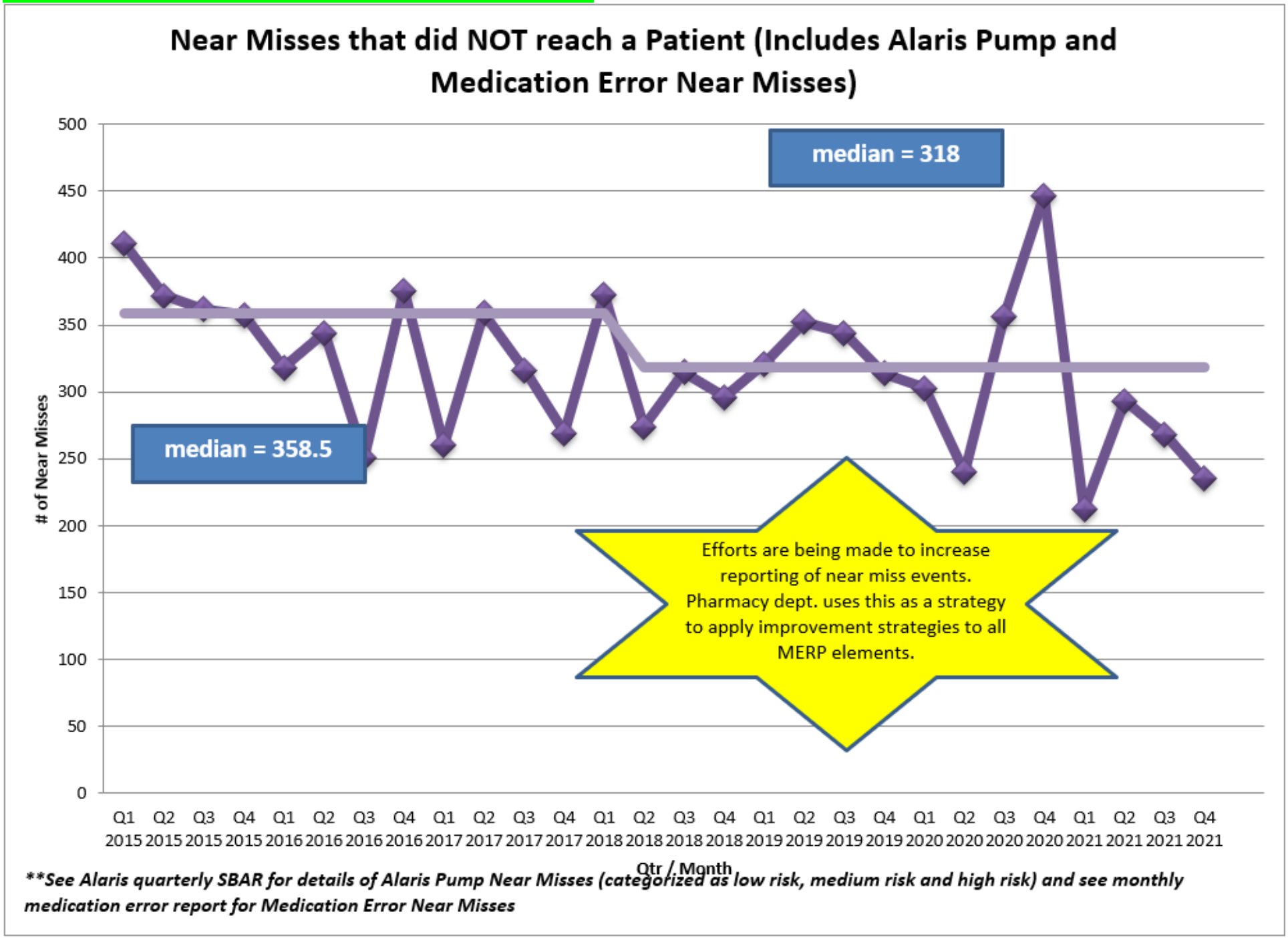
- RXe-Source Pharmacy (After hours pharmacy) medication errors trend:
  - In 2021, RXe-Source pharmacy contributed to 7 errors vs. 11 errors in 2020, 18 errors in 2019 and 14 errors in 2018. Education was provided to the pharmacists involved in all cases per the RXe-Source director.
  - 3 of the errors in 2021 (43%) involved antibiotics (2 wrong formulation [IVPB to injection and 1 inappropriate verification of non-formulary order]).
  - There were 4 level B errors and 3 Level C errors. Thus 4/7 (57%) were near misses that did not reach the patient and none of the errors contributed to patient harm.

Conclusion: The MERP program has been effective in detecting medication errors and in developing corrective actions taken for the past year. The annual SERS review was completed in February 2022.

APPENDIX A: PERCENT MEDICATION ERROR RATE GRAPH

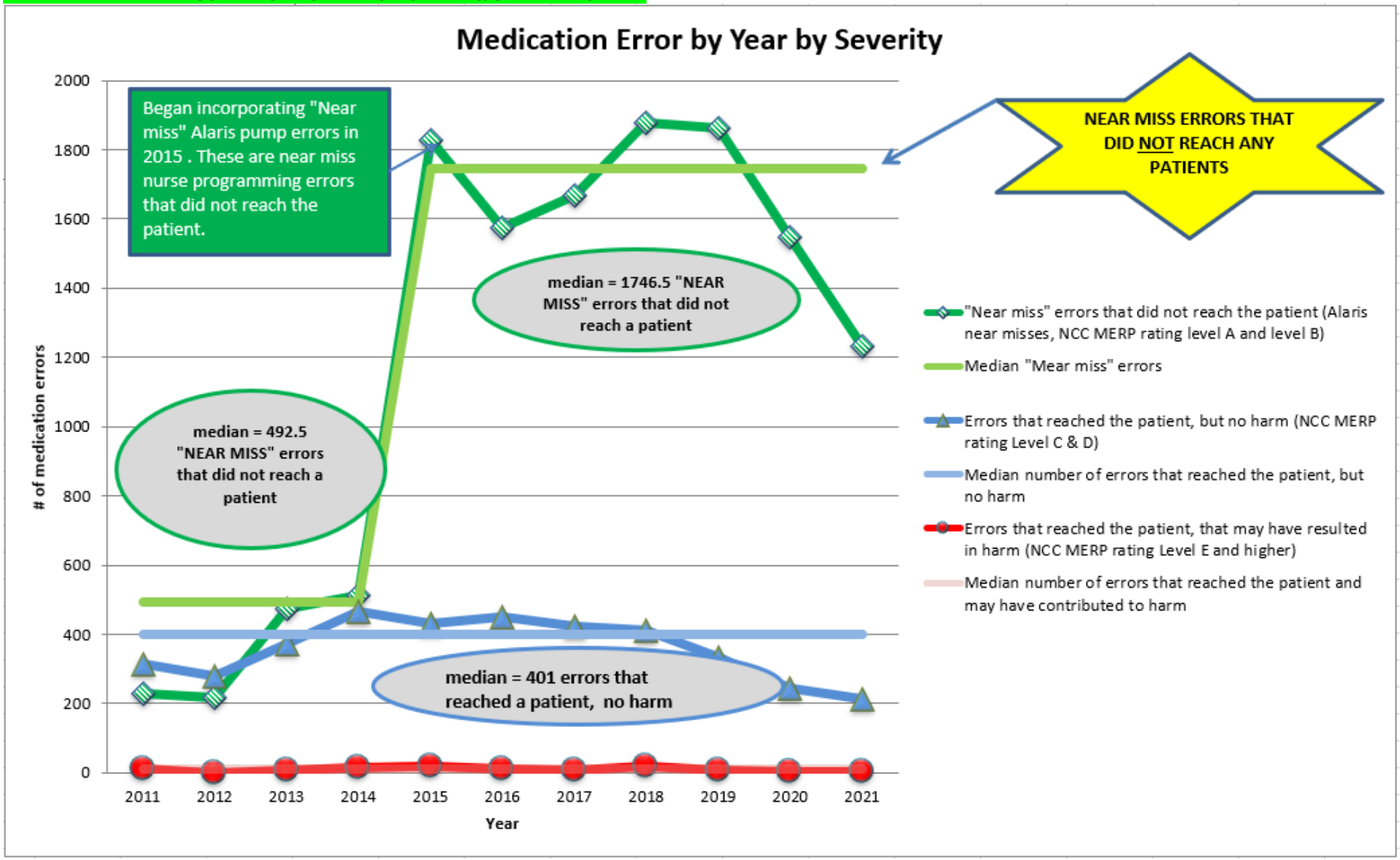


APPENDIX B: NEAR MISS MEDICATION ERROR GRAPH & SEVERITY GRAPH

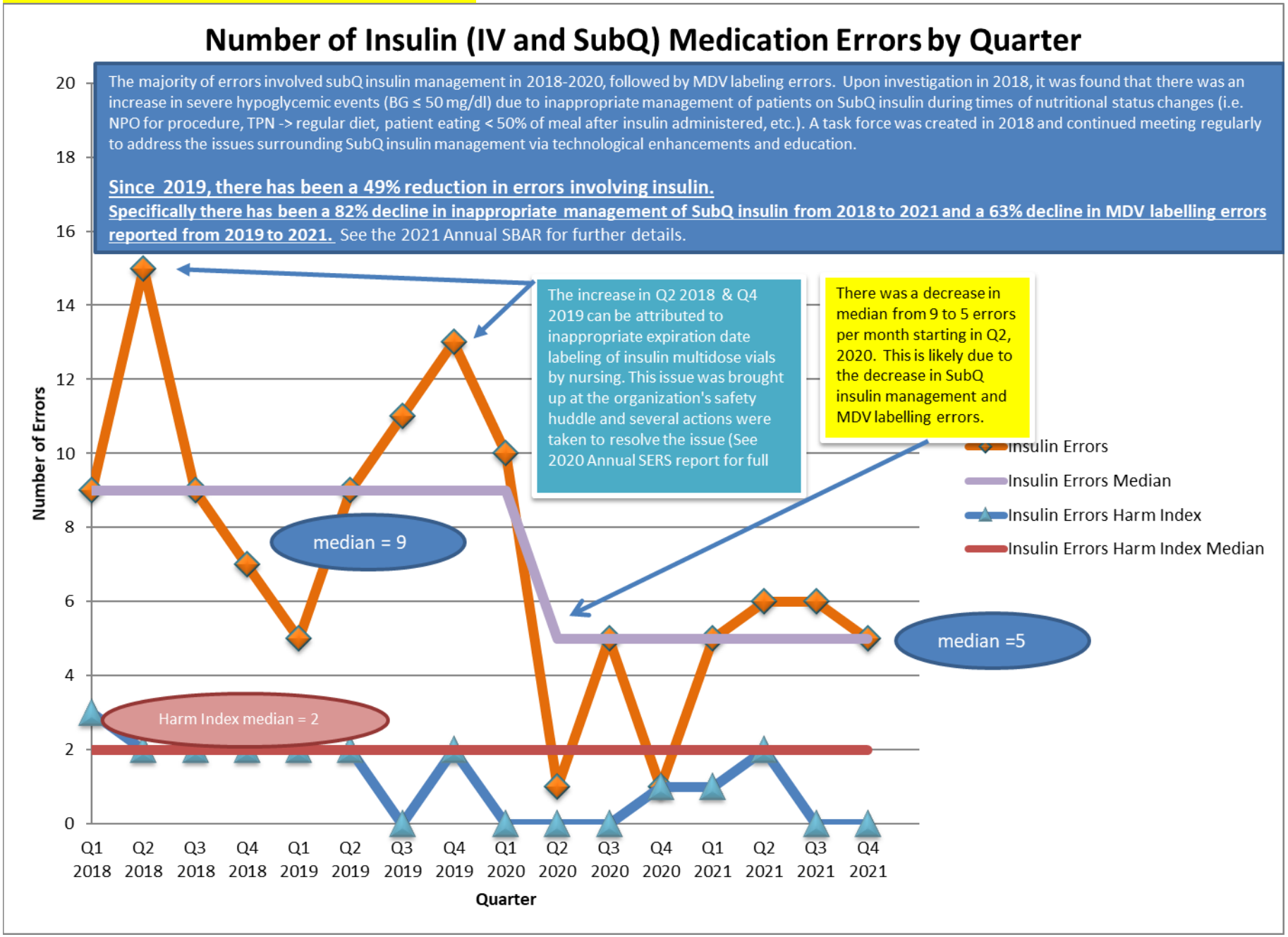


See Alaris quarterly SBAR for details of Alaris Pump Near Misses (categorized as low risk, medium risk and high risk) and see monthly medication error report for Medication Error Near Misses

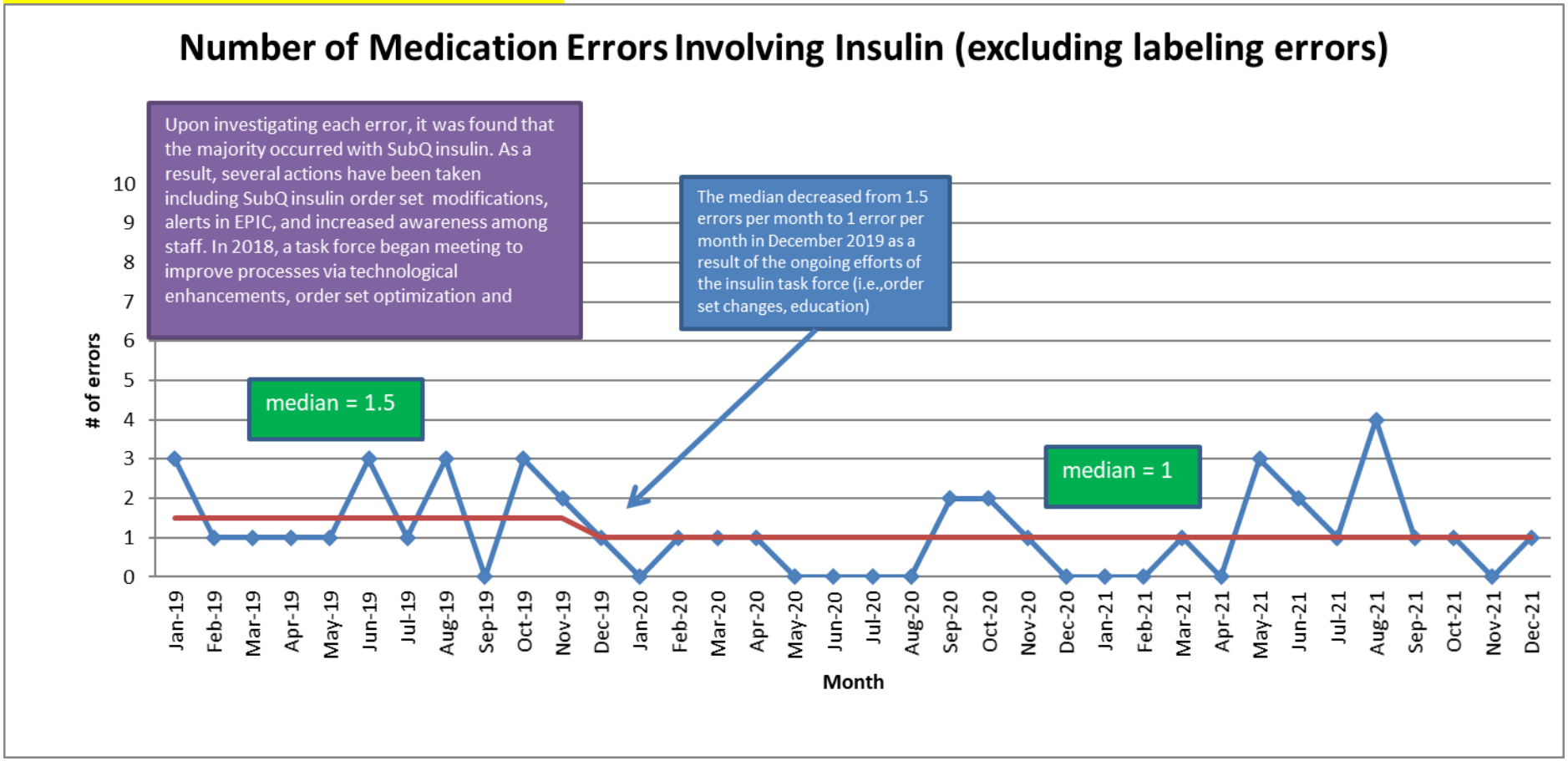
APPENDIX B: NEAR MISS MEDICATION ERROR GRAPH & SEVERITY GRAPH



APPENDIX C: HIGH ALERT MEDICATION ERROR GRAPHS



APPENDIX C: HIGH ALERT MEDICATION ERROR GRAPHS



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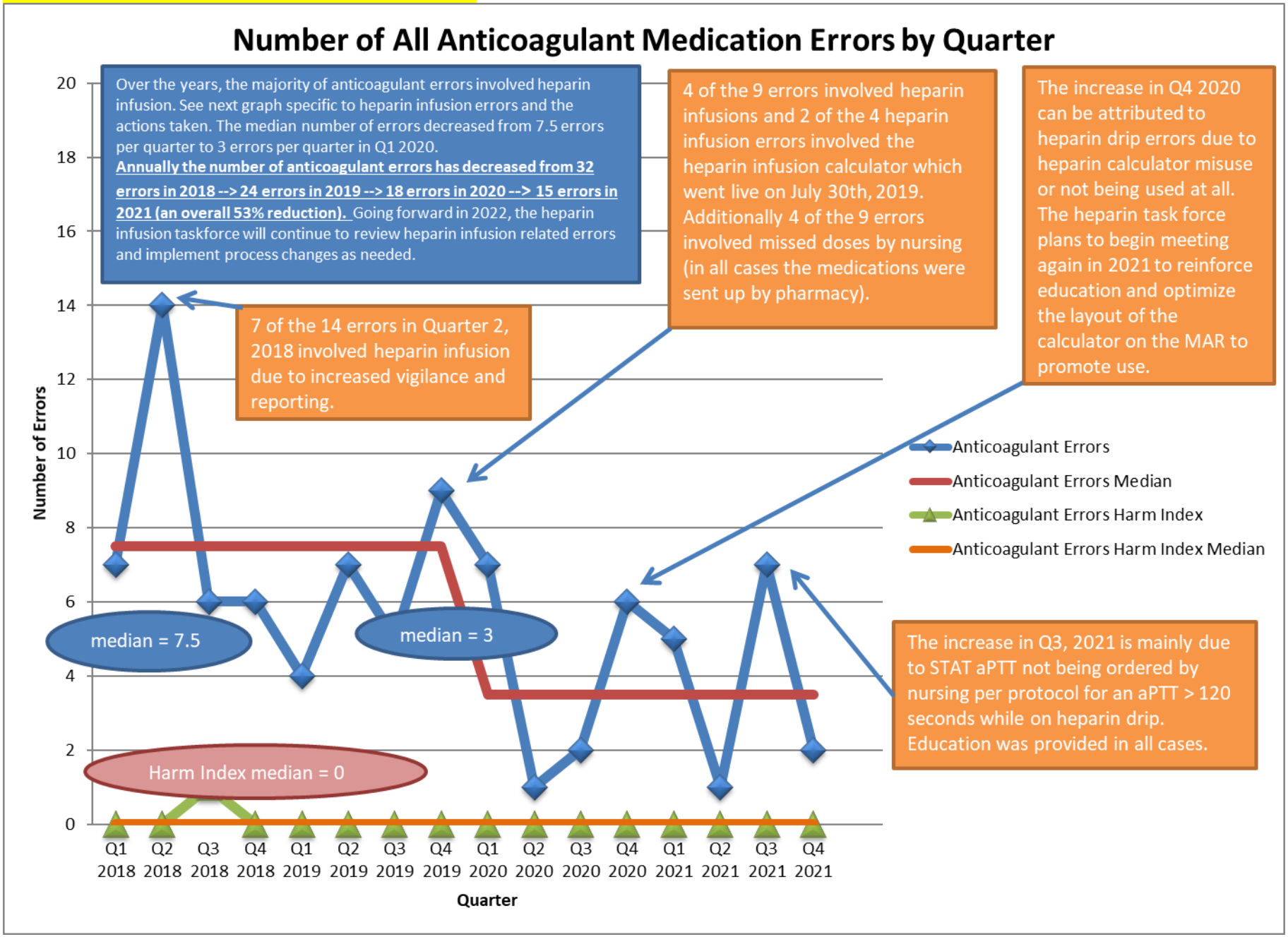
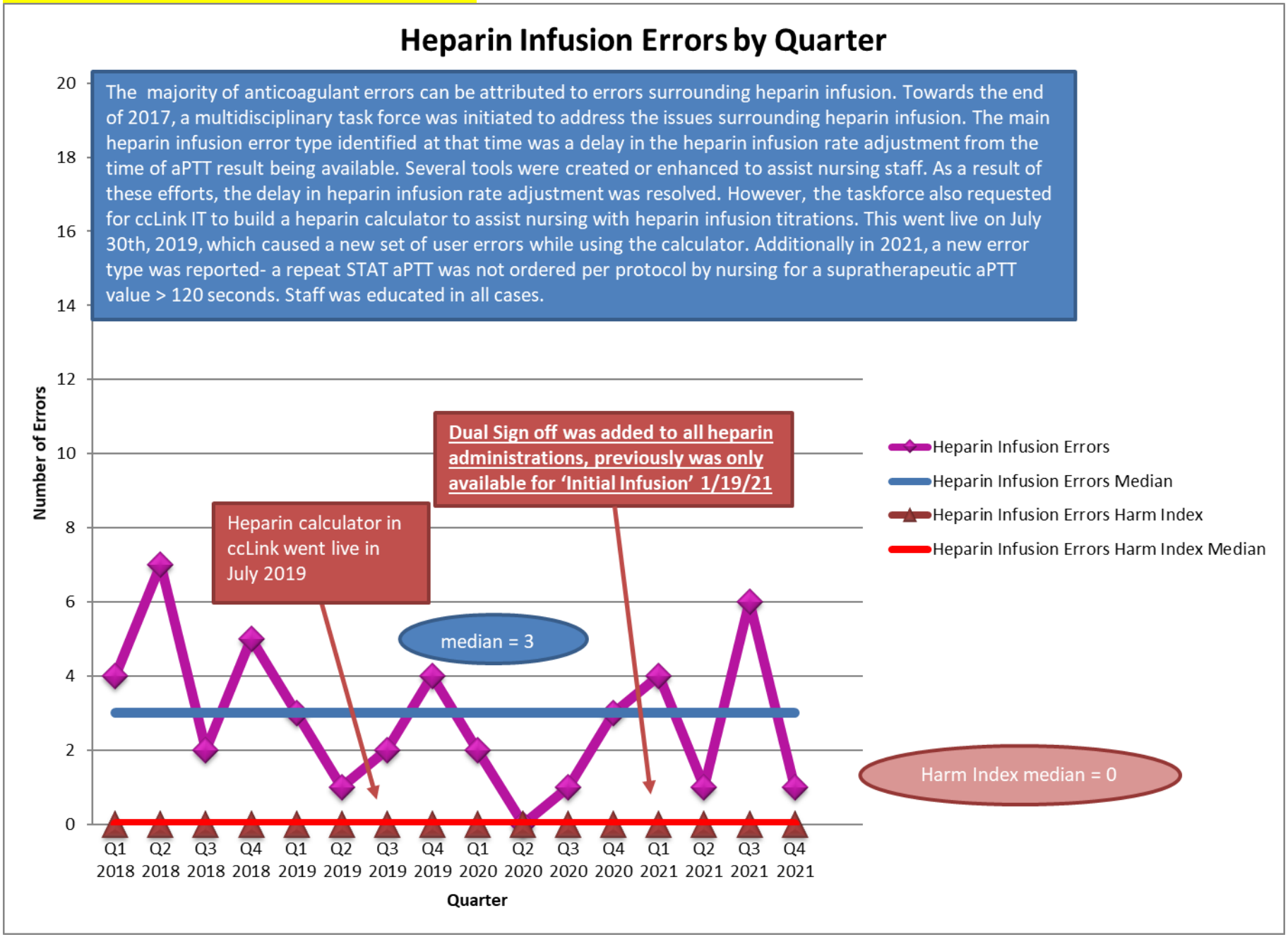
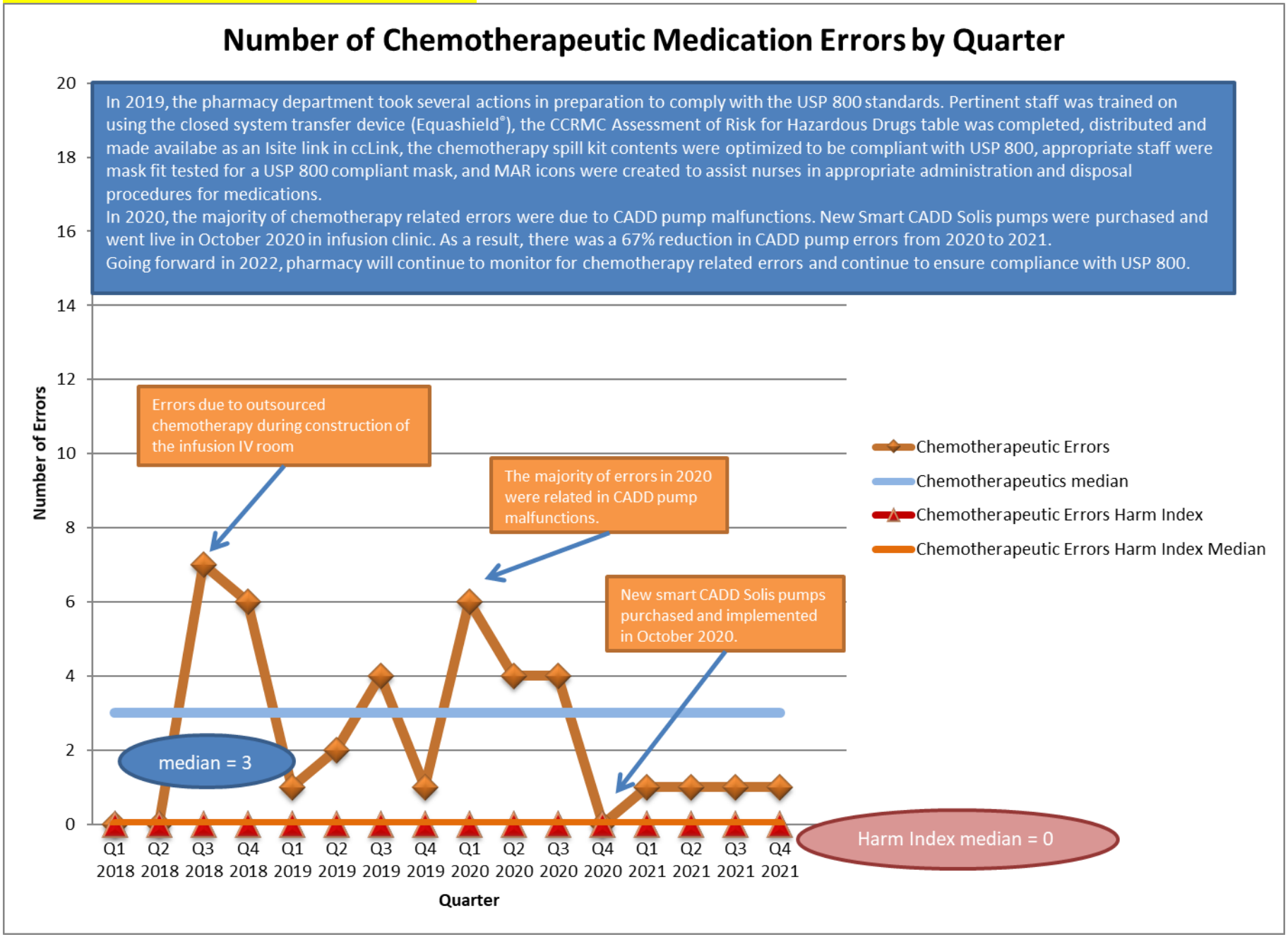


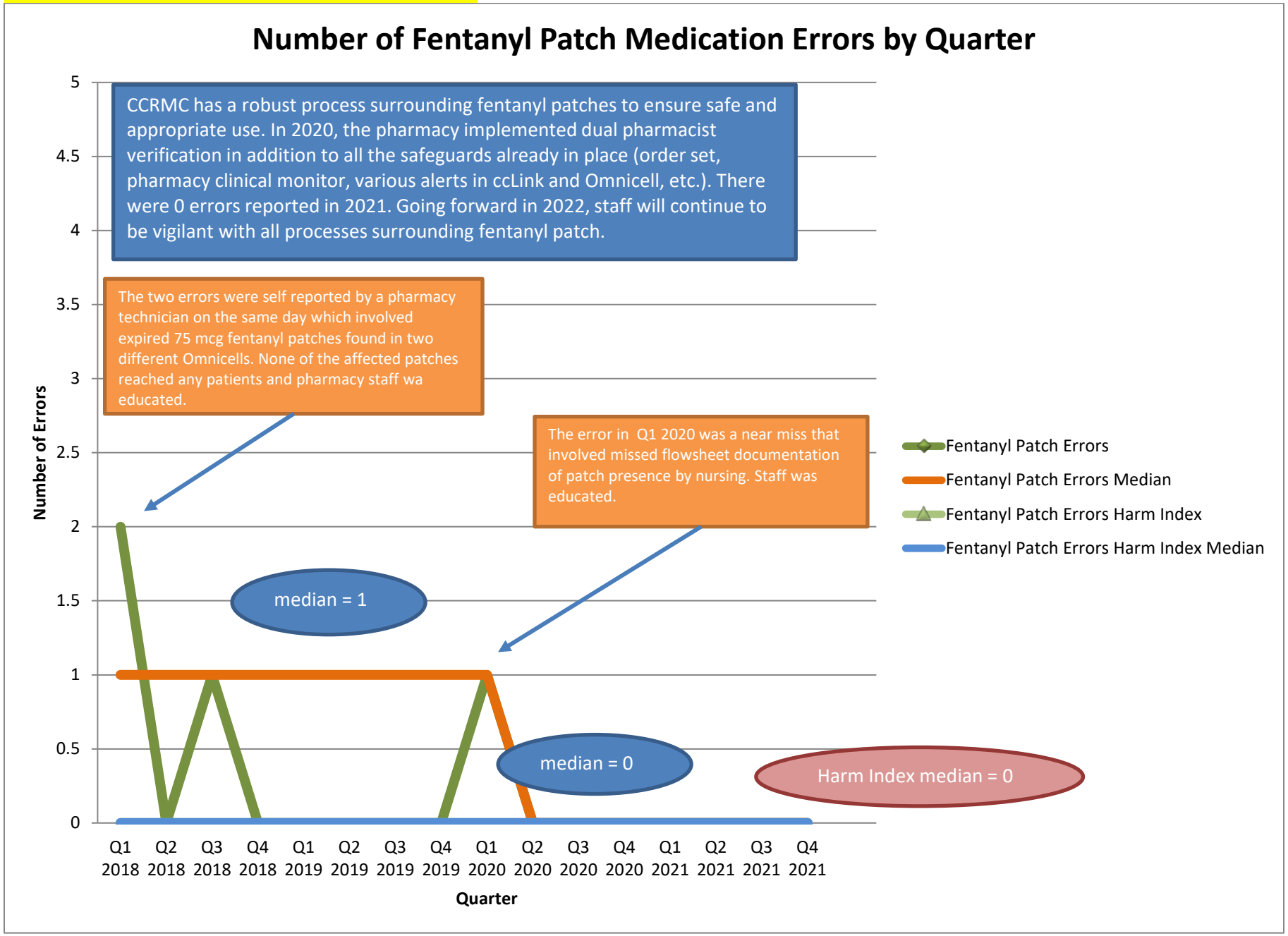
APPENDIX C: HIGH ALERT MEDICATION ERROR GRAPHS



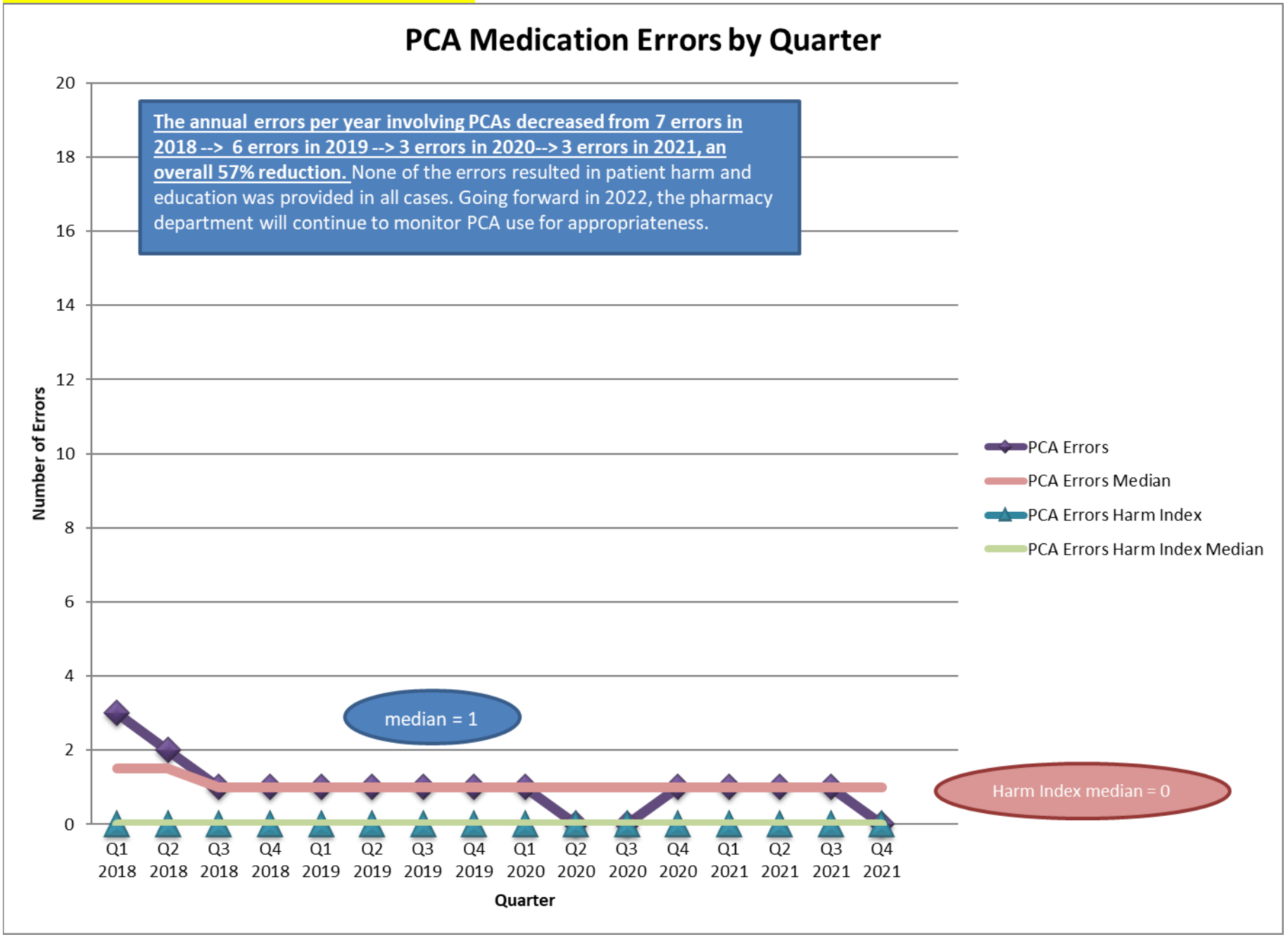
APPENDIX C: HIGH ALERT MEDICATION ERROR GRAPHS



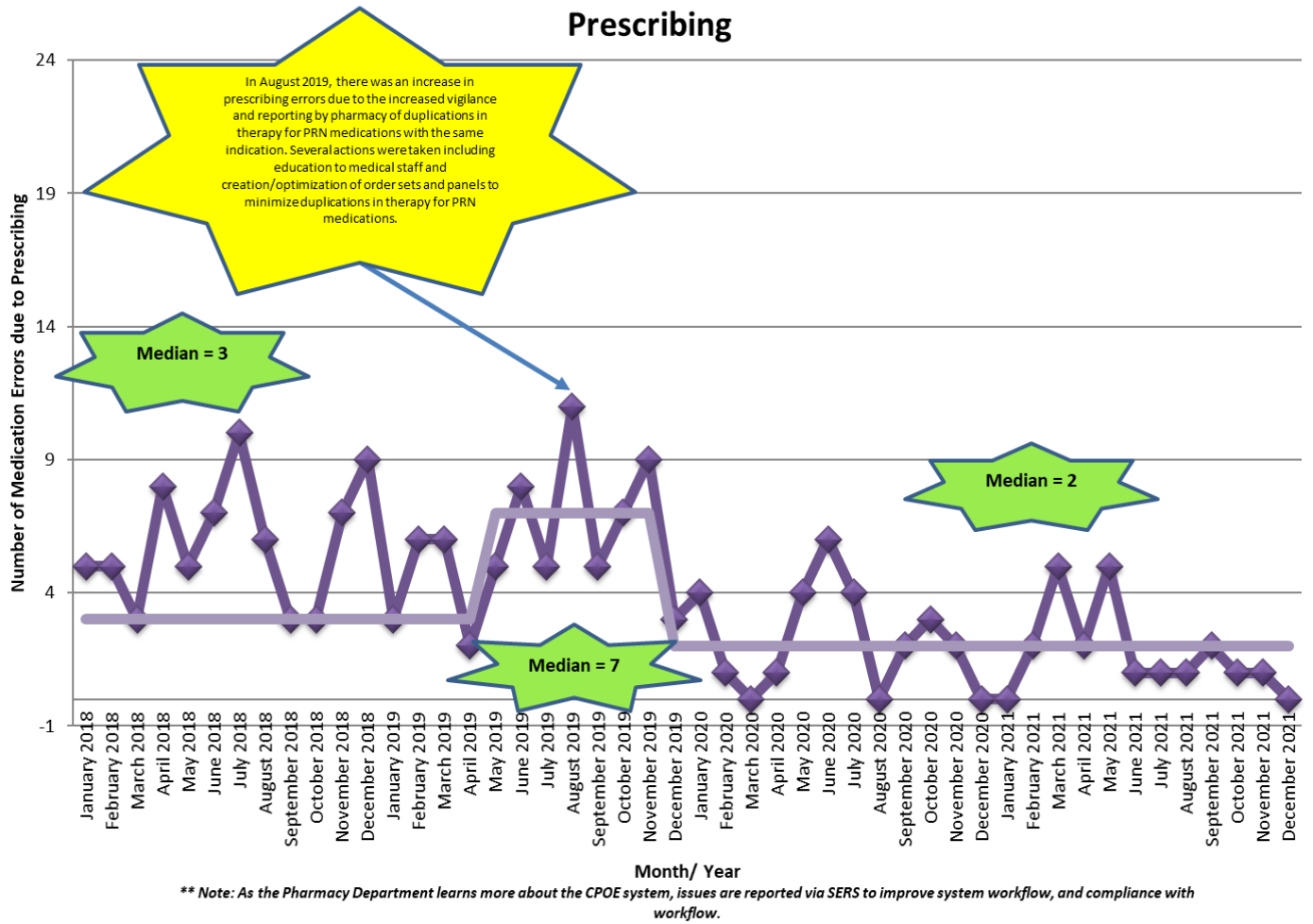
APPENDIX C: HIGH ALERT MEDICATION ERROR GRAPHS



APPENDIX C: HIGH ALERT MEDICATION ERROR GRAPHS



APPENDIX D: MERP ELEMENT GRAPHS



*** Note: As the Pharmacy Department learns more about the CPOE system, issues are reported via SERS to improve system workflow, and compliance with workflow.*

Prescribing by Year:
2018: 73 errors (0.007% error rate)
2019: 70 errors (0.006% error rate)
2020: 26 errors (0.003% error rate)
2021: 21 errors (0.002% error rate)
Looking back since 2019, CCRMC has reduced errors involving overrides, inappropriate insulin management and duplications in therapy.

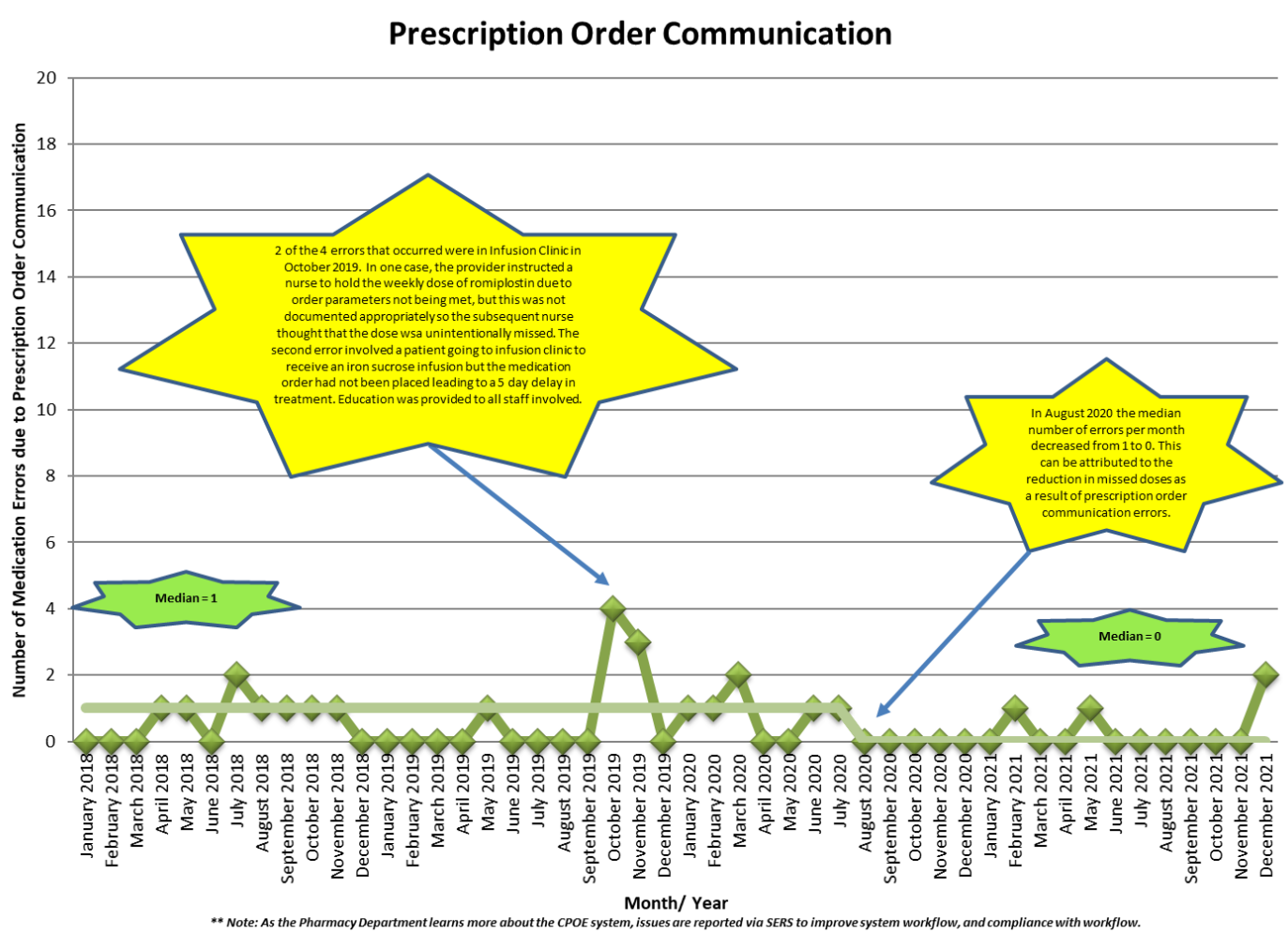
Duplications in therapy:
13 in 2019 → 4 in 2020 → 3 in 2021. Overall, 77% reduction since 2019 due to several efforts made to minimize duplicate PRN medications (order set changes, order panels created, etc.). The pharmacy's increased vigilance led to an increase in reporting of medications with duplicate PRN reasons.

Inappropriate insulin management:
5 in 2019 → in 2020 and 5 in 2021. See the High Alert Section of this SBAR and the Insulin SBAR for more details on specific errors and all actions taken.

Medication prescribed and given too soon
1 in 2019 → 4 in 2020→ 5 in 2021.
The majority of these errors involved acetaminophen being given as a x1 order in the OR or PACU and then the first dose of the scheduled order being given too soon in PACU or on the floor. The pharmacy dept. is working with ccLink to create a BPA to flag the nurse whenever acetaminophen is being administered less than 3 hours after the previous dose.

Looking back in 2021, the median number of prescribing errors per month decreased from 7 errors per month to 2 errors per month starting in December 2019 (a 71% reduction). This is as a result of the improvements seen in reducing the number of overrides (90% reduction since 2018) and reducing duplications in therapy (77% reduction since 2019) via order set changes and order panel creation. In 2021, the error types that peaked involved 1) inappropriate management of patients on insulin (5 errors reported) and 2) medications prescribed and given too soon after a dose had already been given (5 errors reported). Going forward in 2022, the focus will be to continue monitoring the areas above to ensure continued optimization and improvement.

APPENDIX D: MERP ELEMENT GRAPHS



** Note: As the Pharmacy Department learns more about the CPOE system, issues are reported via SERS to improve system workflow, and compliance with workflow.

Prescription Order Communication by Year:

2018: 8 errors (0.0007% error rate)
2019: 8 errors (0.0006% error rate)
2020: 6 errors (0.0006% error rate)
2021: 4 errors (0.0004% error rate)

Looking back since 2018, the percent error rate has been consistently low. The only trend noted was missed doses as a result of a communication error.

Missed/delayed doses due as a result of a communication error:

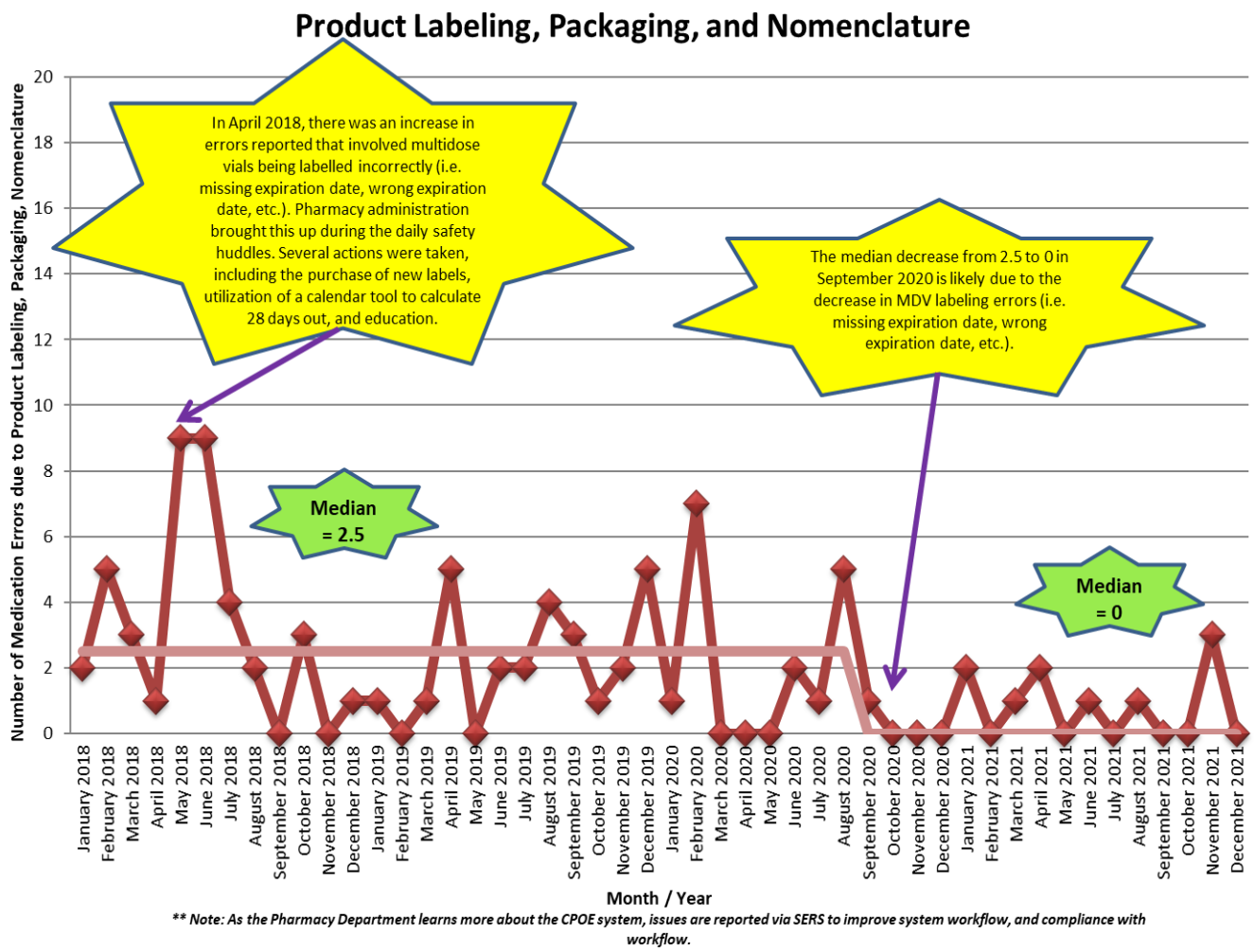
3 in 2019 → 2 in 2020 → 2 in 2021, a 33% improvement since 2019

Order entry error:

2 in 2021 (atropine at bedside order placed as a x1 order instead of a x1 PRN order).

Looking back in 2021, there was a decrease in median from 1 error per month to 0 errors per month starting August 2020. In 2021, there was a 33% improvement in missed doses due as a result of communication error. 2 errors involved the provider placing an order for atropine to be placed at bedside as a "once," order, which resulted in unintentionally medication administration. Pharmacy is working with cardiology and the head of the ICU department to optimize the atropine order to default to "Once PRN" with a PRN reason for HR less than 30 bpm." This PRN reason can be modified if needed. Going forward in 2022, pharmacy will continue to monitor prescription order communication errors for any trends and act accordingly.

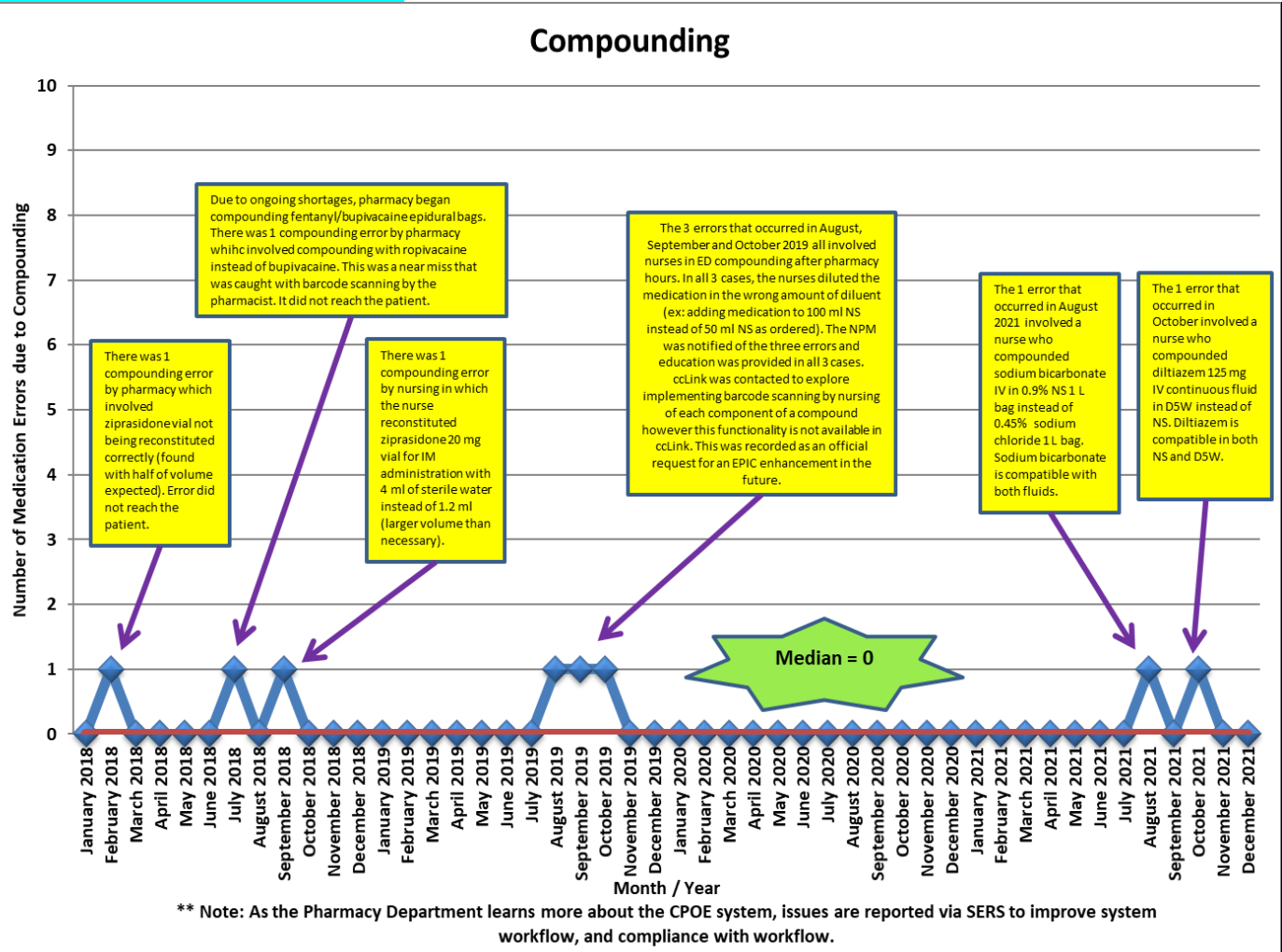
APPENDIX D: MERP ELEMENT GRAPHS



Product Labeling, Packaging and Nomenclature:
2018: 39 errors (0.004% error rate)
2019: 26 errors (0.002% error rate)
2020: 17 errors (0.002% error rate)
2021: 10 errors (0.001% error rate)
Looking back since 2019, the percent error rate has been consistently low. The trends noted are as follows:
MDV expiration labeling errors by nursing:
19 in 2018 → 16 in 2019 → 11 in 2020 → 8 in 2021, an overall 58% reduction. This is as a result of several optimizations made (providing list of Omnicell MDVs on each nursing unit, nursing cycle counts each shift, 28-day calendar tool provided by pharmacy to nursing and nursing education).

Looking back in 2021, the median number of errors per month in product labeling, packaging and nomenclature decreased from 2.5 to 0 starting in September 2020. Further, there was a 58% decrease in MDV expiration labeling errors by nursing compared to 2018. Going forward in 2022, pharmacy will continue to monitor for and report these types of errors. Pharmacy will continue to reinforce cycle counts of the MDVs by nursing and will continue to encourage all pharmacy staff to continue to be vigilant and report any labeling errors.

APPENDIX D: MERP ELEMENT GRAPHS

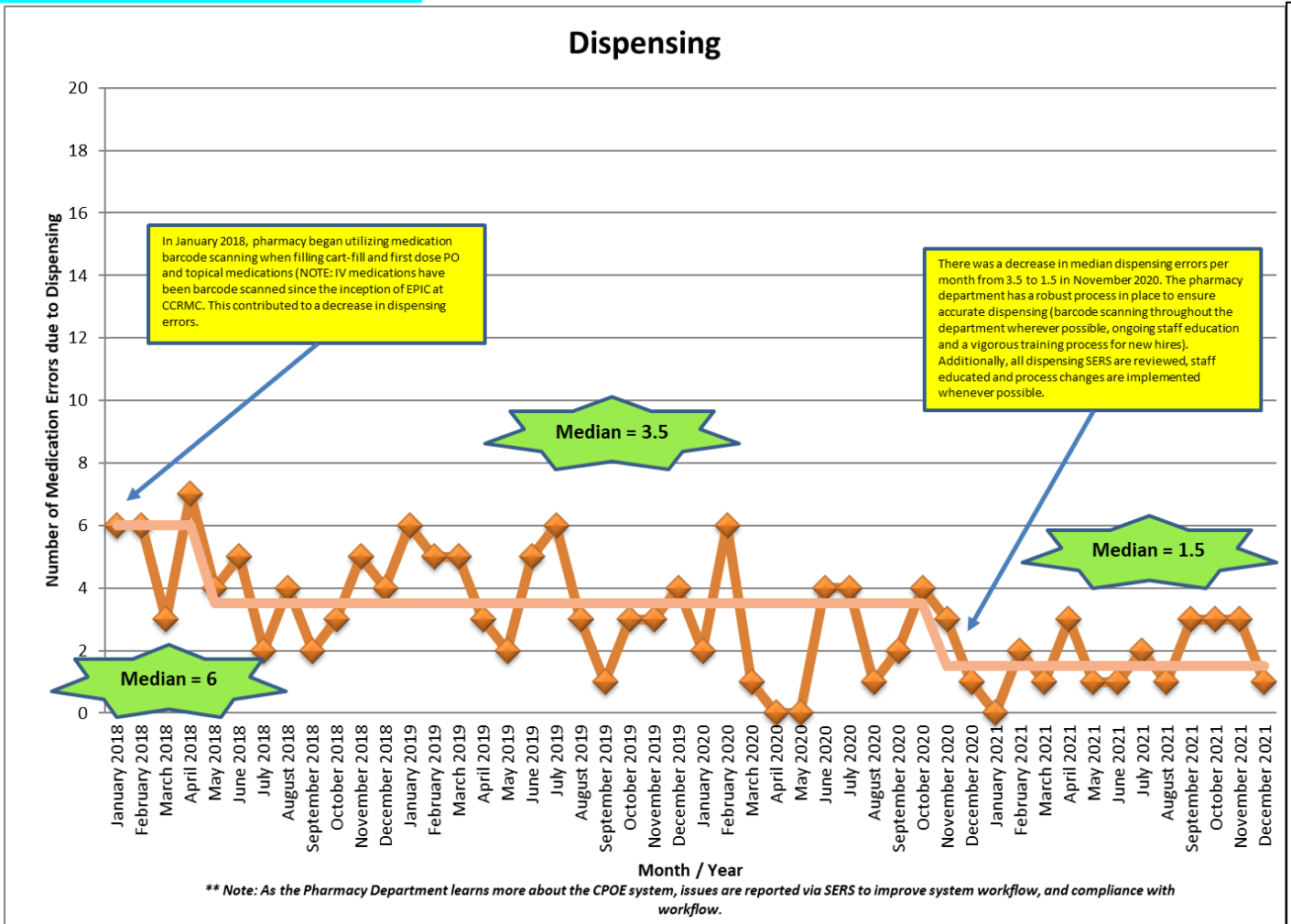


** Note: As the Pharmacy Department learns more about the CPOE system, issues are reported via SERS to improve system workflow, and compliance with workflow.

Compounding:
2018: 3 errors (0.0003% error rate)
2019: 3 errors (0.0002% error rate)
2020: 0 errors (0% error rate)
2021: 2 error (0.0002% error rate)
In 2019, there were 3 errors in which nurses compounded medications after pharmacy hours and compounded the medication in the wrong volume of fluid. All 3 errors happened in the ED and pharmacy reached out to the ED nursing program manager to educate staff.
In 2020, there were no compounding errors reported.
In 2021, there was 2 errors in which nurses compounded the medication in the wrong fluid outside of pharmacy hours. All IV orders specify what fluid the medication is compounded in as part of the order. Also, the drug compatibility chart is available to all nursing staff. Pharmacy reached out to the nursing program manager to educate staff. Additionally in both cases reported, the IV fluid used was also compatible with the medication being admixed.

Looking back in 2021, construction was started in 2020 to change the inpatient pharmacy compounding area from a segregated compounding area to an ante/buffer clean room and was ongoing in 2021. The construction is planned to be completed in 2022. Going forward, pharmacy will continue to monitor for compliance with USP 797 and USP 800 standards via pharmacy audits. In 2021, there was an increase in number of errors from 0 in 2020 to 2 in 2021. These 2 errors were caused by compounding the medication in the wrong fluid by nursing outside of pharmacy hours. Pharmacy reached out to the nursing program manager to educate staff to minimize these errors in the future. Additionally, pharmacy provides an annual IV training for nursing staff and will continue to do so. Going forward in 2022, pharmacy will continue to review and trend any compounding errors.

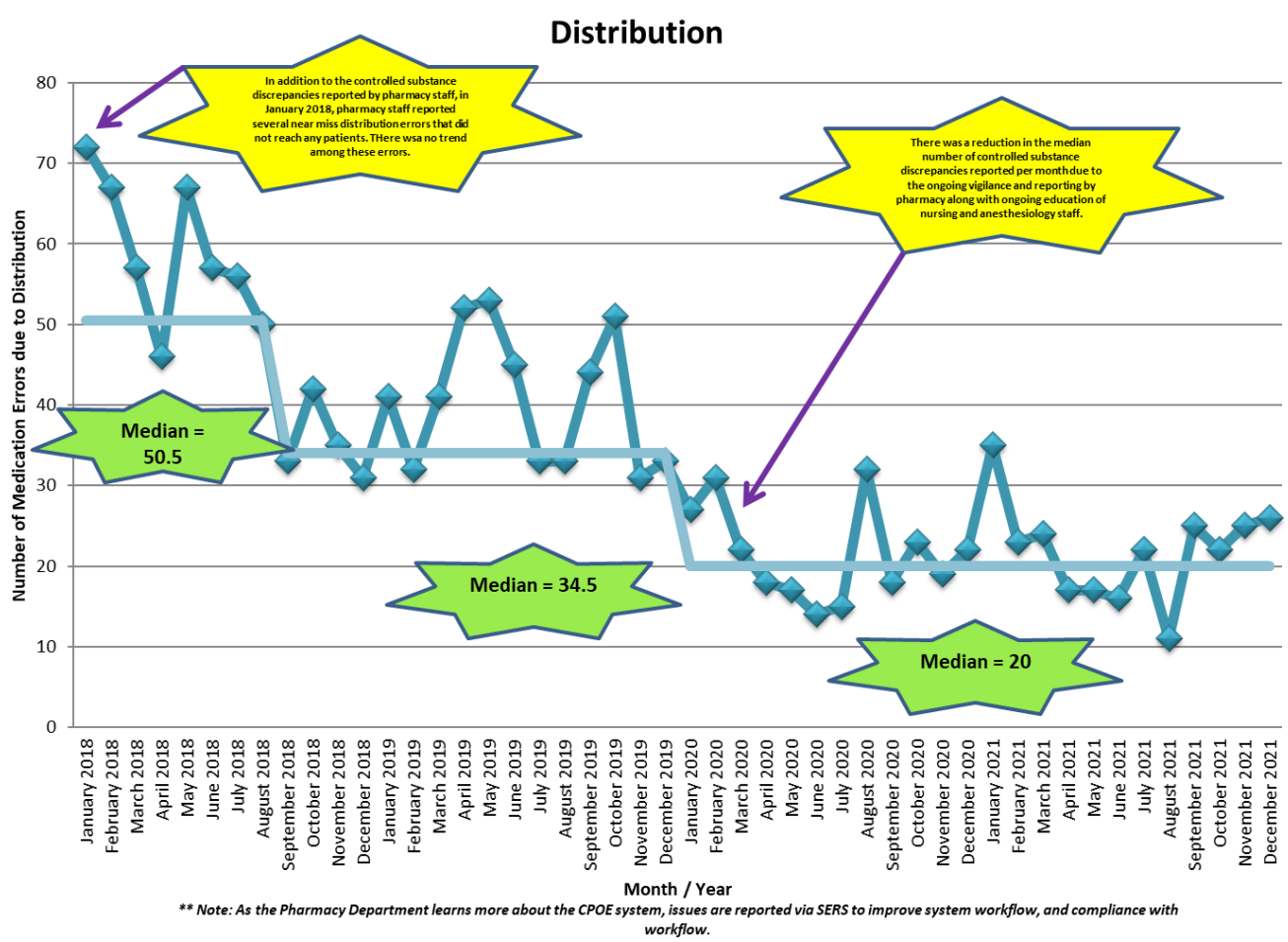
APPENDIX D: MERP ELEMENT GRAPHS



Dispensing:
2018: 52 errors (0.005% error rate)
2019: 46 errors (0.004% error rate)
2020: 28 errors (0.003% error rate)
2021: 21 errors (0.002% error rate)
Looking back since 2019, the percent error rate has been consistently low. The trends noted are as follows:
Wrong dose/strength errors:
11 in 2018 → 13 in 2019 → 3 in 2020 → 6 in 2021. An increase from 2020 but a 54% decrease from 2019. Pharmacy staff was educated to ensure barcode scanning, which could have prevented 2 of the errors in 2021.
Dispensing delays:
3 in 2019 → 2 in 2020 → 3 in 2021. Education was provided in all cases.

Looking back in 2021, the median number of errors per month decreased from 3.5 to 1.5 starting in November 2020 through 2021. There was an increase in number of wrong dose/strength errors from 3 errors in 2020 to 6 errors in 2021, however this was still lower than 13 errors in 2019 (an overall 54% decrease). It is important to note that barcode scanning was bypassed in 2 of the cases in 2021, which could have prevented those two errors. The pharmacists involved were educated. Pharmacy staff was also educated in regards to the dispensing delay errors.
The pharmacy department has a robust process in place to ensure accurate dispensing (barcode scanning throughout the department wherever possible, ongoing staff education and a vigorous training process for new hires). Additionally all dispensing errors are discussed with staff and process changes are implemented whenever possible. Going forward in 2022, the pharmacy department will work with ccLink to initiate barcode scanning in the Willow Ambulatory environment (this is in addition to the other areas of the pharmacy that already have barcode scanning enabled).

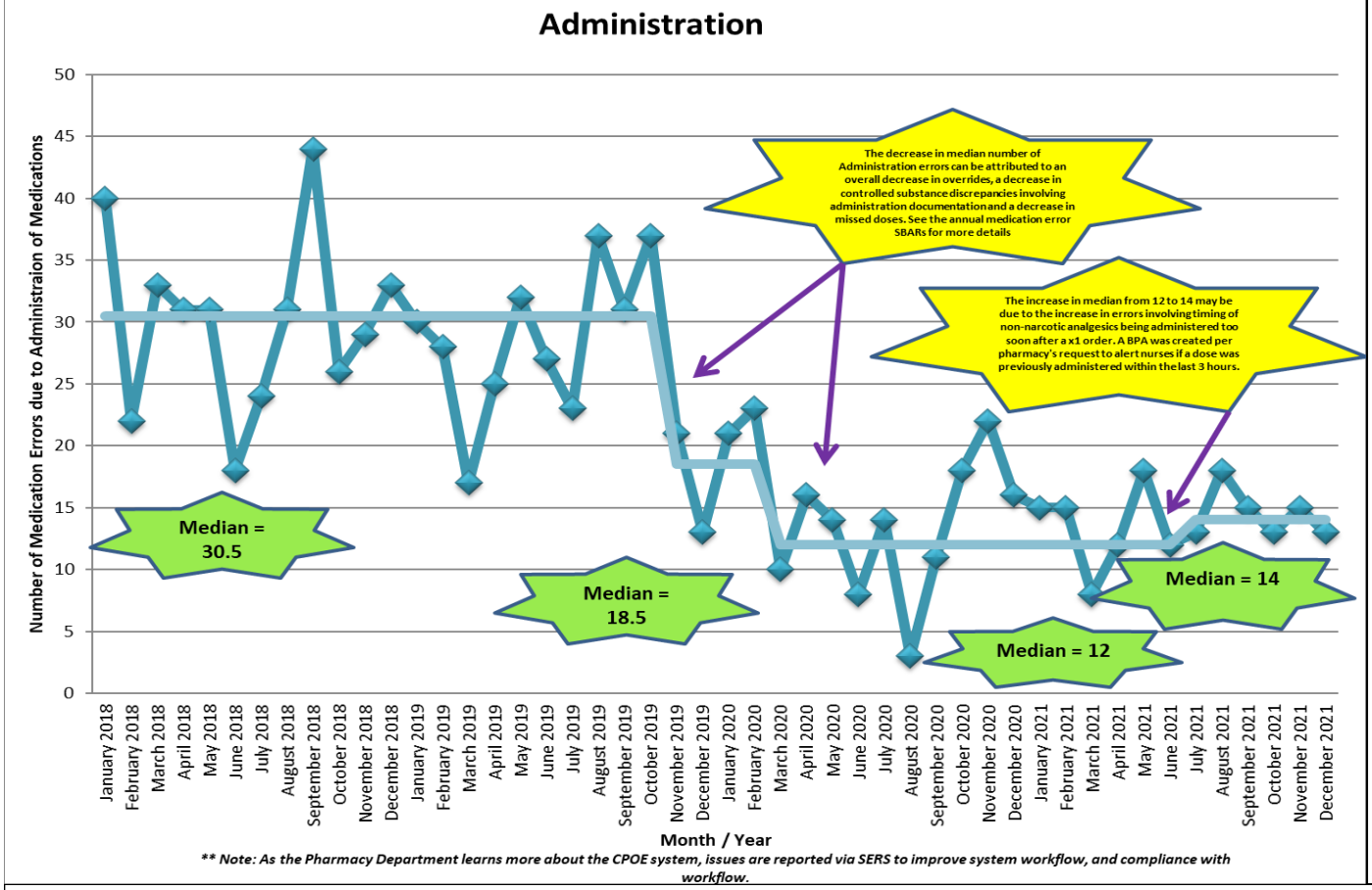
APPENDIX D: MERP ELEMENT GRAPHS



Distribution:
2018: 615 errors (0.056% error rate)
2019: 490 errors (0.039% error rate)
2020: 257 errors (0.026% error rate)
2021: 268 errors (0.024% error rate)
Looking back, there was a decrease in median from 34.5 to 20 errors per month starting January 2020 through 2021. The increase in number of errors from 257 in 2020 to 268 in 2021 is due to an increase in the number of controlled substances discrepancies. Pharmacy is working closely with nursing leadership.
Controlled substance discrepancies:
486 in 2018 → 386 in 2019 → 193 in 2020 → 218 in 2021 (55% reduction since 2018)
See the "medication errors by drug class- controlled substance" section for an in-depth review of controlled substance monitoring and corrective actions.
Issues surrounding Omnicell:
25 in 2018 → 21 in 2019 → 13 in 2020 → 18 in 2021 (28% reduction since 2019). There is an ongoing education of pharmacy staff to ensure accurate filling of Omnicell bins. Note that there is a technological limitation of Omnicell that only allows barcode scanning of the first dose being added to the Omnicell, instead of each dose.
MDV expiration labeling errors by nursing:
21 in 2018 → 19 in 2019 → 11 in 2020 → 8 in 2021, an overall 58% reduction due to the ongoing efforts by pharmacy and nursing to reduce these errors (education, MDV cycle counts by nursing, 28-day calendar tool).

Looking back in 2021, there was a decrease in median from 34.5 to 20 errors per month starting in January 2020. There was a 55% reduction in controlled substance discrepancies since 2018 and a 62% reduction in MDV expiration labeling errors by nursing since 2018 along with the 28% reduction in issues surrounding Omnicell since 2018. Although there was an increase in number of narcotic discrepancy errors from 2020 to 2021, the overall reduction in number of controlled substance discrepancies since 2018 is due to the ongoing monitoring and reporting of controlled substance discrepancies on a daily basis by pharmacy along with a task being added to the task list for OR and L&D OR in January 2020 for nurses to ensure that the anesthesiologists complete post case dose reconciliation prior to closing the case. In 2020, CCRMC was recognized in the Cal Hospital Opioid Care Honor Roll as one of the 25 hospitals ranked in the "superior performance." Going forward in 2022, pharmacy will continue to monitor and report controlled substance discrepancies. Going forward in 2022, pharmacy will complete the conversion of G4 Omnicells to XT (allows for better patient data security, higher narcotic security with metal locking bins rather than plastic, and Omnidispensers instead of coils which will cause less jams and are more space efficient/ increase capacity). The multidisciplinary Opioid Stewardship Committee will continue to meet on a quarterly note to review guidelines and regulations, and optimize pain management strategies at CCRMC.

APPENDIX D: MERP ELEMENT GRAPHS

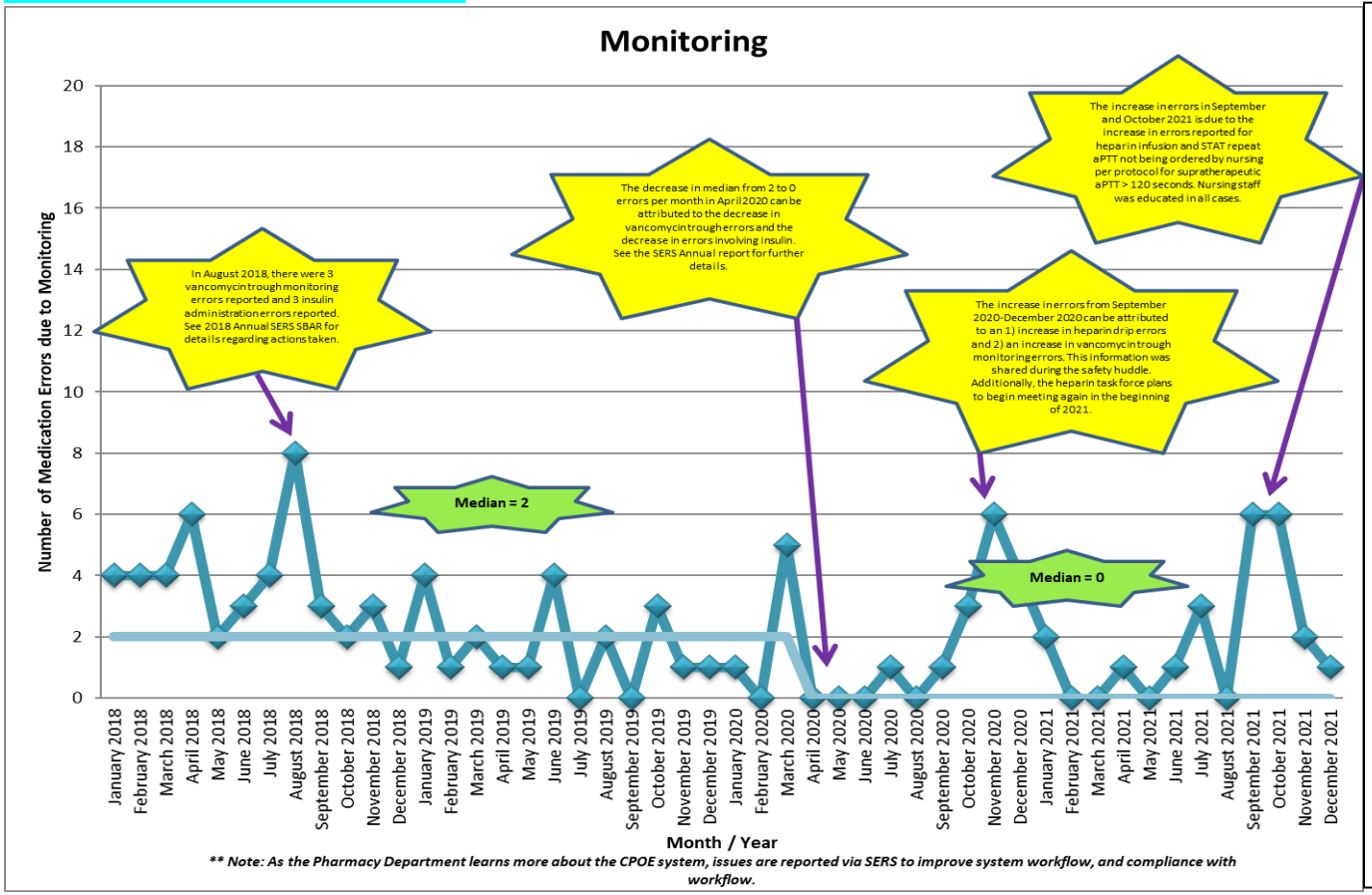


Administration:
2018: 352 errors (0.032% error rate)
2019: 299 errors (0.023% error rate)
2020: 161 errors (0.017% error rate)
2021: 150 errors (0.014% error rate)
Trends noted are as follows.
Overrides:
87 in 2018 → 72 in 2019 → 32 in 2020 → 24 in 2021, an overall 72% reduction.
Missed doses:
47 in 2018 → 51 in 2019 → 25 in 2020 → 36 in 2021, an overall 23% reduction.
Missed doses due to clamp errors:
14 in 2018 → 14 in 2019 → 8 in 2020 → 8 in 2021, an overall 43% reduction.
Wrong dose/rate/concentration/time/ frequency:
15 in 2019 → 22 in 2020 → 29 in 2021. The increase in 2021 may be due to the increase in errors involving timing of non-narcotic analgesics being administered too soon after a x 1 order (8 cases involving acetaminophen and 1 involving ketorolac).

Looking back in 2021, there was a 57% reduction in number of errors since 2019. The top error types that peaked were override errors, missed dose errors and errors caused by wrong dose/rate/concentration/frequency/time. While these errors were the top error types, the override errors had overall reductions of 72% since 2018 and the missed dose errors had 43% reduction due to ongoing efforts by the organization. There was an increase in wrong time errors in which acetaminophen or ketorolac second dose was administered too soon after a x1 dose was administered in the OR or PACU. A BPA is in the process of being created to alert nurses if a dose had been administered less than 3 hours prior to help prevent this error type. Going forward in 2022, pharmacy will continue to monitor and trend any similar errors.

Going forward in 2022, pharmacy will continue to monitor overrides for any trends and work with NPMs to resolve any issues. See the annual overrides SBAR for more details. There are several processes in place from previous years that have contributed to the downtrend of clamp errors and maintaining a low number of errors (i.e. audits by pharmacy and nursing, education by the professional development department alert in Alaris pump, etc.). Going forward in 2022, the Alaris infusion pumps will be updates to alarm for unclamped secondary infusions which was a previously unavailable feature. This is planned to go live in the beginning of 2022. The Medication Safety Committee will continue to monitor and trend these types of errors.

APPENDIX D: MERP ELEMENT GRAPHS



Monitoring:
2018: 44 errors (0.004% error rate)
2019: 23 errors (0.001% error rate)
2020: 24 errors (0.002 % error rate)
2021: 21 errors (0.002 % error rate)
In 2021, the median number of errors continued to be 0 per month since April of 2020. Trends noted are as follows.

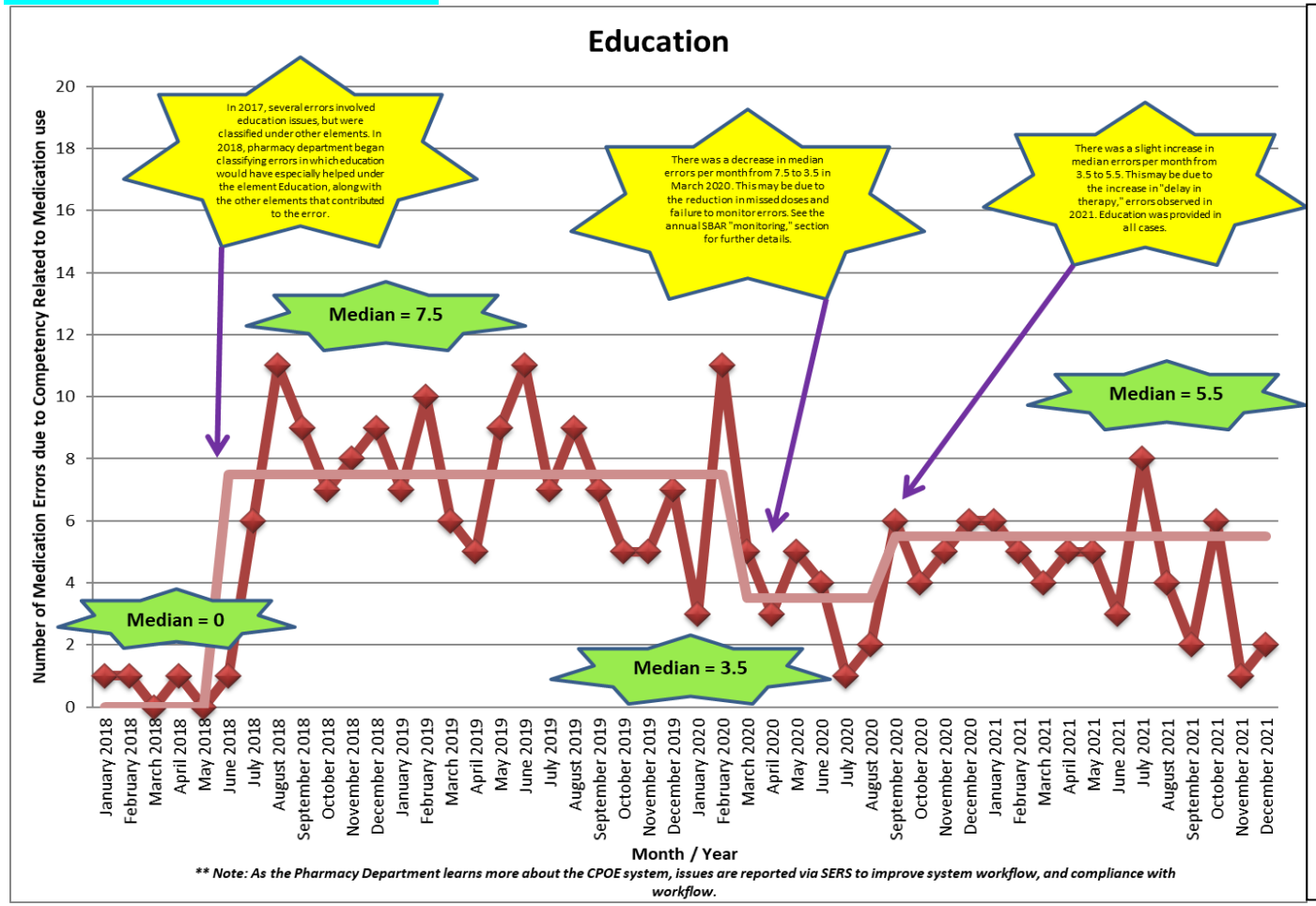
Heparin infusion errors:
13 in 2018 → 10 in 2019 → 5 in 2020 → 11 in 2021. While the number of errors increased from 2020 to 2021, the percent of errors (# of heparin errors/ days of therapy) only slightly increased from 3.8% in 2020 to 4% in 2021.

Vancomycin trough errors:
15 in 2018 → 9 in 2019 → 9 in 2020 → 6 in 2021, an overall 60% reduction.

Insulin errors:
7 in 2018 → 1 in 2019 → 1 in 2020 → 1 in 2021, an overall 86% reduction.

There was a decrease in the median number of errors per month from 2 to 0 starting in April 2020 through 2021. In 2021, there was a 60% reduction in number of vancomycin trough errors from 2018 to 2021. In order to further reduce vancomycin trough errors, a BPA was created per the request of pharmacy to alert nurses of a trough order within 2 hours of the vancomycin due time. While there was an increase in heparin infusion errors from 2020 to 2021, there was also an increase in patient days of heparin (160 days in 2020 vs. 297 days in 2020). When looking at the number of errors over the patient days, there was a 3.8% error rate in 2020 and a slight increase up to 4% in 2021. The slight increase may be due to a new error type identified in 2021 (missed STAT repeat aPTT order by nursing for aPTT > 120 seconds). Nursing staff was educated and reminded to order the STAT repeat aPTT per protocol. See the "High Alert- Anticoagulation" section for further details of actions taken. Going forward in 2022, pharmacy will continue to address these errors, emphasize education and work with ccLink IT to optimize the protocol. Dual Sign off has been added to all heparin administrations, which previously was only available for 'Initial Infusion' in January 2021. Additionally, the calculator format was updated to make the "initial dose" and "subsequent dose" sections stand out more on the MAR.
More so, there was an 86% reduction in number of insulin related errors from 2018 to 2021. The decrease in insulin related errors can be attributed to the several actions taken by the multidisciplinary insulin task force since its inception in 2018. See the "high alert" section of this SBAR and the Insulin SBAR for more details.

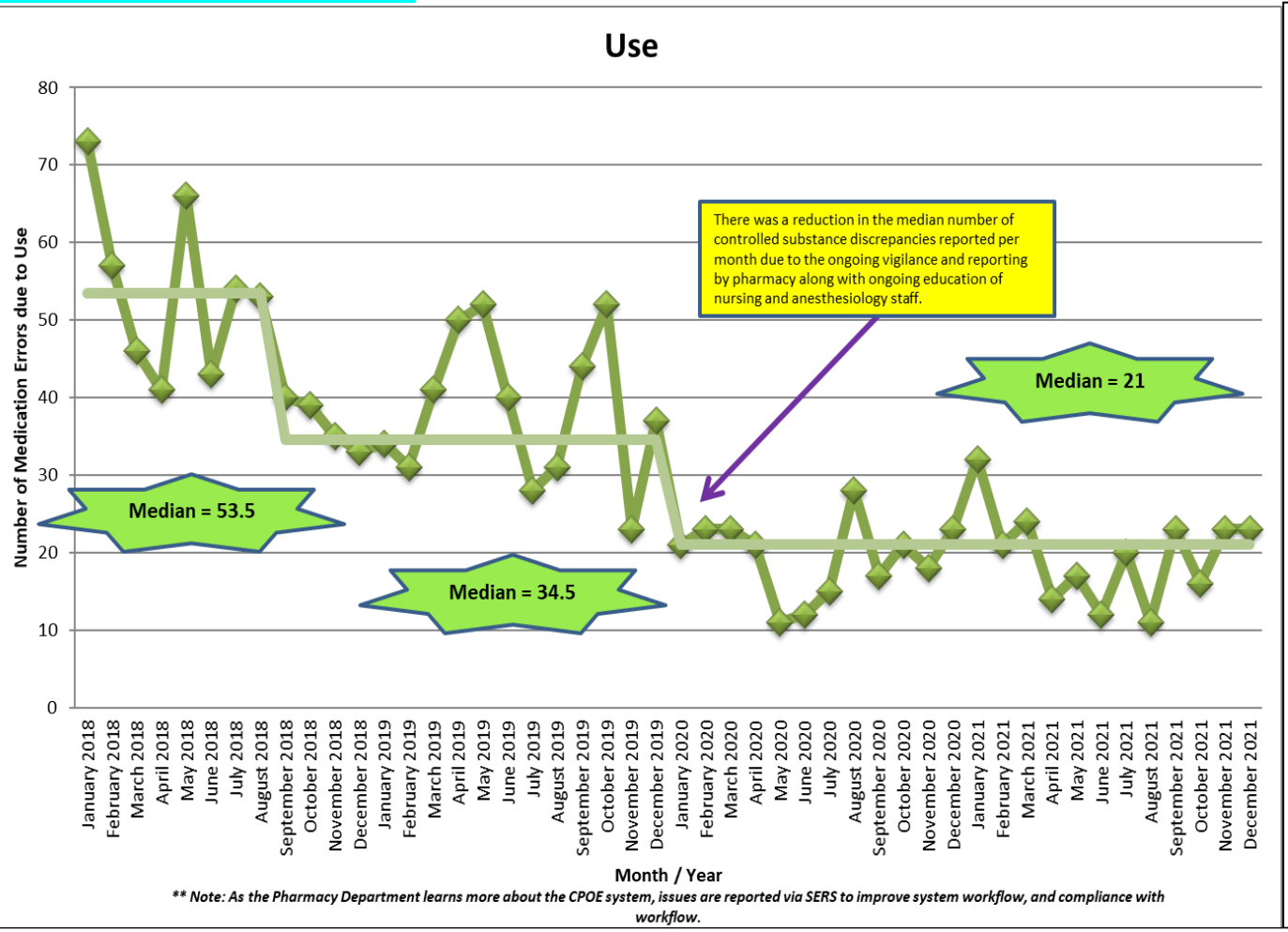
APPENDIX D: MERP ELEMENT GRAPHS



Education:
2018: 55 errors (0.005% error rate)
2019: 87 errors (0.007% error rate)
2020: 55 errors (0.006 % error rate)
2021: 51 errors (0.005 % error rate)
Trends noted are as follows.
Delays in therapy:
6 in 2018 → 5 in 2019 → 4 in 2020 → 7 in 2021
Failure to monitor:
5 in 2018 → 8 in 2019 → 2 in 2020 → 4 in 2021
Missed doses:
3 in 2018 → 5 in 2019 → 6 in 2020 → 2 in 2021

Looking back in 2021, the median number of errors per month was stable at 5.5 errors. The top error types were delays in therapy and failure to monitor. 2 of the 7 delays involved delays in Kcentra administration. Going forward in 2022, pharmacy will provide educational materials for the professional development department to educate nursing staff on Kcentra administration in order to help prevent delays in the future. There was no harm to either patient who had Kcentra ordered. There was a 50% decrease in failure to monitor errors from 2019 to 2021 (see "monitoring" section for details), and a 60% decrease in missed doses (see "administration," section for further details). Looking back in 2021, there were several educational efforts that took place including but not limited to 1) education for pharmacy staff on soaking medication cart and spraying medication package with alcohol spray upon return to pharmacy, 2) education to nursing staff on discarding medications from COVID patient rooms. Going forward in 2022, education will be provided to nurses on the following and other items as deemed necessary- 1) the IV compatibility chart, 2) waste management in the inpatient and ambulatory settings, 3) education to nurses when dispense tracking is implemented
The majority of education errors are also classified under the other elements that apply to the error and are further discussed and trended under those elements. Going forward in 2022, pharmacy will continue to work with nursing leadership and the Professional Development Department to promote ongoing education.

APPENDIX D: MERP ELEMENT GRAPHS

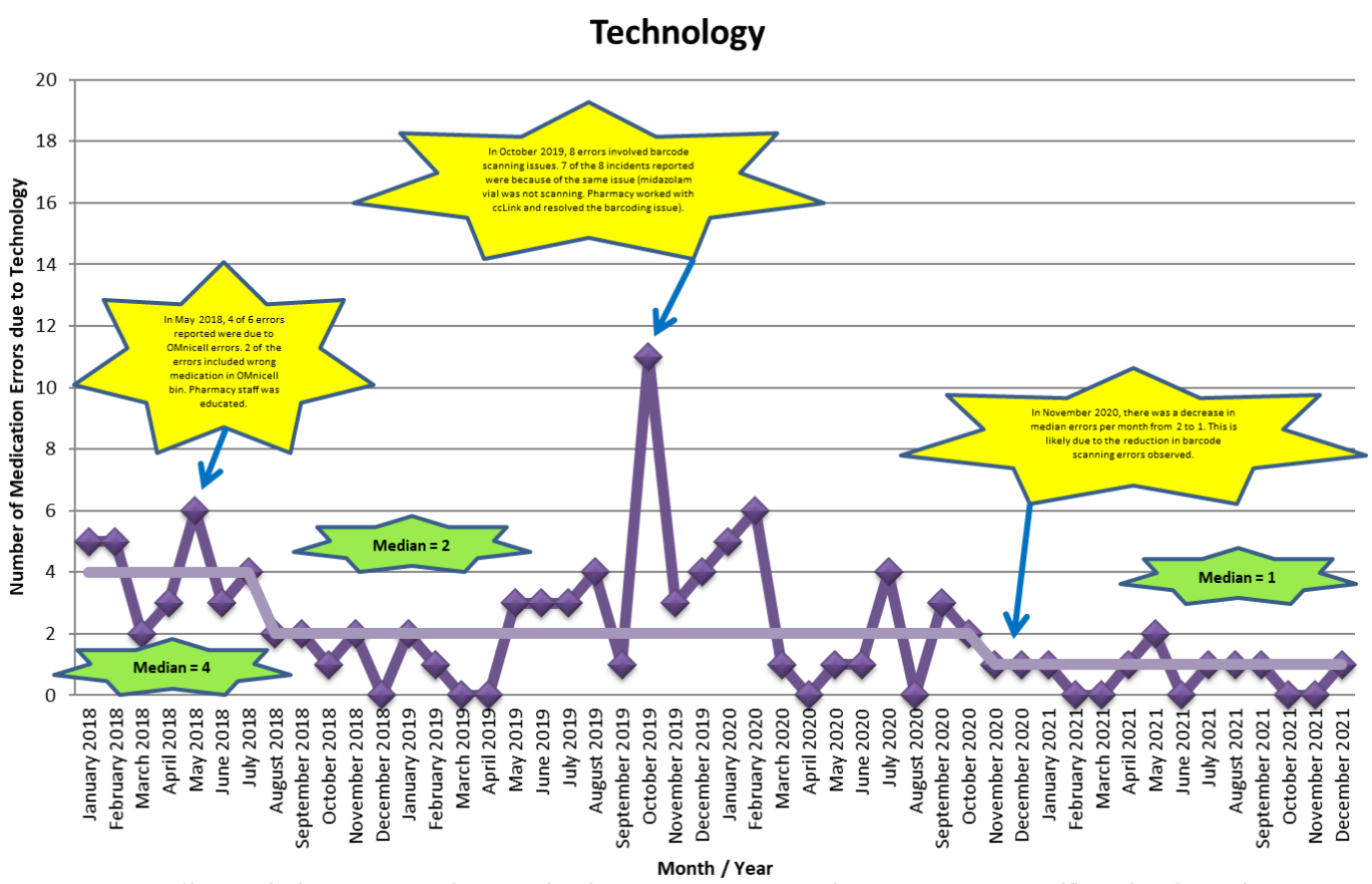


*** Note: As the Pharmacy Department learns more about the CPOE system, issues are reported via SERS to improve system workflow, and compliance with workflow.*

Use:
2018: 582 errors (0.053% error rate)
2019: 460 errors (0.036% error rate)
2020: 233 errors (0.024 % error rate)
2021: 236 errors (0.021 % error rate)
Looking back in 2020, the median number of errors decreased from 34.5 per month to 21 per month starting in January 2020. Trends noted are as follows. The increase in number of errors from 233 in 2020 to 236 in 2021 is due to increase in number of controlled substances dispenses. Pharmacy is working closely with nursing leadership and nursing program manager.
Controlled substance discrepancies:
486 in 2018 → 386 in 2019 → 193 in 2020 → 218 in 2021 (55% improvement since 2018)

Looking back in 2021, there was a decrease in the median errors per month from 34.5 to 21 starting in January 2020 and remained the same through 2021. There was an overall 55% decrease in controlled substance discrepancies since 2018. The reduction in controlled substance discrepancies is due to the ongoing monitoring and reporting of controlled substance discrepancies on a daily basis by pharmacy along with a new task being added to the task list for OR and L&D OR in January 2020 for nurses to ensure that the anesthesiologists complete post case dose reconciliation prior to closing the case.
In 2020, CCRMC was recognized in the Cal Hospital Opioid Care Honor Roll as one of the 25 hospitals ranked in the "superior performance."
Going forward in 2021, pharmacy will continue to monitor and report controlled substance discrepancies. The multidisciplinary Opioid Stewardship Committee will continue to meet on a quarterly note to review guidelines and regulations and optimize pain management strategies at CCRMC.

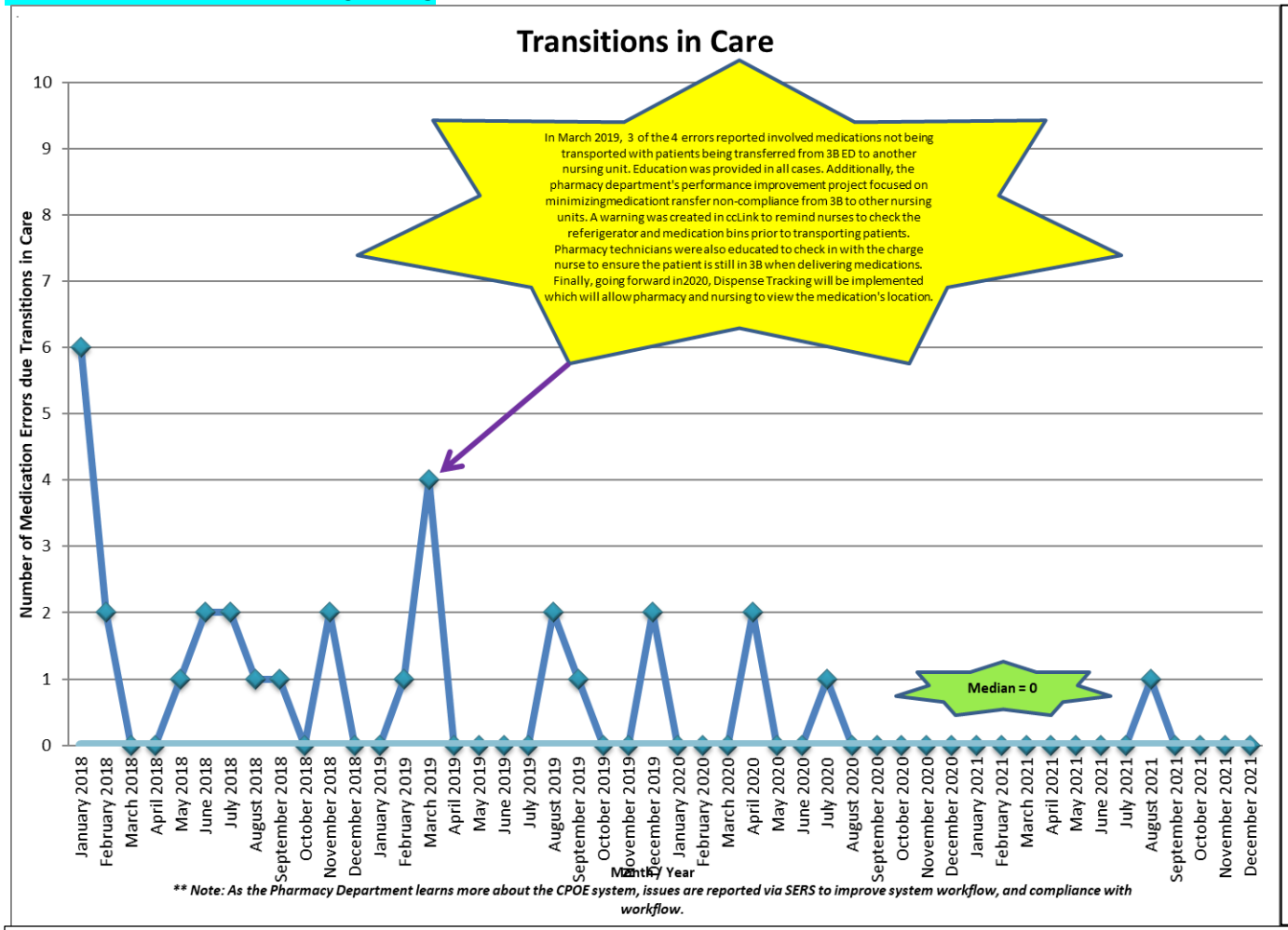
APPENDIX D: MERP ELEMENT GRAPHS



Technology:
2018: 36 errors (0.003% error rate)
2019: 31 errors (0.002% error rate)
2020: 25 errors (0.0.003 % error rate)
2021: 8 errors (0.001 % error rate)
Looking back since 2019, the percent error rate has been consistently low. The trends noted are as follows:
Errors involving Omnicell:
12 in 2018 → 4 in 2019 → 5 in 2020 → 2 in 2021
Barcode scanning:
2 in 2018 → 10 in 2019 → 0 in 2020 → 0 in 2021
IV pump issues:
1 in 2018 (Alaris) →5 in 2019 (3 Alaris, 2 CADD) → 7 in 2020 (all CADD) → 4 in 2021 (2 Alaris, 2 CADD)

Looking back in 2021, there was a 83% decrease in errors involving Omnicell since 2018 due to ongoing education of pharmacy staff. Also, the barcode scanning errors continued to be 0 in 2021 as a result of technological fixes and education of pharmacy and nursing staff.
In 2021, there was a decrease in CADD pump malfunctioning errors from 7 in 2020 to 2 in 2021 in infusion clinic (71% improvement). In October 2020, new smart CADD Solis pumps were purchased for infusion clinic and went live. Pharmacy will continue to trend CADD pump data and report findings to the Medication Safety Committee.
Going forward in 2022, pharmacy will complete the conversion of G4 Omnicells to XT (allows for better patient data security, higher narcotic security with metal locking bins rather than plastic, and Omnidispensers instead of coils which will cause less jams and are more space efficient/ increase capacity). Pharmacy will continue to trend and monitor technological errors.

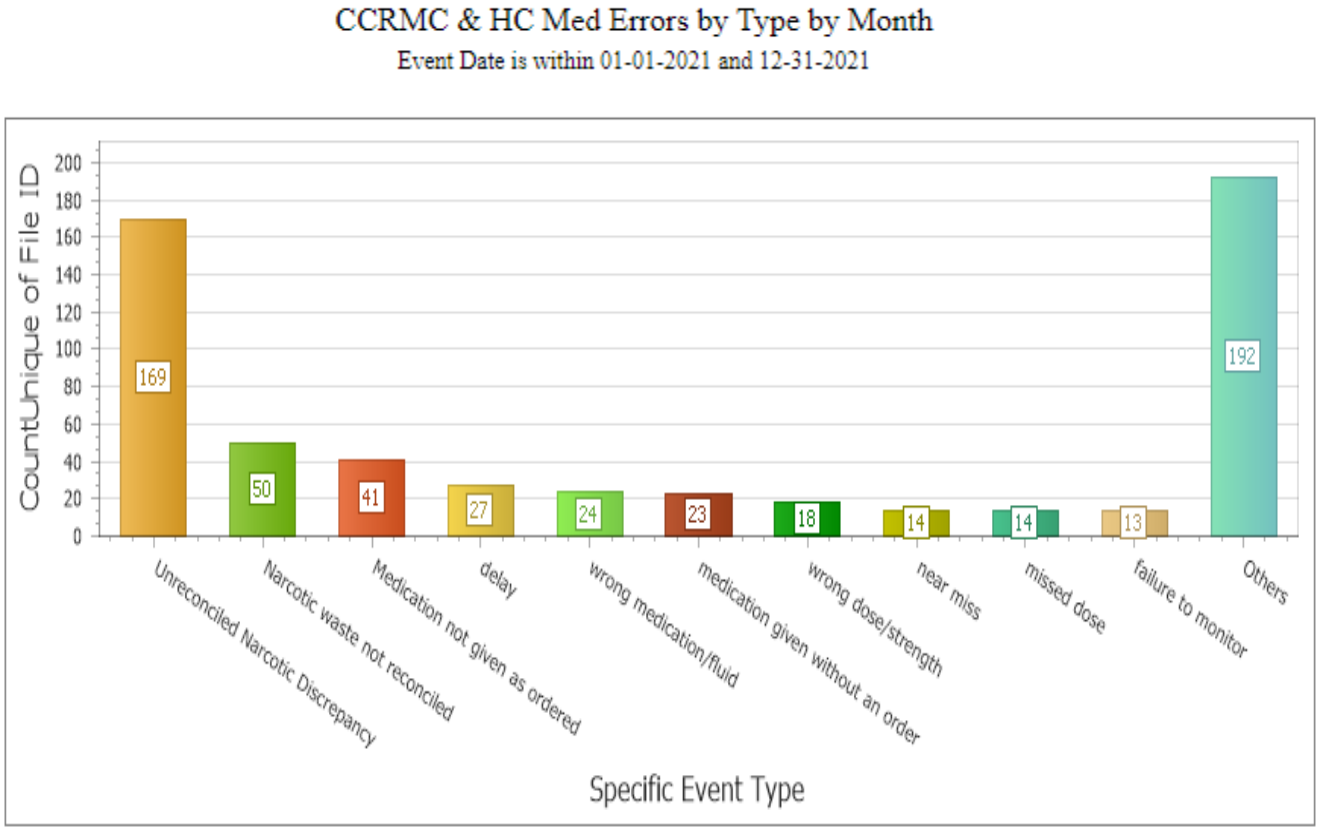
APPENDIX D: MERP ELEMENT GRAPHS



Transitions in Care:
2018: 17 errors (0.002% error rate)
2019: 10 errors (0.0008% error rate)
2020: 3 errors (0.0001% error rate)
2021: 1 error (0.0001% error rate)
Looking back since 2018, the percent error rate has been consistently low. The trends noted are as follows:
Errors involving patient transfer within the hospital from one unit to the next:
5 errors in 2018 → 9 errors in 2019 → 2 errors in 2020 → 1 error in 2021.

Looking back in 2021, there was an 88% decline in errors from 2019 to 2021 involving patient transfer within the hospital from one unit to the next. The pharmacy department's performance improvement project was to deliver medications to patients in a timely manner and improve pharmacy operations by reducing unnecessary in-basket messages. Upon investigation, it was found that the top reason for in-basket messages was for missing doses. With further analysis, it was found that one of the top two contributing factors to missing doses was non-compliant medication transfer events (i.e., medications already dispensed from pharmacy not being transferred with patient from one unit to the next). In 2020, pharmacy and nursing focused on educating staff which contributed to the decline in errors reported. Simultaneously, in 2021, pharmacy explored utilizing a dispense tracking system to help with locating missing doses that have already been dispensed. Going forward in 2022, the pharmacy department will work with ccLink IT to pilot the dispense tracking system.

APPENDIX E- MEDICATION ERRORS BY TYPE



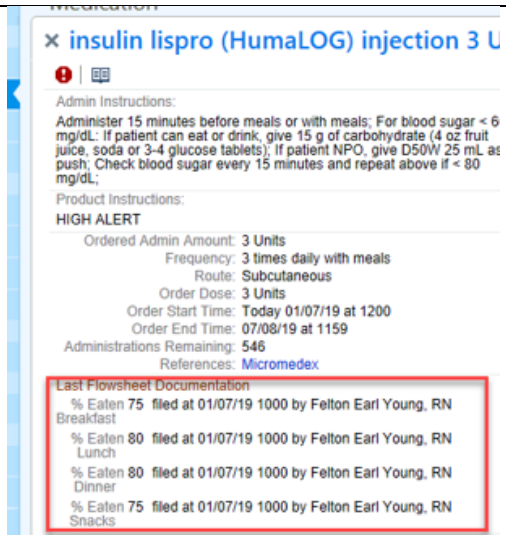
SUPPLEMENT

DETAILED DOCUMENTS

CCRMC TIMELINE OF EFFORTS MADE TO REDUCE SEVERE HYPOGLYCEMIA (BG≤ 50 MG/DL)

Date	Action Taken	Status
October 2017	As a result of multiple level E events in one patient, the plan of correction was to create a BPA, which went into effect in October 2017. The BPA reminds physicians to reduce the insulin dose in the scenario if all of the following is true: 1) patient has had more than one day in the hospital. 2) Diet order changed from non-NPO to NPO. 3) On long-acting insulin or insulin infusion. If all 3 are true, POP-UP will alert the physician to consider decreasing the insulin regimen.	Completed
February 2018	The pre-checked dextrose fluid for patients who become NPO in the SubQ insulin order sets was unchecked and hidden due to a technological glitch in the programming. This was fixed in February 2018.	Completed
March 2018	The BPA regarding NPO status was not coded correctly and was programmed to not fire within 24 hours of patient being in the ED (including boarder patients who may be in the ED for longer than 24 hours). BPA was updated to fire for ED boarder patients in March 2018.	Completed
March 2018	Administration instructions were added to scheduled mealtime insulin in March 2018: *"If scheduled mealtime insulin already administered and patient does not eat, check BG 30 minutes after insulin administration."*	Completed
March 2018	Updated BG goals were added to the SubQ insulin order sets in March 2018, consistent with ADA Diabetes Care Guidelines. *Goal blood glucose is 140-180 mg/dL for non-pregnant adult inpatients.* *More stringent goal blood glucose (110-140 mg/dL) may be appropriate for selected patients if this can be achieved without significant hypoglycemia.*	Completed

March 2018	Conducted DUE for SubQ insulin and severe hypoglycemia ≤50 mg/dl. Continued to do so and findings shared with multidisciplinary insulin taskforce	Ongoing
June 2018	Vigilanz activation for pharmacy for insulin and BG ≤ 70 mg/dl was activated by June 2018.	Completed
July 2018	SQ insulin sidebar report was made and is available for inpatient nurses in July 2018.	Completed
September 2018	Multidisciplinary meetings to begin in the 4th Quarter 2018 in order to continue to address the issues surrounding insulin and hypoglycemia.	Completed
October 2018	New system list created for nutrition dept. for any patient on insulin (previously had a list of patients on long-acting insulin only). This was completed in October 2018.	Completed
November 2018	PRN fluid changed from D5W to D5NS per request of medical staff and admin instruction changed from for NPO patients with BG < 250 mg/dl, to start upon patient becoming NPO. This was completed in November 2018.	Completed
November 2018	Hyperkalemia treatment- Insulin +D50 order panel created, which includes POCT BG checks before administration, then hourly after administration x 6 hours. This was completed in November 2018.	Completed
January 2019	5D Pilot project to improve percent eaten documentation initiated	Completed
January 2019	Multidisciplinary meeting to explore barcoding meal trays to help with amount eaten documentation	Not started due to technological limitations with EPIC
January 2019	MAR updated to allow RN to view previous % eaten documentation under insulin order in the administration screen	Completed January 2019

		
January 2019	Drug utilization evaluation of insulin and BG ≤ 50 mg/dl conducted, and findings shared with multidisciplinary insulin committee	Completed
February 2019	Physician oversight/QA process initiated in February 2019 for any patients with severe hypoglycemia	
February 2019	RN education plan to educate nurses to administer rapid acting insulin with first bite of meal (0-15 minutes before eating).	
February 2019	SubQ insulin guideline sidebar to be updated to include specific instructions and to match MAR administration instructions.	Finalized in May 2019
February 2019	SubQ insulin administration instructions updated	Finalized in May 2019
February 2019	Vigilanz alerts for BG < 70 mg/dl to 5D charge nurses and certain providers	
February 2019	Requested PRN POCT BG Q6 Hours while NPO order to be placed into the SubQ insulin order sets	Completed
March 2019	Hypoglycemia smart phrase created so that physician oversight/QA process could be standardized with plan to start running reports on this.	Smart phrase was created.
March 2019	NPO for diabetic order panels (including dextrose fluid and POCT BG Q6 hours) were built out.	Completed
March 2019	eLearning for providers regarding insulin management	Completed in May 2019
March 2019	Charge nurses requested to have option in EPIC to add a column for POCT BG orders to their system list.	Completed
March 2019	New Vigilanz alerts for pharmacists: - Incremental BG decline New BPA for providers for SCr > 1.5 mg/dl and BG < 110 mg/dl	Completed
April 2019	Nourishment room updates- PARs of certain food items increased based on need of each nursing unit to ensure that snacks are available for diabetic patients at all times.	Completed
May 2019	Update SubQ insulin order sets to include a whole separate section for NPO patients (with Q6 hour correctional dose insulin).	Completed
May 2019	Informational BPA to provider if patient has NPO status ordered but has TID AC/HS correctional dose lispro or vice versa	Completed
December 2019	Haiku alert for BG < 80 mg/dl to doctor first contact went into production	Completed

December 2019	Ensure that all pre-procedure order sets have a dextrose containing fluid and hypoglycemia protocol for diabetic patients	Completed
June 2020	The Hyperkalemia panel (insulin + D50 + POCT BG checks) was made searchable with the term “insulin,” in ccLink.	Completed
December 2020	Removal of single IV regular insulin order in the ED medications preference list. Instead make a mini panel with POCT BG checks post administration	Completed
January 2021	Work with L&D to optimize the C-section order set by adding a dextrose containing fluid and POCT BG checks	Completed
April 2021	Create an NPO diabetic system list for each nursing unit and for pharmacy	Completed
April 2021	Create a BPA for NPO diabetic patients without a dextrose fluid on board and another BPA for nurses to start the dextrose fluid upon pt becoming NPO	In process
April 2021	Add glucose tablets to formulary and hypoglycemia protocol	Complete
June 2021	Create a SubQ insulin order set for pregnant patients, not in peripartum	Completed
June 2021	Work with L&D to optimize the Type 1 and Type 2/gestation intrapartum and post-partum order sets	In process
August 2021	Dextrose fluid and POCT BG checks added to the C-section pre-op order set for any patients who have a history of taking medications for diabetes.	Complete
August 2021	Dextrose fluid and POCT BG checks added to the Surgery pre-op order sets for any patients who have a history of taking medications for diabetes. OP Gen Surgery Pre-Perioperative Orders (3041000508) OP GYN Pre-Perioperative Orders (30410000999) OP Orthopedic Surgery Pre-Perioperative Orders (3041000509)	Complete

Heparin Infusion Multidisciplinary Task Force Action Taken	Date
Heparin Multidisciplinary task force began meeting.	June 2018
Heparin Infusion PDSA initiated in 3D.	June 2018
Administration instructions on MAR updated to be clearer, along with heparin Sidebar table.	August 2018
"Heparin aPTT," lab order created, to differentiate aPTT results for patients on heparin infusion. With this new lab, all results are considered "critical," which prompts a phone call from lab to nurse caring for patient or charge nurse regarding aPTT result.	January 2019
Isite report enhanced to track heparin aPTT lab orders (time of order, time of result, time of MAR action)	January 2019
Heparin activity report created so that nursing could easily view past actions taken in regard to heparin infusion.	January 2019
BPA to direct nurse to order the correct lab "aPTT Heparin," for patients on heparin infusion.	February 2019
Heparin infusion calculator built and in production.	Request was made in October 2019, testing started in March 2019 and implementation occurred on July 30th 2019
Administration instructions "DO NOT REBOLUS AFTER A HOLD" are already in the heparin infusion medication order, however these instructions were not in the bolus order. The instructions were added to the bolus order.	September 2020
Errors were submitted to the nursing educators to educate nurses on heparin drip, including how to use the heparin calculator and to remind nurses to always use the calculator.	September 2020
Heparin Task Force to begin meeting again to address the issues surrounding heparin drip.	Restarted in 2021 and ongoing
Dual sign-off was added to all heparin administrations, previously was available for "initial infusion."	January 2021
Heparin calculator text on MAR updated: The "initial dose" and "subsequent titrations" were updated to stand out more on the MAR to promote nursing use of the correct section at the right time	April 2021
Nursing order and side bar report verbiage updated: "DO NOT WAIT FOR BASELINE APTT RESULT to Start heparin infusion. If baseline aPTT is greater than 50 seconds, notify MD."	April 2021

Action Taken to prevent therapeutic duplication of PRN medications	Date Completed
'"Post-Anesthesia Orders": Post-anesthesia order set contained PRN orders for fentanyl, morphine and hydromorphone with the same indication based on patient's pain score. To prevent duplication of PRN orders with the same indication, the post-anesthesia order set was revised to include instructions for the nurse as to which opioids is to be given first, second and third. The ordering provider must choose the opioid to be given as first, second and third choice at the time of ordering. This will provide clear instructions for the nurse how to administer the 3 PRN opioids medications ordered for pain management.	Q1, 2018
Ticket 424475- Acetaminophen PO/IV order panels. Administration instructions were added.	7/1/2019
Ticket 424756- Constipation medications order panel and antiemetic medications order panel created. All single order medications in these panels removed from orderable in EPIC.	7/1/2019
Email sent to RXe-Source regarding therapeutic duplication of PRN orders.	7/6/2019 and again on 8/1/2019
CIWA order set with multiple lorazepam PRN orders with same indication. Administration instructions were added to clarify when to give which order of lorazepam.	7/8/2019
Ticket 425262- Acetaminophen PO/Rectal order panel removed from order sets.	7/8/2019
Memo from Pharmacy director distributed to medical staff regarding prevention of therapeutic duplication of PRN medications. Director of Pharmacy also met with residents with the support of the residency director to discuss this issue.	7/16/2019 & 8/5/2019
Ticket 428004-Post-partum C-section order set constipation section was updated to have clear instructions.	7/17/2019
Ticket 428321- Promethazine IM/PO/Gel. IM route was removed. Administration instructions were added to the gel and the PO tablet to provider instructions to nurse to initiate therapy with topical and then switch to PO if topical ineffective.	7/23/2019
Meetings with Chair of the psychiatry department and nurse program manager. Plan to optimize order sets to eliminate duplicate PRN medications.	Meeting on 8/1/19 and 8/8/19
Ticket 429490- Hydrocodone/APAP and oxycodone/APAP orders in ccLink had an option to use for mild pain (1-3). This option was removed so that these would only be used for moderate/ severe pain and promote use of non-narcotic options for mild pain. This also prevents duplication of therapy between analgesics.	8/7/2019
Pharmacy department also requested a new I-vent category to be created ("Duplication of PRN reason"). Going forward, interventions will be documented under the new I-vent category. Additionally, SERS are submitted for errors found, and variance reports are also submitted to RXe-Source pharmacy to ensure education of all staff involved.	8/15/19

Analysis of Medication Errors- 2021:

- Top medication classes involved in medication errors
- Medication errors by severity Level
- High alert medication errors
- Trend of MERP elements
- Summary of actions taken

MEDICATION ERRORS BY DRUG CLASS:

Below are the medication classes that have persistently caused the highest number of medication errors per year:

CONTROLLED SUBSTANCES

DATA HIGHLIGHTS:

250 errors involved controlled substances (0.26% of total controlled substance transactions in 2021) vs 229 (0.22%) in 2020, 449 (0.36%) in 2019, and 558 (0.4%) in 2018.
202/250 (81%) of errors did not reach the patient (Level B and lower), and only 1/250 errors caused harm and 99.6.% of errors did not cause harm (Level E and lower).

TRENDS NOTED:

- The #1 error type reported in 2021 was related to controlled substance discrepancies, which is consistent with 2020, and 2019. There was a 55% reduction in controlled substance discrepancies in 2021 compared to 2018 (218 discrepancies in 2021, 193 discrepancies in 2020, 386 discrepancies in 2019 and 486 discrepancies in 2018).
- There were 218 controlled substance discrepancies reported in 2021 (0.23%), 218/96,205 of controlled substance transactions in Omnicell, an increase from 193 (0.18%) in 2020, a reduction from 386 (0.32%) in 2019 and a reduction from 486 (0.36%) in 2018.
    - The breakdown of the different controlled substance discrepancy types are as follows:
        - "Unreconciled Narcotic Discrepancy" (n=163 discrepancies/96,205 controlled substance transactions= 0.17% in 2021 vs. 0.18% in 2020, vs. 0.25% in 2019, and 0.29% in 2018)
        - " Narcotic waste not reconciled" (n=50 (n= 27 discrepancies/96,205 controlled substance transactions= 0.05% in 2021, vs. 0.03% in 2020, 0.07% in 2019, and 0.06% in 2018)
        - "Missing narcotic from Pharmacy return bin" (n=0 discrepancies/106,454 controlled substance transactions=0% in 2021, vs. 0% in 2020, vs. 0.0008% in 2019 and 0% in 2018)
        - "Cycle count errors" (n = 0 discrepancies/96,205 controlled substance transactions= 0% in 2021, vs.0% in 2020 vs. 0% in 2019 and 0.003% in 2018.
- There was no trend among the other errors involving controlled substances.

MAIN ACTIONS TAKEN:

- The pharmacy department monitors and reports controlled substance discrepancies on a daily basis as a quality assurance measure.
- With the California Code of Regulations, title 16, section 1715.65, the pharmacy department implemented a quarterly inventory count for all Schedule II medications at CCRMC in 2018. This report includes any discrepancies noted with comments and explanations as needed. This is in addition to the monthly inventory Omnicell report and oversight of controlled substance transactions.

- The multidisciplinary Opioid Stewardship Committee was created in 2016 and continues to meet on a quarterly note to review guidelines and regulations and optimize pain management strategies at CCRMC. The committee works to ensure the quality and safety of care provided at CCRMC. In 2020, CCRMC was recognized in the Cal Hospital Opioid Care Honor Roll as one of 25 hospitals ranked in the "superior performance." For a comprehensive overview of actions taken, see the "controlled substance and pain" SBAR.

ANTIMICROBIALS

DATA HIGHLIGHTS:

42 antimicrobial order-related errors (0.07%) in 2021, vs. 57 errors (0.09%) in 2020, 75 errors (0.07%) in 2019 and 101 errors (0.08% in 2018. 42/42 (100%) of errors did not cause harm (Level D and lower), vs. 56/57 (98%) in 2020, 75/75 (100%) in 2019 and 98/101 (98%) in 2018.

TRENDS NOTED:

- Breaking down the errors by event type, the top 3 event types were as follows:
  - The main cause of antimicrobial errors overall was missed doses 18/38 (47%) vs. 20/57 (35%) in 2020, 25/75 (33%) in 2019, and 23/101 (23%) in 2018. Though the percentages have increased, the total number of missed dose errors have decreased from 2019 to 2021. In 2021, the following trends could be noted:
    - TREND: 7/18 (39%) of missed dose errors involving antimicrobials were due to incorrect tubing connections/nursing forgetting to unclamp the secondary line, a reduction from 8/20 (40%) in 2020 14/25 (56%) in 2019, 15/23 (65% in 2018).
      - A breakdown by nursing unit reveals 3 in 4B, 1 in 3D, 1 in 3E, 1 in 4A, and 1 in 5A.
      - A breakdown by nursing shift reveals 4 during PM shift, 2 during day shift and 1 during night shift.
    - TREND: 3/18 (17%) of missed dose errors involved Add-Vantage medications not being activated prior to administration, an increase from 0% in 2020 4% in 2019, 9% in 2018
      - A breakdown by nursing unit reveals 2 from 5A and 1 from 3D.
      - There were no trends in regard to nursing shift or time of day.
  - Issues with vancomycin trough monitoring accounted for 4/42 errors (10%), vs 8/57 errors (14%) in 2020, 9/75 errors (12%) in 2019, 15/101 (15%) in 2018.
  - Prescribing errors accounted for 6/38 (16%) in 2021 but was not noted to be a top error in the past years.
    - TREND: 3/6 (50%) of prescribing errors were made by medical residents, and all providers involved were individually educated on their errors.
      - A breakdown by unit reveals 2 in 3B and 1 in 3E
      - A breakdown by time of day reveals that all 3 errors were made in the night and PM shifts.
    - TREND: 2/6 (33%) were made by pharmacists dosing vancomycin per protocol and one of the pharmacists was a new hire. The pharmacists involved were educated.

MAIN ACTIONS TAKEN:

- Regarding the nurses forgetting to unclamp the secondary line, there are several processes in place from previous years which had previously contributed to the downtrend of clamp errors and maintaining a low number of errors, including monthly feedback provided from Pharmacy to Nursing leadership, Nursing Program Managers and the Department of Quality , pharmacy department audits of medication administration, nursing audits of medication administration, and education by the professional development department for orienting nurses. The number of clamp errors in 2021 was lower than 2020, 2019 and 2018 as noted above.

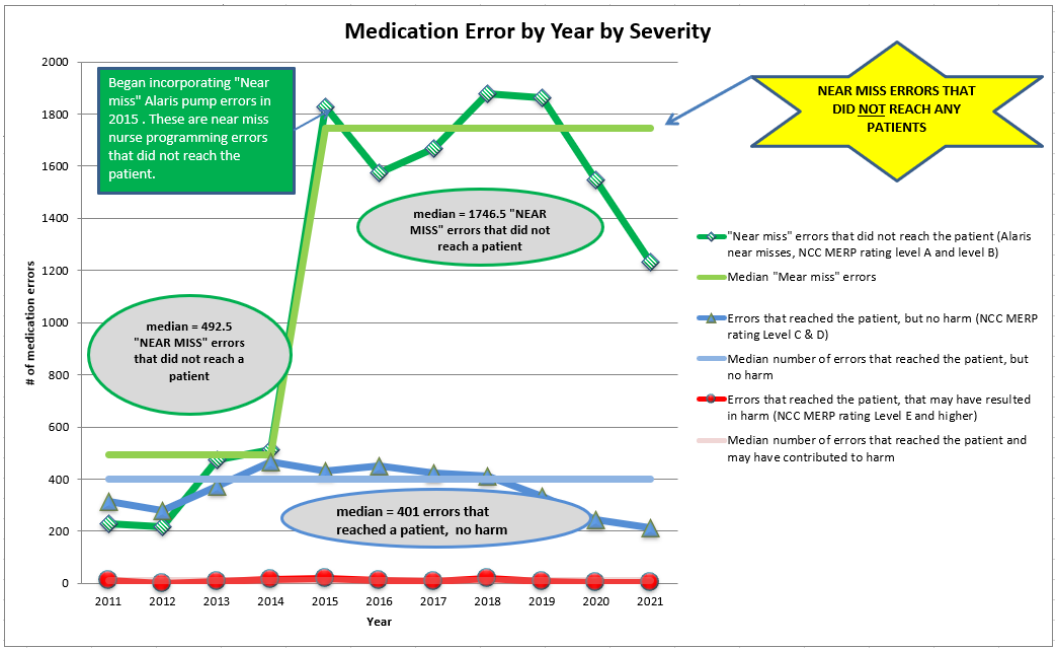
- In regard to the IV medication not being activated when dose is being administered, nurses are educated during the IV admixture training to ensure the IVs are activated when hanging doses. Additionally, since 2013, pharmacy worked with ccLink to create additional reminders on medication labels for nurses to activate all Add-vantage medications prior to administration.
- In 2021, there were 4 vancomycin trough monitoring errors, vs. 8 in 2020, 9 in 2019 and 15 in 2018 showing an overall decrease.
- Several actions have also been taken over the past several years in an effort to ensure appropriate vancomycin trough monitoring.
    - In 2018, the vancomycin trough monitoring issues were discussed during one of the organization's safety huddles to educate staff and minimize this type of error.
    - In 2021, pharmacy department worked with ccLink to optimize the vancomycin trough monitoring communication process with nursing staff to reduce missed vancomycin trough errors.
    - Pharmacy continues to educate nursing staff regarding the vancomycin trough monitoring process upon hire, during the nursing orientation.
    - Pharmacy continues to educate new pharmacist hires on the pharmacy vancomycin dosing protocol. New hires also take a baseline competency test and a post-training competency test to ensure adequate understanding of CCRMC monitoring protocols, including the vancomycin monitoring protocol. In addition, pharmacy continues to update and optimize orientation and training materials to minimize such errors in the future.
- CCRMC has had a robust Antimicrobial Stewardship Program (ASP) in place through the Pharmacy Dept for years. A Formal ASP committee and team was formed in early 2015 and meets quarterly. A pharmacist and ID physician meet daily to conduct a stewardship review of select patients and make recommendations when appropriate. The acceptance rate of interventions is monitored and trended. Additionally, the committee reviews antibiotic usage trends, and conducts further drug utilization evaluations to assess for appropriateness of therapy when necessary (See the Antimicrobial Stewardship SBARs for full details). Pharmacy continues previous efforts, including discontinued antibiotic order renewal reminders, renal dose adjustment monitor, IV to PO conversion, culture and sensitivity reporting, assessing completed antibiotics, and aminoglycoside monitoring. In 2019, a gap analysis was conducted using the CDC's Core Elements of Hospital Antimicrobial Stewardship Programs and CCRMC was found to be compliant with all elements. In 2020, the committee was granted approval to create an antibiotic order set to promote the appropriate and safe use of antibiotic therapy. Pharmacy worked with the ID physician to draft the order set in 2020. The order set was implemented in ccLink in January 2022 for provider use; pharmacy will continue to update the order set as needed per IDSA guidelines and based on antibiogram data. Pharmacy will also continue to trend and monitor for appropriate use of antimicrobials through quarterly data analyses and ASP meetings.

MEDICATION ERRORS BY SEVERITY LEVEL:

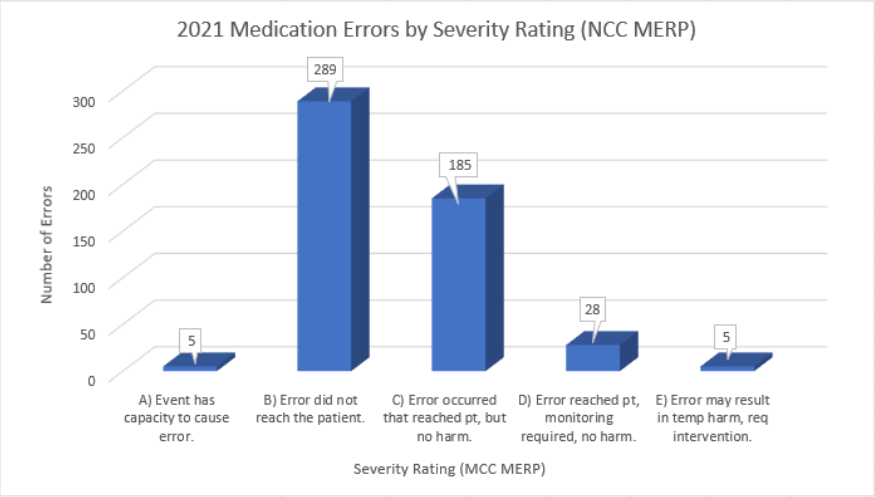
- The majority of errors reported did not result in patient harm (Level A-D). The harm index median has been consistently low over the years and has been marginally above 0 (0.0009%) since January 2019 (See Appendix B for graph).
    - Percentage of medication errors that did not result in any patient harm by year:
        - 2011= 97.8% (Level A-D (no harm)) = 547/ 559 SERS; Level E= 12)
        - 2012= 99.4% (Level A-D (no harm)) = 537/ 540 SERS; Level E= 3)
        - 2013= 99.1% (Level A-D (no harm)) = 846/ 853; Level E =7)
        - 2014= 98.5% (Level A-D (no harm)) = 977/ 992; Level E= 14; Level F= 1)
        - 2015=98% (Level A-D (no harm)) = 798/814; Level E= 15; Level F = 1)
        - 2016=99% (Level A-D (no harm)) = 769/780; Level E= 8; Level F = 3)
        - 2017=99.1% (Level A-D (no harm)) = 970/979; Level E= 8; Level F = 1)
        - 2018=98% (Level A-D (no harm)) = 1098/1,115; Level E= 17)
        - 2019=99% (Level A-D (no harm)) = 86/878; Level E= 9)

➢2020=99.4% (Level A-D (no harm)) = 505/508; Level E= 3)
➢2021=99.2% (Level A-D (no harm)) = 493/498; Level E= 5)

- In 2021, Level A-D, which did not cause any harm accounted for most of the errors. There were 5 level E events (1%), meaning that intervention was required or there was temporary harm. There were 0 errors that were level F-I in 2018-2021.



➢The near miss errors reported (Level A, Level B), continue to account for the majority of errors reported with 297/498 (60% of errors reported), vs. 259/508 (51%) in 2020, 530/878 (60%) in 2019 and 670/1,115 (60%) in 2018.
➢Level E errors (5 errors total):
  - There were 5 level E errors in 2021, vs. 3 level E errors in 2020, and 9 level E errors in 2019 and 17 errors in 2018 (a 71% reduction).
  - TREND: 4 of the 5 errors were prescribing errors.
    - TREND: 3 of the 4 prescribing errors involved inappropriate insulin management (2 cases of insulin not being reduced appropriately from home, 1 case involving NPO patient not receiving dextrose fluids). See the High Alert- Insulin section for further details.
  - Overall, the number of Level E errors involving insulin decreased from 9 errors in 2018 to 3 errors in 2021 (a 67% reduction). A multidisciplinary task force was formed to address the issues surrounding SubQ insulin management in 2018. See "High-Alert medication errors," section for specific actions involving insulin.
  - Education was provided to staff in all the events and process changes were implemented as necessary.
  - Pharmacy worked with the providers and ccLink IT to implement technological enhancements to prevent this from happening in the future (adding POCT BG checks and dextrose fluid to pre-op C section order set in addition to other pre-op order sets). The standalone regular IV insulin order was also removed from orderable so that it is only available in the order panels/order sets with the necessary safeguards and instructions.



HIGH-ALERT MEDICATION ERRORS (44 ERRORS REPORTED IN 2021):

High-Alert medications have an increased risk of causing significant harm to a patient when used in error. High-Alert medication errors are trended and analyzed by the pharmacy department in an effort to enhance or implement specific safeguards to reduce errors and reduce the risk of harm. This analysis is also conducted to ensure that pharmacy is compliant and proactive in regard to CCRMC's policy #3701 "High Risk/High Alert Medication Management." High alert medications included in this policy are anticoagulants, insulin, chemotherapy, PCA medications and fentanyl patch.

The number of high-alert medication errors decreased by 54% from 95 errors in 2018 → 74 errors in 2019→ 56 errors in 2020→ 44 errors in 2021. The median harm index (Level E and higher events) for 4 of the 5 high alert categories has been 0 since Q1 2015, meaning that none of the errors contributed to patient harm (anticoagulants, chemotherapeutics, fentanyl patch and PCAs). While insulin's median harm index has been at 2 errors per month since Q1 2018 (due to increased **vigilance and reporting by pharmacy), the percent rate of severe hypoglycemia (BG ≤ 50 mg/dl) has** declined from 3.5% in 2017 to 2.2% in 2018 and further down to 1.2% since February 2019. See the Insulin SBAR for full details. Below are actions taken in 2019 and plans for 2020 (See Appendix B for graphs).

Anticoagulants:

15 (0.04% of all anticoagulant orders) errors involved anticoagulants in 2021, vs. 18 (0.06% of all anticoagulant orders) in 2020, 24 (0.07% of all anticoagulant orders) in 2019 and 32 (0.09% of all anticoagulant orders) in 2018.

12 out of 15 (80%) involved heparin drip errors. 5 of the 12 heparin drip errors (41%) involved a new type of error not identified in previous years (missed STAT repeat aPTT order by nursing for aPTT > 120 seconds). 4 of the 5 errors occurred on the same unit so this information was shared with the nurse program manager to educate staff. There was a 17% reduction in errors from 2020 to 2021, a 38% reduction in errors from 2019 to 2021 and a 53% reduction from 2018 to 2021. The majority of errors since 2017 have involved heparin infusion errors (ex: missed or delayed aPTT result, rate not adjusted in a timely manner, wrong rate, etc.). In 2017, a multi-disciplinary task force was initiated to address the issues surrounding heparin infusion. In 2018, several improvement actions took place. In July 2019, a heparin calculator went live in ccLink. While errors from 2017 and 2018 decreased (heparin rate not being adjusted in a timely manner, lab timing errors by lab and nursing), the heparin calculator introduced a new set of errors involving the misuse and inconsistent use of the heparin calculator by nursing staff. The heparin calculator works well when used correctly. However, due to technological limitations, use of the heparin calculator is not mandatory in ccLink which has led to inconsistent and incorrect use of the calculator. Currently the heparin calculator is "required" for the initial administration but not for subsequent titrations

due to limitations of ccLink. Additionally, in 2021 a new error peaked which involved repeat STAT aPTT not being ordered per protocol by nursing for a supratherapeutic aPTT > 120 seconds. This redundant STAT aPTT is used as a preventative measure to rule out any errors of sampling from the line running heparin as an essential safety measure from the medication safety perspective. Education was provided in all cases. Additionally, the heparin task force began meeting again towards the end of 2020 to update the heparin calculator tip sheet and to reinforce education for nursing staff. In January 2021, dual sign off was added to all heparin administrations, previously was only available for 'Initial Infusion'. In April 2021, the heparin calculator text was updated to make each section "initial dose" and "subsequent titrations" stand out more. In order to prevent errors of calculator misuse/unuse, the nursing staff in 3D/3E (where the majority of errors occurred) began using a bedside heparin infusion worksheet to assist with titrations and began huddling during the shift when patients are actively on heparin to remind nurses to use the heparin calculator for all heparin titrations. The heparin task force will continue to work to minimize heparin infusion errors via education of staff and process changes when appropriate. Additionally in October 2021, the ambulatory anticoagulation clinic was taken over by pharmacy (previously a nursing run clinic).

Insulin:

22 errors (0.8% of all insulin orders) involved insulin in 2021, vs. 20 (0.08% of all insulin orders) in 2020, 34 (0.14% of all insulin orders) in 2019, and 40 errors (0.15% of all insulin orders) in 2018.

Note: Excluding MDV labeling errors from the count, there were 15 insulin errors which count for 0.7% of all insulin orders.

Of the 22 errors, 3 involved inappropriate management of patients on SubQ insulin (down from 5 errors in 2020 and 12 errors in 2019). There were 7 errors involving insulin drips, which is an increase from 4 in the previous year (TREND: 3 of the errors were delays in initiating the insulin drip in the ED prior to transfer to the inpatient unit. None of the delays resulted in patient harm). These findings were shared with the Nurse Program Manager of the ED to educate staff on prompt initiation of insulin drips when ordered. Out of the 22 errors, only 1 error resulted in a hypoglycemic event which was managed appropriately. Since 2018, there was an increased vigilance surrounding hypoglycemic events. A multidisciplinary task force was formed in 2018. Through this committee, several actions have taken place including 1) Changes in ccLink (optimization of order sets and panels, creation of best practice alerts, etc.) 2) Optimization of pharmacy monitoring process to ensure uniform review of patients (See Appendix D for full list of actions taken) and identification of high-risk patients (ex: patients with worsening renal function). 3) A quality assurance physician oversight process was created in 2019 which involves a medical staff physician reviewing the cases of severe hypoglycemia (BG ≤ 50 mg/dl), providing feedback to the primary team, and documenting interventions via a "Hypoglycemia prevention," progress note in the patient's chart. See appendix F for a full list of all actions taken. 7 of the errors involved inappropriate expiration date labeling of insulin multidose vials by nursing (no expiration label after opening, wrong expiration date written, etc.). This is down from 8 errors in 2020, and 13 errors in 2019. The multi-dose vial labeling issue has been brought up at the organization's safety huddle and several actions were taken to resolve the issue, including the purchase of new expiration labels, adoption of a calendar tool to help with a calculation of 28 days out, and education of nursing staff. In 2018, a cycle count was implemented for charge nurses to conduct, and this was reinforced in 2019 in 2020. Data will continue to be trended and reported in 2022.

Chemotherapeutics:

4 errors (0.16% of all chemotherapy orders) involved chemotherapeutic agents in 2021, vs. 14 errors (0.8% of all chemotherapy orders) in 2020, 8 errors (0.29% of all chemotherapy orders) in 2019, and 13 errors (0.47% of all chemotherapy orders) in 2018.

In 2021, 50% (2 out of 4 errors) involved errors with the CADD pump (1 error due to battery depletion and 1 error due to the bag leaking). This is a reduction from 6 errors involving CADD pumps in 2020 (67% reduction). The infusion clinic nurses send extra batteries home with the patients. An instruction sheet was created and provided to the patients on how to switch out the batteries of the new CADD pumps. Pharmacy will continue to monitor for CADD pump errors and review CADD pump data on a regular basis.

Fentanyl Patch:

There were 0 errors involving fentanyl patch in 2021 (0% of all fentanyl patch orders), vs. 1 error in 2020 (2.2% of all fentanyl patch orders), 0 errors in 2019 (0% of all fentanyl patch orders), and 3 errors in 2018 (1.2% of all fentanyl patch orders).

Several efforts are in place to ensure safe use of fentanyl patch at CCRMC, including a thorough initial screening for appropriateness by the clinical pharmacy department along with a daily clinical monitor and patient education. Additionally, in 2020 pharmacy made the fentanyl patch require dual pharmacist independent verification as an extra step to ensure safe use of fentanyl patch. Going forward in 2021, staff will continue to be vigilant to ensure safe and appropriate use of fentanyl patch at CCRMC.

PCA:

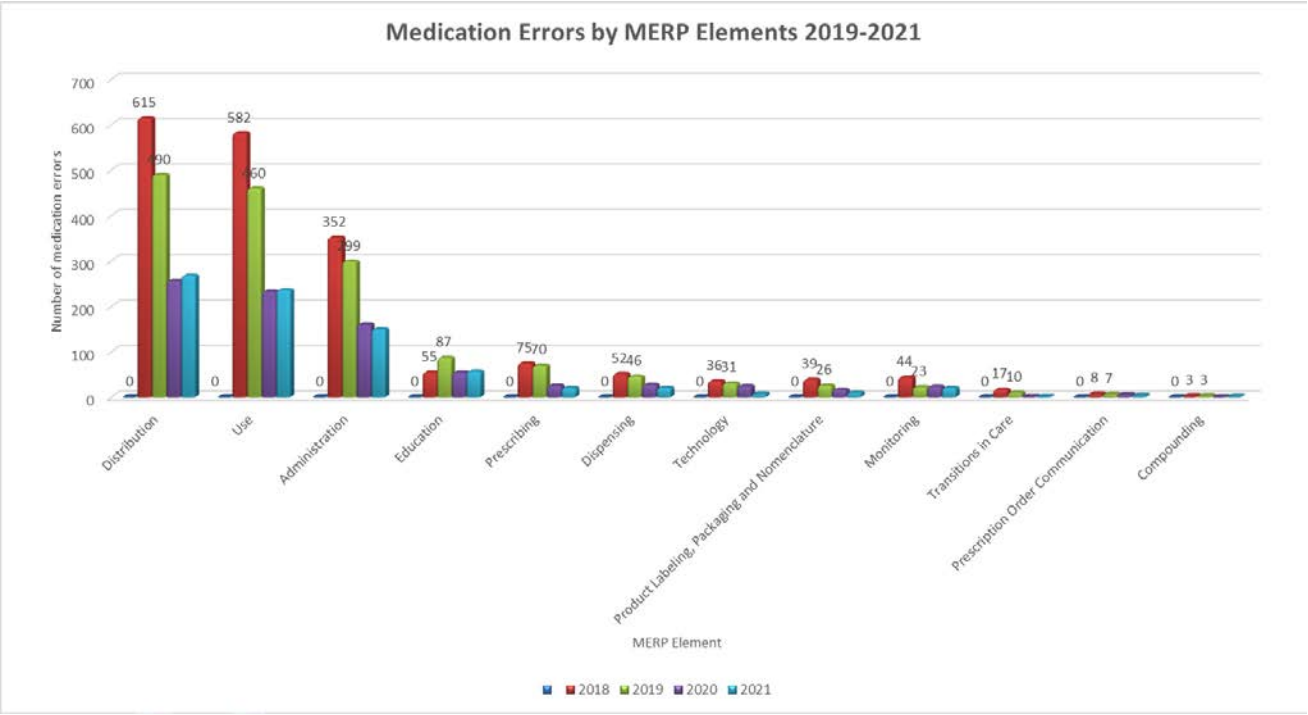
3 errors involved a PCA in 2021 (0.77% of all PCA orders), vs. 3 errors in 2020 (0.86% of all PCA orders), 6 errors in 2019 (1.6% of all PCA orders), and 7 errors in 2018 (1.2% of all PCA orders).

There was no trend among the 3 errors. 1 was a delay in starting the PCA, 1 was inaccurate documentation of PCA delivery in the documentation flowsheet and 1 was due to the PCA being continued after the order was discontinued. None of the errors resulted in patient harm. In 2020, pharmacy, nursing and ccLink IT worked together, meeting regularly to update the PCA and documentation tools to ensure that PCAs are easier to order, verify and administer. Prior to that in 2019, the PCA documentation for nurses was optimized via flowsheet enhancements. Going forward in 2022, PCA errors will continue to be monitored and any trends will be reported. The pharmacy will continue to review patients on PCAs daily.

ERRORS BY MERP ELEMENTS IN 2021:

The breakdown of these 498 medication errors into MERP elements, in order of most errors reported can be seen below. The error rate is a calculation of the # of errors/ # of doses dispensed (1,105,468):

- Distribution: 268= 0.024% error rate vs. 0.026% in 2020, 0.039% in 2019 and 0.056% in 2018
- Use: 236= 0.021% error rate vs. 0.023% in 2020, 0.036% in 2019 and 0.053% in 2018
- Administration: 150 = 0.014% error rate vs. 0.0165% in 2020, 0.023% in 2019 and 0.032% in 2018
- Education: 57 = 0.005% error rate vs.0.006% in 2020, 0.007% in 2019 and 0.005 in 2018
- Prescribing: 21= 0.002% error rate vs 0.003% in 2020, 0.006% in 2019 and 0.007% in 2018
- Dispensing: 21 = 0.002% error rate vs. 0.003% in 2020, 0.004% in 2019 and 0.005% in 2018
- Technology: 8= 0.001% error rate vs. 0.003% in 2020, 0.002% in 2019 and 0.003% in 2018
- Product Labeling, Packaging and Nomenclature: 11 = 0.001% error rate vs. 0.002% in 2020, 0.002% in 2019 and 0.004% in 2018.
- Monitoring: 21= 0.002% error rate vs. 0.003% in 2020, 0.001% in 2019 and 0.004% in 2018.
- Transitions in Care: 1= 0.0001% error rate vs. 0.0001% in 2020, 0.0008% in 2019 and 0.002% in 2018
- Prescription Order Communication: 4= 0.0004% error rate vs. 0.0006% in 2020, 0.0006% in 2019 and 0.0007% in 2018
- Compounding: 2= 0.0002% error rate vs. 0% in 2020, 0.0002% in 2019 and 0.0003% in 2018



Element #1. PRESCRIBING

TRENDS NOTED:

- "Prescribing" accounts for 21 medication errors in 2021. This calculates to a 0.002% (# of errors/# of doses dispensed) error rate vs 0.003% in 2020, 0.006% in 2019 and 0.007% in 2018.
- Breaking down the events by Specific Event Type, the top 3 event types were as follows:
  - 5 errors involved management of diabetic patients on insulin, which is an increase from 2 errors in 2020, but the same as 5 errors in 2019 and a decrease from 6 errors in 2018. The decrease seen in 2020 may have been due to the COVID-19 pandemic and low hospital census compared to 2019 and 2021.
    - TREND: 2 errors involved continuation of home insulin doses without lowering the dose while hospitalized. One case resulted in hypoglycemia which was treated appropriately, and one case was a near miss that did not reach the patient.
    - TREND: 2 errors involved IV to SubQ conversion. One case involved patient having both IV and SubQ insulin active orders (no hypoglycemia and the SubQ insulin was discontinued per recommendation of pharmacist), and one case involved inappropriate IV to SubQ conversion resulting in hypoglycemia which was treated appropriately.
    - One error involved the failure to order a dextrose containing fluid for an NPO patient undergoing a C-section. The C-section order set was optimized to include a pre-checked dextrose fluid for diabetic patients.
  - Medication prescribed and given too soon after a dose had already been given accounted for 5 errors in 2021 vs. 4 errors in 2020, 1 error in 2019, and 5 errors in 2018
    - TREND: 2 of the 5 errors involved patients receiving a x1 order of acetaminophen being administered in the OR or PACU and then a scheduled order being released once patient is transferred to the unit and being administered too soon (within 3 hours of previous dose).
  - Duplications in therapy accounted for 3 errors in 2021 vs. 4 errors in 2020, 4 errors 13 errors in 2019 and 3 errors in 2018

- TREND: 2 of the duplications in therapy involved analgesic medications.
- TREND: The decrease in duplications in therapy is as a result of the multidisciplinary efforts to reduce duplications of PRN medications with the same indications. Several actions were taken towards the end of 2019 including order set changes, education to medical staff, pharmacy and nursing staff, and oversight by the pharmacy department via a clinical monitor.

- Contraindicated medication prescribed accounted for 2 errors in 2021, consistent with 2 errors in 2020, 2 errors in 2019 and 3 in 2018. There was no trend in these errors and education was provided to the providers in both cases.

- There were no major trends by drug class with the "Prescribing," errors.
- Breaking down "Prescribing" errors by MERP severity rating, we see that there were:
  - 9 level C errors
  - 5 level B errors
  - 4 Level E errors
  - 3 level D errors (see "Medication Errors by Severity Level," section for more detail)
  - See "Percent Medication Error Rate" graph with harm index (Appendix B)

MAIN ACTIONS TAKEN:

- In regard to the errors involving inappropriate insulin management, see the "high alert medication errors" section for actions taken.
- In regard to medication being ordered and administered too soon after a dose has already been given, it was found that the majority of these types of errors occur upon transition of patients from the OR to PACU/ PACU to other units or when prescribing a scheduled medications after a one-time order was placed and administered. The pharmacy department worked with ccLink to create a BPA alert to flag the nurse whenever acetaminophen is being administered less than 3 hours after the previous dose.
- In an effort to minimize therapeutic duplication of PRN medication orders at CCRMC, several order sets have been optimized and order panels have been created with clear instructions for nurses to make selections between drugs prescribed for the same indication (See Appendix H). Additionally, the pharmacy department monitors for therapeutic duplication 1) upon verification of orders and 2) via a retrospective review of the dashboard report "Rx Multiple Order with same PRN Reason." Any interventions made by pharmacy are documented via "I-vents" under the category "duplicate therapy."

ANALYSIS: In 2021, the top error types were inappropriate management of patients on insulin and medication ordered and administered too soon after a previous dose had been given. See the "High Alert-Insulin," section for details on errors identified and actions taken. In order to prevent future errors involving acetaminophen being ordered and administered too soon after a previous dose, a BPA was created per pharmacy's request to alert nursing of a previous dose being administered within the last 3 hours. Pharmacy will continue to monitor for these error types. It is also important to note that in regards to duplication therapy of PRN medications, several actions were taken in 2019 including enhanced monitoring and reporting by the pharmacy department and the optimization of several order sets/creation of new order panels. These efforts resulted in a 25% decrease in this type of error from 2020 to 2021. Going forward in 2022, the pharmacy department will continue to monitor and trend duplications in PRN therapy errors.

Element #2. PRESCRIPTION ORDER COMMUNICATION

TRENDS NOTED:

- "Prescription Order Communication" accounts for 4 total medication errors in 2021. This calculates to a 0.0004% error rate (4 of errors/1,105,468 of doses dispensed) vs. 0.0006% in 2020, 0.0006 in 2019 and 0.0007% in 2018.
- Breaking down the events by Specific Event Type:

- TREND: There were two errors involving continuous drips where the provider communicated to stop the drips but did not communicate if/when the drips should be restarted. Additionally in one case, the communication to stop the drip was via a ccLink chat message rather than an actual order in the chart.
- TREND: 2 errors involved atropine to be placed at bedside but the nurse mistakenly administering it because it showed up on the MAR as a "scheduled order."

- When reviewing the errors by drug class, there was a trend seen by drug class (2 errors involved atropine at bedside order as noted above).
- Breaking down "Prescription Order Communication," errors by MERP severity rating, there were:
  - 4 level C errors
  - Therefore, none of the errors resulted in harm. See "Percent Medication Error Rate" graph with harm index (Appendix B)

MAIN ACTIONS TAKEN:

Education was provided to staff involved in all cases. The default frequency for atropine is x ONCE. Pharmacy is updating the order to default to "once as needed" with the PRN reason "as needed for HR of 30 bpm. Contact MD after atropine is administered."

ANALYSIS: Going forward in 2022, pharmacy will continue to monitor prescription order communication errors for any trends and act accordingly.

Element #3. PRODUCT LABELING, PACKAGING & NOMENCLATURE

TRENDS NOTED:

- "Product Labeling, Packaging, and Nomenclature" accounts for 10 medication errors in 2021. This calculates to a 0.001% error rate (# of errors/# of doses dispensed), vs. 0.002% in 2020, 0.002% in 2019 and 0.004% in 2018.
- Breaking down "Product Labeling, Packaging, and Nomenclature" by specific event type, the top event types were as follows:
  - TREND: 8/10 (80%) involved multi-dose vial expiration labeling issues by nursing (28-day expiration date missing, wrong, etc.), a reduction from 11 errors in 2020, 17 errors in 2019 and 19 errors in 2018. These were all "near miss" medication errors that did not reach any patients.
  - There were no other trends noted among the remaining errors.
- Breaking down "Product Labeling, Packaging and Nomenclature," by drug class, in 2021, the top drug class was insulin, which accounted for 7 of the 8 MDV labelling errors (88%). The insulin MDVs were either incorrectly labeled or not labeled with beyond use dates after being opened.
- Breaking down "Product Labeling, Packaging, and Nomenclature" errors by MERP severity rating, there were:
  - 10 level B events
  - 1 level C event

  - Therefore, none of the events resulted in harm. See "Percent Medication Error Rate" graph with harm index (Appendix B).

MAIN ACTIONS TAKEN:

The multi-dose vial (MDV) expiration labeling errors issue was brought up by pharmacy at the organizational safety huddles. Additionally, in 2018, charge nurses began to receive a list of Omnicell MDVs at their units and then cycle count the MDVs every shift to monitor compliance with MDVs operation. A 28-day calendar tool was also provided by pharmacy to nursing to assist nurses in determining the expiration date. In 2019, it was found that the charge nurses

were not doing the cycle counts as intended. Pharmacy continues to reinforce cycle counts of the MDVs by nursing and continues to monitor for these errors and report findings to the Medication Safety Committee.

ANALYSIS: Looking back in 2021, 80% of the "Product Labeling, Packaging and Nomenclature," errors were due to multi-dose vial expiration date labeling by nurses. In 2020 the errors were addressed as specified above at an institutional level with pharmacy working closely with nursing leadership to resolve the issue. Education was provided in all cases. Going forward, medication errors will continue to be evaluated and trended in 2022.

Element #4. COMPOUNDING

TRENDS NOTED:

- "Compounding" accounts for 2 errors in 2021. This calculates to a 0.0002% error rate (# of errors/# of doses dispensed) vs. 0 errors in 2020, 0.0002% in 2019 and 0.0003% in 2018.
  - ➢ TREND: both compounding errors were due to nursing pulling the wrong IV fluid to compound a medication after pharmacy hours. In both cases, the IV solution used was compatible with the medication.
- Breaking down "Compounding" errors by MERP severity rating, there were:
  - ➢ 2 level C events
  - ➢ Therefore, none of the events resulted in harm. See "Percent Medication Error Rate" graph with harm index (Appendix B).

MAIN ACTIONS TAKEN:

CCRMC continues to be compliant with USP 797 and USP 800 standards. Additionally the pharmacy provides IV admixture training for nursing on a yearly basis. Starting in November 2020, construction was started to change the inpatient pharmacy compounding area from a segregated compounding area to an ante/buffer clean room and was continued through 2021. The construction is planned to be completed in 2022.

ANALYSIS: Going forward in 2022, pharmacy will continue to monitor for compliance with the USP 797 and 800 standards via pharmacy audits.

Element #5. DISPENSING

TRENDS NOTED:

- "Dispensing" accounts for 21 total medication errors in 2021. This calculates to a 0.002% error rate (# of errors/# of doses dispensed), 0.002% in 2020, 0.004% in 2019 and 0.005% in 2018.
- Breaking down the Dispensing errors by Specific Event Type, the top event types were as follows:
  - ➢ TREND: 6 errors involved wrong dose, strength, formulation, or medication being dispensed, an increase from 3 errors in 2020, but a decrease from 13 errors in 2019 and 11 errors in 2018 (45% improvement since 2018). 4 of the 6 errors were near misses that did not reach the patients and 2 reached the patients but there was no harm.
    - ➢ TREND: 2 of the 6 errors could have been prevented if the barcode scanning was used as it should have been.
    - ➢ TREND: 2 of the 6 errors involved pharmacist dosing vancomycin at the wrong dose
  - ➢ TREND: 3 errors involved dispensing delay, resulting in delay in therapy (1 error was due to the antibiotic being sent to wrong unit, 1 due to delay in compounding and delivering insulin drip, and 1 due to medication being dispensed from Omnicell instead of MIP).

- There was no trend in the remaining errors.

- Breaking down the dispensing errors by drug class, the following was noted:
  - 7 errors involved antibiotic agents
    - TREND: 2 errors involved delays in therapy
    - TREND: 2 errors involved vancomycin trough errors (1 not ordered, and one MAR note with wrong time)
    - TREND: 2 errors involved wrong dose of vancomycin ordered
  - No other trend in drug class was observed
- Breaking down "Dispensing" errors by MERP severity rating, there were:
  - 10 level B events
  - 10 level C events
  - 1 level E event

  - Therefore, 1 of the events resulted in harm. See "Percent Medication Error Rate" graph with harm index (Appendix B).

MAIN ACTIONS TAKEN:

- In January 2018, pharmacy began utilizing medication barcode scanning when filling cart-fill and first dose PO medications (Note: IV medications have been barcode scanned since the inception of EPIC at CCRMC). This resulted in a reduction in errors involving wrong dose/strength/formulation being dispensed. In 2021, there were 6 wrong dose, strength, formulation, or medication being dispensed. Two of the cases could have been prevented if the barcode scanning technology was utilized as is standard procedure. Staff was educated. The pharmacy department has been working with ccLink IT to further expand barcode scanning into the willow ambulatory environment of the pharmacy.
- For medications that involved dispensing delays, all pharmacists and pharmacy staff were educated.
- Pharmacy staff was educated in all cases.

ANALYSIS:

Looking back in 2021, the majority of dispensing errors were due to wrong dose, strength, formulation or medication being dispensed. Since 2018, the pharmacy department has optimized barcode scanning. Going forward, barcode scanning will also be implemented in the willow ambulatory environment. In regards to medications being prescribed too soon after a previous dose, the pharmacy department will work with ccLink IT in 2021 to implement technological fixes to prevent these types of errors.

Element #6. DISTRIBUTION

TRENDS NOTED:

- "Distribution" accounts for 268 total medication errors in 2021. This calculates to a 0.024% error rate (# of errors/# of doses dispensed), vs. 0.026% in 2020, 0.039% in 2019 and 0.056% in 2018. In 2021, 77% of the distribution errors were categorized as level A or B events, that did not reach any patient.
- Breaking down "Distribution" errors by Specific Event Type, the top event types were as follows:
  - 218 (82%) distribution errors were due to controlled substance discrepancy errors that were entered by pharmacy department as part of the controlled substance surveillance program at CCRMC. See "Medication Errors by Drug Class- Controlled Substance," section for more information.
  - 18 errors were due to issues surrounding Omnicell. TREND: Specifically, 9 errors included wrong medication found in Omnicell bin. This is a 44% decrease since 2018 (16 errors in 2020, 16 errors in 2019 and 25 errors in 2018).

- 8 errors involved multidose vials expiration labeling by nursing of certain medications in Omnicell (TREND). See "See "Product labeling, packaging and nomenclature" section for more details." This is an improvement from 11 errors in 2020.
- Other errors were due to miscellaneous causes in which no trend could be noted.

- Breaking down "Distribution" errors by drug class, the following was noted:
  - 250 errors were due to controlled substances (218 were controlled substance discrepancies)
- Breaking down "Distribution" errors by severity rating, there were:
  - 219 level B errors
  - 45 level C errors
  - 2 level A errors
  - 2 level D errors

  - Therefore, none of the events resulted in harm. See "Percent Medication Error Rate" graph with harm index (Appendix B).

MAIN ACTIONS TAKEN:

- See "Medication Errors by Drug Class- Controlled Substance," section for in-depth review of controlled substance monitoring and corrective actions.

- Pharmacy staff was educated to ensure accurate filling of Omnicell medications. There is barcode scanning that is utilized in Omnicell, but due to technological limitations, only one tablet of each medication fill is required to be scanned, instead of all of them. CCRMC pharmacy leadership has repeatedly reported this to Omnicell as an issue that needs addressing.

- In regards to the errors involving multidose vial expiration labeling by nursing, see "Product labeling, packaging and nomenclature" section for more details.

ANALYSIS: Looking back in 2021, the majority of distribution errors surrounded controlled substance monitoring. The total number of controlled substance discrepancies decreased from 486 errors in 2018 to 386 errors in 2019, 193 in 2020 and 218 in 2021 (an overall 55% decrease from 2018 to 2021). Pharmacy will continue to monitor for controlled substance discrepancies going forward in 2022.

Element #7. ADMINISTRATION OF MEDICATION

TRENDS NOTED:

- "Administration" accounts for 150 medication errors in 2021. This calculates to a 0.014% error rate (# of errors/# of doses dispensed), which is decreased from 0.017% in 2020, 0.023% in 2019 and 0.32% in 2018.
- Breaking down "Administration," errors by Specific Event Type, the top event types were as follows:

  - 36 errors involved "missed doses." When looking at the number of missed doses over the total doses dispensed, this calculates to a 0.003% in 2021 vs. 25 errors in 2020 (0.003%), 51 errors in 2019 (0.004%) and 47 errors in 2018 (0.004%).

    - Of the 36 missed doses, the top error trends were as follows:
      - Incorrect tubing connections/ line clamped: 8 errors (TREND: 7 of 8 cases involved antimicrobials [88%]). 3 errors occurred during PM shift, 2 during day shift and 2 during NOC shift. 1 error occurred during the lunch hour, 2 errors occurred around times of shift

change from NOC to day shift. The total errors due to incorrect tubing connections/line clamped decreased to 8 errors in 2021 vs. 9 errors in 2020,14 errors in 2019 and 14 errors in 2018.

- Nurse forgot/distracted/busy: 14 errors (no trend was noted among the 14 errors).

➢ Breaking down the "missed dose," errors by location: 3E IMCU (6 errors), 4B Med Surg (6 errors), 5D Med Surg (5 errors), 3B ED (4 errors), 5A L&D (4 errors), 3D ICU (3 errors), 2C PACU (2 errors), 5C Post-partum (2 errors), 2B OR (1 error), 3A RAD (1 error), 4C Psych (1 error) and 4A Med Surg (1 error)

➢ 24 errors were due to overrides (See Appendix C for graphs). When looking at the overrides over the total number of doses dispensed from Omnicell in the year, this calculates to a 0.002% override rate in 2021, a reduction from 0.003 in 2020, 0.006% in 2019 and 0.009% in 2018.

➢ Looking at override errors by unit, the following 4 units had the most overrides.

- 3D (ICU)- 5 overrides (vs. 3 in 2020, 6 in 2019 and 12 in 2018)
- 3E (IMCU)- 3 overrides (vs. 1 in 2020, 3 in 2019 and 1 in 2018). Note that IMCU does not normally peak as one of the top units, however in 2021, there were times during the COVID-19 pandemic surges where the IMCU was converted to an ICU unit which may have contributed to the increase in overrides being more consistent with ICU override frequency.
- 3B (ED)- 3 in 2021 (vs. 8 in 2020, 19 in 2019, and 27 in 2018)
- 5A (L&D)- 2 overrides (vs. 8 in 2020, 7 in 2019 and 7 in 2018)

➢ There was no trend in drug class among the overrides.

- Breaking down administration errors by drug class, the following was noted:

➢ 25 anti-infectives (vs. 34 in 2020, 52 in 2019 and 56 in 2018). (TREND: the top error type for anti-infectives was missed dose (9 errors), followed by delay (6 errors). See "antimicrobials," section above for more details.

➢ 19 controlled substances (vs.19 in 2020, 61 in 2019 and 80 in 2018). See "controlled substances," section above for more details.

➢ 16 non-narcotic analgesic errors (vs. 6 in 2020, 19 in 2019 and 15 in 2018)

➢ TREND: 13 errors involved acetaminophen (8 involved dose given too soon [< 3 hours after previous dose due to a x1 order followed by a scheduled order])

➢ TREND: 3 errors involved NSAIDS (no trend)

➢ TREND: Of the 16 non-narcotic analgesic errors, 9 involved dose given too soon [< 3 hours after previous dose due to a x1 order followed by a scheduled order]).

- Breaking down administration errors by severity level:

➢ 18 were level B

➢ 107 were level C

➢ 21 were level D

➢ 1 level E

<u>MAIN ACTIONS TAKEN:</u>

- All administration override issues: NPMs investigated 100% of SERS for overrides, and all were appropriate per NPM, and were either resolved, or orders were back charted. Data from the Annual Override Report is shared with Nursing Leadership.

- For the errors involving non-narcotic analgesic being administered too soon after a x1 order, a BPA was created to notify nurses if a dose was previously administered within the last 3 hours. Additionally, a logic was created in the post-op order set so that if a x1 dose of acetaminophen or ketorolac was administered in the OR, then the timing of the post-op order would be offset so that a dose would not be given too soon.

- In regards to the nurses forgetting to unclamp the secondary line, see above "Antimicrobials," section for more details on actions taken.

- In regards to the controlled substance errors, see above "controlled substances," section for more details.

ANALYSIS:

Looking back in 2021, the top errors that peaked were missed dose errors followed by override errors which is consistent with the previous year. In regards to missed doses due to the medication line being clamped, there are several processes in place from previous years that have contributed to the downtrend of clamp errors and maintaining a low number of errors ((i.e., audits by pharmacy and nursing, education by the professional development department). In 2019, the pharmacy department's Performance Improvement Project focused on minimizing missed doses due to medication transfer non-compliance from 3B ED to subsequent units. Several actions were taken including nursing education, warnings in ccLink to remind nurses to retrieve the patient's medications upon transfer and pharmacy technicians double checking that the patient is still in the ED when delivering medications. Going forward in 2022, pharmacy is working with ccLink IT to enable tracking of medication location to help locate missing medications. Pharmacy will continue to be vigilant in monitoring for controlled substance discrepancies (specific actions taken and to be continued are specified in the "Medication Errors by Drug Class- Controlled Substance," section). Pharmacy will also continue to monitor the trend of non-narcotic analgesics being administered too soon. Refer to the overrides SBAR for trends and actions taken.

Element #8. MONITORING

TRENDS NOTED:

- Monitoring accounts for 21 total medication errors in 2021. This calculates to a 0.002% error rate (# of errors/# of doses dispensed) vs. 0.002% in 2020, 0.001% in 2019 and 0.004% in 2018.
- Breaking down "monitoring," errors by Specific Event Type, the most common event types were as follows:
  - ➢11 errors involved heparin infusion vs 5 errors in 2020, 10 errors in 2019 and 13 errors in 2018.
  - ➢6 errors involved vancomycin trough monitoring errors vs. 9 in 2020, 9 in 2019 and 15 in 2018 (see the "Antimicrobial," section for more details).
  - ➢1 error involved insulin infusion vs. 1 in 2020, 1 in 2019 and 3 in 2018.
- Breaking down monitoring errors by class, the following was noted:
  - ➢11 due to anticoagulants (TREND: 11 of 11 cases (100%) involved heparin infusion- see above)
  - ➢6 due to anti-infectives (TREND: 6 out of 6 cases (92%) involved vancomycin trough monitoring- see above)
- Breaking down Monitoring errors by harm level, there were:
  - ➢17 level C
  - ➢ 3 level D
  - ➢ 1 level B

  - ➢See "Percent Medication Error Rate" graph with harm index (Appendix B).

MAIN ACTIONS TAKEN:

- For heparin infusion errors, see the "High Alert Medication Errors," section for actions taken. Additionally, pharmacy reviews all heparin infusions on a daily basis and communicates with the nurse involved when an action is needed.
- For vancomycin trough errors, see the "Antimicrobials," section for details of actions taken.

ANALYSIS: In 2021, the majority of monitoring errors were due to issues surrounding heparin drip and vancomycin trough monitoring. See the "high alert section," for more details about the heparin drip issues and actions taken. See the "antimicrobial," section for vancomycin trough errors and actions taken.

Element #9. Education

TRENDS NOTED:

- "Education accounts for 57 errors in 2021. This calculates to a 0.005% error rate (# of errors/# of doses dispensed), vs. a 0.006% in 2020, 0.007% in 2019 and 0.005% in 2018.
- The top error types that peaked were:
  - 7 errors involved delays (TREND: 2 involved delays in Kcentra administration (both level D events not contributing to harm)
  - 4 errors involved monitoring (TREND: 3 heparin drip errors- see "High Alert," section for more details).
  - 3 errors involved wrong medication/fluid errors (no trend identified).
- The top drug classes that peaked were:
  - 7 antidiabetic agents (TREND: 6 involved insulin and 2 of those errors resulted in hypoglycemia)- see "high alert" section for further details)
  - 6 narcotics (there was no trend among these errors)
  - 6 anti-infectives (There was no trend among these errors)
- Education was provided to involved staff in all cases.
- Breaking down Monitoring errors by harm level, there were:
  - 23 level B
  - 16 level C
  - 13 level D
  - 4 level E (see "Medication Errors by Severity Level," section for more detail)
  - 1 level A

  - See "Percent Medication Error Rate" graph with harm index (Appendix B).

MAIN ACTIONS TAKEN: Education was provided to involved staff or patient (when applicable) to ensure safe medication use. See the "Antimicrobials" section for specific actions taken in regards to the antimicrobial errors and the "controlled substance," section for narcotic errors. See the "High Alert Medication Errors" section for specific actions taken in regards to insulin. In regards to the errors involving Kcentra, pharmacy reached out to the professional development department to educate nurses on Kcentra administration.

ANALYSIS:

In 2021, there were trends noted in errors involving delays in therapy, heparin drip titration, and insulin management. See the "High Alert Medication Errors" section for more details on actions taken and plans going forward in 2022.

Element #10. USE

TRENDS NOTED:

- "Use" accounts for 236 total medication errors in 2021. This calculates to a 0.021% error rate (# of errors/# of doses dispensed), a decrease from 0.024% in 2020, 0.036% in 2019 and 0.053% in 2018. This is the #2 most common MERP element classification for errors in 2021, which is due mostly to controlled substance discrepancy monitoring by pharmacy department. See "Medication Errors by Drug Class- Controlled Substance," section for in-depth review of controlled substance monitoring and corrective actions taken/corrective actions.
- Breaking down the "Use," errors by Specific Event Type, the top errors were as follows:
  - 218 (92%) of errors were due to controlled substance discrepancy monitoring errors that were entered by pharmacy department as part of the controlled substance surveillance initiatives. This is an increase from 193 in 2020, but reduction from 386 errors reported in 2019 and 486 errors reported in 2018 (an overall 55% reduction). See "Medication Errors by Drug Class- Controlled Substance," section for in-depth review of controlled substance monitoring and corrective actions taken/corrective actions.
  - 8 errors involved labeling issues (TREND: all 8 errors involved multi-dose vial expiration labelling by nursing staff- see the "Product labeling, packaging and nomenclature," section for more detail.)
- Breaking down the "Use, errors by drug class, the following was noted:
  - 221 errors involved controlled substances (218 controlled substance discrepancies)
  - 8 errors involved anti-diabetic agents (TREND: 8 errors involved multi-dose vial expiration labelling by nursing staff)
  - 5 errors involved propofol (the propofol bottle not replaced after 12 hours)
- Breaking down "Use" errors by severity rating, there were:
  - 195 level B errors
  - 43 level C errors
  - Therefore, none of the events resulted in harm. See "Percent Medication Error Rate" graph with harm index (Appendix B).

MAIN ACTIONS TAKEN:

- See "Medication Errors by Drug Class," section for in-depth review and actions taken in regards to controlled substance discrepancy errors and for errors involving anti-infectives.
- See the "Product labeling, packaging and nomenclature," section for actions taken in regards multi-dose vial expiration labeling errors by nursing.

ANALYSIS: Looking back in 2021, the majority of "use" errors surrounded controlled substance monitoring, which are trended via unit specific controlled substance discrepancy reports. However, the number of discrepancies decreased by 60% from 2018 to 2021 as a result of the ongoing efforts to reduce discrepancies. Going forward in 2022, pharmacy will continue to be vigilant in monitoring for controlled substance discrepancies and continue to report all discrepancies in SERS.

Element #11. TECHNOLOGY

TRENDS NOTED:

- "Technology" accounts for 8 total medication errors in 2021. This calculates to a 0.001 % error rate (# of errors/# of doses dispensed) vs. 0.003 % in 2020, 0.002% in 2019 and 0.003% in 2018.

- Breaking down the "technology," errors by "Specific Event Type," the main error types were:
  - ➢4 errors involved issues with IV pumps, 2 errors with the Alaris pump and 2 errors with CADD pump in the infusion center. The number of errors related to CADD pump decreased from 7 in 2020 to 2 in 2021. (See the High Alert Section for more details).
  - ➢2 errors involved Omnicell (No TRENDs found)
- Breaking down "technology," errors by drug class, the following was noted:
  - ➢2 errors involved chemotherapy (TREND: 2 cases involved CADD pump malfunctions).
- Breaking down "Technology" errors by severity rating, there were:
  - ➢5 level B errors
  - ➢3 level C errors
  - ➢Therefore, none of the events resulted in harm. See "Percent Medication Error Rate" graph with harm index (Appendix B).

MAIN ACTIONS TAKEN:

- In regards to the CADD pump issues, the pumps were replaced in 2020. See the "High Alert," section for more details.

ANALYSIS: Looking back in 2021, the most common error IV pump issues involved CADD pump (ex: battery depletion, pump malfunction/leaking, etc.) however the number of errors relating CADD pump decreased from 7 in 2020 to 2 in 2021. This is likely due to the CADD pumps were replaced in 2020 with new smart pumps with drug libraries and the capability to run reports for quality monitoring. Going forward in 2022, data will continue to be trended and processes will be optimized as needed.

Element #12. TRANSITIONS IN CARE

TRENDS NOTED:

- "Transitions in Care accounts" for 1 total medication error in 2021. This calculates to a 0.0001% error rate (# of errors/# of doses dispensed) which is the same as 0.0001% in 2020, 0.0008% in 2019 and 0.002% in 2018.
- 1 error involved missing medications that had already been dispensed by pharmacy due to medications not being transferred with the patient upon transfer from one unit to the next.
- Breaking down "Transitions in Care" errors by severity rating, there were:
  - ➢1 level B error
  - ➢Therefore, none of the events resulted in harm. See "Percent Medication Error Rate" graph with harm index (Appendix B).

MAIN ACTIONS TAKEN:

- Staff was educated in the case listed above.

ANALYSIS: Looking back in 2021, the 1 error involved medications not being transported with the patient upon transfer from one unit to the next, however there was a 50% decrease in this error type from 2020 to 2021. The pharmacy department's performance improvement project was to deliver medications to patients in a timely manner and improve pharmacy operations by reducing unnecessary in-basket messages. Upon investigation, it was found that the top reason for in-basket messages was for missing doses. With further analysis, it was found that one of the top two contributing factors to missing doses was non-compliant medication transfer events (i.e., medications already dispensed from pharmacy not being transferred with patient from one unit to the next). In 2020, pharmacy and nursing focused on educating staff which contributed to the decline in errors reported. Simultaneously, in 2020, pharmacy explored utilizing a dispense tracking system to help with locating missing doses that have already been dispensed. In 2021,

the necessary equipment was purchased and going forward in 2022, the pharmacy department will plan to work with ccLink IT to pilot the dispense tracking system when it becomes fully functional.

Overall Summary:

- There was a 2% decline in SERS reported in 2021 vs. 2020, a 43% decline since 2019 and a 55% decline since 2018. The drop from 2018 and 2019 can be attributed to the reduction in controlled substance discrepancies in 2020 and 2021 vs. 2018 and 2019. This is as a result of the ongoing efforts by Pharmacy, Nursing and Anesthesiology to minimize controlled substance discrepancies (technological enhancements, education, etc.) along with oversight from the Opioid Stewardship Program Committee.
- There were 498 medication related SERS reported in 2021, compared to 508 in 2020, 879 in 2019 and 1,115 in 2018. When looking at the percent of errors reported (# of errors/ # of doses dispensed), there was a 0.05% error rate in 2021, vs. 0.05% in 2020, 0.07% in 2019 and 0.1% in 2018. The decrease in percent error rate can in large part be attributed to the reduction in controlled substance discrepancies since 2018 to 2020. The decrease is as a result of the ongoing efforts by Pharmacy, Nursing and Anesthesiology to minimize controlled substance discrepancies (technological enhancements, education, etc.) along with oversight from the Opioid Stewardship Program Committee. It is important to note that 100% of controlled substance discrepancies are investigated and resolved.
- In 2021, 99.2% of error did not contribute to any patient harm (Level E errors or higher).
- Controlled substances contributed to the highest number of errors. The top error type was controlled substance discrepancies. Following controlled substances were anti-infectives. The top error types were missed doses due to IV line remaining clamped and vancomycin trough monitoring errors.
- Pharmacy department promotes awareness and transparency in the organization and uses SERS as an approach to identify areas for improvement so that strategies could be implemented to correct these issues. Pharmacy department generates the most SERS of the organization in order to support this methodology for improvement.

Conclusion: The MERP program has been effective in detecting medication errors and in developing corrective actions taken for the past year. The annual SERS review was completed in February 2022.

CONTRA COSTA REGIONAL MEDICAL CENTER POLICY #: 5013
DEPARTMENT OF PHARMACY SERVICES

MEDICATION ERROR REDUCTION PLAN

I. PURPOSE:

To outline the Medication Error Reduction Plan & the Annual review of the MERP plan

II. REFERENCES:

TJC Standards LD.01.03.01, LD.03.01.01, LD.03.02.01, LD.03.05.01, LD.04.04.01, MM.06.01.01, MM.07.01.03, MM.08.01.01, PI.01.01.01, PI. 02.01.01, PI.03.01.01

CMS CoP § 482.11(a), 482.12(b)(d)(f), 482.21(a)(b)(c)(d)(e), 482.23(c), 482.25(a)(b), 482.41(c), 482.42(b)

California SB 1875

III. POLICY:

SB1875 requires an annual review of all MERP elements for efficacy. There are twelve different 'elements' to the medication management process that require monitoring: Prescribing, Prescription Order Communication, Product Labeling, Packaging, and Nomenclature, Compounding, Dispensing, Distribution, Administration of Medications, Monitoring, Education, Use, Technology, and Transitions in Care.

IV. PROCEDURE:

Below is a breakdown, by element, of the monitors in place at CCRMC. This is a multidisciplinary process, with many departments involved/responsible for the monitor/audit/report.

1. Prescribing:

- Medication errors: review and analysis of all medication errors involving prescribing
- Adverse Drug Events: review and analysis of all reported adverse drug events
- Pharmacy interventions: review and analysis of all reported pharmacist interventions with providers
- Antibiotic stewardship: report on appropriate prescribing and monitoring of antibiotic therapy

- Fentanyl patch: review of all fentanyl patch orders for appropriateness of therapy and monitor of provider prescribing process
- Rescue medications: review of 100% of all doses of rescue medications administered to patients
- LASA review: review of latest literature on LASA and report on all CCRMC medication errors involving look-alike-sound-alike errors

2. Prescription Order Communication:

- Medication errors: review and analysis of all medication errors involving order communication

3. Product Labeling, Packaging, and Nomenclature:

- Medication errors: review and analysis of all medication errors involving labeling, packaging, and nomenclature
- Internal pharmacy audit: monthly audit of pharmacy-dispensed doses, looking for proper labeling, ingredients, cart fill check, etc
- LASA review: review of latest literature on LASA and report on all CCRMC medication errors involving look-alike-sound-alike errors

4. Compounding:

- Medication errors: review and analysis of all medication errors involving compounding
- Internal pharmacy audit: monthly audit of pharmacy-dispensed doses, looking for proper labeling, ingredients, cart fill check, etc.
- End-Product-Testing

5. Dispensing:

- Medication errors: review and analysis of all medication errors involving dispensing
- Internal pharmacy audit: monthly audit of pharmacy-dispensed doses, looking for proper labeling, ingredients, cart fill check, etc
- Turn-Around Time: monitor of pharmacy TAT
- LASA review: review of latest literature on LASA and report on all CCRMC medication errors involving look-alike-sound-alike errors

6. Distribution:

- Medication errors: review and analysis of all medication errors involving distribution.

- Internal pharmacy audit: monthly audit of pharmacy-dispensed doses, looking for proper labeling, ingredients, cart fill check, etc
- High risk/high alert: review of latest literature on high-risk medications and report of all medication errors involving high risk medications
- LASA review: review of latest literature on LASA and report on all CCRMC medication errors involving look-alike-sound-alike errors

7. Administration of medications:

- Medication errors: review and analysis of all medication errors involving administration of medications
- Bar code report: report on medications being administered without proper barcoding.
- Alaris pump report: report on improper use of Alaris pump
- Override report: monitor of medications removed from the automated dispensing machine using the override function
- LASA review: review of latest literature on LASA and report on all CCRMC medication errors involving look-alike-sound-alike errors
- CADD pump report: report on use of CADD pump

8. Monitoring:

- Medication errors: review and analysis of all medication errors involving monitoring of medications
- Antibiotic stewardship: report on appropriate prescribing and monitoring of antibiotic therapy
- Pharmacist-managed Diabetes Care Management Clinic: review and analysis of patient outcomes for pharmacist-managed diabetes patients vs provider-managed diabetes patients.
- Anticoagulation clinic
- Erythropoetin stimulating agent clinic
- Pharmacy interventions (including but not limited to daily drug information, clinical monitors set via Datamining software as well as EHR)
- D50 Use Review
- Medication overrides
- Medication barcoding
- Medication extraction from the nighlocker after hour
- Controlled substance discrepancy
- Medication pass audit of the hospital units
- Pharmacy practices internal audit
- Review of Rescue medications

- Adverse Drug Events: review and analysis of all reported adverse drug events

9. Education:

- Medication errors: review and analysis of all medication errors with regards to competency of staff
- Patient education on fentanyl patch: review and monitor for documentation of patient education for all patients being discharged on fentanyl patch
- Professional Development Department provides ongoing education for nursing staff
- Transitions of Care program by pharmacy department: Admission medication reconciliation and discharge medication reconciliation for patients deemed as "High Risk," per defined criteria.
- Anticoagulation clinic program run by Pharmacy Dept (Ambulatory care, Healthcenters)

10. Use:

- Medication errors: review and analysis of all medication errors related to medication use
- Antibiotic stewardship: report on appropriate prescribing and monitoring of antibiotic therapy
- Fentanyl patch: review of all fentanyl patch orders for appropriateness of therapy and monitor of provider prescribing process

11. Technology:

- Medication errors: review and analysis of all medication errors related to technology
- Alaris pump report: report on improper use of Alaris pump
- ccLink: reports on system changes made in response to system issues
- CADD pump report: report on use of CADD pump
-

12. Transitions in Care:

- Medication errors: review and analysis of all medication errors related to transitions in care
- Transitions of Care program by pharmacy department: Admission medication reconciliation and discharge medication reconciliation for patients deemed as "High Risk," per defined criteria.

An annual report on the effectiveness of the plan, illustrated by the annual medication errors and metrics associated with each element is prepared and presented to the Medication Safety Committee, Patient Care Policy & Evaluations Committee and the Performance Improvement Committee, and the Medical Executive at the end of the MERP year. The plan is then modified, based on the findings, for the following year and adopted by the organization.

V. Attachment:
Annual MERP Review
MERP Plan 2022

VI. RESONSIBILITY:

Director of Pharmacy Services

Reviewed: 3/14, 3/16, 3/18, 3/19, 3/20, 3/21, 3/22
Revised: 3/14, 3/16, 3/18, 3/19, 3/21, 3/22

MEDICATION ERROR REDUCTION PLAN-ANNUAL MERP REVIEW

CONTRA COSTA REGIONAL MEDICAL CENTER (3/2022-3/2025 cycle)

Approval	Signatures	Date
Chief Executive Officer		**3/2022**
Chief Medical Officer		**3/2022**
Chief Nursing Officer		**3/2022**
Director of Safety and Performance Improvement		**3/2022**
Medical Executive Committee		**3/2022**
Patient Safety and Performance Improvement Committee		**3/2022**
Patient Care Policy and Evaluation		**3/2022**
Governing Body		**3/2022**
Director of Pharmacy Services, Medication Safety Committee		**3/2022**

Policy (5013)

The Medication Error Reduction Plan submitted to CDPH in 2001 as a facility plan to eliminate or substantially reduce medication-related errors (by authority of SB1875/801) and Health & Safety code 1339) has been incorporated in this policy.

Annual review of the effectiveness of the plan will be performed depicted in the MERP grid. If the plan is not effective in reducing medication errors, MERP will be revised to redesign actions and achieve goals.

Background

CDPH shall monitor the implementation of the plan upon licensure visit every three years.

CCRMC cycles per CDPH audits: started in 2009 and repeats every three years.

MEDICATION ERROR REDUCTION PLAN-ANNUAL MERP REVIEW

CONTRA COSTA REGIONAL MEDICAL CENTER (3/2022-3/2025 cycle)

Table of content

I. Introduction

- A. Contra Costa Regional Medical Center (CCRMC) MERP
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- A. Scope
- B. Goal and objective
- C. Action plans and initiatives

III. Organization Responsibility and Accountability

- A. Quality system that addresses the issue of facility-wide reduction of medication errors
- B. Medication safety subcommittee of Pharmacy and Therapeutics committee (i.e., PCP&E)

IV. Reporting system and Monitoring

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VI. MERP Elements of the plan to monitor and evaluate safe medication practices in error reduction

VII. MERP Grid

VIII. Effectiveness of the Plan

Addendum I: Pharmacy Department's QA/PI collaborative structure

MEDICATION ERROR REDUCTION PLAN-ANNUAL MERP REVIEW
CONTRA COSTA REGIONAL MEDICAL CENTER (3/2022-3/2025 cycle)

I. INTRODUCTION

The following is Contra Costa Regional Medical Center (CCRMC) and Healthcenters' plan (HC) to eliminate or substantially reduce medication-related errors as part of Senate Bill 1875/ 801 and Health & Safety Code 1339 (MERP).

A. CONTRA COSTA REGIONAL MEDICAL CENTER AND HEALTHCENTERS MERP

Contra Costa Regional Medical Center is a 167 bed county hospital located in Martinez California. We are directed and guided by established policies and procedures, protocols and guidelines to minimize medication errors and adverse drug events. Events are reported through an electronic event reporting system (SERS), a voluntary, non-punitive reporting system for all problems/risk issues identification, and preventive action designed for implementation to reduce errors or potential risks. Medication safety initiatives were developed in 2001. Over the years we have incorporated into our medication safety and quality system risk reduction requirements from Federal and State Laws, including but not limited to CMS, CDPH, FDA, other governmental agencies, TJC standards; National Patient Safety Goals & TJC Booster Pack, applicable clinical practice guidelines and recommendations from nationally recognized organizations (e.g., ISMP, The Medical Letter, etc…), professional societies and associations (e.g., ASHP, CSHP, APhA, ADA, etc…) as well as shared learnings from any external resources with successful medication practices demonstrated in reducing medication errors and adverse drug events.

B. VISION

To be the health care system of choice in Contra Costa County where partnerships with patients and employees exist to promote individuals and community wellness.

C. MISSION

The mission of Contra Costa Health Services is to care for and improve the health of all people in Contra Costa County with special attention to those who are most vulnerable to health problems.

- We provide high quality services with respect and responsiveness to all.
- We are an integrated system of health care services, community health improvement and environmental protection.
- We anticipate community health needs and change to meet those needs.
- We work in partnership with our patients, cities and diverse communities, as well as other health, education and human service agents.
- We encourage creative, ethical and tenacious leadership to implement effective health policies and programs.
- We have a department-wide goal to reduce health care disparities and health disparities by addressing issues of diversity and linguistic and cultural competence

D. VALUES

Respect, Safety, Learning, Honesty, Excellence, Functional, Communication, Stewardship, Creativity, and Compassion.

E. STRATEGIC DIRECTIVES

CCRMC and Clinics use a system-wide approach to identify high risk and problem prone patient and care processes, redesign unsafe care processes, implement best practices, and adopt successful practices from other organizations that will improve and ensure patient safety. Our goal is to increase the safety of patients receiving medications at CCRMC and Clinics.

II. OVERVIEW OF CCRMC's MERP

A. SCOPE OF THE MEDICATION ERROR REDUCTION PLAN

1. Ensuring provision of pharmaceutical services meet the patient's therapeutic goal by improving safe medication use processes that optimize therapeutic outcomes
2. Ensuring the safe administration of medications according to physician's orders
3. Ensuring compliance with regulatory requirements related to medication safety and security throughout the hospital

4. Reviewing, analyzing, and trending medication errors and adverse drug events (i.e., Adverse Drug Reactions as well as medication errors), and identifying processes and practices which require improvement
5. Implementing evidence-based practices in medication administration, medication safety and security, and improved technologies and pharmaceuticals

B. GOAL AND OBJECTIVE

Our objective is to increase effectiveness in the implementation of evidence-based medication practices shown to reduce preventable adverse medication events. Medication safety will be improved through compliance with medication error reduction standards and safety practice implementation required by CMS, CDPH, FDA, Board of Pharmacy, TJC and its National Patient Safety Goals as well as Booster Pack.

- Development and revision of policies and procedures and protocols to minimize Adverse Drug Events (ADE) will be based on review of facility reported adverse drug events, medication use evaluation, chart reviews, observed medication passes, accepted professional principles, incorporation of Federal & State laws and regulations, TJC medication management standards and National Patient Safety Goals, its Booster Pack as well as its Sentinel Event Reports, other external alerts and/or recommendations from national associations including but not limited to the Institute For Safe Medication Practices (ISMP), National Coordination Council for Medication Error Reporting and Prevention (NCCMERP), Institute of Healthcare Improvement (IHI), other governmental agencies such as FDA Medwatch program, as well as clinical practice guidelines and standards of practice from nationally recognized professional organizations (e.g., American Pharmaceutical Association (APhA), American Society of Healthcare Systems Pharmacists (ASHP), California Society of Healthcare Pharmacists (CSHP), etc.

Our processes include but are not limited to the following:

1. Identify the causes of preventable Adverse Drug Events (ADE)
2. Identify the causes of preventable Rescue medications
3. Implement selected short-term changes, as well as
4. Identify, evaluate and implement long-term strategies that require operational and capital expenditures that will ensure safe medication processes and systems with or without technology.

C. ACTION PLANS AND INITIATIVES

See MERP Grid for an updated medication safety QA/PI project list, demonstrating numerous medication safety goals, initiatives, and medication related best practices. Our priority is to achieve continual implementation of safe medication practices to substantially reduce medication errors and/or proactively prevent adverse events by addressing issues, actual or potential risk points or deficiencies associated with CDPH MERP elements.

III. ORGANIZATIONAL RESPONSIBILITY AND ACCOUNTABILITIES

(DHS-CDPH guiding principle #1-Establish an organized quality system that addresses the issue of a facility wide reduction of medication errors)

1. CCRMC has an ongoing approved and leadership-supported Medication Error Reporting Program with policies and procedures which clearly establish organizational structure in providing the leadership and quality system in advancing patient safety, risk management, and error reduction. Approved policies and procedures establishing our medication management and quality system are continually addressing issues in improving and refining processes, based on what went wrong, to design corrective actions for implementation and prevent re-occurrence.
2. Under the oversight of the PCP&E, a multidisciplinary Medication Safety Committee was formed in 2001. The Medication Safety Committee (MSC), run by the Department of Pharmacy (SEE

Addendum I), has oversight on all medication management processes, system wide. MSC is a subcommittee of the Patient Care Policy and Evaluation Committee (PCP&E) and reports to several medical staff committees i.e., PCP&E (i.e, P&T), PS&PIC, and MEC on a monthly basis. MSC oversees/addresses ALL medication errors and meets on a multidisciplinary note, every month, to discuss in detail all medication errors that occurred during that month. Medication errors are trended using NCCMERP ratings and through ongoing data aggregation analysis and preventative action design. In addition, at CCRMC, Pharmacy Dept trends near misses as well as harm index (see SBARs in MERP binder or electronic MERP document).

3. The MERP plan for the upcoming year is drafted annually submitted to executive members of this organization as well as medical staff committees (PCP&E, PS&PIC, and MEC) once MSC endorses it.
4. This committee is Chaired by the Director of Pharmacy Dept. The quality of different services in ensuring compliance with all MERP elements and established hospital policies is assessed and monitored via data collection. (See Annual Medication Error Reports in the MERP binder).
5. MSC has oversight on all medication related processes and generates many reports, including but not limited to Medication Errors, Rescue Meds, CSPs (Compounding Sterile Products), Clinical Monitors, Alaris® pump, Overrides, Pharmacy Department's Performance Improvement projects, ADRs, and ISMP reports.
6. Medication error reports and adverse drug reaction reports with executive summary and pertinent data feedback relative to the user/user department are sent/referred to relevant medical staff, nursing unit/departments. Action response is requested from unit management/department head before SERS is closed.

7. Feedbacks on medication safety initiatives are reported to the Medical staff as well as Nursing staff through leadership of these departments.
8. A summary of all MSC agenda items are reported to PCP&E, PS&PIC as well as MEC. The Director of Pharmacy Department is a member of all these committees and presents the report on all pertinent information on a monthly basis to the aforementioned committees.
9. Implementation of our MERP is integrated into the facility-wide quality assurance/performance program.
10. Ongoing educational efforts are in place to heighten the awareness of medication safety to our patients.

IV. REPORTING SYSTEMS AND MONITORING

(DHS-CDPH guiding principles #2-Develop effective reporting mechanisms to ensure medication related errors are reviewed)

Reduction of medication errors and adverse reactions can be achieved by effective reporting systems that proactively identify causative factors and are used to implement corrective actions to reduce or prevent reoccurrences. To facilitate reporting, CCRMC adopted a medication error definition that is broad enough in scope to capture actual, potential, or “near miss” events and an adverse drug reaction (ADR) definition to capture suspected as well as actual ADRs.

CCRMC conducts proactive identification of adverse drug events or unsafe care processes including concurrent and retrospective review of patient’s clinical records, monitoring of targeted high-risk drugs with pertinent lab results, observing medication passes, conducting drug use evaluation and drug regimen review for high-risk patients for drug and or dosage adjustment to

prevent potential adverse drug events, as well as performing other QA/PI initiatives as listed in MERP grid.

At CCRMC the Pharmacy Department believes in transparency and uses our event reporting system (SERS) to place in all near misses as well as discrepancies. Pharmacy Department believes that SERS is a means of trending and alerting healthcare members of the ongoing challenges in the system. In addition, Pharmacy Department uses analyzed data as a means of identifying QA and PI projects. See MERP Grid for examples of system enhancement projects using this methodology by the Pharmacy Department.

Pharmacy Department is the biggest contributor to SERS entry in the organization. All relevant data from our monitors and reports are entered into this system on a concurrent and retrospective basis. Through subsequent follow up with Nursing, Medical Staff, and Quality departments, we have been able to overcome many medication safety challenges in the past few years.

A. CCRMC has a voluntary, non-punitive reporting system to monitor and report Adverse Drug Events (ADE) via a long-standing effective medication error reporting as well as an Adverse Drug Reaction program (ADR) with data collection, aggregation, analysis, and special emphasis on designing and implementation of preventative actions on an ongoing basis.

B. Medication events, actual, potential, or near misses are reviewed and trended to evaluate changes in our systems that could improve patient safety. Evaluation and implementation of medication safety initiatives follow our continuous quality improvement process using the PDSA (Plan-Do-Study-Act) model, the Rapid Cycle Improvement techniques, the Failure Mode and Effect Analysis (FMEA), and the Root Cause Analysis (RCA) model for sentinel event or “near misses” in conjunction with our Quality department / Risk management & Patient Safety Officer.

V. PROCESS-MERP IMPLEMENTATION ASSESSMENT

A. ASSESSMENT

(DHS-CDPH guiding principle #3- Establish a baseline assessment and then, at a minimum annually review the effectiveness of the plan to reduce medication-related errors)

Baseline assessment of medication related problems and annual review of the effectiveness of the plan are performed using an objective based critical review. If the plan is not effective in reducing medication errors, MERP will be revised to redesign actions to achieve goals.

B. CDPH REQUIREMENT IN ASSESSING EFFECTIVENESS OF MERP IMPLEMENTATION:

Evaluate, assess, and include a method to address each of the procedures and systems listed under 1339, H&S, subdivision (d) to identify weaknesses or deficiencies that could contribute to errors in the administration of medications. CDPH categorized and focused on evaluating twelve elements on MERP implementation for ongoing improvement.

At CCRMC we use our medication error reports to trend challenging elements. Medication errors are reviewed periodically (i.e., monthly, quarterly, and annually).

The following year's plan is drafted after meticulous review of all Medication Errors, analyzing the cumulative data using monthly, quarterly, and annual Med Error patterns. Subsequently thereafter, plans are implemented to reduce the likelihood of the errors in those certain areas.

Pharmacy Dept uses the Run Chart methodology to graph each MERP element to assess the effectiveness of the instituted plans and whether those plans were adequate in reducing medication errors over time.

Run Charts are cumulative; using Median Line, we can detect any trends, shifts, or astronomical data points. We also insert annotations on the aforementioned run charts to be able to describe the cause and effects concerning any peaks or trough vs any observed isolated incidents.

Pharmacy Dept works very well with ALL departments (Nursing, medical staff, or ancillary departments) in conjunction with Quality Managers and the Professional Development Department (PDD) to apply corrective actions. Success is measured by following SERS in the affected areas to see if the action plan was proven effective or not and reflected on the run charts as cited above.

Education and Information dissemination

1. CCRMC disseminates information to hospital leadership, physicians, nurses, pharmacists, and quality managers. The following activities are currently underway to increase awareness of patient safety:
    a. Data feedback to physicians by Pharmacy Department's leadership on medication errors, adverse drug reaction reporting and medication use quality assurance and use audits.
    b. Data feedback to nursing by Pharmacy Department's leadership on medication errors, rescue meds, adverse reactions, and quality audits.

    At CCRMC we have actively received and used new information and notices related to:

    - Medication errors
    - Processes for avoiding errors
    - Recalls

- Problem prone medications and
- Resources related to adverse events associated to medications.

A monthly memo is generated by the Pharmacy Department with all the PCP&E updates. In addition, a memo is generated and sent to the Medical Staff president regarding "Preventable ADRs as well as Preventable Rescue Meds as a learning and educational opportunity.

Technology Strategies

(DHS-CDPH guiding principle #4-Technology implementation shall be part of the plan)

Technology will be used whenever possible to improve effectiveness and efficiency in the medication use processes to make errors difficult to commit and to promote a culture of safety and quality in the workplace. Listed below are technological applications completed at CCRMC.

Technology action plan:

1. Automated Dispensing Cabinets (i.e, Omnicell)
   - Continue using the alerts, reports, and paging system available by the Omnicell software
2. Continue using Repackager (Omnicell) to minimize medication errors in form of medication Unit Dosing and distribution to Nursing units
3. Provide ongoing support to maintain quick access and availability to medical information or current IV administration guidelines, online:
   - Micromedex-available to all staff
   - Lexicomp- available to all staff

4. Expanding reporting capabilities of EPIC (our EHR) to generate more and more meaningful reports in form of system lists, workbench reports, or crystal reports.
5. Usage EHR, i.e, ordersets, Best Practice Alerts (BPA's), First Data Bank (FDB) warnings (i.e., concerning allergy, Drug-Drug Interaction, high dose, etc…) enables us to ensure safe medication practices at CCRMC.
6. Utilizing different software and technologies to extract data and trend values
7. VigiLanz (A data mining system)
    - VigiLanz is programmed to include many monitors. It filters the data and reports all monitors that need to be addressed by the pharmacists on a daily basis
8. SERS (Safety Event Reporting System)
    - Electronic event reporting system with the built in reporting mechanism
9. Alaris® Pump (i.e, Smart pump)
    - Smart pump has been programmed to match our EHR rates of administration for all formulary drugs. The use of basic infusion is monitored and use of guardrail is encouraged. Alaris® committee is a subcommittee of MSC that meets every month. Data is trended using its report functionality. Rounds are made by Pharmacy and Nursing to assure compliance with set safety parameters.
10. Kitcheck®
    - Kit check® uses the RFID technology. Pharmacy Dept uses this technology to improve the efficiency of monitoring the expired medications in variety of kits and carts.

- Kit Check® technology was instituted in Anesthesia Workstations to better manage the inventory of the trays.

11. HER (ccLink)
    - Barcoding technology
        - Introduced globally as BCMA
        - Introduced departmentally in most areas of the Pharmacy dept
    - Antimicrobial Stewardship (ASP) module
12. Central Temperature monitoring software

C. Literature review for ongoing review of the plan

(DHS-CDPH guiding principle #5- Review pertinent literature related to the reduction of medication related errors in the development and ongoing review of the plan.)

Pertinent literature related to the reduction of adverse drug events has been and will continue to be reviewed in the development and review of the plan. The ultimate goal is to deliver safe medication practices at CCRMC and Clinics.

Literature for ongoing learning and sharing are readily obtained from any of our resources at CCRMC. We have a very generous library of resources made available to staff, electronically. A few examples would be Micromedex, Up-To-Date, and many journals through our library. In addition to that, we benefit from nationally recognized entities and their publications such as ASHP, FDA Medwatch alerts, etc… (SEE Goal and Objective section above)

D. CCRMC participates in the following medication safety collaborative for learning from errors and sharing of best practices:

- East Bay Society of CSHP (California Society of Healthcare Pharmacists): Collaboration of all East Bay Pharmacy Leadership
- South Bay Society of CSHP (California society of Healthcare Pharmacists): Collaboration of all South Bay Pharmacy Leadership
- ARC-Gordon and Betty Moore foundation: Avoid Readmission Coalition. Pharmacy Director has done a number of presentations for this organization and currently is the expert speaker/presenter for Avoid Readmission Campaign in the East Bay
- ISMP Canada: Pharmacy Director has been invited to ISMP in Canada to share the Medication Reconciliation Process at CCRMC as IHI model hospital
- Sharing ADE data with Vizient Hospital Innovation Improvement Network (HIIN) to assess how CCRMC ADEs compares with other hospitals in that network

VI. MERP ELEMENTS OF THE PLAN TO MONITOR AND EVALUATE SAFE MEDICATION PRACTICES IN ERROR REDUCTION:

The main section of this report will be categorized by the twelve elements of medication practices: Prescribing, Dispensing, Distribution, Administration, Competency related to medication use, Product-labeling, Packaging and Nomenclature, Compounding, Prescription Order Communication, Monitoring, Use, and Transition of Care.

The annual MERP program assessment review and effectiveness evaluation in support of identifying plan weaknesses and deficiencies for change implementation and MERP program modification are highlighted in our MERP Grid.

Processes to Reduce Medication Errors:

Methodologies to reduce medication errors include on-going proactive surveillance and retrospective tools to identify the root causes of variation or deviation in medication management

process and system performance. Examples of on-going proactive surveillance tools include the use of trigger tool to identify areas for improvement in clinical care and patient safety, the reviews of medication usage evaluations, and daily monitoring of Automated Dispensing Cabinets medication overrides.

Data from comprehensive review of reported medication events and on-going proactive and retrospective reviews of system performance will be utilized to determine and evaluate medication safety systems related to, but not limited to: prescribing, prescription order communication, product labeling, packaging and nomenclature, compounding, dispensing, distribution, administration, education, monitoring, medication use and storage of medications.

Corrective actions are promptly initiated to address each of the eleven processes and systems once a significant trend or pattern has been identified through the on-going monitoring methodologies as described above. Corrective actions may include changes in systems, procedures, staff and management in-services, and revision in policies and procedures. Should the corrective actions as implemented prove to demonstrate a decrease or reduction in medication errors overtime, then the specific hospital policy and corresponding procedures will be revised and forwarded to the Medication Safety Committee (MSC) as well as the oversight committees (i.e, PCP&E, etc…) for review and approval.

Annually, all the revised and changed procedures and systems will be reviewed and evaluated by the MSC as well as PCP&E to determine if the changes undertaken have been effective, or not; and whether the ongoing indicator should continue to be monitored for the forthcoming year.

Frequency of monitoring for the specific indicator that has demonstrated a reduction in medication errors will also be revisited and determined by the Medication Safety Committee and approved by the PCP&E Committee.

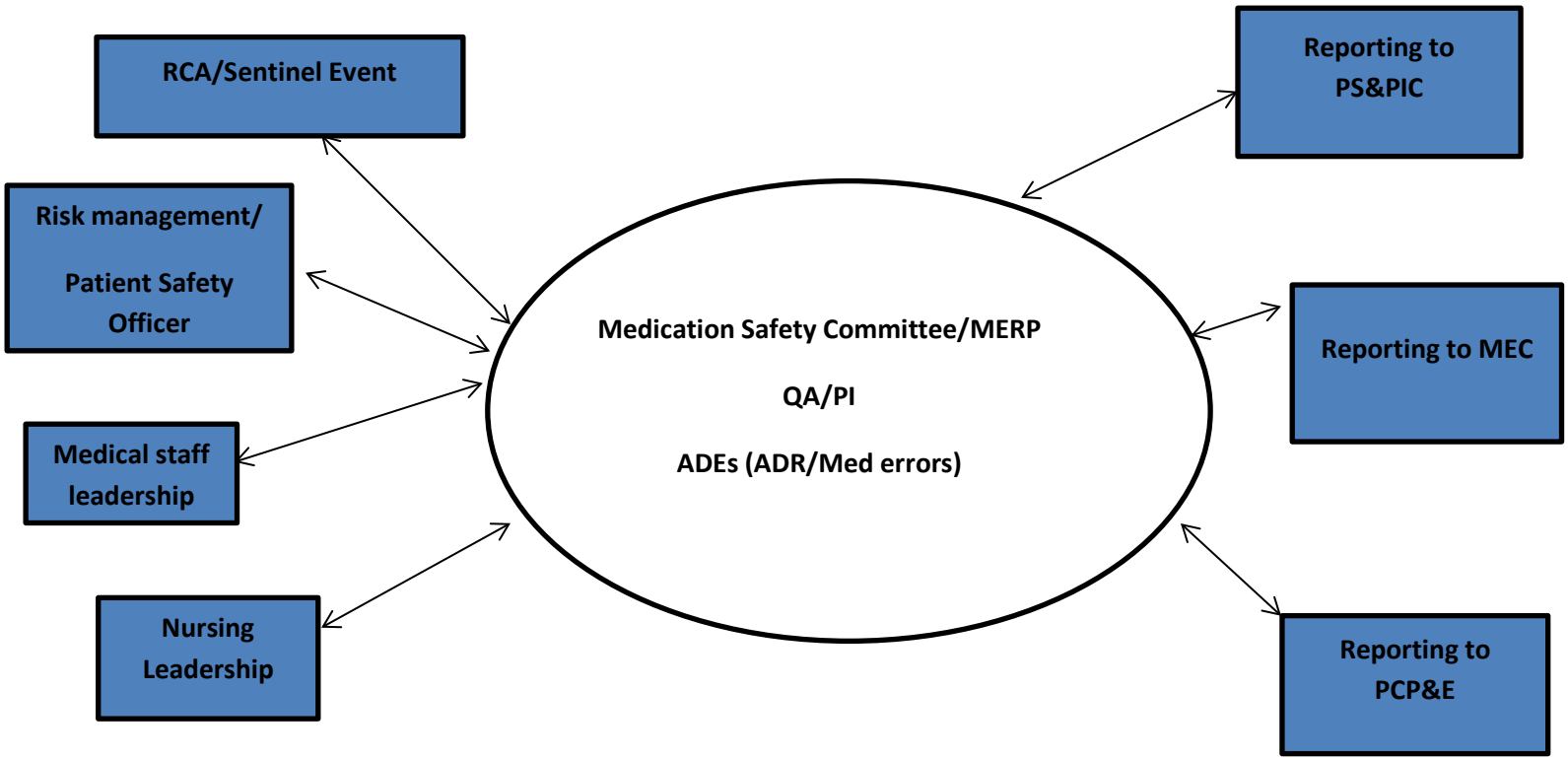
VII. MERP GRID:

See MERP binder and/or electronic files with hyperlinks to data analysis and reports.

VIII. Effectiveness of the Plan:

The program has been effective in detecting medication errors and in developing corrective actions for the past year (see MERP grid).

Addendum I- Pharmacy Department's QA/PI collaborative structure



(Policy: 5013)

CONTRA COSTA HEALTH SERVICES

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MEDICAL EXECUTIVE COMMITTEE AGENDA

CHAIR-KRISTIN MOELLER, M.D.
December 20, 2021
12 to 2:00p

As the elected leadership of the CCRMC/HCs Medical Staff, we stand against racism and hate. *We recognize the negative impact of longstanding structural racism on health, and we commit to take action to combat this in our own system and work for health equity for our patients.*

Join Zoom Meeting
https://cchealth.zoom.us/j/8544948118
Meeting ID: 854 494 8118
****If you are on phone only for the Zoom, use *6 to mute/unmute**

Agenda Topic	Status	Time
Call to Order		
Review of November 15, 2021 Minutes	See attached Draft Minutes.	2 min.
Announcements (3 min)		
• **January 24, 2022 MEC meeting reports to Sue by January 12, 2021** ○ Cancer Committee-Dr.Gynn ○ Psychiatry-Dr. Berlingieri Please use the standard SBAR form for your reports -You will be given 5 minutes in which to present your report. Please number the pages of your report. **PLEASE DATE YOUR REPORT AND NUMBER THE PAGES.** **Next meeting January 24, 2022**		
ADMINISTRATIVE REPORTS		
Anna Roth, Health Services Director Chris Farnitano, M.D.-Health Officer Pat Godley, CFO for Health Services Jaspreet Benepal, RN, Chief Nursing Officer Samir Shah, M.D., Chief Executive Officer/Chief Medical Officer Vacant - Chief Quality Officer David Runt - Chief Operations Officer Gilbert Salinas, Chief Equity Officer, HS	Rajiv Pramanik, M.D.- CMIO Gabriela Sullivan, M.D.- Specialty/Ambulatory Medical Director Ori Tzvieli, M.D., Public Health Director Sharron Mackey, MHS, Chief Executive Officer CCHP Dennis Hsieh, M.D., Medical Director/Chief Medical Officer CCHP Sergio Urcuyo, M.D.- Hospital Medical Director Sonia Sutherland, M.D.-Medical Director, Detention Health	
NEW BUSINESS		
JCC Nominations – Dr. Porteous/Dr. Goheen Vote Needed	Dr. Moeller	3 min.
Approval of interim ED chair, Dr. Pyra Aarden-vote needed	Dr. Moeller	3 min.
Funds Approval-Vote Needed-Credentialing Education Course for MSO staff $2,495.	Dr. Moeller	3 min.

CONTRA COSTA HEALTH SERVICES

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MEDICAL EXECUTIVE COMMITTEE AGENDA

CHAIR-KRISTIN MOELLER, M.D.
December 20, 2021
12 to 2:00p

Agenda Topic	Status	Time
Review of Ambulatory Policy 1072 Patient Treatment Management Plan	Dr. Moeller	3 min.
Nominations Open January 1 for the Following: (Term 7/1/2022 - 6/30/2024) **Department Heads:** **ED** **Surgery** **Psychiatry/Psychology** **Diagnostic Imaging** **OB/GYN** **Critical Care** **Division Heads:** **DFAM West County** **DFAM Far East County**		
OLD BUSINESS		
Consent Agenda		
Medication Safety Committee-Dr. Ataii **2021 Q1 ADR report for *medical staff***	See report. Share with department members.	5 min.
PCP&E-Dr. Forman **Nursing Policies-Helena Martey** 400 NURSING: Negative Pressure Wound Therapy: Application, Maintenance 204-A NURSING: Adult- Crash Cart Check Log 310 CCU: Care of the Patient Undergoing Bronchoscopy 2.92 NURSERY: Terbutaline Sulfate Administration 2. 50 L & D: Magnesium Sulfate Therapy: Nursing Care Initiation and 2.50- AProtocol for Administration of Magnesium Sulfate 2.50- B Eclampsia Algorithm 2.50- C Magnesium Sulfate in L&D 3 . 160 NURSING: Urine Specimen Collection	See report. Please ask if you wish to see a specific policy and it will be sent to you.	5 min.
COMMITTEE REPORTS		

CONTRA COSTA HEALTH SERVICES

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MEDICAL EXECUTIVE COMMITTEE AGENDA

CHAIR-KRISTIN MOELLER, M.D.
December 20, 2021
12 to 2:00p

Agenda Topic	Status	Time
Credentials Committee- Dr. Mbanugo List of Candidates - Vote needed	See report	3 min.
Patient Safety and Performance Improvement Committee		3 min.
APC - Dr. Mbanugo 3037 W/7 Attachments on EOC 4200 Appendix 3-Standardized protocols for resource nurses 3037A-Front Entrance 3037B-Registration-waiting areas 3037C-Employee only areas 3037 D-Clinical areas 3037E-Exam Rooms 3037 F Administration Record Keeping checklist 3037 G-Biannual safety inspection EOC correction plan 4029 Total Cast	See report	3 min.
Contra Costa Health Plan-Sharron Mackey	Pending	
DEPARTMENT & DIVISION REPORTS		
DFAM Martinez-Dr. Katzman	Pend to January	5 min.
Pediatrics Department-Dr. Jolton	See report	5 min.
Pathology Department-Dr.Das	Pending	5 min.
Dental Department-Dr. Garcia	See report	
Med Staff Assistance Committee-Dr. Wadle	Pending	5 min.
ADJOURN TO CLOSED SESSION-VOTING MEMBERS ONLY		
Adjournment. Next Meeting Date: January 24, 2021		

CONTRA COSTA REGIONAL MEDICAL CENTER HOSPITAL AND HEALTH CENTERS		AC NURSING POLICY NO:3037-A ADDENDUM A			
FRONT ENTRANCE/LOBBY		KEY= USE #1 FOR YES, NO AND/OR N/A			
#	ITEMS TO INSPECT/REVIEW	COMPLIANT			
		YES	NO	N/A	ACTION
	ENVIRONMENTAL/OTHER				
1	Visit rate schedule is posted and rates are current.				
2	Clinic hours posted are consistent with Ambulatory Care Policy 3034				
3	Patient Rights and Responsibility signs are posted in English and Spanish				
4	"Language Assistance Services" information sheet is posted				
5	Current CCRMC license is posted				
6	Emergency evacuation routes are posted				
7	No smoking signs are present at all patient entrances				
8	"Welcome to Health Center" brochures (English/Spanish)				
9	"Advanced Directives" brochure (Multiple Languages)				
10	"Information about the Interpreter Services" Brochures				
11	Wallet Cards and Speak Up Flyers				
12	Patient comment cards (English/Spanish)				
13	CCRMC & CCHS brochures				
14	If applicable, elevator permit is current				
15	Floors/carpets are clean and in good repair				
16	No hand written signs are taped to walls, signage is professional and clear				
17	Front entrance and lobby area of clinic are clean, organized and clutter free				
18	Signs reminding staff to respect patient's privacy are posted in appropriate areas				
19	Public and TTY phones are available if applicable				
20	"Discrimination Against the Law" is posted				
	INFECTION CONTROL				
21	Trash cans at exterior doors are not overflowing				
22	Drinking fountains are operational and, if applicable, water is cold? Also there is no water around the drinking fountain.				
23	Bathrooms are clean and in good repair				

24	No shared children's' play toys are present in the health center				
		0	0	0	
	PERCENTAGE	#DIV/0!			

CONTRA COSTA REGIONAL MEDICAL CENTER
HOSPITAL AND HEALTH CENTERS

AC NURSING POLICY NO:3037-B
ADDENDUM B

REGISTRATION/WAITING AREAS		KEY= USE #1 FOR YES, NO AND/OR N/A			
#	ITEMS TO INSPECT/REVIEW	COMPLIANT			
		YES	NO	N/A	ACTION
	EXITS/MECHANICAL AREAS/FIRE PROTECTION				
1	Emergency evacuation routes are posted				
	ELECTRICAL				
2	Waiting areas and other areas where children may frequently be present contain childproof electrical sockets				
3	Walkways are free of clutter/equipment				
4	There are no extension cords in use				
5	All areas have flashlights in working order				
	ENVIRONMENTAL/OTHER				
6	"Welcome to Health Center" brochure (English/Spanish)				
7	Visit rate schedule is posted in registration and rates are current				
8	Medicare/Medi-Cal participation notices posted (English/Spanish)				
9	"Advance Directives" brochure (Multiple languages)				
10	"Information about the Interpreter services" brochure				
11	Wallet cards and Speak Up Flyers				
12	Patient Comment cards (English/Spanish)				
13	CCRMC & CCHS brochures				
14	"Language Assistance Services" information sheet is posted				
15	"Five Steps for Patients to Safer Health Care" flyers (English/Spanish) are posted in waiting areas				
16	ADA (Americans Disabilities Act) notice (English/Spanish) are posted in waiting areas				
17	Prostate & Breast Cancer notices (English/Spanish) are posted				
18	No hand written signs are taped to walls, signage is professional and clear				
19	Floors/Carpets are clean and in good repair				
20	Waiting area furniture is properly placed and torn/broken items removed				

21	Multi-colored "Emergency Action Plan" flipchart is visibly available in all work areas				
22	All staff wearing ID badges				
23	Registration areas have a designated area for proper disposal/pick up of discarded stickers				
24	Computer monitor either have privacy screens or are positioned in a way that patient specific information is not visible to the public				
25	Patient education material display is present in waiting areas				
26	All areas of clinic are clean, organized and clutter free				
27	Bulletin boards are neat and orderly and any posted policies are current				
28	Website address to MSDS icon is on all PCs				
	INFECTION CONTROL				
29	There are no shared children's play toys present in the health center				
30	Drinking fountains are operational				
31	Bathrooms are clean and in good repair				
	TOTAL	0	0	0	
	PERCENTAGE	#DIV/0!			

CONTRA COSTA REGIONAL MEDICAL CENTER
HOSPITAL AND HEALTH CENTERS

AC NURSING POLICY NO:3037-C
ADDENDUM C

EMPLOYEE ONLY AREAS		KEY= USE #1 FOR YES, NO AND/OR N/A			
		COMPLIANT			
#	ITEMS TO INSPECT/REVIEW	YES	NO	N/A	ACTION
	ELECTRICAL				
1	If emergency exit signs are lighted, lights are working				
2	There are no extension cords in use				
	EXITS/MECHANICAL AREAS/FIRE PROTECTION				
3	Interior hallways have at least 44" clearance and items in the hallway are only on one side				
4	All door stops are removed				
5	Nothing is stored under sink cabinets				
6	Walkways are free of clutter/equipment				
7	Storage areas do not have boxes on the floor or items stored within 18" of a sprinkler head				
8	Fire extinguisher inspection is current and the extinguisher safety seal is intact				
9	Fire extinguisher have clear unobstructed access				
10	The view of all exit signs are not obstructed				
11	Back door entrances not intended for public use are locked from the outside to ensure security of staff-only areas; however, emergency exiting is allowed				
12	Medical gas zone valves are correctly labeled				
13	At bulk O2 storage tanks, there is signage "Oxygen-No Smoking-No Open Flames"				
14	In kitchen, min 16" clearance between grease fryer & surface flames from adjacent equipment				
15	Signage in kitchen for Emergency Natural Gas Valve shutdown in place				
16	Kitchen Only. Ventilation baffles are properly placed without surrounding gaps.				
	ENVIRONMENT/OTHER				
17	Employee posting included in the Annual Labor Law posters:				

	Safety				
	* Workers' Compensation Notice to Employees (AK-230)				
	*CAL OSHA Safety and Health on the Job				
	*Emergency poster				
	*Emergency action plan				
	Personnel				
	*Drug Free Workplace				
	*Harassment prevention				
	*Unemployment insurance/disability notification				
	Affirmative Action				
	*EEOC Discrimination (DFEH-162)				
	*American Disability Act				
18	Emergency evacuation routes are posted				
19	Multi-colored "Emergency Action Plan" flip chart visibly available in all work areas				
20	Freestanding shelves and cabinets are secured to walls				
21	Floors/Carpets are clean and in good repair.				
22	All areas of clinic are clean, organized, and clutter free				
23	No hand written signs are taped to walls, signage is professional and clear				
24	Shelving has a "lip" to prevent spillage during an earthquake (for applicable storage materials)				
	INFECTION CONTROL				
25	Supplies of toilet paper and paper towels are not stored in "dirty" housekeeping closet				
26	Drinking fountains are operational and in good repair.				
27	Bathroom are clean and in good repair				
	TOTAL	0	0	0	
	PERCENTAGE	#DIV/0!			

CONTRA COSTA REGIONAL MEDICAL CENTER
HOSPITAL AND HEALTH CENTERS

AC NURSING POLICY NO:3037-D
ADDENDUM D

CLINICAL AREAS		KEY= USE #1 FOR YES, NO AND/OR N/A			
		COMPLIANT			
#	ITEMS TO INSPECT/REVIEW	YES	NO	N/A	ACTION
	CHEMICAL/STORAGE AREAS				
1	Biological/medical waste is disposed in appropriate biohazard container				
2	Biomedical waste posters are displayed in appropriate areas				
3	Contaminated trash is disposed of properly				
4	Sharp containers in suites/nursing areas are not past the "full" line				
5	Locked biohazard storage areas contain only biohazard material				
6	O2 tanks and liquid nitrogen tanks are secure				
7	All secondary containers are properly labeled				
8	Emergency Eyewash/Shower maintenance tag is present and weekly maintenance complete (if applicable)				
9	Emergency Eyewash/Shower is unobstructed (if applicable)				
10	No more than 12 full compressed gas cylinders stored in an oxygen storage space				
11	Compressed gas E cylinders stored in secured, upright position				
12	Oxygen storage rooms caution signage posted in locations where 12 or more oxygen tanks.				
13	Compressed gas H cylinders double strapped/chained with protective caps in place				
14	Proper personal protective equipment is available.				
15	EVS/Mechanical/Electrical/Telecom/Data closets are clean and free of clutter.				
16	No ladders blocking electrical panels. Ladders hung on wall out of the way.				
17	Biohazard/Sharps/Pharmecutical waste containers not more than 3/4 full (not above fill line)				
18	Clean and dirty equipment and supplies are stored separately				
	EXITS/MECHANICAL AREAS/FIRE PROTECTION				

19	Emergency Exits: egress unobstructed & doors unlocked				
20	Exits Clearly marked with illuminated signs				
21	Emergency lighting provided for all occupied areas and tested monthly and annually.				
22	All doors in exit path kept closed				
23	Lighting is functioning properly (e.g. no lights missing, broken, burnt out)				
24	Handrails provided on all stairs are secure.				
25	Fire sprinkler escutcheons securely in place and flush with ceiling				
26	Fire sprinkler heads clean, without dust, debris				
27	Smoke detectors flush with ceiling and in good repair				
28	Fire extinguisher maintenance tag is in date for both monthly, annual, and safety seal is intact.				
29	Fire doors are self closing and latching				
30	Roll down fire doors unobstructed				
31	Interior hallways have at least 44" clearance and items in the hallway are only on one side				
32	Emergency evacuation plans/routes are posted				
33	The view of all exit signs is not obstructed				
34	If emergency exit signs are lighted, lights are working				
35	Fire extinguishers have clear unobstructed access				
36	Storage areas do not have boxes on the floor or items stored within 18" of a sprinkler head				
37	Back door entrances not intended for public use are locked from the outside to ensure security of staff-only areas; however, emergency exiting is allowed				
38	Medical gas zone valves are correctly labeled				
39	At bulk O2 storage tanks, there is signage "Oxygen-No Smoking-No Open Flames"				
40	In kitchen, min 16" clearance between grease fryer & surface flames from adjacent equipment				
41	Signage in kitchen for Emergency Natural Gas Valve shutdown in place				
42	Kitchen Only. Ventilation baffles are properly placed without surrounding gaps.				

	ELECTRICAL				
43	All electrical cords are in good condition				
44	Extension cords are not used in lieu of permanetly installed fixed wiring				
45	Extension cords are not connected to patient care equipment				
46	No daisy chaining of electrical cords				
47	Cover plates, switches, outlets, etc are in good condition				
48	Electrical panel boxes unobstructed, closed and accessibility is not blocked (36" clear)				
49	Power strips used with patient care equipment are hospital grade and in good repair				
50	Patient care equpiment is grounded with a hospital grade power cord or double insulated				
51	Patient care equipmnet is in good repair, no cracking, loose hardware and fittings, not soiled				
52	Gas & Control panels have a minimum 36" of unobstructed work space in front and are closed				
53	All areas have flashlights in working order				
	ENVIRONMENTAL/OTHER				
54	All floors are clear of debris and dry				
55	Shelves and racks are of adequate strength and are secured				
56	All walk off mats are in good condition				
57	Wet Floor signs used properly				
58	Inventoried patient care equipment has BEC tags and preventative maintenance is current				
59	Ceiling tiles are in good condition (e.g. not broken or stained)				
60	No holes or penetrations in walls/ceilings/floors				
61	No cardboard stored in patient care areas				
62	Solid bottom shelf on linen storage carts				
63	No tape, tape residue on patient care equipment				
64	Under sink areas clean, no leaks, in good repair. No under sink storage (check inside)				
65	No broken door or counter laminate, flooring. Surfaces are intact and are non porous				

66	Clean linen carts covered				
67	Ceiling/wall registers clean and in good repair				
68	No broken guardrail corners				
69	No sharp edges				
70	No bump hazards				
71	No falling hazards				
72	All telephones in clinic suites contain current California Poison control stickers with phone number (To order, call 1 800 582 3387)				
73	Bulletin boards in nursing suites are neat and orderly and any posted policies are current				
74	Multi-colored "Emergency Action Plan" flip chart visibly available in all work areas				
75	Website address to MSDS on line is visibly available to all staff at all PCs				
76	Code yellow report are available at all workstations				
77	All staff are wearing ID badges				
78	Protected Health Information is properly disposed in containers labeled "SHRED".				
79	Computer monitors either have privacy screens or are positioned in a way that patient specific information is not visible to the public				
80	Copies of licenses of Laboratory staff and Diagnostic Imaging staff are posted and are current (if applicable)				
81	All door stops are removed				
82	All areas of clinic are clean, organized and clutter free				
83	No hand written signs are taped to walls, signage is professional and clear.				
84	Floors are clean and in good repair				
85	Freestanding shelves and cabinets are secured to wall				
86	Shelving has a "lip" to prevent spillage during an earthquake (for applicable storage materials)				
87	In dental areas, exposure plan is available				
88	Triplicate paper secured (as needed) in locking paper trays and locked filing cabinets.				
89	Protected Health Information are secured always				

90	Medical equipment which is included in Biomed's preventive maintenance schedule has a Biomed tag not more than 1 year old Examples: ____Infant Scales ____Digital Adult Scales ____Audiometers ____Tympanometry ____EKG Machines ____Centrifuge ____Steris machine ____Colposcopes ____ AED ____HEPA Filters ___Electric Exam Tables _____Jaundice Meters ____Lift System ____Microscopes _____Sterilizers ____Suction Pump _____Freezers _____Refrigerators ____Vital Sign Monitors				
	INFECTION CONTROL				
91	Environmental surfaces are cleaned with an EPA-approved disinfectant that is clearly labeled.				
92	Dirty linen if present is closed/covered				
93	Equipment is clean and no tape residue				
94	Storage area is dust-free and dry				
95	Food, meds and specimens are not stored together anywhere				
96	If specimens are collected they have a biohazard label, and are stored appropriately				
97	Refrigerator/freezer temps are recorded daily and action is taken for an out-of-range of temps (meds 36-46F, food 32-40F, freezers <32F)				
98	No under sink-storage				
99	If sterile items are present, wrapping on sterile items is intact				
100	PPE is available near the point-of-care/SPD/entry to areas				
101	Sharps disposal containers are readily available in clinical areas & not overfull				
102	Specimens are properly contained and labeled				
103	Biohazards are labeled with the universal biohazard symbol and/or color (red/orange)				
104	Red bag waste is covered				
105	Specimen transport containers are sturdy and covered				
106	Food and drink are not present in areas where clinical specimens are handled/stored				
107	Supplies are available to foster good hand hygiene practices				

108	No outdated meds. Multi-use items are dated when opened. Multi-use vials expire 28 days after opening or on expiration date (whichever comes first)				
109	Any open solution bottles are dated and timed. Expire 24hr after opening if there is not preservative. (Except one-time use)				
110	Exam tables are cleaned or disposable paper covers are changed between each pt. Surfaces are disinfected when the paper is torn, wet, or visibly soiled.				
111	Disposable thermometer sheaths are used once and then discarded.				
112	Supplies for drawing blood are organized and tubes are within labeled "use by" dates				
113	Sterilizers are clean and free of build up.				
114	Sterilizers logs (Sterilizer cleaning, Biologic resuls, Validation testing) up to date				
115	Staff is appropriately dressed				
116	Temperature and Humidity Parameters within accepatable limits.				
117	Vents clean and dust free				
118	Medication refrigerators contain only medications or lab reagents (stored in sealed container)				
119	No food or specimens are present				
120	Medication refrigerators are locked and in a secured area.				
121	Personal Protective Equipment (e.g. gloves, goggles, masks, etc.) are readily available and staff are aware of location)				
122	Surgical instruments are not stored in examination rooms				
123	All syringes and medications are secured.				
124	No drug samples are present in clinic area				
125	Formalin is not present in exam rooms				
126	No shared children's' play toys are present in the health center				
127	OT/PT areas have temperature check logs for equipment which requires temperature checks (i.e. paraffin, baths, hydrocollator, if applicable)				
128	All items that have NDC numbers are stored in humidity/temperature controlled environments.				
		0	0	0	
	PERCENTAGE	#DIV/0!			

CONTRA COSTA REGIONAL MEDICAL CENTER
HOSPITAL AND HEALTH CENTERS

AC NURSING POLICY NO:3037-E
ADDENDUM E

EXAM ROOMS		KEY= USE #1 FOR YES, NO AND/OR N/A			
#	ITEMS TO INSPECT/REVIEW	COMPLIANT			
		YES	NO	N/A	ACTION
	CHEMICALS/STORAGE AREAS				
1	Contaminated trash is disposed of properly in Red Biohazard containers				
2	Biohazard/Sharps/Pharmaceutical waste containers not more than 3/4 full (not above fill line)				
3	Biohazards containers are labeled with the universal biohazard symbol and/or color (red/orange)				
	ENVIRONMENTAL/OTHER				
4	Patient Health Information is always secured.				
5	Exam tables and chairs are in good repair				
6	Regular trash is properly labeled				
7	Nothing is stored under sink cabinets				
8	Shelving has a "lip" to prevent spillage during an earthquake (for applicable storage materials, if applicable)				
9	Floors are clean and in good repair				
	INFECTION CONTROL				
10	There are no outdated drugs, culture tubes, blood tubes, Fit Kits, KY Jelly, KOH, NS, sterile equipment, etc. (Remember every drawer and cabinet may be				
11	All opened multi-dose injectables are dated and signed when opened; Expiration date is current and not more than 28 days after date of open except for vaccines, follow manufacture dates.				
12	Topical, Oral, and injectables and lab reagents are separated				
13	Personal Protective Equipment (e.g. gloves, goggles, masks, etc.) are readily available and staff is aware of location.				
14	Surgical instruments are not stored in examination rooms.				
15	All syringes and medications are in a secured area at all times.				
16	No drug samples present in the clinic area				
17	Formalin is not present in exam rooms				
18	Dirty linen hampers are closed/covered (if applicable)				

TOTAL	0	0		
PERCENTAGES	#DIV/0!			

CONTRA COSTA REGIONAL MEDICAL CENTER HOSPITAL AND HEALTH CENTERS		AC NURSING POLICY NO:3037-F ADDENDUM F			
ADMINISTRATION RECORD KEEPING CHECKLIST		**KEY= USE #1 FOR YES, NO AND/OR N/A**			
		COMPLIANT			
#	ITEMS TO INSPECT/REVIEW	YES	NO	N/A	ACTION
	EXITS/MECHANICAL AREAS/FIRE PROTECTION				
1	Documentation of quarterly fire drills is complete				
2	Documentation of safety inspections every six months is complete				
3	Last fire inspection was within last 12 months and certificate is readily available				
4	Signage in kitchen for Emergency Natural Gas Valve shutdown in place				
	ENVIRONMENTAL/OTHER				
5	Ensure CCRMC license is posted and current (if applicable)				
6	Ensure Clinical and Public Health Laboratory registration and CLIA License is posted and current				
7	Ensure Hazardous Materials Permit to Operate is posted and current (if applicable)				
8	Ensure Enviornmental Permit to Operate is posted and current (if applicable)				
9	Ensure individual Lab licenses (copy okay) are posted for Laboratory draw stations and units (if applicable)				
10	A copy of Hospital & Health Center Policy & Procedure Manuals are present				
11	A copy of Ambulatory Care Policy & Procedure Manual is present				
12	A copy of CCHP Provider Manual is present				
13	A copy of Infection Control Manual is present				
14	MSDS binder is present and current				
15	Point of Care Procedure Manual is present				
16	After hours messages on main phone line to health center is working and accurate				
17	All health centers have staff complete asbestos notification form and it is available and organized in Personnel records (if applicable)				
18	Personnel Files (including those for contract and temporary employees are complete with):				

	*Current Licensure, if applicable				
	*Job Description				
	*Orientation documentation				
	*Competency assessment				
	Ongoing training and education, including				
	*SICR				
	*Harassment Prevention/Discrimination				
	*HIPPA				
	*Workplace Violence				
	*Professional Development Transcript				
19	Sterile Processing Department procedure is available online				
20	Signature sheets in manual current (updated every 3 years)				
	TOTAL	0	0	0	
	PERCENTAGES	#DIV/0!			

BI-ANNUAL SAFETY INSPECTION - EOC - CORRECTION PLAN

AC NURSING POLICY NO.: 3037-G

ADDENDUM G

Department Manager is usually considered the person responsible for follow up

Include Door Numbers, work order numbers or specific location as appropriate

	PROBLEM AREA	DISCREPANCY / EXPLANATION FOR QUESTIONS ANSWERED "NO"	CORRECTIVE ACTION	TARGET DATE	DATE COMPLETED	PERSON RESPONSIBLE
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
	PROBLEM AREA	**DISCREPANCY / EXPLANATION FOR QUESTIONS ANSWERED "NO"**	**CORRECTIVE ACTION**	**TARGET DATE**	**DATE COMPLETED**	**PERSON RESPONSIBLE**
16						
17						
18						
19						

20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						

APPENDIX 3

STANDARDIZED PROTOCOLS FOR THE RESOURCE NURSE

I. The following are Standing orders for the treatment of the below infective diseases and or consultation to provide timely care of these patients. Consultation with a provider is available if needed for any reason.

A. CANDIDIASIS, VULVOVAGINAL:

1. Setting

a. Positive finding of Candida on Potassium Hydroxide (KOH) prep and patient reporting symptoms consistent with symptomatic Candida infection (vaginal discharge, vaginal or vulvar itching or discomfort or dysuria), OR

b. Antibiotics within the last 7days and symptoms consistent with candidiasis.

2. Recommended Treatment:

a. short course (1-7 days) of topical OTC formulations of Clotrimazole OR

b. Miconazole 2% vaginal cream, one applicator per vagina at bedtime for 7days OR

c. Clotrimazole 1% vaginal cream, one applicator per vagina at bedtime for 7 days OR

d. Fluconazole 150 mg oral tablet – single dose (non-pregnant.)

Pregnant or possibly pregnant (delayed period, not using contraception)

a. Clotrimazole 1% PV X7 Days or Miconazole 2% PV `x 7 days and avoid fluconazole.

3. Precaution: Allergies to medicine

4. Partner Treatment- Not indicated.

5. Education

a. Educate that this is not considered a sexually transmitted disease.

b. Educate that risk factors are antibiotics, diabetes, pregnancy and weakened immune system, use of douches or intravaginal agents that change the normal vaginal environment.

c. Treatment creams may weaken latex condoms and diaphragm (check product labeling.)

7. Follow-up – Routine follow-up not indicated unless symptoms persist.

8. Consultation

a. Consult with physician if treatment failure or contraindications to recommended treatments.

b. More than 3 documented episodes in past year (may need evaluation for other risk factors for recurrent infection.)

c. Children under 12 years old.

B. CHLAMYDIA

1. Setting:

Positive finding of Chlamydia on Nucleic Acid Amplication Testing (NAAT) testing of urine or genital/rectal/pharyngeal swab; or positive culture of any site.

See # 8 for patients to seek consultation prior to treating.

2. Recommended Regimen in Pregnancy and in patients who might be Pregnant (delayed menses or not on Birth Control Pills.

a. Azithromycin 1 gram orally as single dose.
b. Alternate Regimen: Amoxicillin 500mg orally 3 times/day for 7days.

3. Recommended Treatment for Adolescents, Adults and Partner Treatment if not Pregnant.

a. Doxycycline 100mg orally 2 times/day for 7days
b. Alternate Regimens (if intolerant or allergic):
a. Azithromycin 1g orally in a single dose OR
b. Levofloxacin 500mg orally once daily for 7days

4. Reinforce education at time of visit.
a. If prescribing a 7-day course of antibiotics, the prescription must be e prescribed to patient's pharmacy and patient will self-administer at home.
b. Alternate treatment option for those who do not have insurance, transportation, or any issue that prevents a patient from coming into the clinic, then the prescription will be e-prescribed, and education will be provided over the phone.

5. Precautions: Allergies to medicine.

6. Expedited Partner Treatment (EPT)
a. **First-choice partner management strategy:** Attempt to bring partners in for complete clinical evaluation, STD testing, counseling, and treatment with their PCP or in STD clinic or Women's Health Clinic.
b. Those with partners who patient indicates are unable or unlikely to seek timely clinical services, can be given a prescription and educational material for the patient delivered partner therapy.
c. The Resource Nurse can "e prescribe" a prescription for patient and partner (all sexual partners) – see above Recommended Regimen in Pregnancy/Patients who might be Pregnant) and Recommended Treatment for Adolescents, Adults and Partner Treatment if not Pregnant.
d. The instructions should read "for the treatment of patient and partner".
Partner definition: Limited to the number of known sex partners regardless of presence of symptoms in previous 60 days (or most recent sex partner if none in the previous 60 days).

7. Education
a. Recommend abstinence until 7 days after partner and patient treated.
b. Discuss safe sex practices; encourage testing for other STDs including HIV not already done.
c. Patient should notify all partners in the last 60 days.
d. Instructions should include clear instructions, warnings, and clinic referrals should be provided.
e. If e-prescribing partner therapy, educational materials with clinic referral information directed to the partners should be given to patient to accompany patient-delivered partner therapy. (see attached appendices od sample materials).
f. Patients with a diagnosis of chlamydia should be tested for HIV, Gonorrhea and Syphilis.
g. MSM who are HIV Negative with a rectal chlamydia diagnosis should be offered HIV PrEP.

2. Follow-up
   a. Recommend patient schedule an appointment: STD Clinic, Women's Health Clinic (if female), or in any other family medicine or short notice clinic. Follow-up is recommended to re-test patient and to discuss safe sex education, and testing for other STDs.
   b. Follow-up testing is recommended 3-5 weeks after completion of treatment for pregnant women. All others follow-up testing recommended at 3-4 months after treatment.

3. Consultation
   a. Consult physician of treatment failure or contraindications to recommended and alternative treatments.
   b. Symptoms suggestive of Pelvic Inflammatory Disease (abdominal pain, fever, etc.).
   c. Symptoms of epididymitis or prostatitis (abdominal pain, fever, scrotal pain or swelling).
   d. Post-partum woman (infant may need treatment.)
   e. Children under 12 years old.
4. CMR reporting: Chlamydia is a reportable disease. Complete CMR form.

C. **GONORRHEA**

1. Setting
   Positive finding of uncomplicated gonorrhea on NAAT testing of urine, or pharynx/genital/rectal/swab; positive culture of any site.
2. Recommended Treatment
   For patients weighing 150kg or less: Ceftriaxone 500mg IM X 1
   For patients weighing 150kg or more: Ceftriaxone 1g IM
   If Chlamydia has not been excluded, treat for Chlamydia with Doxycycline 100mg orally 2 times /day for 7days (non-pregnant.) In Pregnancy and in patients who might be Pregnant (delayed menses or not on Birth Control Pills): Azithromycin 1 gram orally as single dose.

   Alternate Regimen in Pregnancy and in patients who might be Pregnant (delayed menses or not on Birth Control Pills): Amoxicillin 500mg orally 3 times/day for 7days.

   Alternate Treatment (If patient is allergic or unable to use Cephalosporin):

   a. **Cefixime 800mg orally (single dose) PLUS Doxycycline 100mg 2 times/day for 7days OR** If patient is allergic or unable to use cephalosporin but can come to the clinic for a one-time treatment-

   b. Gentamycin 240mg IM as a single dose plus Azithromycin 2g orally as a single dose.

   c. For pregnant patients and in patients who might be Pregnant (delayed menses or not on Birth Control Pill): - If allergic to cephalosporin, contact GYN On Call to discuss treatment option: Gentamycin vs Desensitization.

3. **Precautions**

Allergies to medicine including anaphylaxis to penicillin's or cephalosporins.

4. Expedited Partner Treatment (EPT)

a. **First-choice partner management strategy:** Attempt to bring partners in for complete clinical evaluation, STD testing, counseling, and treatment with their PCP or in STD clinic.

b. Those with partners who patient indicates are unable or unlikely to seek timely patient delivered partner therapy

c. The Resource Nurse can e-prescribe a prescription for non-pregnant patients and all non-pregnant sexual partners for: **800mg Cefixime** (single dose) PLUS **Doxycycline 100mg 2 times/day for 7 days.** The instructions for both medications should read "for the treatment of patient and partner(s)". If partner is pregnant, they should consult their Prenatal Provider.

d. Partner definition: Limited to the number of known sex partners in previous 60 days (or most recent sex partner if none in the previous 60 days).

e. If e-prescribing partner therapy- education materials with clinic referral information directed to the partners should be given to patient to accompany patient-delivered partner therapy (see attached appendices of sample materials)

5. Education

a. Recommend abstinence until 7 days after initiation partner and patient treatment.

b. Discuss safe sex practices; encourage testing for other STDs including HIV if not already done.

c. Instructions should include clear instructions, warnings, and clinic referrals should be provided.

d. Patients with a diagnosis of gonorrhea should be tested for HIV, chlamydia and Syphilis.

e. MSM who are HIV Negative with a rectal gonorrhea diagnosis should be offered HIV PrEP.

6**. Follow-up**

a. Recommend patient schedule an appointment with PCP or, in STD Clinic, or in Women's Health Clinic (if female) or in any other Family Medicine or Short Notice Clinic. Follow up is recommended to discuss partner notification, safe sex education, and testing for other STDs.

b. Test of cure is unnecessary for persons with uncomplicated urogenital or rectal gonorrhea who are treated with any of the recommended or alternative treatment.

Retest all persons who have been treated for gonorrhea 3 months after treatment.

If retesting at 3months is not possible, retest within 12months after initial treatment.

Follow up testing in 3-5 weeks after completing treatment for pregnant women.

7. **Consultation**

a. Consult with physician if treatment failure or contraindications to recommended and alternative treatments.

b. Symptoms suggestive of Pelvic Inflammatory Disease (abdominal pain, fever, etc.).

c. Symptoms suggestive of epididymitis or prostatitis (abdominal pain, fever, scrotal pain or swelling.)
d. Post-partum woman (Infant may need treatment.)
e. Children under 12 years old.

8. CMR reporting: Gonorrhea is a reportable disease. Complete CMR form.

D. **STREPTOCOCCAL THROAT INFECTION**

1. **Setting**

Positive throat culture showing Group A Streptococcus

2. **Recommended Treatment**

a. Children less than 1yr old, consult PCP or on call Pediatrician.
b. Children over 1yo: **Amoxicillin 50mg/kg/day** as a single dose for 10d. Max daily dose **1000mg/day**
c. Adults over 27 kg: **Pen VK 500 mg TID** for 10 days or
Amoxicillin 500mg PO BID for 10d or
Penicillin G Benzathine (Bacilli L-A): 1.2million units IM as a single dose

3. **Alternative Treatments (if allergic to penicillin~~)~~**

a. Children less than one year: consult with a provider
b. Children more than one year: **Azithromycin 12mg/kg** (maximum 500 mg/dose) on day 1, followed by 6mg/kg (maximum 250mg/dose) on days 2-10. Given as a single daily dose for 10 days.
c. Adults: **Azithromycin 500 mg** on day 1, then 250 mg daily, day 2 through day 5 OR **Clindamycin 300mg po TID** for 10d

4. **Precautions**

Allergies to medicine

5. **Education**

a. Encourage generous fluid intake
b. Use warm saltwater gargles PRN
c. Complete all 10 days of medication, even if feeling better, to prevent rheumatic fever complications.
d. Infection Control: wash hands, don't share food or drinks, no kissing, discard present toothbrush to decrease risk of re-infection.

6. **Follow-up**

Seek care if symptoms persist, unable to keep down fluids or medications, any trouble breathing.

7. **Consultation with physician if:**

a. Severe symptoms or fever over 101 degrees F
b. Severe dysphasia or any dyspnea
c. Children under 2 years old.
d. If treatment failure or contraindications to recommended and alternative treatments.

E. **TRICHOMONAS**

1. Setting
   Positive finding of trichomonas on antigen test, wet prep, pap smear or urinalysis in non-pregnant patients only.

3. **Recommended Treatment**
   For Females: Metronidazole 500 mg orally twice a day for 7 days
   For Males: Metronidazole 2g orally single dose.
4. Precautions
   a. Allergies to medicine

5. Partner Treatment
   a. **First-choice partner management strategy:** Attempt to bring partners in for complete clinical evaluation, STD testing, counseling, and treatment with their PCP or in STD clinic.
   b. Those with partners who are unable or unlikely to seek timely clinical services, the Resource Nurse can e-prescribe a prescription for patient and all partners regardless of symptoms:
   The instructions should read "For the treatment of patient and partner".
   c. Partner definition: Limited to the number of known sex partners in previous 60 days (or most recent sex partner if none in the previous 60 days).
   d. If e-prescribing partner therapy- educational materials with clinic referral information directed to the partners should be given to patient to accompany patient-delivered partner therapy (see attached appendices of sample materials).
6. Education
   a. Recommended abstinence for 7 days post treatment of patient and partner.
   b. Discuss safe sex practices; encourage testing for other STDs including HIV if not already done.
   c. Instructions should include clear instructions, warnings, and clinic referrals should be provided.

7. Follow-up
   Recommend patient make appointment with PCP, Women's Clinic, or STD Clinic for follow-up.

8. Consultation
   a. Consult with provider if treatment failure or contraindications to recommended.
   b. Children under 12.

F. **URINARY TRACT INFECTION**

Treatment for **uncomplicated** patients with symptoms of UTI such as pain and burning with urination, frequency, urgency, and /or suprapubic pain. Antibiotic therapy can generally be administered empirically without obtaining a urine culture.

Complicated patients defined as but not limited to:
Chronic renal disease

Diabetes Mellitus

Immunodeficiency (HIV+, patient's currently receiving chemotherapy or biotherapy, long term prednisone, organ transplant patient)

Fever, flank pain, nausea and vomiting present

Recent UTI (within 6 months)

Urologic abnormalities

12 years and under

Patients being followed by anticoagulation clinic

Males of all ages

1. Setting: For Non-Pregnant Women

a. Urine culture with >100,000 cfu/ml with or without signs or symptoms of lower urinary tract infection:

b. Urine cultures 50,000 – 100,000 cfu/ml with symptoms of lower urinary tract infection:

i) **Recommended Treatment:**
-Macrobid 100mg orally twice a day for 5days or
-**Bactrim DS** 160/800mg 1 PO BID for 3 days or
-Fosfomycin 3g orally single dose

IF THERE ARE REASONS TO AVOID THE RECOMMENDED TREATMENT ABOVE:

ii) **Choose a Beta-Lactam:**

- Cephalexin 250mg to 500mg orally tid for 5 to 7days or
-Amoxicillin-clavulanate 500mg orally bid for 5 to 7days or
-Cefpodoxime 100mg orally bid for 5 to 7days or
-Cefdinir 300mg orally bid d for 5 to 7days or
-Cefadroxil 500mg orally bid for 5 to 7days

IF THERE ARE REASONS TO AVOID THE RECOMMENDED TREATMENT AND ALSO THERE ARE REASONS TO AVOID A BETA-LACTAM:

iii) **Choose a Fluoroquinolone:**

-Ciprofloxacin 250 mg orally twice daily for 3 days
- Ciprofloxacin extended release 500 mg orally daily for 3days
- Levofloxacin 250 mg orally daily for 3 days.

IF THERE ARE REASONS TO AVOID THE RECOMMENDED TREATMENT AND

ALSO, REASONS TO AVOID A BETA-LACTAM AND A FLUOROQUINOLONE:

iv) -Obtain a Urine Culture and susceptibility testing; select antibiotics based on those results.

c. **For Group B Strep urine cultures:** Patients with urinary tract symptoms, pyuria, and urine culture positive for GBS (≥100,000 CFU/mL), with a non-contaminated specimen, patients should receive antimicrobial therapy as outlined below.

i) **Amoxicillin 500mg po tid** x 7 days or
ii) Beta-Lactam Drugs Listed on B(ii)
ii) **If allergies preclude, consult with a provider.**

Alternative Treatment for Pregnant females: Clindamycin is the only oral alternative (if the GBS isolate is susceptible), for those determined to have severe IgE-mediated hypersensitivity to penicillin and beta-lactams.

d. Urine culture<100,000 cfu/ml with no symptoms of lower urinary tract infection: Consult with a provider on all groups.

2. Setting for Pregnant Women:
   a. Treat if Urine culture with >100,000 cfu/ml: Antibiotics for asymptomatic bacteriuria in Pregnancy **should be held until c/s result is available,**
   b. **If** symptomatic treat without waiting for sensitivity result.

   c. Recommended Treatment for 5days -Choose one based on the sensitivities

-Cephalexin (Keflex) 500mg tid—preferred if sensitivities not yet available
-**Amoxicillin 500mg orally tid or**
- amoxicillin 875 mg bid
- Cefpodoxime 100mg bid

- Nitrofurantoin (Macrobid): 100mg bid (avoid in first trimester and term after 38weeks if other options available)

b. If not sensitive to any of the above or allergies preclude use consult with a provider.
In the setting of a positive urine culture during pregnancy, the resource nurse consults the ordering provider, the PCP and the on-call OB/GYN (in that order) for any consultations and concerns.

3. Precautions
Allergies to medicine

4. Education
   a. Encourage generous fluid intake
   b. To reduce risk of infection patient should: urinate after sexual intercourse and wipe front to back after using restroom.

5. Follow-up
Seek care if symptoms persist, unable to keep down fluids or medications

6. Consultation
   a. All complicated patients as designated above.
   b. Available culture sensitivities show resistance to recommended and alternative treatments.
   c. Consult with physician if treatment failure or contraindications to recommended and alternative treatments

Revised by Ogo Mbanugo, MD – APC Chair.

CONTRA COSTA REGIONAL MEDICAL CENTER AC NURSING POLICY NO: 4200 Appendix 3
HOSPITAL AND HEALTH CENTERS

APPROVED BY:
Ambulatory Policy Committee: 5/2019
Medical Executive Committee: 5/2019
Revised and Approved by APC:1/2021
Revised and Approved by APC: 11/2021
MEC 1/2021, 12/2021

CONTRA COSTA REGIONAL MEDICAL CENTER **AC NURSING POLICY NO: 4029**
CONTRA COSTA HEALTH CENTERS

CAST: TOTAL CONTACT

I. PURPOSE:

To provide guidelines for protecting the skin on the foot and alleviating pressure to affected area(s) when the cast is applied.

II. REFERENCE:

Available online at http://www.podiatrytoday.com/article/1853.

TJC 2016 Standard PC.02.01.05, "The hospital provides interdisciplinary, collaborative care, treatment and services."

III. POLICY:

Verify correct patient using two identifiers and perform a time-out with the patient to identify correct cast for site.

- Cast is applied by Ortho-tech per provider order.
- Serial casting is performed for 3-6 weeks.
- Provider evaluates the progression of healing prior to each re-application.

IV. AUTHORITY/RESPONSIBILITY:

Ortho-Tech

V. PROCEDURE:

A. Assemble equipment:
   1. Webril
   2. Stockinet
   3. Felt
   4. Fiberglass casting material
   5. Fiberglass reinforcement splint
   6. Rubber cast heel and ¼ "plywood sole or cast shoe
   7. Reston (sticky back sponge)

B. Applying cast:
   1. Place patient in sitting position with ankle at $90^{0.}$
   2. Put cotton or gauze between toes.
   3. Apply 4x4 over ulcer.
   4. Apply stockinet.
   5. Twist area so toes are not exposed yet not tightly over the toes.
   6. Apply felt pad over malleoli and up and down tibial crest (to protect bony prominent areas).
   7. Trim Reston and cover toes.
   8. Fold Reston in half so toes are not exposed.
   9. Trim Reston around first and fifth metatarsal.

10. Apply Webril sparingly.
11. Apply 3" or 4" fiberglass roll and mold well.
12. Apply reinforcement splints (if needed).
13. Apply plywood sole with additional plaster where necessary.
14. Apply rubber walking cast heel or cast shoe.

Note: Remember to keep the ankle at 90^0. ***THIS IS CRITICAL FOR AMBULATION AND TO PREVENT EQUINUS CONTRACTURE.***

C. Patient teaching:
   1. Review with patient "Cast Care" handout

D. Document in ccLink record:
   1. Placement of cast
   2. How patient tolerated procedure
   3. Instructions provided

VI. DOCUMENTATION:

Cast Care handout

REVIEWED BY :
ACPC :9/2008

REVISED BY:
ACPC: 2/2012, 2/2016

APPROVED BY:
Ambulatory Policy Committee: 5/2012
ACPC: 9/2021
APC:10/2021
MEC:12/2021

CONTRA COSTA HEALTH SERVICES

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MEDICAL EXECUTIVE COMMITTEE AGENDA

CHAIR-KRISTIN MOELLER, M.D.
January 24, 2021
12 to 2:00p

As the elected leadership of the CCRMC/HCs Medical Staff, we stand against racism and hate. *We recognize the negative impact of longstanding structural racism on health, and we commit to take action to combat this in our own system and work for health equity for our patients.*

Join Zoom Meeting
https://cchealth.zoom.us/j/8544948118
Meeting ID: 854 494 8118
****If you are on phone only for the Zoom, use *6 to mute/unmute**

Agenda Topic	Status	Time
Call to Order		
Review of December 20, 2021 Minutes	See attached Draft Minutes.	2 min.
Announcements (3 min)		
• **February 28, 2022 MEC meeting reports to Sue by February 10, 2021** ○ Administrative Affairs Committee-Drs. Robello and Tyrrel ○ DFAM-West County-Dr. Sheldon ○ Medical Staff Assistance Committee ○ Surgery Department-Dr. Dosanjh Please use the standard SBAR form for your reports -You will be given 5 minutes in which to present your report. Please number the pages of your report. **PLEASE DATE YOUR REPORT AND NUMBER THE PAGES. Please include your executive summary which can be added to the minutes.** **Next meeting February 28, 2022**		
ADMINISTRATIVE REPORTS		
Anna Roth, Health Services Director Ori Tzvieli, Acting Health Officer Pat Godley, CFO for Health Services Jaspreet Benepal, RN, Chief Nursing Officer Samir Shah, M.D., Chief Executive Officer/Chief Medical Officer Vacant - Chief Quality Officer David Runt - Chief Operations Officer Gilbert Salinas, Chief Equity Officer, HS	Rajiv Pramanik, M.D.- CMIO Gabriela Sullivan, M.D.- Specialty/Ambulatory Medical Director Ori Tzvieli, M.D., Public Health Director Sharron Mackey, MHS, Chief Executive Officer CCHP Dennis Hsieh, M.D., Medical Director/Chief Medical Officer CCHPS Sergio Urcuyo, M.D.- Hospital Medical Director Sonia Sutherland, M.D.-Medical Director, Detention Health	
NEW BUSINESS		

CONTRA COSTA HEALTH SERVICES

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MEDICAL EXECUTIVE COMMITTEE AGENDA

CHAIR-KRISTIN MOELLER, M.D.
January 24, 2021
12 to 2:00p

Agenda Topic	Status	Time
Dr. Jenny Guss as Interim Psychiatry Department Head - vote needed	Dr. Moeller	3 min.
APC Chair-Dr. Irina Pyrkova-Vote Needed	Dr. Moeller	3 min.
Updates from Acting Health Officer-Dr. Ori Tzvieli-Dr. Chris Farnitano has retired.	Dr. Moeller	3 min.
Nominations Open January 1 for the Following: (Term 7/1/2022 - 6/30/2024) **Nominations due on March 1, 2022** **Department Heads:** ED Surgery Psychiatry/Psychology Diagnostic Imaging OB/GYN Critical Care **Division Heads:** DFAM West County DFAM Far East County	Dr. Moeller	5 min.
OLD BUSINESS		
2022 Draft MS Bylaws – approved by county counsel with minor grammar changes only	AAC – information only	3 min.
Consent Agenda		
Medication Safety Committee-Dr. Ataii	See report.	5 min.
PCP&E-Dr. Forman **Infection Control-Kathy Ferris** 1072 Patient Treatment Management Plan **Nursing Policies-Helena Martey** 106 ED Nursing: Report of injuries to Local Law Enforcement Agencies 102 ED Nursing: Report of Injuries to Local Law Enforcement Agencies 320 CCU Nursing: Cardioversion (Synchronized Countershock) 351 CCU Nursing: Post Anesthesia Care	See report. Please ask if you wish to see a specific policy and it will be sent to you.	5 min.

CONTRA COSTA HEALTH SERVICES

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MEDICAL EXECUTIVE COMMITTEE AGENDA

CHAIR-KRISTIN MOELLER, M.D.
January 24, 2021
12 to 2:00p

Agenda Topic	Status	Time
807 CCU Nursing: Fecal management System (FMS) 1421-A CCU/ IMCU Nursing: Set up & Planned Actions 514 Nursing Psych: Involuntary Admission Conservatorship and Temporary Conservatorship		
COMMITTEE REPORTS		
Credentials Committee- Dr. Mbanugo List of Candidates - Vote needed	See report	3 min.
Patient Safety and Performance Improvement Committee	Dr. Beach	3 min.
APC - Dr. Mbanugo	No policies	3 min.
Contra Costa Health Plan-Sharron Mackey	Pending	5 min.
DEPARTMENT & DIVISION REPORTS		
DFAM Martinez-Dr. Katzman	See report	5 min.
Pathology Department-Dr.Das	Pending to February	5 min.
Cancer Committee-Dr. Gynn	Pend to March	5 min.
ADJOURN TO CLOSED SESSION-VOTING MEMBERS ONLY		
Adjournment. Next Meeting Date: February 28, 2021		

CONTRA COSTA REGIONAL MEDICAL CENTER
HOSPITAL AND HEALTH CENTERS

ED NURSING POLICY NO: 106

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ABSENT WITHOUT LEAVE (AWOL)

I. PURPOSE:

To outline the procedure to be followed when a patient leaves the Emergency Department (ED) prior to completion of visit.

II. REFERENCES:

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CCRMC Hospital Policy 609: Patient Leaving Against Medical Advice (AMA), Absent without Leave (AWOL) and Access to Outdoors
California Welfare and Institution Codes 5150, 5250, 5170
Lanterman-Petris-Short (LPS) Act
~~Conservatorship Public Health Hold - California Health & Safety Code 3285d, penalties 3251 & 3354~~
~~Safety Event Reporting System~~
TJC ~~2016~~ Standard: RI.01.02.01: "The hospital respects the patient's right to participate in decisions about his or her care, treatment, and services."

III. POLICY:

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If a patient leaves without notice prior to completion of their ~~Emergency Department (ED)~~ visit ~~and/or discharge,~~ or if there is an unauthorized departure ~~(AWOL)~~ of an involuntary psychiatric patient ~~on voluntary or involuntary status~~, this will be handled according to this policy in order to ensure patient safety.
In the event ~~of~~ a Psychiatric patient leaves~~ing~~ (~~either~~ while on ~~voluntary or~~ involuntary status), the Hospital Deputy and the Medical Center Supervisor (MCS) ~~Nurse Program Manager~~ will be notified. ~~This is done to protect the safety of others, as well as to comply with legal requirements.~~

IV. AUTHORITY/RESPONSIBILITY:

~~All levels of Emergency Department Staff~~Physicians
Registered Nurses
Licensed Vocational Nurses

V. PROCEDURE:

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A. For patient *not on legal hold* and absence without notice or absent without leave (AWOL):
~~1. Patients may leave after ED medical exam, prior to final diagnoses and discharge instructions.~~
~~2.~~1. Once a patient is noted to be absent from the department, ~~check with staff,~~ notify Charge Nurse and physician ~~MD, and check the lobby~~.
~~3.~~2. Attempt to ~~C~~call ~~the~~ patient's listed contact~~demographic phone~~ number and ~~document outcome~~notify family/significant other that patient has left the hospital.

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~~4.~~3. Document AWOL in the Safety Event Reporting System (SERS).
~~4. Document Triage Time, Triage Level, Chief complaint, Room time if known, or diagnosis if documented.~~
~~C.~~B. ~~Voluntary or~~ For patient on Involuntary ~~Public Health~~ Hold ~~or Psychiatric Patient~~:

1. ED staff will search the Unit
2. Notify Charge Nurse, physician and MCS.
~~1.~~3. Contact Hospital Deputy via radio and provide patient's name, description of appearance, clothing, time of departure.
   - ~~ED staff is to search the ED~~
   - Hospital Deputy personnel will search grounds for patient and will notify Martinez Police.
~~2.~~4. Notify police agency of patient's home of record ~~of AWOL~~ if needed.
~~3. Notify Staffing Office - Ext. 5132.~~
~~4. Notify physician.~~
~~5. If patient has a~~ Notify legal representative (~~i.e.~~i.e., conservator, parent, Regional Center, lawyer, etc.) ~~they are to be notified~~if applicable.
~~Notify NPM, and Medical Center Supervisor.~~
5.

~~Document time and condition of patient when last seen on unit and time of notifications of the above persons in the Medical Record in ccLink.~~

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VI. DOCUMENTATION:

~~Emergency Department Record in ccLink~~
~~Electronic Order Entry~~
Safety Event Reporting System (SERS) ~~report~~

APPROVED BY:
~~Chief Medical Officer~~
~~ED Director~~
~~Clinical Practice Committee: 2/2017~~
~~Patient Care Policy & Evaluation Committee: 3/2017~~
~~Medical Executive Committee: 3/2017~~
Emergency Department: 2021
Clinical Practice Committee: 2021
Patient Care Policy & Evaluation Committee: 2021
Medical Executive Committee 2021

REVIEWED:
11/2001, 1/2003, 1/2006, 1/2007, 5/2010, 2/2018, 8/2021

REVISED:
1/2017, 8/2021

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CONTRA COSTA REGIONAL MEDICAL CENTER
HOSPITAL AND HEALTH CENTERS

ED NURSING POLICY NO~~:~~ 102

REPORT OF INJURIES TO LOCAL LAW ENFORCMENT AGENCIES

I. PURPOSE:

To provide a mechanism by which the appropriate law enforcement agency is notified when a patient presents to the Emergency Department for treatment of injuries related to criminal conduct.

II. REFERENCES:

~~AB-1652~~
California Penal Code~~s~~ ~~Sections~~ 11160 ~~&and~~ 11161
~~TJC 2016 Standard PC.01.02.09, "The hospital assesses the patient who may be a victim of possible abuse and neglect."~~

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III. POLICY:

The appropriate law enforcement agency will be notified when~~ever~~:

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A. A patient who has sustained a wound or other injury inflicted by his or her own act or inflicted by another where the injury is by means of a knife, firearm, or other deadly weapon~~s~~.
B. Any patient suffering from any wound~~s~~ or other physical injury inflicted ~~upon the person where the injury is the~~ as a result of assault~~ive~~ or abus~~ive~~. ~~conduct arrives in the Emergency Department for treatment.~~
C. Law Enforcement must be notified immediately and sent a written report (MR155) within 2 working days.

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~~B. This notification takes place by:~~
~~1. An immediate phone report or as soon as practically possible;~~
~~AND~~
~~2. A written report (MR-155, attached) sent to the appropriate agency within 2 working days.~~

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IV. AUTHORITY/RESPONSIBILITY:

~~All levels of Emergency Department Staff~~
Physicians
Registered Nurses
Licensed Vocational Nurses

V. PROCEDURE:

~~A. In the Emergency Department, the first concern is to provide appropriate medical care for any injuries.~~

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~~B.~~A. The Triage Nurse or Primary Nurse will ~~obtain and document number in the Emergency Department Nursing Record the patient's Chief Complaint/HPI to~~ include the character and extent of injury; date of injury, and jurisdiction within which the injury occurred in the documentation~~.~~
~~C.~~B. The Triage Nurse or Primary Nurse will inform the patient of the requirement to report the injury to the appropriate law enforcement agency.

~~D.~~C. A phone report ~~detailing the patient's Chief Complaint/HPI~~ will be made ~~immediately or~~ as soon as ~~practically~~ possible to the appropriate law enforcement agency. ~~Any Emergency Department health care provider may make this report.~~ The Incident or Case Number provided will be documented in EMR.

~~E.~~D. A written report (MR155) is completed by nurse, physician or other health care practitioner.

~~F.~~E. A copy of the written report (MR155) is forwarded to the appropriate law enforcement agency within 2 working days by the Unit Clerk. Addresses and phone numbers for Contra Costa, Alameda, and Solano County law enforcement agencies are listed on the ~~reverse~~back of the MR155.

~~VI. DOCUMENTATION:~~
~~MR155 Report Injuries of Local Law Enforcement Agencies~~
~~Emergency Department Record (MR387-2)~~
~~Electronic Order Entry and Documentation in the Electronic Medical Record~~

FORMS:
MR155: Report of Injuries to Local Law Enforcement Agencies

APPROVED BY:
~~Chief Medical Officer~~
~~Clinical Practice Committee~~
Emergency Department: 2021
Clinical Practice Committee: 2021
Patient Care Policy & Evaluation Committee: 2021
Medical Executive Committee 2021

REVIEWED:
11/2001, 1/2003, 1/2006, 1/2007, 5/2010, 1/2017, 2/2018, 8/2021

REVISED:
8/21

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CARDIOVERSION
(SYNCRONIZED COUNTERSHOCK)

I. PURPOSE:

To provide guidelines for the Critical Care Unit Registered Nursing Staff in facilitating scheduling and assisting the physician during the cardioversion in the ICU or IMCU.

II. REFERENCES:

IC Policy #301 "Standard Precautions"
IC Policy #302, Transmission Based Precautions Isolation Precautions
NUR Policy #123 "Preadmission and Admission Procedure for Outpatient Procedures"
NUR Policy #1017 "Restraint and Seclusion."

III. POLICY:

Tachy-dysrhythmias will be terminated by cardioversion in a safe manner Cardioversions are to be performed only by qualified medical staff and moderate sedation trained nurse staffing at a 1:1 nursing level during the procedure and immediate post-procedure during recovery period.

The patient's safety and comfort will be maintained by the nurse during the procedure; restraints may be necessary to prevent significant harm to the patient. The policy on Restraints and Seclusions (#1017) will be followed in this circumstance. Emergency equipment is readily available with staff versed in its use.

IV. AUTHORITY/RESPONSIBILITY:

Registered Nursing Staff
Medical Staff with privileges for cardioversion
Respiratory Care Practitioners

V. PROCEDURE:

A. Procedure Scheduling:
   1. Physician will schedule the cardioversion in ccLink providing the patient's name, medical record number, telephone number, and date/time of procedure.
   2. Inform patient of pre-procedure instruction including lab –draw/NPO midnight before procedure.
   3. Physician should ascertain any relevant lab the day prior to the procedure.

B. Day of cardioversion:
   1. RN responsibilities:
      a. Conduct Universal protocol immediately before procedure.
      b. Verify the following items are in the room: Ambu bag, Soft wrist restraints, Functional Yankauer Suction, Adult Oral Airways, Nasal cannula, simple face mask, Capnometer, Crash cart just prior to the procedure.
      c. Verify the physician privileges for cardioversion and conscious sedation in the hospital Look-Up system.
      d. Confirm the patient has been NPO since midnight prior to the procedure.
      e. Ensure patent IV access with Normal Saline or Ringer's Lactate.

f. Check current lab results applicable for procedure (i.e., PTT is in the patient's record..
g. Confirm informed consent is present in the patient's record.
h. Document current weight on patient record.
i. Establish sedation plan including med, dosage. Have sedation med and reversal agent at bedside.
j. Apply Adult Plus Multifunction electrode pads (M3713) on patient:
   i. Preferred placement: Anterior-Apex (Transchest).
   ii. Bariatriac/Obese patient placement: Anterior –Posterior.
   Monitor patient's EKG by connecting the monitor cable to the EKG port on the side of the defibrillator
k. Attach slave cable between the EKG outport from the Phillips Heart start MRx defibrillator to the bedside monitor.
l. Verify defibrillator is in the Sync Mode.
m. Monitor patient's comfort, conscious level and physiologic status during the procedure.
n. Document medications administered, joules delivered, and patient tolerance.
o. Order 12-lead EKG post cardioversion.
p. Discharge the patient when they meet Discharge Criteria (See back of Conscious Sedation Form). Document Aldrete Score.

2. Respiratory Care Practitioner
   a. Attend to airway management.

VI. FORMS USED (when electronic record unavailable):
Conscious Sedation Orders and Nursing Assessment and Monitoring (MR696-0)
Authorization for Consent to Surgery or Special Diagnostic or Therapeutic Procedures (MR39A-1)
Interim Operative Note (MR372-4)
Post-Operative Discharge Instructions (MR421-6)
Document in ccLink Universal protocol and sedation document

APPROVED BY:
Critical Care Committee: 08/2015
Clinical Practice Committee: 2/25/2013, 08/2015, 2/2018
Patient Care Policy & Evaluation Committee: 3/6/2013, 9/2015, 3/2018
Medical Executive Committee: 09/2015, 5/2018

REVIEWED:
2008, 2012, 08/15, 2/17, 2/2018, 10/2021

REVISED:
5/20/2004, 05/2007, 2/2018

CONTRA COSTA REGIONAL MEDICAL CENTER
HOSPITAL AND HEALTH CENTERS

CCU NURSING POLICY NO: 351

POST ANESTHESIA CARE

I. STANDARD OF PRACTICE:

Generally patients requiring post-anesthesia care will be recovered in the PACU. Special circumstances, including the critically ill patient, may make recovery more appropriate in the ICU. This decision will be made by the anesthesiologist.

II. PURPOSE:

To provide monitoring guidelines to the critical care nursing staff during post anesthesia recovery period

III. REFERENCES:

Procedure 205- "Recovery from General Anesthesia"
Procedure 206- "Discharge from PACU"

IV. POLICY:

Patients returning from surgery to the critical care units will receive a level of post-anesthesia care consistent with standards of care in the Post Anesthesia Care Unit (PACU).

V. AUTHORITY AND RESPONSIBILITY:

PACU Registered Nursing Staff, Critical Care Registered Nursing Staff, Anesthesiologist

VI. PROCEDURE:

A. If a patient bypasses the PACU and returns to critical care or is admitted directly to a critical care unit from surgery, a PACU Registered Nurse will assume responsibility for recovering the patient unless the patient was previously staffed at a 1:1 (nurse:patient) ratio prior to surgery.
B. All patients being recovered in a critical care unit will be staffed at a 1:1 (nurse:patient) ratio during the recovery period.
C. Patients returning directly to critical care for recovery will have - post anesthesia care orders completed - by the anesthesiologist.
D. During the recovery process, restraints may be necessary to prevent significant harm to the patient. The policy for medical restraints and seclusion (Policy #1017) will be followed in this circumstance.
E. During hand-off of care, receiving RN will verify assessment with PACU RN and – documented on EMR

VII. FORMS USED:

Post Anesthesia Recovery Report (MR142-0)
CPT Code Sheet (WAMT41-4)

REVIEWED:
10/2003, 9/2008, 8/2016, 2/2018, 10/2021

REVISED:
5/5/2004, 9/13/05

CONTRA COSTA REGIONAL MEDICAL CENTER
HOSPITAL AND HEALTH CENTERS

NURSING POLICY NO: #807

FECAL MANAGEMENT SYSTEM (FMS)

I. PURPOSE:

To provide guidelines for the insertion, maintenance, and removal of the fecal management system.

II. REFERENCES:

Flexi Seal Fecal Management System , ConvaTec, Product inserta (2015) ~~Bristol-Myer Squibb company (2012).~~
~~TJC 2018 Standard PC 01.02.01, "The hospital assesses and reassesses its patients."~~

III. POLICY:

A. Indications: for use to manage fecal incontinence through the collection of liquid to semi-liquid stool and to provide access to administer medications ~~the fecal management of patients with little or no bowel control, and liquid to semi-liquid stool.~~
B. A Physician order is required.
C. Nursing personnel will insert the fecal management system (FMS) using standard precautions. Patient safety, comfort and privacy will be maintained throughout the procedure.
D. The fecal management system is not to be used on patients with solid stools.
E. The FMS should not be used for more than 29 consecutive days.
F. Contraindications include:
1. Pediatric patients.
2. ~~Lower bowel or~~ rectal surgery within the last 12 months.
3. Fecal impaction.
4. Any rectal or anal injury.
5. Severe hemorrhoids.
6. Severe anal or rectal stricture or stenosis. (Distal rectum cannot accommodate the balloon when inflated.)
7. Rectal mucosa impairment (severe proctitis, ischemic proctitis, mucosal lacerations).
8. Rectal or anal tumor(s).
~~8.~~9.Have any indwelling rectal anal device
~~9. Solid or soft-formed stool.~~
10. ~~-~~

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IV. AUTHORITY / RESPONSIBILITY:

Physician, RN, LVN

V. PROCEDURE:

A. **INSERTION:**
1. Materials needed:
- Fecal management system kit, (with catheter tube assembly, collection bag, 45ml luer -lock syringe, cinch clamp)
- Non-sterile gloves,
- Water soluble lubricant gel,
- Waterproof pad,

- ~~Silicone catheter tube assembly~~
- ~~45 ml luer-lock syringe,~~
- ~~Liter collection bags with collection bag cap~~
- ~~Non-permeable bag~~

2. Explain the procedure to the patient. Place waterproof pad under patient's buttocks.
3. Wash hands.
4. Apply non-sterile gloves.
5. Remove residual air from the balloon by attaching the syringe to inflation (white) port and withdrawing the plunger. Expel any air from the syringe.
6. Fill the syringe (marked ≤ 45 ml) with 45 mL tap water or saline. Attach syringe to the inflation port.
7. Secure collection bag to the connector at the end of the catheter.
8. Position the patient in left side-lying position. If unable to tolerate, position the patient so access to the rectum is possible.
9. Remove any indwelling or anal device.
10. Apply lubricant to gloved finger and perform a digital exam to assess for fecal impaction. If present, notify the MD to determine if impaction removal is appropriate.
11. Wash hands and change gloves.
12. Unfold the catheter to lay flat on the bed, extending the collection bag towards the foot of the bed. Insert lubricated gloved index finger into the blue retention balloon cuff finger pocket for digital guidance during device insertion. Coat the balloon end of the catheter with lubricating gel.
13. Grasp the catheter and gently insert the balloon end through the anal sphincter until the balloon is beyond the external orifice and well inside the rectal vault.
14. Inflate the balloon with 45 mL of water or saline by slowly depressing the syringe plunger. **Do not inflate the balloon with more than 45 mL.**
15. Once the balloon has reached the optimal fill level, the indicator bubble on the inflation(white) port will pop. The indicator could pop before the 45 mL has been inflated, if the space available for the balloon is smaller than the balloon. Filling should stop when the indicator pops out and stays out.
16. If the indicator bubble does not pop, the balloon is under-filled. Withdraw the liquid and reposition the balloon in the rectal vault. After repositioning, re-fill the balloon as described. When the indicator bubble deflates or appears excessively inflated, the retention balloon is no longer at the optimal level. Withdraw the fluid and re-fill the balloon as described. **Do not inflate the balloon with more than 45 mL.**
17. Remove the syringe from the inflation port and gently pull on the silicone catheter to check that the balloon is securely in the rectum and that it is positioned against the rectal floor.
18. Position the length of the catheter along the patient's leg avoiding kinks and obstructions.
19. Note where the position indicator line is relative to the patient's anus. Observe for changes in the location of the position indicator line as a means to determine movement of the retention balloon in the rectum. This may indicate the need for the balloon or device to be repositioned.
20. Hang the collection bag by the strap at a convenient location on the bedside.

21. Remove waterproof pad and dispose of all used and soiled supplies in the appropriate containers.
22. Remove gloves and wash hands.
23. Document the procedure and the patient's tolerance of it in ccLink.

B. **STOOL SAMPLINGS**
1. Wash hands and apply gloves.
2. Obtain ~~a slip tip~~ luer-slip syringe.
3. Verify the patient with 2 patient identifiers.
4. Locate the sample port on the catheter and then open the sample port cap.
5. Press the tip of the syringe through the slit inside of the sampling port to access the interior of the catheter.
6. Withdraw the syringe plunger to collect the stool sample.
7. Remove the syringe and close the sampling port cap.
8. Transfer stool specimen into a specimen cup.
9. Label the specimen cup at the patient's bed side.
10. Remove gloves and wash hands.
11. Dispose of the stool sampling syringe according to a red biohazard trash.

C. **MAINTENANCE IRRIGATION;** If the catheter becomes blocked with solid particles, it can be rinsed. Procedure:
1. Wash hands and apply non-sterile gloves along with any ~~other~~ personal protective equipment needed to avoid splashes.
2. Fill a syringe with tap water at room temperature.
3. Attach the syringe to the BLUE irrigation port (marked IRRIG) and flush device.
4. Repeat as needed. If repeated flushing does not return the flow of stool, inspect the device for external obstruction. If no obstruction is found, obtain an order to discontinue the FMS.
5. Remove gloves and wash hands.
6. Document in patient care record in ccLink.

D. **REMOVAL OF FECAL MANAGEMENT SYSTEM:**
1. Gather equipment.
2. Wash hands and apply non-sterile gloves.
3. Attach ~~a 60 mL~~ syringe to the WHITE inflation port and withdraw all the fluid from the balloon.
4. Disconnect the syringe.
5. Grasp catheter (as close to the patient as possible) and slowly slide the catheter out of the anus.
6. Dispose of the device in the red biohazard trash.
7. Remove gloves and dispose in appropriate trash container.
8. Wash hands.
9. Document in patient care record in ccLink.

E. **MEDICATION ADMINISTRATION**
1. Flush the irrigation line with 10 mLs of room temperature water.
2. Remove the cinch clamp from the kit packaging. Note that the cinch clamp has

two notches and therefore two closure positions. Without closing, position the cinch clamp around the catheter at the black indicator line.

3. Close the cinch clamp to the first closure position.
4. Prepare a new syringe with the medication as prescribed.
5. Connect the medication syringe to the BLUE~~blue--~~ irrigation port (marked "IRRIG"). Administer the medication as prescribed.
6. Remove the syringe once all the medication has been instilled. Dispose the syringe according pharmaceutical waste disposal policy.
7. Flush irrigation line immediately with at least 50 mL of room temperature tap water to ensure the delivery of medication into the rectum.
8. Tighten the cinch clamp completely by closing to the second closure position to ensure no medication flows back though the catheter.
9. Allow the medication to dwell in the rectum for the prescribed amount of time.
10. Then open the cinch clamp and remove it from the catheter. Flush the irrigation line once again with 10 mLs of room temperature tap water.

F. **PRECAUTIONS**

1. Close attention should be exercised with the use of the FMS device in patients who have inflammatory bowel conditions.
2. Small amounts of seepage and moisture around the catheter is anticipated. To avoid skin irritation, initiate appropriate skin care protocol. Keep skin clean, dry and protected with a moisture barrier product. Patients with very weak sphincter muscles may not be able to hold the device in place and may experience increased leakage of stool.
3. Solid or soft formed stool cannot pass through the catheter and will obstruct the opening.
4. If the catheter does become blocked with solid particles, it can be rinsed (see irrigation section). If obstruction of the catheter is due to solid stool, the device should be discontinued.
5. To avoid injury to the patient, do not insert anything into the anal canal while the FMS is in place (e.g., thermometers, suppositories, etc.). Remove the device prior to the insertion of anything into the anal canal.
6. Notify the physician if any of the following occur:
   a. Persistent rectal pain.
   b. Rectal bleeding.
   c. Abdominal distention.
7. If the patient's bowel control, consistency and frequency of stool begin to return to normal, discontinue use of the device.
8. The following adverse events could occur:
   a. Excessive leakage of stool around the device.
   b. Loss of anal sphincter muscle tone that could lead to temporary anal sphincter dysfunction.
   c. Infection.
   d. Pressure necrosis of rectal or anal muscles.
   e. Bowel obstruction.
   f. Perforation of bowel.

VI. DOCUMENTATION:

ICU/IMCU Flowsheet in ccLink
Patient Care Record in ccLink

APPROVED BY:
Critical Care Committee: 6/2015
Clinical Practice Committee: 7/2015
Patient Care Policy & Evaluation Committee: 11/2015
Medical Executive Committee: 12/2015

REVIEWED:
7/2008, 9/2009, 7/2015, 8/2016, 2/2017, 2/2018, 1/2020, 2/2021, 10/2021

REVISED:
8/2008, 6/2012, 7/2015

CONTRA COSTA REGIONAL MEDICAL CENTER
HOSPITAL AND HEALTH CENTERS

NURSING POLICY #1421-A
CCU/IMCU NURSING POLICY NO. 313A
ADDENDUM A

SET UP & PLANNED ACTIONS

Planned Action	Key Information

For OXIMAX® N-85 Portable Capnography/Pulse Oximeter and Microstream CO_2 Extension to Phillips Monitor

OXIMAX® n-85 set up

1. Turn on monitor by sliding the On/Off switch on top right of monitor.

1. Monitor is ready after a 30-second warm-up and self-check; **NO** calibration or zeroing is necessary.

2. Choose appropriate capnography CO_2 sampling line for patient.

2. The Smart CapnoLine Plus for non-intubated patients samples $ETCO_2$ selectively from the nose or the mouth. Oxygen is delivered through pinholes under the nose which increases the oxygen concentration at the level of the airway.

3. Open the FilterLine Input Connector door on the top left, under the word Microstream® (figure 1).

Figure 1

4. Connect the luer lock-type end of the FilterLine to the monitor and turn clockwise until snug. DO NOT over-tighten. Pump will start automatically.

4. Autozero will appear at the top of the screen after patient monitoring is initiated to indicate the monitor is performing a self-calibration. No action is required.

5. Alarm silence is the top left button on the front of the monitor; press and quickly release the button to temporarily silence the alarms.

5. Do not permanently silence the alarms.

6. To change alarm limits, press and hold the bottom right button to bring up the alarm limits menu. Press and release the same button to scroll through and highlight choices. Highlight the parameter you want to change and use the toggle buttons to increase or decrease the parameter's value.

6. Default alarm settings are restored each time the unit is turned off.

7. Press and hold the bottom left button anytime to return to the monitoring screen.

7. If no actions are taken in 15 seconds, the monitor defaults back to monitoring screen.

8. Press and release large arrow button, bottom right for 30 minute and 8-hour trend information.

9. For intubated patient, place FilterLine H-set proximally to the endotracheal tube.

10. Draw arterial blood gases (ABG) at 30 minutes after connecting a sampling line to the patient.

10. Establish baseline correlation between capnography numeric value and $PaCO_2$ value from ABG readings.

Microstream CO2 extension to Phillips Monitor set up

1. Plug in the Microstream CO_2 extension to the Multi-Measurement Module.

2. Choose appropriate capnography CO_2 sampling line for patients.

3. Open the FilterLine connector door on the front (figure 2).

4. Connect the luer lock-type end of the FilterLine to the monitor and turn clockwise until snug. DO NOT over-tighten. Pump will start automatically.

5. Set up the alarm limits on Phillips monitor.

6. For intubated patient, place FilterLine H-set proximally to the endotracheal tube.

7. Draw arterial blood gases at 30 minutes after connecting a sampling line to the patient.

Figure 2

Reviewed 2/2018, 10/2021

CONTRA COSTA REGIONAL MEDICAL CENTER
HOSPITAL AND HEALTH CENTERS

PSYCHIATRIC NURSING POLICY: 514

INVOLUNTARY PATIENTS ~~ADMISSION~~: CONSERVATORSHIP AND TEMPORARY CONSERVATORSHIP

I. PURPOSE:

To provide guidelines for protecting the rights of patients ~~requiring involuntary~~who are conserved or who meet requirements for ~~admission and/or conservatorship status~~ temporary conservatorship while they receive psychiatric treatment in the Psychiatric Emergency Services (PES) or Inpatient Psychiatry (Units 4C and 4D).

II. REFERENCES:

Title 22: Section 70717.
Welfare & Institution Codes: 5250, 5252.1, 5152.1, 5358, 6004, 6005, 7103
The Joint Commission (TJC) 2021~~16~~ Standard RI.01.01.01, "The hospital respects, protects and promotes patient rights."

III. POLICY:

Legal status of all patients is verified and/or updated based on psychiatric evaluation in the Psychiatric Emergency Services (PES) and Inpatient Psychiatry Service (Units 4C and 4D). Patients ~~admitted involuntarily under~~with the legal status of ~~Conservatorship or Temporary Conservatorship~~Conserved or Temporary Conservatorship retain all rights accorded to patients.

IV. AUTHORITY/RESPONSIBILITY:

Psychiatry Chief(s), Nursing~~e~~ Program Manager(s), Psychiatrists, Mental Health Program Manager, Mental Health Program Supervisor, Mental Health Clinical Specialist/Medical Social Worker II (MHCS/SW), RN, LVN, LPT, Discharge Planner, Clerk~~MHCS, RN, LVN, LPT, Discharge Planner~~

V. PROCEDURE:

A. Upon intake to PES or admission to Inpatient Psychiatry, ~~the Mental Health Clinic Specialist (MHCS)~~ Social Services staff will verify the legal status of the patient and contact the patient's conservator for the appropriate signatures. This can be done by checking ~~the monthly list of~~information about Public Conservators ~~and Conservatees, or~~, or, for private conservators, a copy of the Conservatorship Decree will accompany the patient.

~~A.~~B. If a patient is conserved in another county, social services staff should communicate this information to the attending psychiatrist.

~~B.~~C. All patients with a conservator or temporary conservatorship or those who are placed on a ~~conservatorship or~~ temporary conservatorship while at Contra Costa Regional Medical Center (CCRMC) will have a "Request for Voluntary Admission and Authorization for Treatment" (MR-94) signed by their conservator or temporary conservator.

~~C.~~D. All patients with a conservator or those who are placed on a conservatorship while at CCRMC will have the Informed Consent for Psychotropic Medication forms signed by their conservator.

E. The clerk or Charge Nurse/Team Leader should update the legal status of the patient on admission to Inpatient Psychiatry service using the Legal Status book.

~~D.~~ The psychiatrist should complete an order in ccLink for the legal hold (Conserved or Temp Conserved) and document the legal status in the Intake or Psychiatric H&P note and progress notes as appropriate.

F. ~~All patients on a temporary conservatorship or placed on a temporary conservatorship while at CCRMC will have Informed Consent forms signed by their temporary conservator if medications are indicated.~~

~~E.~~

VI. DOCUMENTATION~~FORMS USED~~:

Application for Voluntary Admission and Authorization for Treatment (MR-94)
Court appointed Conservatorship papers
Informed Consent for Psychotropic Medications (MR-650)
Inpatient Psychiatry Legal Status Book
Patient Care Record in ccLink

~~**VII. RESPONSIBLE STAFF PERSON:**~~

~~Program Chief Detention and Mental Health/Psychiatry, Chief Psychiatrist(s), Nurse Program Managers~~

REVIEWED: 6/92, 10/96, 8/97, 3/01, 5/04, 12/16, 09/21

REVISED: 12/94, 11/15, 09/21

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CONTRA COSTA HEALTH SERVICES

Committee Name: PCP&E Committee, MEC and PIC
Meeting Date: December 2021

Issue Name: Medication Safety Committee Updates from the November 2021 meeting to PCP&E, PIC, and MEC	**Presenter(s):** Shideh Ataii, Pharm.D., APH Director of Pharmacy SVCs, CCRMC and Clinics

Situation:
To share all Medication Safety Committee updates/information pertaining to the medication management process at CCRMC and clinics with the PCP&E committee members. These updates will also be shared with the Medical Executive Committee (MEC), and PIC as applicable. These committees will be responsible for disseminating the information within the report to their respective departments. For complete detailed reports, refer to Medication Safety Committee files.

Background:
The Medication Committee updates include the following but are not limited to:

- Monthly and quarterly medication error reports with the following severity ratings:
  A. Event has capacity to cause error
  B. Error did not reach the patient
  C. Error occurred that reached the patient, but no harm
  D. Error occurred that reached the patient, monitoring required, but no harm
  E. Error occurred that contributed to temporary harm and required intervention
  F. Error occurred that may have contributed to temporary harm and required initial or prolonged hospitalization
  G. Error occurred that may have contributed to permanent patient harm
  H. Error occurred that required intervention necessary to sustain life
  I. Error occurred that may have resulted in patient death
- Literature review including any regulatory updates such as AFLs from CDPH, ISMP updates, TJC etc.
- Quarterly reports including Drug Recalls, clinical monitors, pharmacy interventions, override reports etc.
- Quarterly reports from SPI including anticoagulation updates, Medication Reconciliation

Assessment/Findings:
Medication Error Report for October 2021:
All medication errors were reviewed for the month of October. The total number of medication events/errors reported in SERS for October 2021 was 41 events compared to 53 events reported in the previous month. There were 2 errors reported which involved RXe-Source pharmacy (1 in the previous month). There were 93,141 doses dispensed this month compared to 95,449 doses dispensed in the previous month. This calculates to a 0.04% error rate, which is slightly lower than the previous month (0.05% in September 2021).

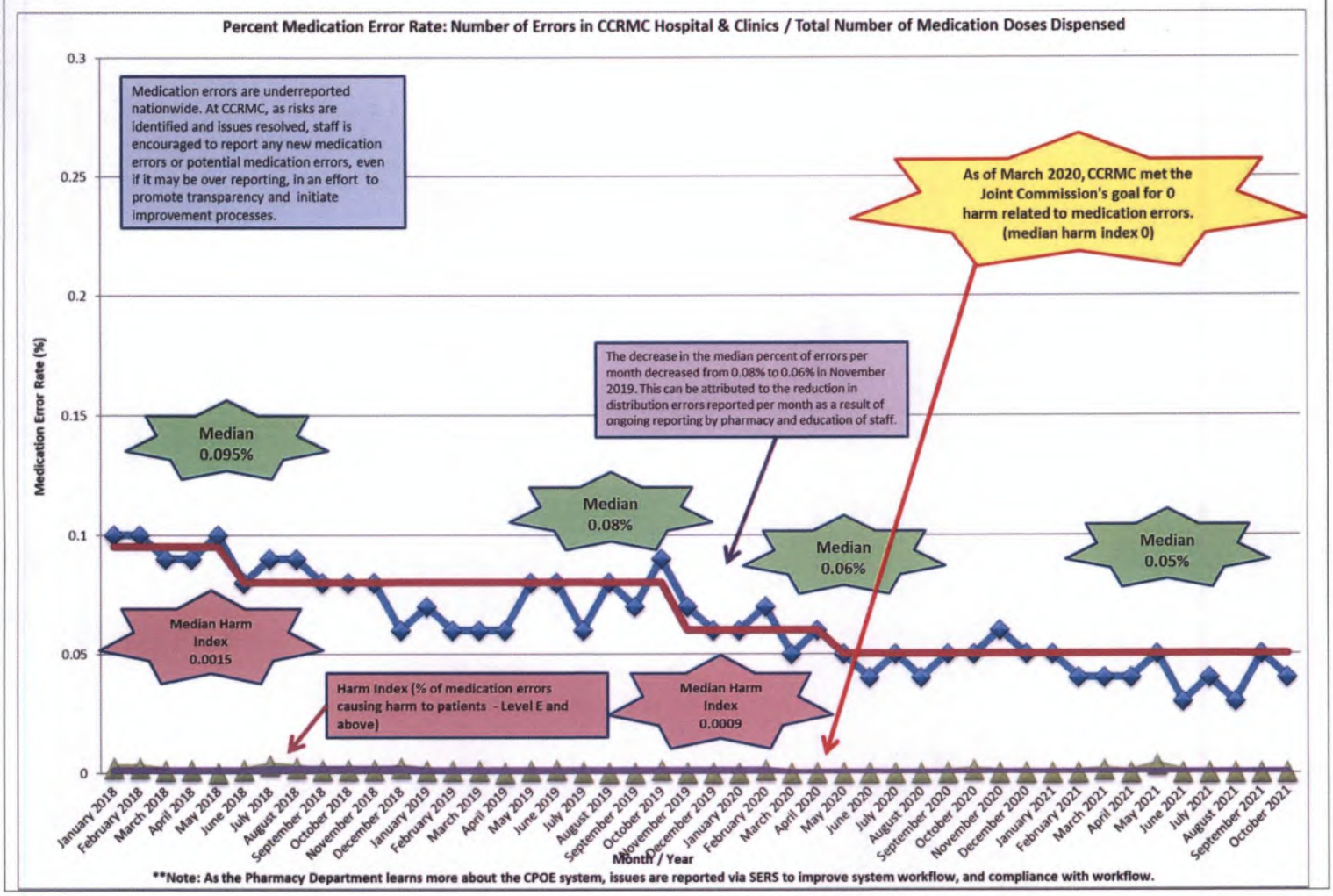
The MERP Elements that did not contribute to any errors this month were Prescription Order Communication, Product Labeling, Packaging, and Nomenclature, Technology, and Transitions in care.

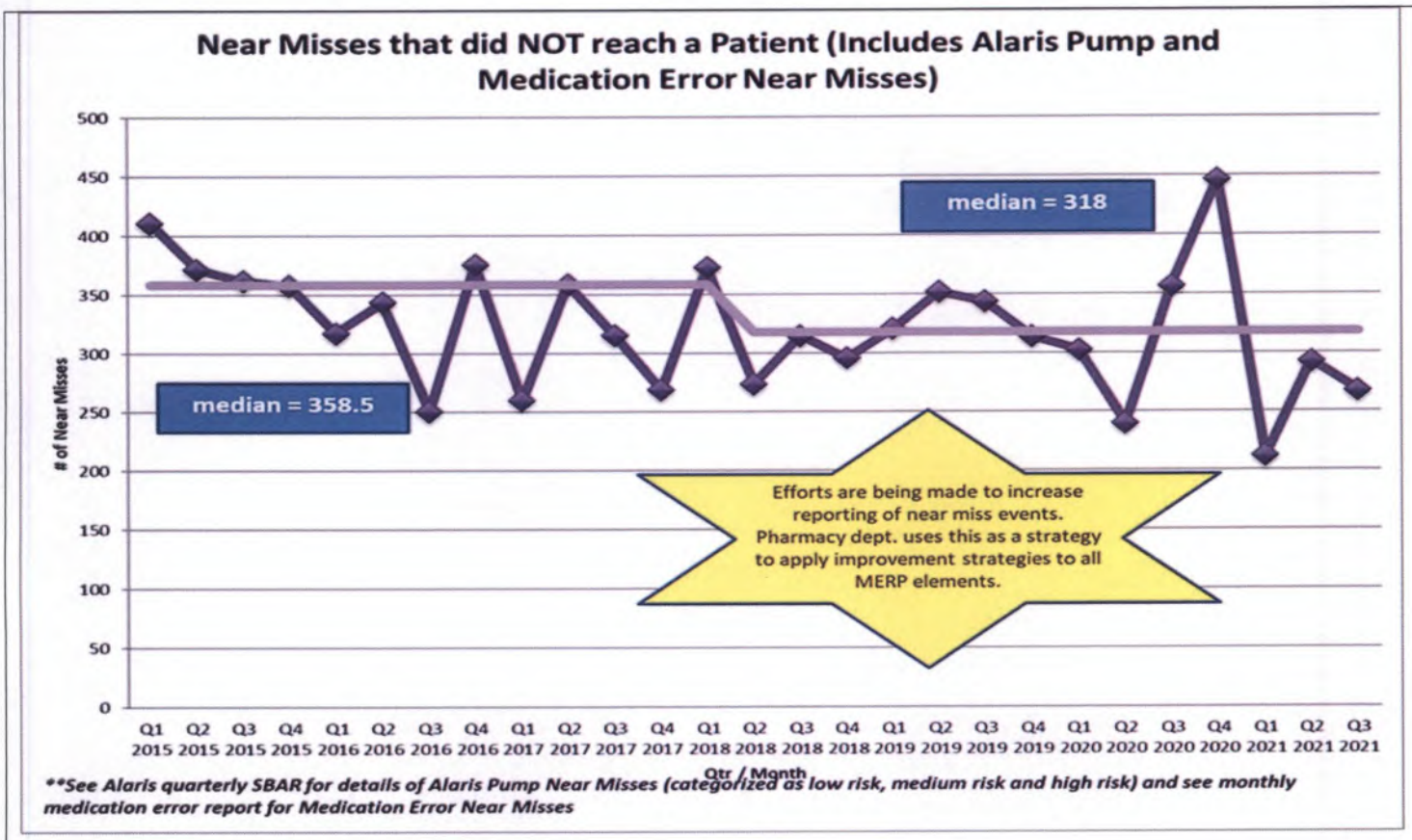
The following MERP elements contributed to the SERS for the month of October:

Distribution: 22 events
Administration: 13 events
Prescribing: 1 event
Monitoring: 6 events
Compounding: 1 event
Dispensing: 3 events
Education: 6 events

100% of the events closed were evaluated for Level of harm from A-I. Events were classified as: Level A (1), Level B (24), C (19), D (1). There were no LEVEL E events to report for this month.

No system changes are pending for this month. A few of the system changes from the previous month are currently still pending





See Alaris quarterly SBAR for details of Alaris Pump Near Misses (categorized as low risk, medium risk and high risk) and see monthly medication error report for Medication Error Near Misses

Pharmacy observed medication pass audit:

Medication pass survey was completed in anesthesia workstations, infusion clinic, 3D, 3E, 4A, 4B and 5D in November of 2021.
Assessment: 5 units were audited in the month of November (3D, 4B, 5D, OR workstations, and infusion) and no error was found.

Audit of Pharmacy dispensing practices:

The medication dispensing practices were met with 100% compliance across all areas. Pharmacy will continue to audit dispensing practices.

Controlled Substance Documentation Compliance Report for the Anesthesiology Dept-(Period Q2 2021 and Q3 2021):

Data Highlights:

- Current overall compliance rate median: 97.73%.
- Q2 2021 compliance with zero waste documentation percentage: 97.23%.
- Q3 2021 compliance with zero waste documentation percentage: 97.06%.
- Q2 2021 compliance with waste documentation percentage: 95.83%.
- Q3 2021 compliance with waste documentation percentage: 99.12%.
- Q2 2021 compliance with return documentation percentage: 90.32%.
- Q3 2021 compliance with return documentation percentage: 82.76%.
- Current overall non-compliance rate median: 2.27%.
- Q2 2021 non-compliance with zero waste documentation percentage: 2.77%.
- Q3 2021 non-compliance with zero waste documentation percentage: 2.94%
- Q2 2021 non-compliance with waste documentation percentage: 4.17%.
- Q3 2021 non-compliance with waste documentation percentage: 0.88%.
- Q2 2021 non-compliance with return documentation percentage: 9.68%.
- Q3 2021 non-compliance with return documentation percentage: 17.24%.

SEE GRAPHS AT THE END OF THIS REPORT

Qualitative and Quantitative Analysis of Compounded Sterile & Non-Sterile Products, Quarter 2 2021:

During the **2nd quarter of 2021**, the pharmacy sent a total of 4 **samples** as described below, to an outsourced laboratory by the name of DynaLabs.

Compounding Facility	Compound Type	Description of Compound	Potency Test Performed?	Sterility Test Performed?	Endotoxin Test Performed?
CCRMC Outpt Pharmacy – Negative Hood	Sterile	**Phenylephrine HCl 100 mg/ 500 mL NS**	**Yes**	**Yes**	**Yes**
CCRMC Outpt Pharmacy – Positive Hood	Sterile	**Phenylephrine HCl 100 mg/ 500 mL NS**	**Yes**	**Yes**	**Yes**
CAPS	Sterile	**Epinephrine 2 mg/ 250 mL D5W**	**Yes**	**Yes**	**Yes**
Nephron	Sterile	**Labetalol 20 mg/ 4 mL inj syringe**	**Yes**	**Yes**	**Yes**

Assessment:

All ***compounded sterile products*** from CCRMC Outpatient Pharmacy **passed the qualitative and quantitative checks** for *sterility* (testing for absence of bacteria, fungi [mold, and yeast] in both aerobic and anaerobic broths), *potency* (within the acceptable range defined in the USP General Chapter or drug-specific monograph), and *endotoxin* (limit defined by drug-specific monograph).

All of the ***compounded sterile products*** from CAPS and Nephron 503b Pharmacy **passed the qualitative and quantitative checks** for *sterility* (testing for absence of bacteria, fungi [mold, and yeast] in both aerobic and anaerobic broths), *potency* (within the acceptable range defined in the USP General Chapter or drug-specific monograph), and *endotoxin* (limit defined by drug-specific monograph).

Qualitative and Quantitative Analysis of Compounded Sterile & Non-Sterile Products, Quarter 3 2021:

During the 3rd **quarter of 2021**, the pharmacy sent a total of 4 **samples** as described below, to an outsourced laboratory by the name of DynaLabs.

Compounding Facility	Compound Type	Description of Compound	Potency Test Performed?	Sterility Test Performed?	Endotoxin Test Performed?
CCRMC Outpt Pharmacy – Negative Hood	Sterile	**Phenylephrine HCl 100 mg/ 500 mL NS**	**Yes**	**Yes**	**Yes**
CCRMC Outpt Pharmacy – Positive Hood	Sterile	**Phenylephrine HCl 100 mg/ 500 mL NS**	**Yes**	**Yes**	**Yes**
CAPS	Sterile	**Norepinephrine 4 mg/ 250 mL D5W**	**Yes**	**Yes**	**Yes**
Nephron	Sterile	**Labetalol 20 mg/ 4 mL inj syringe**	**Yes**	**Yes**	**Yes**

Assessment:

All ***compounded sterile products*** from CCRMC Outpatient Pharmacy **passed the qualitative and quantitative checks** for *sterility* (testing for absence of bacteria, fungi [mold, and yeast] in both aerobic and anaerobic broths), *potency* (within the acceptable range defined in the USP General Chapter or drug-specific monograph), and *endotoxin* (limit defined by drug-specific monograph).

All of the ***compounded sterile products*** from CAPS and Nephron 503b Pharmacy **passed the qualitative and quantitative checks** for *sterility* (testing for absence of bacteria, fungi [mold, and yeast] in both aerobic and anaerobic broths), *potency* (within the acceptable range defined in the USP General Chapter or drug-specific monograph), and *endotoxin* (limit defined by drug-specific monograph).

ADR report, 1st quarter 2021:

Breakdown of ADRs by Report Source	
Total number of events reported by Medical Records coding:	*103*
Total number of voluntary reports (SERS,etc.)	*39*
Total number of ADRs reported from Omnicell	*31*
Total number of events reported by Dashboard Reports	*1*

Breakdown of True ADRs by Setting	
Total number of ADRs from in-patient setting	*11*
Total number of ADRs from out-patient/Amb. Care setting (includes Emergency Department)	*92*

Number of ADRs reported	
Total number of all ADRs reported	*173*
TOTAL NUMBER OF TRUE ADRs in 1st Quarter of 2021	***103***
Note that the eliminated number of ADRs include untrue ADRs, duplicate reports from prior months/years, and coded line items in error.	

Findings:
For the 1st quarter of 2021, there were 331,839 medication orders. For the 1st quarter of 2021, the ADR rate (true ADR) was **0.03%** (compared to 0.017% in 4th quarter of 2020). A data deficiency is that the denominator is the total number of medications prescribed, not the total number of prescriptions filled. This is because CCRMC can only keep track of prescription fills for patients with CCHP, but not for patients with other insurance carriers.
All ADR reports are categorized as either "Allergic" reactions, "Supratherapeutic" events or "Toxic" events. The potentially preventable events were shared with providers.

Omnicell XT implementation:

The timeline for the Omnicell XT conversion at CCRMC was shared with committee members. The implementation is currently ongoing.

Medication Shortage List:

Findings:
In the month of November 2021, there were 146 medications on the drug shortage spreadsheet. The breakdown of these medications by color-coding was:

- Green = 46% (68)
- Yellow = 49% (71)
- Red = 5% (7)

Of the medications coded as red, the following medications have been especially problematic and have resulted in necessary action (see attached TABLE for full details):

Drug on Shortage	Alternative Agents	CCRMC Actions	Current Status
Ammonia Inhalant	None	CCRMC has sufficient quantity on hand but will check with alternative suppliers	CARES act now requires a new drug application before the manufacturer can resume marketing the product. The manufacturer is reaching out to FDA for guidance on extending the grace period based on public health need. No ETA provided.
Bupivacaine 0.5% with epinephrine	Other anesthetic agents	CCRMC able to procure limited supply	On shortage due to increased demand and manufacturing delays. ETA unknown.
Cefotetan IV premix bags	Cefotetan 1g and 2g vials are available	Cefotetan 1 g and 2 g doses to be compounded by Pharmacy. Vials added to OR Omnicells for after-hours use.	On backorder due to manufacturing delays. ETA of 12/2021
Desmopressin nasal spray (150 mcg/0.1 mL)	Injectable desmopressin available	IV and SubQ desmopressin available and can be used for the same indication as intranasal 150 mcg/0.1 ml (hemophilia A)	Recalled due to higher amounts of desmopressin than specified. Company cannot estimate a release date. Currently on backorder.
Homatropine 5% ophthalmic solution	Atropine eye drops	Pharmacy to consider formulary change if discontinued by manufacturer. Atropine on hand (more potent)	Unavailable for ordering due to manufacturing delays. Estimated availability date end of 2021.
Isoniazid 100 mg/mL Injection	Isoniazid tablets remain available as an alternative	Pharmacy actively monitoring availability.	On shortage due to manufacturing delays. No ETA provided.
Protamine Sulfate injection 50mg/5mL	None	CCRMC currently able to order 250mg/25mL vials	Not available due to manufacturing delays. ETA of December 2021.

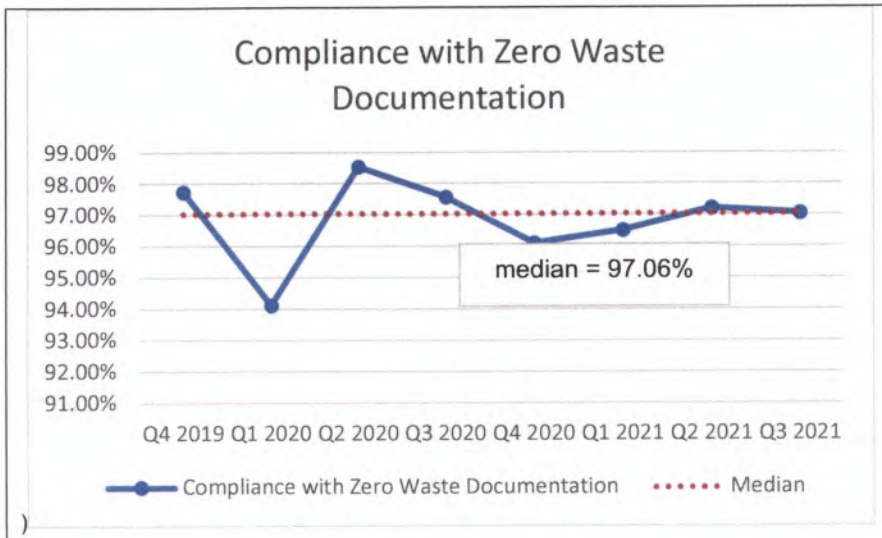
Recommendations/Actions: What actions should the committee take?

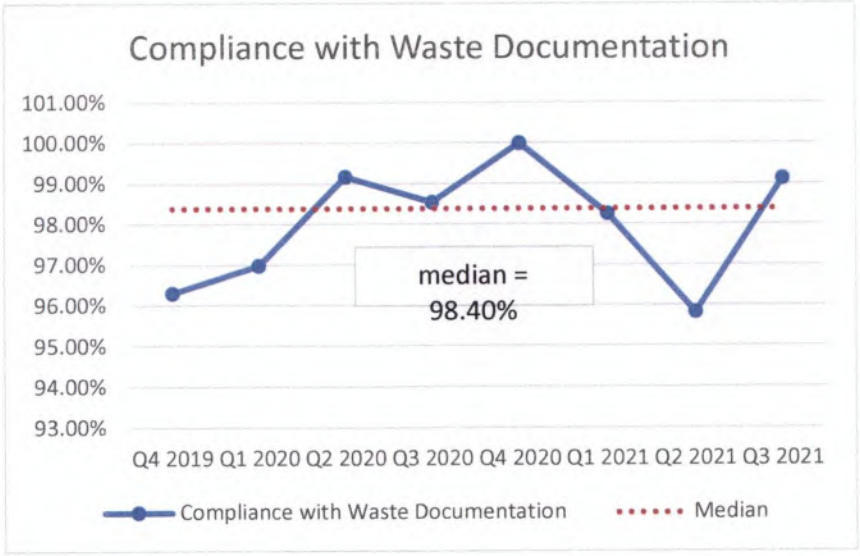
❒ Check here if presenter does not have a recommendation to the Committee

Note: The committee will track and expect a report back on any actions it adopts or otherwise requires.

Who	What	When
Director of Pharmacy Services	Report to PCP&E, MEC and PIC as applicable	**Recurring**

NEXT PAGE:
Controlled Substance Documentation Compliance Report for the Anesthesiology Dept- (Period Q2 2021 and Q3 2021):


Compliance with Zero Waste Documentation
99.00%
98.00%
97.00%
96.00%
95.00%
94.00%
93.00%
92.00%
91.00%
median = 97.06%
Q4 2019 Q1 2020 Q2 2020 Q3 2020 Q4 2020 Q1 2021 Q2 2021 Q3 2021
Compliance with Zero Waste Documentation
Median


Compliance with Waste Documentation
101.00%
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99.00%
98.00%
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96.00%
95.00%
94.00%
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median = 98.40%
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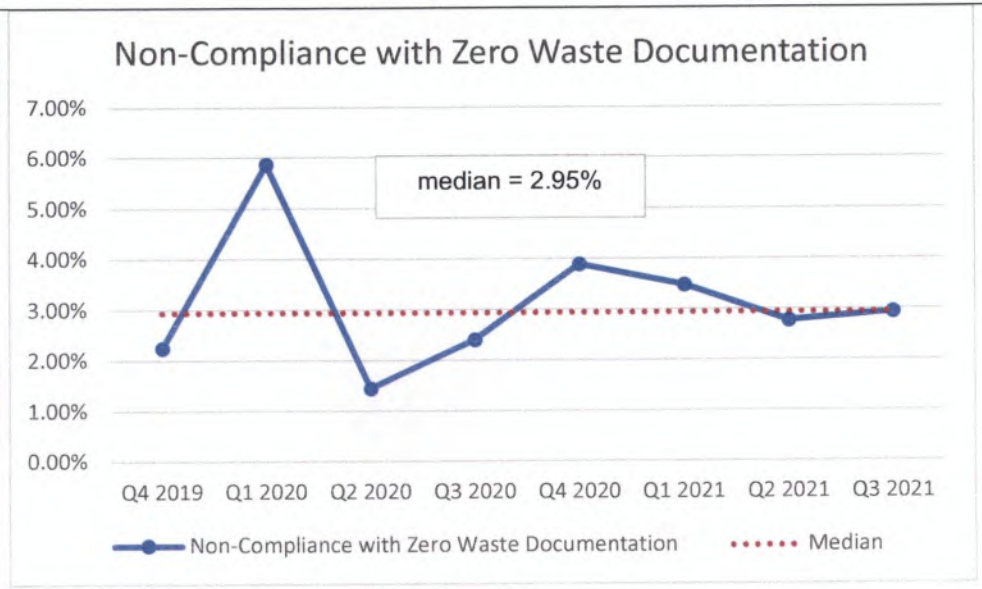
Compliance with Waste Documentation
Median


Non-Compliance with Zero Waste Documentation
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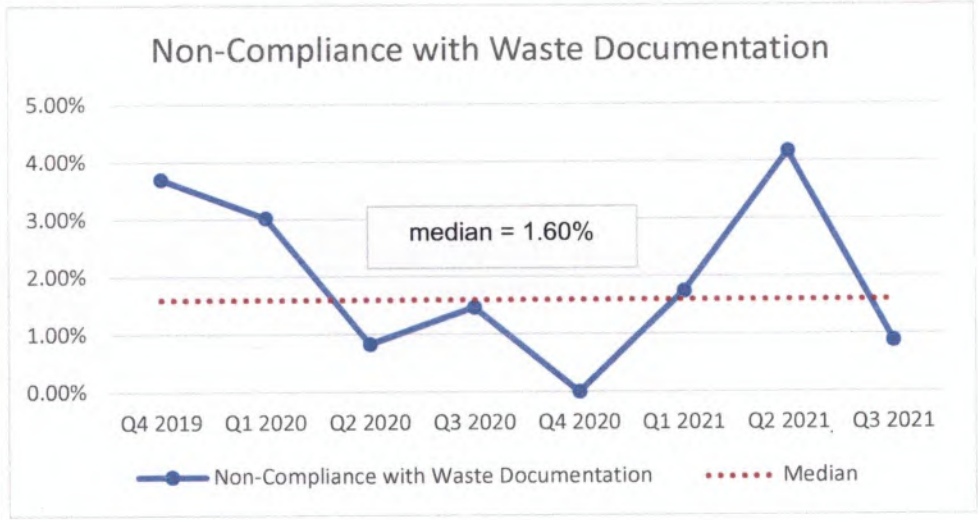
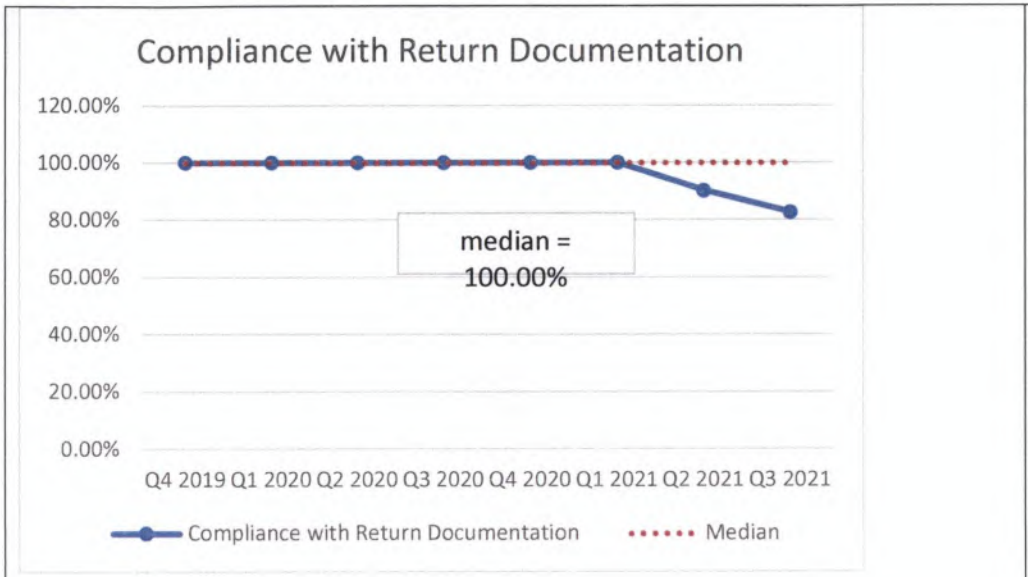
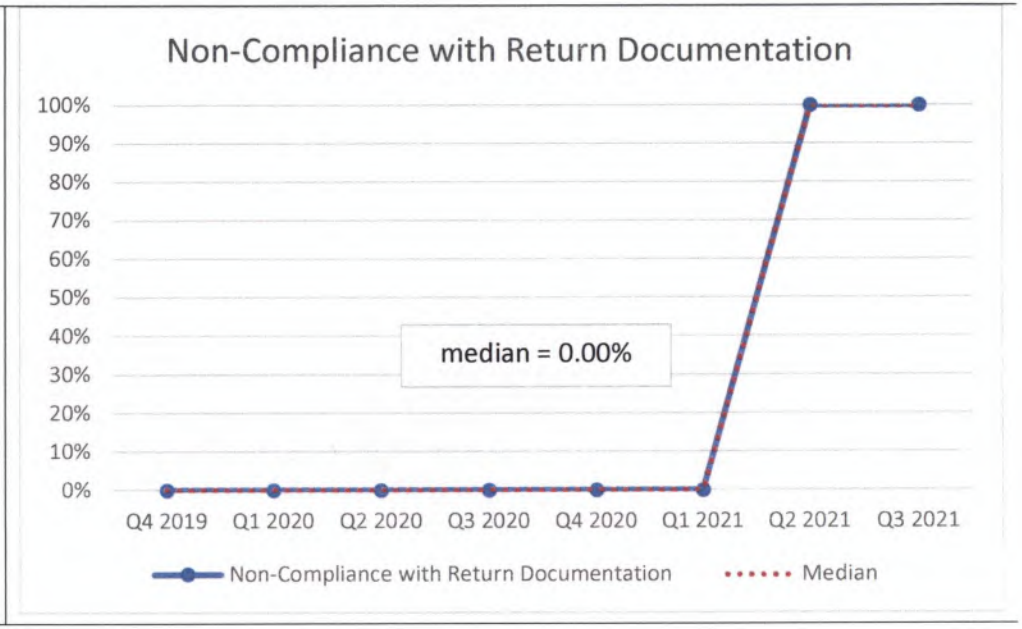
6.00%
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
median = 2.95%
Q4 2019 Q1 2020 Q2 2020 Q3 2020 Q4 2020 Q1 2021 Q2 2021 Q3 2021
Non-Compliance with Zero Waste Documentation
Median


Non-Compliance with Waste Documentation
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
median = 1.60%
Q4 2019 Q1 2020 Q2 2020 Q3 2020 Q4 2020 Q1 2021 Q2 2021 Q3 2021
Non-Compliance with Waste Documentation
Median


Compliance with Return Documentation
120.00%
100.00%
80.00%
60.00%
40.00%
20.00%
0.00%
median = 100.00%
Q4 2019 Q1 2020 Q2 2020 Q3 2020 Q4 2020 Q1 2021 Q2 2021 Q3 2021
Compliance with Return Documentation
Median


Non-Compliance with Return Documentation
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
median = 0.00%
Q4 2019 Q1 2020 Q2 2020 Q3 2020 Q4 2020 Q1 2021 Q2 2021 Q3 2021
Non-Compliance with Return Documentation
Median

CONTRA COSTA
HEALTH SERVICES

TO: *All Medical Staff / Residents*
All Nursing Staff

DATE: *11/3/2021*

BY: *Marjan Orellana, Pharm.D.*
Adeebeh Fakurnejad, Pharm.D.
Department of Pharmacy

SUBJECT: *Pharmacy and Formulary Updates*

FORMULARY CHANGES:
None

FDA BLACK BOX WARNING:

1. JAK Inhibitors Safety Review – Tofacitinib (Xeljanz®, Xeljanz XR®), Baricitinib (Olumiant®), Upadacitinib (Rinvoq®)

Based on a completed U.S. Food and Drug Administration (FDA) review of a large, randomized safety clinical trial, we have concluded there is an increased risk of serious heart-related events such as heart attack or stroke, cancer, blood clots, and death with the arthritis and ulcerative colitis medicine tofacitinib.

This trial compared tofacitinib with another type of medicine used to treat arthritis called tumor necrosis factor (TNF) blockers in patients with rheumatoid arthritis. The trial's final results also showed an increased risk of blood clots and death with the lower dose of tofacitinib. A prior drug safety communication based upon earlier results from this trial, reported an increased risk of blood clots and death only seen at the higher dose.

Baricitinib and upadacitinib have not been studied in trials similar to the large safety clinical trial with tofacitinib, so the risks have not been adequately evaluated. However, since they share mechanisms of action with tofacitinib, FDA considers that these medicines may have similar risks as seen in the tofacitinib safety trial.
Two other JAK inhibitors, ruxolitinib and fedratinib, are not indicated for the treatment of arthritis and other inflammatory conditions and so are not a part of the updates being required.

Revisions to boxed warning to include information about risks. In addition, limiting all approved uses to certain patients who have not responded or cannot tolerate one or more TNF blockers.

FDA MEDWATCH ALERTS/DRUG SAFETY COMMUNICATIONS

FDA MedWatch alerts are reviewed monthly and selected medication label changes and alerts are presented here. Please refer to FDA website for a complete list of label changes and safety alerts.
https://www.accessdata.fda.gov/scripts/cder/safetylabelingchanges/index.cfm?event=searchResult.page
https://www.fda.gov/drugs/drug-safety-and-availability/drug-safety-communications

1. Alcohol Based Hand Sanitizers

(Drug Safety Communication) - The U.S. Food and Drug Administration (FDA) is warning that getting alcohol-based hand sanitizer in the eyes from splashing or touching the eyes after use of hand sanitizer can result in serious injury, including severe irritation and damage to the surface of the eye. Eye exposure to hand sanitizer has been reported in all age groups; however, it has occurred most often in children. Such eye injuries have become much more frequent, likely due to the marked increase in the use of alcohol-based hand sanitizer during the COVID-19 pandemic.

2. Cefazolin (Ancef®) – *formulary*

Postmarketing Experience: Skin and subcutaneous tissue disorders – Acute generalized exanthematous pustulosis (AGEP)

3. Isoflurane (Forane®) – *formulary*

Contraindications: history of confirmed hepatitis due to a halogenated inhalational anesthetic or a history of unexplained moderate to severe hepatic dysfunction (e.g., jaundice associated with fever and/or eosinophilia) after anesthesia with isoflurane or other halogenated inhalational anesthetics.

Warnings: *Hepatic Reactions* - Cases of mild, moderate and severe postoperative hepatic dysfunction or hepatitis with or without jaundice, including fatal hepatic necrosis and hepatic failure, have been reported with isoflurane. Clinical judgment should be exercised when isoflurane is used in patients with underlying hepatic conditions or under treatment with drugs known to cause hepatic dysfunction.

As with all halogenated anesthetics, repeated anesthetics within a short period of time may result in increased effects, particularly in patients with underlying hepatic conditions, or additive effects in patients treated with drugs known to cause hepatic dysfunction. Evaluate the need for repeated exposure in each individual patient and adjust the dose of isoflurane based on signs and symptoms of adequate depth of anesthesia if repeated exposure in a short period of time is clinically indicated.

QTc Prolongation - QTc prolongation, with rare instances of torsade de pointes, have been reported. Monitor QT interval when administering isoflurane to susceptible patients.

4. Linezolid (Zyvox®) – *non-formulary*
Warnings and Precautions: *Hyponatremia and/or Syndrome of Inappropriate Antidiuretic Hormone Secretion (SIADH)* - Postmarketing cases of hyponatremia and/or Syndrome of Inappropriate Antidiuretic Hormone Secretion (SIADH) have been observed in patients treated with linezolid. In reported cases, the signs and symptoms included confusion, somnolence, generalized weakness, and in severe cases led to respiratory failure and even death. Monitor serum sodium levels regularly in the elderly, in patients taking diuretics, and in other patients at risk of hyponatremia and/or SIADH while taking linezolid. If signs and symptoms of hyponatremia and/or SIADH occur, discontinue linezolid, and institute appropriate supportive measures.

5. Mycophenolate (Cellcept®) – *non-formulary*
Warnings and Precautions: *Serious infections* - viral infections reported include … COVID-19 (*new addition*) Consider dose reduction or discontinuation of mycophenolate in patients who develop new infections or reactivate viral infections, weighing the risk that reduced immunosuppression represents to the functioning allograft.

Acute Inflammatory Syndrome Associated with Mycophenolate Products - Acute inflammatory syndrome (AIS) has been reported with the use of MMF and mycophenolate products, and some cases have resulted in hospitalization. AIS is a paradoxical pro-inflammatory reaction characterized by fever, arthralgias, arthritis, muscle pain and elevated inflammatory markers including, C-reactive protein and erythrocyte sedimentation rate, without evidence of infection or underlying disease recurrence. Symptoms occur within weeks to months of initiation of treatment or a dose increase. After discontinuation, improvement of symptoms and inflammatory markers are usually observed within 24 to 48 hours.

Monitor patients for symptoms and laboratory parameters of AIS when starting treatment with mycophenolate products or when increasing the dosage. Discontinue treatment and consider other treatment alternatives based on the risk and benefit for the patient.

6. Ondansetron (Zofran®, Zofran ODT®) – *formulary*
Warnings and Precautions: *Myocardial Ischemia* - Myocardial ischemia has been reported in patients treated with ondansetron. In some cases, predominantly during intravenous administration, the symptoms appeared immediately after administration but resolved with prompt treatment. Coronary artery spasm appears to be the most common underlying cause. Therefore, monitor or advise patients for signs or symptoms of myocardial ischemia after oral administration of ondansetron.

7. Rifampin (Rifadin®) – *formulary*
Warnings and Precautions (newly added information): Postmarketing cases of paradoxical drug reaction (recurrence or appearance of new symptoms, physical and radiological signs in a patient who had previously shown improvement with appropriate antimycobacterial treatment, in the absence of disease relapse, poor treatment compliance, drug resistance, side effects of treatment, or secondary infection/diagnosis) have been reported with

rifampin. Paradoxical drug reactions are often transient and should not be misinterpreted as failure to respond to treatment. If worsening of symptoms or signs occurs during antimycobacterial treatment, consider paradoxical drug reaction in the differential diagnosis, monitor, or treat accordingly.

8. Sodium Zirconium Cyclosilicate (Lokelma®) – *formulary*
Warnings and Precautions: *Diagnostic Tests* (*newly added section*) - Sodium Zirconium Cyclosilicate has radio-opaque properties and, therefore, may give the appearance typical of an imaging agent during abdominal X-ray procedures.

PHARMACY POLICIES:
The following Pharmacy policy was revised. Updated policies can be found on iSite.
►**Policy 3216** – Concentrated Electrolyte Solutions
►**Policy 3219** – Crash Cart, Adult - Medication Tray Contents

RECALL SUMMARY OCTOBER 2021
1. Total number of recalls received and reviewed: 1
2. Of recalled items, total number of "RECALLS" illustrating products with a purchase history by CCRMC: 1
3. Of purchased items, total number of medications/products returned due to recall: 0
4. Itemization of medications/products returned due to recall: N/A
5. Action Taken

(Note: a summary of these recalled items are placed onto the PCP&E Physician memos monthly):

- Products with recalled lot numbers were removed quickly from all patient care units and pharmacy and were quarantined.
- Quarantined products were returned.

CONTRA COSTA HEALTH SERVICES

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MEDICAL EXECUTIVE COMMITTEE AGENDA

CHAIR-KRISTIN MOELLER, M.D.
February 28, 2022
12 to 2:00p

As the elected leadership of the CCRMC/HCs Medical Staff, we stand against racism and hate. *We recognize the negative impact of longstanding structural racism on health, and we commit to take action to combat this in our own system and work for health equity for our patients.*

Join Zoom Meeting
https://cchealth.zoom.us/j/8544948118
Meeting ID: 854 494 8118
****If you are on phone only for the Zoom, use *6 to mute/unmute**

Agenda Topic	Status	Time
Call to Order		
Review of January 24, 2022 Minutes	See attached Draft Minutes.	2 min.
Announcements (3 min)		
• **March 21, 2022 MEC meeting reports to Sue by March 10, 2022** ○ Medical Staff Assistance Committee ○ Surgery Department-Dr. Dosanjh ○ Psychiatry/Psychology Department-Dr.Guss ○ Cancer Committee-Dr. Gynn ○ Diagnostic Imaging Department-Dr. Liebig ○ Utilization Management Committee-Dr. Rael ○ Peer Review Oversight Committee-Dr. Moeller Please use the standard SBAR form for your reports -You will be given 5 minutes in which to present your report. Please number the pages of your report. **PLEASE DATE YOUR REPORT AND NUMBER THE PAGES. Please include your executive summary which can be added to the minutes.** **Next meeting March 21, 2022**		
ADMINISTRATIVE REPORTS		
Anna Roth, Health Services Director Ori Tzvieli, Health Officer, Director of Public Health Pat Godley, CFO for Health Services Gilbert Salinas, Chief Equity Officer, HS Jaspreet Benepal, RN, Chief Nursing Officer Samir Shah, M.D., Chief Executive Officer/Chief Medical Officer Vacant - Chief Quality Officer David Runt - Chief Operations Officer	Rajiv Pramanik, M.D.- CMIO Gabriela Sullivan, M.D.- Specialty/Ambulatory Medical Director Sergio Urcuyo, M.D.- Hospital Medical Director Sonia Sutherland, M.D.-Medical Director, Detention Health Sharron Mackey, MHS, Chief Executive Officer CCHP Dennis Hsieh, M.D., Medical Director/CMO CCHP	
NEW BUSINESS		

CONTRA COSTA HEALTH SERVICES

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MEDICAL EXECUTIVE COMMITTEE AGENDA

CHAIR-KRISTIN MOELLER, M.D.
February 28, 2022
12 to 2:00p

Agenda Topic	Status	Time
Quality Indicators-Vote Needed	Dr. Moeller	5 min.
Nominations Due March 1 for the Following: (Term 7/1/2022 - 6/30/2024) **Department Heads:** ED Surgery Psychiatry/Psychology Diagnostic Imaging OB/GYN Critical Care **Division Heads:** DFAM West County DFAM Far East County	Dr. Moeller	3 min.
OLD BUSINESS		
Bylaws Vote Count-76 ballots received **#1Prerogs for Allied Health** **69 Yes/7 No** **#2Update current division names** **70 Yes/5 No/1 Abstain** **#3 Committees** **67 Yes/9 No**	Dr. Moeller	3 min.
Consent Agenda		
Medication Safety Committee-Dr. Ataii	See report.	5 min.
PCP&E-Dr. Forman **Hospital Wide Policies** 357 Roles of the Deputy Sheriff at Hospital and Health Center Sites 360 Security Program **Nursing Policies-Helena Martey** 3.142 Sodium Bicarbonate, Intravenous Administration 3.70 Formula: Safe Preparation, Storage and Feeding 3.70 A Formula Preparation Handout (English) 3. 70 B Formula Preparation Handout (Spanish)	See report. Please ask if you wish to see a specific policy and it will be sent to you.	5 min.

CONTRA COSTA HEALTH SERVICES

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MEDICAL EXECUTIVE COMMITTEE AGENDA

CHAIR-KRISTIN MOELLER, M.D.
February 28, 2022
12 to 2:00p

Agenda Topic	Status	Time
COMMITTEE REPORTS		
Credentials Committee- Dr. Mbanugo List of Candidates - Vote needed	See report.	3 min.
Patient Safety and Performance Improvement Committee - Dr. Beach	No report this month.	3 min.
APC - Dr. Pyrkova	Pending	3 min.
Contra Costa Health Plan-Sharron Mackey	Pending	5 min.
DEPARTMENT & DIVISION REPORTS		
DFAM West County-Dr. Sheldon	See report	5 min.
Pathology Department-Dr.Das	Pending	5 min.
ADJOURN TO CLOSED SESSION-VOTING MEMBERS ONLY		
Adjournment. Next Meeting Date: March 21, 2022		

CONTRA COSTA REGIONAL MEDICAL CENTER
HOSPITAL AND HEALTH CENTERS

HOSPITAL POLICY NO. 357

ROLE OF THE DEPUTY SHERIFF AT HOSPITAL AND HEALTH CENTER SITES

I. PURPOSE

To define the role of the Deputy Sheriff at CCRMC and HCs. Criminal behavior will not be tolerated and may be prosecuted.

II. REFERENCES

HR Job Description for Deputy Sheriff
H & HC Policies 359, 360 and 361

III. POLICY

To improve the overall safety and security of HSD sites where a deputy sheriff is assigned and may be called to intervene when anyone engages in criminal behavior.

IV. AUTHORITY AND RESPONSIBILITY

All Hospital and Health Center Staff

V. PROCEDURE

Deputy Sheriffs are not to get involved in patient care matters.

Staff members may reach the assigned deputy via pager, two-way radio or overhead page. The Security office distributes the pager information.

The physician in collaboration with the patient treatment team will determine whether the patient's act was related or unrelated to a mental or medical disorder. If the act is determined to not be part of the patient's clinical condition the deputy may be called. If the Deputy is to take law enforcement action, the patient will be discharged. Deputies may become involved in order to prevent death, assaults or great bodily harm.

For the purposes of this policy, an assault is a purposeful act of choking, hitting, kicking, biting, pushing, scratching, punching, pulling hair, or unwanted forceful physical contact by a patient against another person (another patient, visitor, staff member or provider) that has the potential for or causes bodily injury.

VI. FORMS

None

VII. RESPONSIBLE STAFF PERSON

Security Chief

WRITTEN: 10/2013
REVIEWED: 11/2021
REVISED: 12/21

Attachment A MEC Policies

CONTRA COSTA REGIONAL MEDICAL CENTER
HOSPITAL AND HEALTH CENTERS

HOSPITAL POLICY NO. 360

SECURITY PROGRAM

I. PURPOSE

The purpose of this policy is to enunciate and clarify the role of the Health Services Security Program for Contra Costa Regional Medical Center and Health Centers.

II. REFERENCES

California Labor Code, Chapter 3, Section 6401
The Joint Commission EC.02.01.01, EC.04.01.01, EM.02.02.05
Contra Costa Regional Medical Center Policy No. 108, "Adverse Event Reporting."
Ambulatory Care Policy No. 1040, "Adverse Event Reporting."
California Health and Safety Code 1257.7

III. POLICY

It is the policy of the Contra Costa Regional Medical Center and Health Centers to provide adequate security to patients, clients, staff, and property through the Department's Security Program. The program is administered and enforced by the Chief, located at the Hospital, and by Deputy Sheriffs, and Sheriff's Rangers at various Health Centers (including the CCRMC). The primary mission of the Security Unit is to protect persons and secondarily to protect property. Whenever possible, Security Personnel will act to defuse a potentially violent situation verbally, without physical contact and with as little disruption of normal activities as possible.

IV. AUTHORITY/RESPONSIBILITY

A. Chief – HSD Security Unit – Telephone 370-5331, FAX 370-5906
The HSD Security Chief holds the rank of LT in the CCCSO and is primarily responsible for the administration and enforcement of the Security Program. He/she works under the direction of the Chief Executive Officer and provides security information and advice to other staff as requested. He/she serves as a member of the CCRMC and Health Centers Environment of Care Committee.

B. Assistant Manager – HSD Security Unit – Telephone 370-5192~~330~~

1. The Assistant Manager – HSD Security Unit holds the rank of Sgt in the CCCSO and is primarily responsible for the day-to-day operations of the Security Unit as well as direct supervision of all Security Personnel. His/her supervisory responsibilities include the establishment and enforcement of security standards and reporting requirements and the development of security plans, policies, and procedures, and developing and maintaining the Security Unit Training Program. He/she works under the supervision of the Chief.
2. All Security Unit personnel are under the direct supervision of the Assistant Manager. However, because of the assignments to outpatient clinics, Security personnel will function administratively under the general guidance of their Health Center site coordinators or their designees. Day-to-day administrative instructions of Health Center Administrators must not conflict with the security standards, reporting requirements, plans, policies, and procedures established by the HSD Security Unit Chief/Assistant Manager.

C. CCRMC & Health Centers Security Program Offices

Location	Telephone
CENTRAL COUNTY SITES	
Contra Costa Regional Medical Center 2500 Alhambra Avenue, Martinez	Days - 925-370-5330 Nights - 925-370-5000 CCRMC - Dial 0 (routine) Emergency -333 (Stat Line) FAX - 925-370-5906
EAST COUNTY SITES	
Pittsburg Health Center 2311 Loveridge Rd., Pittsburg	Days 925-431-2319
WEST COUNTY SITES	
West County Health Center 13601 San Pablo Ave., San Pablo	Days 510-231-9496
North Richmond Center for Health 1501 Fred Jackson Way ~~3~~ 3rd Street, Richmond	Days—— 510-231-1355~~370-7176~~

V. PROCEDURE

A. Chief of HSD Security

The Chief administers the Security Program, conducts periodic inspections/visits and coordination with Security Unit Program offices at various county locations. Maintains a liaison with all county Police Departments and the Sheriff's Office.

B. Assistant Manager

The Assistant Manager – Security Unit responds to security requirements when available on-site at HSD facilities during day and evening operations. Assists with periodic inspections/visits and coordination with Security Offices at outpatient clinic locations and maintains liaison with all county Police Departments and the Sheriff's Office. He/she may consult with Clinic Administrators and Security Unit personnel in carrying out responsibilities for the design and implementation of security systems.

C. HSD Security

Security Unit Personnel patrol designated areas, protect patients, clients, staff, and property at outpatient clinic locations in accordance with instructions from the Assistant Manager and in coordination with their respective Clinic Administrators. They report immediately by phone to the Assistant Manager of any unusual security problems or violations and follow-up oral reports by written, Adverse Event Reports (SERS), Security Program reports, and/or Police reports as applicable. Security Unit

personnel will secure their building at the conclusion of the business day unless otherwise directed.

At the Medical Center, Security will ensure all exterior doors except the third floor Allen Street and ambulance entrance are secured at 2030 hours. These doors remain locked until 0530. Security Unit personnel will also ensure that the other buildings on the CCRMC campus have been properly secured at the end of their business day.

D. Disaster

In event of a major disaster at any site where Security Unit personnel are located and especially disasters involving the Hospital, HSD Security Unit personnel from other locations may be brought in to the disaster site to provide security assistance until returned to their normal stations by the Chief.

VI. FORMS USED

Safety Event Reporting System (SERS)
Health Services Department Security Unit Report Form (Public Service 2 & 3).
Health Services Department Security Unit F.I. Card (PSO1)
Health Services Department Security Unit Activity Cards

VII. RESPONSIBLE STAFF PERSON

Chief of HSD Security

REVIEWED/REVISED 9/98; 5/01, 10/03, 5/07; 10/10, 5/13

CONTRA COSTA REGIONAL MEDICAL CENTER
HOSPITAL AND HEALTH CENTERS

NURSING NURSERY POLICY: 3.142

SODIUM BICARBONATE, INTRAVENOUS ADMINISTRATION

I. PURPOSE:

To specify the nursing methodology to be used when administering IV Sodium Bicarbonate to newborns.

II. REFERENCES:

Sodium Bicarbonate. Micromedex products (2021). https://www.micromedexsolutions.com/micromedex2/librarian/PFActionId/evidencexpert.GetNeofaxDrugMonograph?navitem=neofaxDrugMonographDocRetrieval&drugName=Sodium+Bicarbonate&tabSelected=neonatal#.

TJC. 2021. MM 06.01.01. *The hospital safely administers medications*. PC 02.02.21. *The hospital recognizes and responds to changes in the patient's condition.*

III. POLICY:

A ~~trained~~ registered nurse ~~with nursery experience~~ will safely administer sodium bicarbonate per physician's orders~~. and in accordance with the recommendations of the Neonatal Resuscitation Program, 5th edition~~.

Recommended dosing:

2 mEq/kg/dose, given as a 4.2% concentration solution (0.5 mEq/ml). ~~at a rate no faster than 1 mEq/kg/min.~~

~~BACKGROUND:~~

~~Sodium bicarbonate neutralizes hydrogen ion concentration and raises blood and urinary pH. It is used to manage metabolic acidosis following birth asphyxia.~~

~~**When sodium bicarbonate mixes with acid, carbon dioxide is formed. The lungs must be adequately ventilated to remove the CO2 before administering sodium bicarbonate.**~~

~~Sodium bicarbonate is very caustic and hypertonic and therefore must be given into a large vein, preferably the umbilical vein. Be sure that there is good blood return from the line before administering the sodium bicarbonate.~~

IV. AUTHORITY/RESPONSIBILITY:

~~Experienced~~ Nnursery nurses and~~,~~ physicians ~~pediatricians, pharmacists~~

V. PROCEDURE:

A. ~~Obtain~~ Acknowledge MD order ~~from physician and check that the dose is in the recommended range.~~
B. Obtain vital signs and O2 saturation prior to administration
C. Ensure adequate ventilation by verifying good chest rise and bilateral breath sounds.

D. Obtain sodium bicarbonate 4.2% concentration solution from the Nursery Omnicell
E. ~~Fax order to pharmacy~~ Check medication concentration and dose with a second Nursery RN
F. ~~Assure~~ Ensure that umbilical venous catheter or peripheral IV is set up and ~~is~~ patent. ~~with good blood return.~~
G. ~~Assure that good breath sounds are heard bilaterally and chest movement is present with ventilation.~~
~~H. Obtain vital signs and O2 saturation prior to administration.~~
I. ~~Obtain sodium bicarbonate 4.2% solution from the infant crash cart.~~
~~J. Assure UVC line and tubing are set up correctly.~~
~~K. Check medication concentration and dose with a second RN.~~
~~L. Assure that~~ Communicate to the ~~resuscitation team is aware that sodium bicarbonate infusion has begun and when it is completed.~~
M. ~~Obtain MD order for R~~rRepeat blood gas analysis post administration per MD orders.
N. Document administration ~~completed~~ in ccLink on MAR.

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VI. DOCUMENTATION:

ccLink
Intensive Care Nursery Flow sheet MR517-4
Medication Administration Record MR727-4

APPROVED BY:
Pediatric Department: 11/2021
Clinical Practice Committee:
Patient Care Policy and Evaluation Committee:
Medical Executive Committee

REVIEWED/REVISED:
4/2010, 5/2017, 1109/2021

CONTRA COSTA REGIONAL MEDICAL CENTER
HOSPITAL AND HEALTH CENTERS

NURSING NURSERY PROCEDURE: 3.70

~~FORMULA FEEDING OF THE NEWBORN~~

FORMULA: SAFE ~~FORMULA: SAFE~~ PREPARATION, STORAGE AND FEEDING

I. PURPOSE

To describe the methodology to be used when preparing, storing and ~~initiating~~ formula feeding ~~of~~ a newborn.

II. REFERENCES~~:~~

American Academy of Pediatrics (AAP) Committee on Fetus and Newborn, American College of Obstetricians and Gynecologists (ACOG) Committee on Obstetric Practice, and others. (2017). Chapter 10: Care of the newborn. In *Guidelines for perinatal care* (8th ed., pp. 347-408). Elk Grove Village, IL: AAP. (Level VII)

Stanzo, K. (2019). Chapter 22: Infant feeding. In S.S. Murray and others (Eds.), *Foundations of maternal-newborn and women's health nursing* (7th ed., pp. 606-632). St. Louis: Elsevier.~~American Academy of Pediatrics, and American College of Obstetricians and Gynecologists (1992) Guidelines for Perinatal Care. Washington D.C.: Author.~~

TJC, (202~~1~~~~6~~), Standard PC.03~~1~~.02.01, "*The hospital provides education and training based on each patient's needs and abilities.* ~~assesses and reassesses its patients.~~"

III. POLICY

Nursing staff will support the decision of a mother who wishes to ~~bottle~~ formula feed her newborn. ~~by offering instruction on method and infant safety.~~ Mothers that have decided not to breastfeed, "mixed-feed", or who require supplementation with formula for their newborns at the time of discharge, must receive written instruction and verbal information about safe preparation, storage and feeding of formula. ~~Staff should document completion of formula preparation instruction and feeding in the medical record.~~ The information should be given on an individual basis only.

IV. AUTHORITY/RESPONSIBILITY

Licensed nursing personnel

V. PROCEDURE

A. Review MD order for type of formula, amount and feeding method

~~A.~~ B. Evaluate suck-swallow coordination~~,~~

C. Feed babies ~~on demand or keep to a flexible schedule~~ on cue, frequent low volume feeds with paced technique unless the infant's condition or physician indicates otherwise.

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~~C.~~ D. Sterile caps should be kept on bottles and nipples until the baby is ready to feed. A sharp click is heard when the bottle is first opened.

~~D.~~ E. Instruct parents/caregivers on the ~~(reinforce)~~ use of bulb syringe (see patient teaching guidelines) and make sure ~~mother can reach~~ bulb syringe and ~~her~~ call light are within reach ~~button~~.

~~D.~~ F. Instruct mother on ~~Paced Bottle Feeding~~

~~2.~~ ~~Watch for baby~~ hunger cues:

1. ~~–~~Hands near the mouth

~~b.~~ 2. ~~-~~Arms and legs bending toward body

~~c.~~ 3. ~~–~~Sucking noises

~~d.~~ 4. ~~-~~Puckered lips

~~e.~~ 5. ~~–~~Rooting toward nipple

~~3.~~ G. Feeding ~~baby~~the newborn (Paced Feeding):

~~a.~~ 1. ~~–~~Hold the ~~baby~~ newborn upright

~~b.~~ 2. Eye to eye contact

~~c.~~ 3. ~~–~~Brush the bottle nipple across ~~baby's~~ newborn's upper lip and wait for mouth to open.

~~d.~~ 4. Hold the bottle in an almost flat position, so that the nipple is only partly full of formula. ~~an almost flat position. The nipple will be only partly full.~~

5. ~~–~~Let ~~baby~~ the newborn pause and take breaks every few sucks. The ~~baby~~ newborn will typically feed for about 15-20 minutes.

~~e.~~ 6. Burp newborn after feeds or as needed

H. ~~3.~~ Watch for signs of fullness:

~~a.~~ 1. ~~–~~Sucking slower or stops sucking

~~b.~~ 2. ~~-~~Relaxation of hands and arms

~~c.~~ 3. ~~–~~Turning/pushing away from nipple

4. Falls asleep

I. Regurgitation/Vomiting

1. If vomit is undigested or partially digested formula, wait 15 minutes then refeed volume-for-volume

2. Bilious (bright green or yellow) vomit may indicate an obstruction. Hold feedings.

3. Notify physician

J. Provide parent(s)/caregiver(s) with "Preparing Infant Formula" pamphlet, and education on the preparation, storage and feeding of formula.

K. Document all feedings, events and education provided in ccLink

~~d.~~

~~e. Letting a baby set the pace means less chance of overfeeding, gas, stomach discomfort, and spitting up.~~

~~E.~~A. ~~Have mother feed infant during waking hours unless otherwise ordered. Encourage mother to feed her infant during the night.~~

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~~Refeeding after regurgitation~~

~~2. Wait 15 minutes and refeed volume-for-volume with formula.~~

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~~F.~~B. ~~Vomiting~~

~~1. Document in notes~~

~~2. Notify Physician as condition warrants.~~

~~feedings. Notify physician.~~

~~3. Bilious vomiting means obstruction, until proven otherwise. Hold feedings. Notify physician.~~

~~G.~~C. ~~Record amount and time of all feedings, in the progress notes.~~

~~H.~~D. ~~Make frequent rounds to all mothers and babies to reinforce teaching and assure that fresh formula is available.~~

VI. ATTACHMENTS

Addendum ~~A.~~A: Formula Preparation Handout, English~~Preparing Infant Formula Pamphlet~~

Addendum B: Formula Preparation Handout, Spanish

VII. DOCUMENTATION:

~~VII.~~ ccLink

Newborn Nursery Care (MR540A)

Nursing Care Record (MR541)

Newborn Intensive Care Flow sheet (MR517-4)

~~VIII. REFERENCES:~~

~~American Academy of Pediatrics, and American College of Obstetricians and Gynecologists (1992) Guidelines for Perinatal Care. Washington D.C.: Author.~~

~~TJC 2016 Standard PC.01.02.01, "The hospital assesses and reassesses its patients."~~

APPROVED BY:

Pediatric Department: 11/2021

Clinical Practice Committee

Patient Care Policy and Procedure Committee:

Medical Executive Committee:

REVIEWED/REVISED:

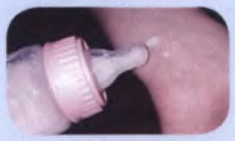
6/2007, 4/2010, 5/2017, 11/2021

General Guidelines for Preparing All Types of Formula

1. **Clean the surface** and equipment used to prepare formula.
2. **Wash your hands** with soap and water and dry with a clean towel.
3. **Use a safe water source.** Tap water is best in most areas. If you have any concerns, talk to your doctor about your water source.
4. **Before opening the container,** rinse and dry the top of the container. Check the expiration date.
5. **Read the directions** on the can for mixing the formula.

Adding too much formula or not enough formula can make your baby sick.

6. **Before you feed the baby, always test the temperature** of the formula. Shake a few drops of formula on your wrist. It should feel warm, not hot.



7. **To warm formula**, put the bottle in a ***small bowl of hot water***, and then shake the bottle to mix well. To cool the formula, put the bottle in a cup of cold water with ice.
   - Test the temperature again on your wrist before feeding the baby.

How Long Should You Keep Formula?	
Once you start to feed the baby	Discard after 1 hour
Prepared formula left unused at room temperature	Discard after 2 hours
Prepared formula in refrigerator (40 degrees F or less)	Discard after 24 hours

Do not heat the formula or bottle in the microwave.

Cleaning Equipment

1. **Wash your hands with soap and** water and dry with a clean towel.

2. **Wash all bottles and equipment** used to make formula in hot soapy water. Use a bottle and nipple brush to remove all formula from the previous feeding.

3. **Rinse the bottles, nipples and equipment with clean water.**
4. **Sterilize the bottles, nipples and equipment** by putting them in a pot of water and boiling them for one minute. Be sure the bottles, nipples and equipment are completely covered in the water.

5. **Keep the pot covered** until you need the bottles or put the nipples and caps on the bottles and store them in a clean area for later use.

Attachment A MEC Policies

PRI
INFA

Breast Milk

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**Infants
breastmilk s**

H

Powdered Formula

Powdered formula is not sterile and may have harmful bacteria in it. The water must be ***hot*** (greater than 158 degrees F) in order to kill bacteria in the powdered formula.

1. **Start with cold tap water.** Boil the water for 1 minute, then let it cool slightly, but no more than 30 minutes. The water must be hot enough to kill the bacteria.

2. **Pour the hot water into clean bottles,** Fill the bottles exactly to the 2 oz., 4 oz. or 6 oz. line on the bottle, depending on how much your baby eats at each feeding.

3. **Use the scoop in the formula container** to measure the formula. Fill the scoop up and level it off with a knife. **Do NOT** pack it down. Return the clean and dry scoop to the can.

How Much Formula?	
Water	**Powdered Formula**
2 oz.	Add 1 scoop
4 oz.	Add 2 scoops
6 oz.	Add 3 scoops

- Most newborn babies only eat two to four ounces per feeding. To make a three-ounce feeding, prepare a six-ounce bottle and divide it into two three-ounce bottles. ***Avoid using half-scoops*** of powder.

4. **Put the nipples and caps on the bottles**, shake well, and test the temperature on your wrist. It should feel warm not hot.

5. **Feed the baby or store** the bottle in the refrigerator for use within 24 hours.

Formula from Concentrate

When making formula from concentrate, add an equal amount of water and formula to make a feeding.

1. **Before opening the can**, wash and dry the top. Shake the can and open with a clean can opener.

2. **Pour the entire can of concentrate** into a pitcher. Using the same can, add a can of tap water. The water does not need to be boiled, unless advised by the doctor.

3. **Mix well and fill each bottle for one feeding**. Put the nipple and cap on the bottle.

4. **Test the temperature on your wrist** and feed the baby or store the bottle in the refrigerator for use within 24 hours.

STORING TIP:

Label the pitcher or bottles of formula with the date and time to avoid feeding your baby formula that has expired.

Reac

This f

1. Shake the con formula well.
2. Pour enough bottles for eac any other wat
3. Put the nippl
4. Test the temp on your wrist. hot. Feed the l in a refrigerato

Trave

What do I do wh

- Store the for before you le cold bottles c insulated bag the baby the warm the for hot water to
- Use single-p formula bott nipples and c when the bab

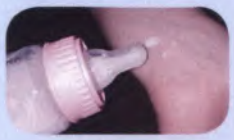
Pautas Generales para Preparar Todo Tipo de Formula

1. **Limpie la superficie** y los utensilios empleados para preparar la formula.
2. **Lávese las manos** con agua y jabón, y séquese con una toalla limpia.
3. **Use una fuente de agua segura. El agua de la llave es la mejor en la mayoría de las zonas.** Si tiene inquietudes, converse con su médico acerca de su fuente de agua.
4. **Antes de abrir el envase,** enjuague y seque la tapa del recipiente. Verifique la fecha de vencimiento.

5. **Lea las instrucciones** que figuran en la lata para mezclar la formula.

Si agrega una cantidad excesiva o insuficiente de fórmula, podría hacerle mal a su bebé.

6. **Antes de alimentar al bebé, compruebe siempre la temperatura** de la formula. Vierta algunas gotas de la leche sobre su muñeca. Debe estar tibia, no caliente.



7. **Para entibiar la formula,** coloque el biberón en un ***tazón pequeño de agua caliente,*** y luego agite el biberón para mezclar bien. Para enfriar la formula, coloque el biberón en una taza de agua fría con hielo.

- Vuelva a probar la temperatura en su muñeca antes de alimentar al bebé.

¿Cuánto Tiempo debe Conservar La Formula?	
Una vez que empiece a alimentar al bebé	Deseche al cabo de 1 hora
Formula preparada que le sobre sin utilizar a temperatura ambiente	Deseche al cabo de 2 horas
Formula preparada en el refrigerador (el refrigerador debe estar a 40° F o menos)	Deseche al cabo de 2 horas

NO caliente la formula /el biberón en el horno de microondas.

Utensilios de Limpieza

1. **Lávese las manos con agua** y jabón, y séquese con una toalla limpia

2. **Lave todos los biberones y los utensilios** empleados para preparar la formula con agua caliente jabonosa. Use un cepillo para biberón y tetina para eliminar toda la leche que haya quedado de comidas anteriores.

3. **Enjuague los biberones, las tetinas y los utensilios con agua limpia.**
4. **Esterilice los biberones, las tetinas y los utensilios** sumergiéndolos en una olla con agua y hiérvalos durante un minuto. Asegúrese de que los biberones, las tetinas y los utensilios estén completamente cubiertos por el agua.

5. **Mantenga la olla tapada** hasta que necesite los biberones o coloque la tetina y la tapa en los biberones y guárdelos en un lugar limpio para utilizarlos después.

Cór Fórmu

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La Organiza alimentar a los durante los prin puede brinda crecimiento y e para

Aquellos l nece

Formula en Polvo

La fórmula en polvo no es estéril y puede contener bacterias perjudiciales. El agua debe estar CALIENTE (a más de 158° F) para eliminar las bacterias presentes en la formula en polvo.

1. **Comience con agua fría del de la llave.** Hierva el agua durante 1 minuto. Luego déjela enfriar un poco, pero no más de 30 minutos. El agua debe estar lo suficientemente caliente como para eliminar las bacterias.

2. **Vierta el agua caliente en biberones limpios,** según la cantidad que tome su bebé en cada comida. Asegúrese de llenar los biberones exactamente hasta la línea del biberón que marca 2 onzas, 4 onzas o 6 onzas.

3. **Use el medidor del envase de la fórmula** para medir la leche. Llene el medidor con la formula en polvo y quite el excedente con un cuchillo. **NO** presione la leche en polvo hacia abajo. Vuelva a colocar el medidor limpio y seco en la lata.

¿Qué cantidad de formula?	
Agua	**Formula en Polvo**
2 onzas	Agregue 1 copa medidora
4 onzas	Agregue 2 copa medidora
6 onzas	Agregue 3 copa medidora

- La mayoría de los recién nacidos toman solo de 2 a 4 onzas por alimento. Para elaborar un alimento de 3 onzas, prepare un biberón de 6 onzas y vierta la preparación en dos biberones de 3 onzas. ***Evite usar la mitad del medidor*** de polvo.

4. **Coloque las tetinas y las tapas en los biberones,** Agite bien y pruebe la temperatura de la leche sobre su muñeca. Debe estar tibia, no caliente.

5. **Alimente al bebé o guárdela en** el refrigerador para usar dentro de las próximas 24 horas.

Formula Concentrada

Al preparar formula con leche concentrada, deberá agregar agua. Añada una cantidad de agua equivalente a la cantidad de fórmula para preparar un alimento.

1. **Antes de abrir la lata,** lave y seque la parte superior. Agite la lata y ábrala con un abrelatas limpio.

2. **Vierta todo el contenido de la lata de leche concentrada en una jarra.** Con la misma lata, agregue una lata de agua de la llave. No es necesario que el agua esté hervida, a menos que lo indique el médico.

3. **Mezcle bien y llene cada biberón para un alimento.** Coloque la tetina y la tapa en el biberón.

4. **Coloque las tetinas y las tapas en los biberones,** agite bien y pruebe la temperatura de la leche sobre su muñeca. Debe estar tibia, no caliente.

5. **Alimente al bebé o guárdela en** el refrigerador para usar dentro de las próximas 24 horas.

SUGERENCIA DE CONSERVACIÓN:

Coloque una etiqueta sobre la jarra o los biberones de formula con la fecha y la hora para no darle a su bebé leche vencida.

Form

Est
y N

1. **Agite el envase**
2. **Vierta una can formula en bib cada comida.** N ningún otro líq
3. **Coloque la teti**
4. **Coloque las tet los biberones,** temperatura de Debe estar tibia
5. **Alimente al be** refrigerador pa próximas 24 ho

Cómo

¿Qué debo hacer

- Guarde la for antes de salir biberones frí bolso térmic hielo. Dele al ponga la lech caliente para

- **Use** biberone ***para usar*** de Lleve tetinas colocar en el esté listo par

CONTRA COSTA HEALTH SERVICES

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MEDICAL EXECUTIVE COMMITTEE AGENDA

CHAIR-KRISTIN MOELLER, M.D.
March 21, 2022
12 to 2:00p

As the elected leadership of the CCRMC/HCs Medical Staff, we stand against racism and hate. *We recognize the negative impact of longstanding structural racism on health, and we commit to take action to combat this in our own system and work for health equity for our patients.*

Join Zoom Meeting
https://cchealth.zoom.us/j/8544948118
Meeting ID: 854 494 8118
****If you are on phone only for the Zoom, use *6 to mute/unmute**

Agenda Topic	Status	Time
Call to Order		
Review of February 28, 2022 Minutes	See attached Draft Minutes.	2 min.
Announcements (3 min)		

- **April 18, 2022 MEC meeting reports to Sue by April 7, 2022**
  - Medical Staff Assistance Committee
  - CCHP Health Plan-Sharron Mackey
  - Department of Hospital Medicine-Dr. Beach
  - MERP – Dr. Ataii
  - Diagnostic Imaging-Dr. Liebig
  - Cancer Committee-Dr. Gynn
  - Emergency Medicine-Dr. Aarden
  - FNP/NP-Heather Cedermaz
  - Surgery Department-Dr. Dosanjh
  - Administrative Affairs Committee-Drs. Robello & Tyrrel
  - Utilization Review Committee-Dr. Rael
  - Inpatient Psychiatry-Dr. Bhandari

Please use the standard SBAR form for your reports -You will be given 5 minutes in which to present your report. **PLEASE DATE YOUR REPORT AND NUMBER THE PAGES. Be sure to include your executive summary which can be added to the minutes. Next meeting April 18, 2022**

CONTRA COSTA HEALTH SERVICES

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MEDICAL EXECUTIVE COMMITTEE AGENDA

CHAIR-KRISTIN MOELLER, M.D.
March 21, 2022
12 to 2:00p

Agenda Topic	Status	Time
ADMINISTRATIVE REPORTS		
Anna Roth, Health Services Director Ori Tzvieli, Health Officer, Director of Public Health Pat Godley, CFO for Health Services Gilbert Salinas, Chief Equity Officer, HS Jaspreet Benepal, RN, Chief Nursing Officer Samir Shah, M.D., Chief Executive Officer/Chief Medical Officer Vacant - Chief Quality Officer David Runt - Chief Operations Officer	Rajiv Pramanik, M.D.- CMIO Gabriela Sullivan, M.D.- Specialty/Ambulatory Medical Director Sergio Urcuyo, M.D.- Hospital Medical Director Sonia Sutherland, M.D.-Medical Director, Detention Health Sharron Mackey, MHS, Chief Executive Officer CCHP Dennis Hsieh, M.D., Medical Director/CMO CCHP	
NEW BUSINESS		
Department of Health Equity	Gilbert Salinas	5 min.
Funding Requests for 2022-2023 have been sent out-see your email-Due to Sue April 7	Dr. Forman	3 min.
Ballots for Department Heads have been sent out-due April 11th	Dr. Forman	2 min.
Approve $10,500.00 Doctors' Day Gifts	Dr. Forman	3 min.
Approve Dr. Veda Bhatt as Chair of the Medical Staff Assistance Committee-Vote Needed	Dr. Forman	3 min.
CCHS Wellness Presentation	Dr. Sutherland & Dr. Johnson	5 min.
OLD BUSINESS		
Bylaws go to Board of Supervisors on 3-22-22 for approval.	Dr. Forman	3 min.
Consent Agenda		
Medication Safety Committee-Dr. Ataii	See report.	5 min.
PCP&E-Dr. Forman Policy 410: Confidentiality Agreement for Non-Medical Staff Members & Other Personnel Associated with Medical Staff, Peer Review, Committees or Activities	See report. Please ask if you wish to see a specific policy and it will be sent to you.	5 min.
COMMITTEE REPORTS		
Credentials Committee- Dr. Mbanugo List of Candidates - Vote needed	See report.	3 min.

CONTRA COSTA HEALTH SERVICES

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MEDICAL EXECUTIVE COMMITTEE AGENDA
CHAIR-KRISTIN MOELLER, M.D.
March 21, 2022
12 to 2:00p

Agenda Topic	Status	Time
Patient Safety and Performance Improvement Committee - Dr. Beach	No report this month.	3 min.
APC - Dr. Pyrkova **AC Nursing Policy 4045 Outpatient Diagnostic Hysteroscopy**	See report.	3 min.
Contra Costa Health Plan-Sharron Mackey	Pending	5 min.
DEPARTMENT & DIVISION REPORTS		
Psychiatry/Psychology Department-Dr. Guss	See report.	5 min.
Diagnostic Imaging-Dr. Liebig	Pend to April.	5 min.
Pathology Department-Dr.Das	Pending.	5 min.
Surgery Peer Review	See report	5 min.
ADJOURN TO CLOSED SESSION-VOTING MEMBERS ONLY		
Adjournment. Next Meeting Date: April 18, 2022		

CONTRA COSTA REGIONAL MEDICAL CENTER **HOSPITAL POLICY NO. 410**
HOSPITAL AND HEALTH CENTERS

CONFIDENTIALITY AGREEMENT FOR NON-MEDICAL STAFF MEMBERS AND OTHER PERSONNEL ASSOCIATED WITH MEDICAL STAFF, PEER REVIEW, COMMITTEES OR ACTIVITIES

I. PURPOSE:

To establish an atmosphere of confidentiality to ensure adequate exchange of information in quality assurance and peer review activities.

II. REFERENCES:

Evidence Code, 1157
CCRMC/HCs Policy & Procedure Manual, Policy No. 700 Policy on Confidentiality of Patient Information.

III. POLICY:

Effective peer and quality review require support from staff individuals who are not medical staff members. It is imperative that these activities be based on free and candid discussion. For that reason, the same standards of confidentiality mandated by the medical staff by-laws shall be extended and in effect for non-medical staff engaging/supporting the same activities. Any breach of confidentiality of the discussions or deliberations of medical staff departments, divisions, committees, or activities except in conjunction with other hospital, professional society, or licensing authority is outside appropriate standards of conduct.

IV. AUTHORITY/RESPONSIBILITY:

Manager, Medical Staff Coordinators and Clerks of the Medical Staff Office (MSO);Utilization Review Coordinators – Quality, Quality Management Program Coordinators; other personnel as appropriate.

V. PROCEDURE:

A. Non-medical staff employees who provide support to medical staff departments, committees, and/or activities engaged in medical staff quality assurance or peer review activities will be required to sign an attestation (see attachment) committing to confidentiality. The departments, committees, and/or activities include the following but are not limited to:
   1. Patient Safety and Performance Improvement Committee
   2. All Medical Staff Department and Division Meetings
   3. Risk Management Committee
   4. Perinatal Morbidity and Mortality Committee
   5. Quality Management Department Meetings.
   6. Bio-Ethics Committee.
   7. Medical Quality Assurance Committee.
   8. Medical Executive Committee.
   9. Psychiatry Utilization Review.
   10. Cancer Committee.
   11. Critical Care Committee.
   12. Patient Care Policy and Evaluation Committee.

B. Employees are required to sign the "Confidentiality Agreement for Non-Medical Staff

Members and Other Personnel Associated with Medical Staff Peer Review Committees/Activities" form. This form is for:

1. All nursing and ancillary members of the committees listed above including permanent, guest, one-time, or one-issue members;
2. All other personnel associated with Medical Staff, Peer Review Committee Activities; such as case reviewers, abstractors, collectors, and data entry personnel.

C. A signature need only be obtained once. It is the responsibility of the minute taker/staff support person assigned to the committee to obtain signed forms.
D. Completed forms are to be stored with current committee minutes in binder or folder.
E. Individuals violating this agreement are subject to disciplinary action as deemed appropriate including application to accord for injunctive or other legal action.

VI. FORMS:

Confidentiality Agreement

VII. RESPONSIBLE STAFF PERSON

Medical Staff President

REVIEWED/REVISED 5/97; 3/01; 12/2021
MEC APPROVAL 3/15/22
JCC/BOARD APPROVAL

CONTRA COSTA REGIONAL MEDICAL CENTER **HOSPITAL POLICY NO. 410**
HOSPITAL AND HEALTH CENTERS

QUALITY MANAGEMENT DEPARTMENT
MEDICAL STAFF PEER REVIEW COMMITTEES
MEDICAL STAFF SUPPORT PERSONNEL

CONFIDENTIALITY AGREEMENT

Confidentiality agreement for non-medical staff members and other personnel associated with medical staff peer review committees or activities.

As a non-medical staff member or guest, or as a support individual to a committee involved in the evaluation and improvement of the quality of care rendered in the hospital and clinics, I recognize that confidentiality is vital to the free and candid discussions necessary for effective medical staff peer review, quality assurance, and other confidential activities. Therefore, I agree to respect and maintain the confidentiality of all discussions, deliberations, records and other information generated in connection with these activities, and to make no voluntary disclosures of such information except to persons authorized to receive it in the conduct of medical, nursing, or other ancillary staff affairs.

Furthermore, my participation in peer review, quality assurance, and other confidential activities is in reliance on my belief that the confidentiality of these activities will be similarly preserved by every other member of the medical, nursing, or other ancillary/support staff involved in these activities. I understand the hospital, clinics and the medical staff are entitled to undertake such action as deemed appropriate to ensure that this confidentiality is maintained, including application to a court for injunctive or other relief in the event of a threatened breach of this agreement.

DATE:

NAME:
(Please print name)

SIGNATURE:

CONTRA COSTA REGIONAL MEDICAL CENTER **AC NURSING POLICY NO: 4045**
HOSPITAL AND HEALTH CENTERS

OUTPATIENT DIAGNOSTIC HYSTEROSCOPY

I. PURPOSE:

To provide guidelines for the nurse assisting the physician in performing a hysteroscopy in Ambulatory Care.

II. REFERENCES:

Royal College of Obstetricians and Gynaecologists (RCOG), British Society for Gynecological Endoscopy. Best practice in outpatient hysteroscopy. London (UK): Royal College of Obstetricians and Gynaecologists (RCOG); 2011 Mar. 22 p. (Green-top guideline; no. 59).

Linda D. Bradley, Tommaso Falcone. "Hysteroscopy: Office Evaluation and Management of the Uterine Cavity." Elsevier Health Sciences, 2008.

TJC 2016 Standard PC.01.02.15, "The hospital provides for diagnostic testing."

III. POLICY:

Whenever a hysteroscopy is performed in Ambulatory Care, the nurse will have the following equipment and follow the procedure as outlined below.

IV. AUTHORITY/RESPONSIBILITY

RN, LVN

Nursing Staff will be trained on the use of the hysteroscope and procedure. Staff will maintain their clinical skill annually.

V. PROCEDURE

A. Assemble the following equipment and supplies:
   1. 1000mL normal saline for irrigation (1) hanging bag
   2. Tall IV pole
   3. Pressure bag/blood pressure cuff to be place around fluid medium bag to maintain distention
   4. 1% Lidocaine without epinephrine 20cc OR 1% Lidocaine with Epinephrine (20cc). (Physician to decide preference).
   5. 10mL Syringe with control top (2)
   6. 18-gauge needle (1)
   7. 22G Spinal needle (1)
   8. Sterile gloves
   9. GYN Pelvic Kit
   10. Open-sided speculum
   11. Betadine solution
   12. Biopsy forceps for rigid scope graspers and whatever else provider needs or thinks s/he needs.
   13. Light source
   14. Bucket (to catch irrigation fluid) if not using the under-buttock drape with funnel
   15. Chuxs (for floor around bucket) and/or Under Buttock Drape with Funnel

B. Patient Preparation/Education:
   1. Obtain necessary consent.
   2. Have patient empty his/her bladder.
   3. Explain procedure and provide emotional support to the patient.

4. Have patient undress from the waist down
5. Cover patient with sheet.
6. Have patient put feet in stirrups.
7. Assess for allergy to NSAIDs, betadine and lidocaine%.

C. Nursing Functions:
1. Time In and Pre-medicate patient with Ketorolac 30mg IM, or Ibuprofen 600mg PO x 1, or Acetaminophen 650mg X 1, per MD EPIC order.
2. Procedure consent must be signed by the patient prior to taking Narcotics, If Narcotics were prescribed for the procedure by the provider.
3. Place all instruments on sterile field.
4. Hang normal saline for distention with hysteroscopy set (keep tip sterile).
5. Open GYN pelvic set and pour Betadine over gauze.
6. Drop gloves on sterile field when provider is ready to start.
7. Open and drop needles and syringes into sterile pelvic kit field.
8. Hook up light source and Video:
   a. Provider will hand you sterile end.
   b. Turn light source setting per providers preferences
9. Time Out
10. Sign Out.
11. At end of procedure ensure counts correct and that the pathology is correctly labeled.

Check list:
1. Introduction of team members to patient
2. Safety check of monitoring and emergency equipment
3. 2 patient identifiers confirmed
4. Confirmed consent
5. Confirmed procedure
6. Special precautions (e.g., MRSA)
7. Review of test results (pregnancy)
8. Confirmed Allergies
9. Confirmed Medication if any (antibiotics)
10. Any special patient concerns
11. Check sterility indicators
12. Any special instrument or implants
13. Post procedure volume of normal saline used in uterine distension if applicable
14. Specimen labelling and management
15. Any equipment issues

D. Care of scopes after procedure:
1. Rinse/soak scopes as directed by sterile processing and place in soiled utility room for central supply tech to process.
2. Sterile processing to be performed per manufactures instructions

E. Document and charge for procedure in cclink.

The original policy written by Ogo Mbanugo, MD

REVISED AND APPROVED BY APC:
1/2016, 4/2016, 2/2022

REVIEWED AND APPROVED BY:
ACPC: 7/2016
Medical Executive Committee: 8/2016**, 03/2022**

CONTRA COSTA HEALTH SERVICES

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MEDICAL EXECUTIVE COMMITTEE AGENDA

CHAIR-KRISTIN MOELLER, M.D.
April 18, 2022
12 to 2:00p

As the elected leadership of the CCRMC/HCs Medical Staff, we stand against racism and hate. *We recognize the negative impact of longstanding structural racism on health, and we commit to take action to combat this in our own system and work for health equity for our patients.*

Join Zoom Meeting
https://cchealth.zoom.us/j/8544948118
Meeting ID: 854 494 8118
****If you are on phone only for the Zoom, use *6 to mute/unmute**

Agenda Topic	Status	Time
Call to Order		
Review of March 21, 2022 Minutes	See attached Draft Minutes.	2 min.
Announcements (3 min)		
• **May, 2022 MEC meeting reports to Sue by May 5, 2022** ○ Critical Care-Dr. Forman ○ DFAM-Dr. Sandler ○ Department of Hospital Medicine-Dr. Beach ○ Medical Staff Assistance Committee-Dr. Bhatt ○ CCHP Health Plan-Sharron Mackey ○ Pathology-Dr. Das ○ Cancer Committee-Dr. Gynn ○ Utilization Review Committee-Dr. Rael Please use the standard SBAR form for your reports -You will be given 5 minutes in which to present your report. **PLEASE DATE YOUR REPORT AND NUMBER THE PAGES. Be sure to include your executive summary which can be added to the minutes. Next meeting May 16, 2022**		
ADMINISTRATIVE REPORTS		
Anna Roth, Health Services Director Ori Tzvieli, Health Officer, Director of Public Health Pat Godley, CFO for Health Services Gilbert Salinas, Chief Equity Officer, HS Jaspreet Benepal, RN, Chief Nursing Officer Samir Shah, M.D., Chief Executive Officer/Chief Medical Officer Vacant - Chief Quality Officer David Runt - Chief Operations Officer	Rajiv Pramanik, M.D.- CMIO Gabriela Sullivan, M.D.- Specialty/Ambulatory Medical Director Sergio Urcuyo, M.D.- Hospital Medical Director Sonia Sutherland, M.D.-Medical Director, Detention Health Sharron Mackey, MHS, Chief Executive Officer CCHP Dennis Hsieh, M.D., Medical Director/CMO CCHP	
NEW BUSINESS		

CONTRA COSTA HEALTH SERVICES

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MEDICAL EXECUTIVE COMMITTEE AGENDA

CHAIR-KRISTIN MOELLER, M.D.
April 18, 2022
12 to 2:00p

Agenda Topic	Status	Time
Financial Report-Dr. Moeller	Dr. Moeller-See report	5 min.
Department Head-Voting Results **ED - Dr Aarden elected** **Critical Care - Dr Elangovan elected** **Psychiatry - Dr Guss elected** **Ob/GYN - Dr C. Wong elected** **DFAM Far East division - Dr David Lee** **DFAM West County - Dr Sheldon** **DI-TBD** **Surgery-Tie Vote**	Dr. Moeller	3 min.
OLD BUSINESS		
		3 min.
Consent Agenda		
Medication Safety Committee-Dr. Ataii	See report	5 min.
PCP&E-Dr. Forman IC502 Sudden Influx of Infectious Patients, Surge Capacity Plan 2021-2022 IC227 Respiratory Hygiene Guidelines IC421 Controlled Air Purifying Respirator 364 Hospital Policy: 364- Code Blue 364C Protected Code Blue 364F Code Blue Workflow in PES Psych Nursing Policy -Helena Martey 403 Overview of the Department of Psychiatry 530 Code Gray and Assistance Calls Hospital Policy -Helena Martey 364 Hospital Policy: 364- Code Blue 364C Protected Code Blue 364F Code Blue Workflow in PES	See report	5 min.
COMMITTEE REPORTS		
Credentials Committee- Dr. Mbanugo List of Candidates - Vote needed	See report	3 min.

CONTRA COSTA HEALTH SERVICES

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MEDICAL EXECUTIVE COMMITTEE AGENDA
CHAIR-KRISTIN MOELLER, M.D.
April 18, 2022
12 to 2:00p

Agenda Topic	Status	Time
Patient Safety and Performance Improvement Committee - Dr. Beach	Oral report	3 min.
APC - Dr. Pyrkova **Policy 4107-Direct Admission to CCRMC**	See report	3 min.
Contra Costa Health Plan-Sharron Mackey	Pending	5 min.
Cancer Committee-Dr. Gynn	Pend to May	5 min.
Administrative Affairs Committee-Drs. Robello & Tyrrel	See report	5 min.
Utilization Review Committee-Dr. Rael	Pend to May	5 min.
DEPARTMENT & DIVISION REPORTS		
Psychiatry/Psychology Department-Inpatient-Dr. Bhandari	See report	5 min.
Diagnostic Imaging-Dr. Liebig	See report	5 min.
Pathology Department-Dr.Das	Pend to May	5 min.
Department of Hospital Medicine-Dr. Beach	Pend to May	5 min.
FNP/NP-Heather Cedermaz	See report	5 min.
ADJOURN TO CLOSED SESSION-VOTING MEMBERS ONLY		
Adjournment. Next Meeting Date: May 16, 2022		

RESPIRATORY HYGIENE GUIDELINES

I. PURPOSE:

To provide guidelines for the implementation of Center for Disease Control and California Department of Health Services' recommendations to limit the spread of communicable respiratory illness within the healthcare setting. The term given to these guidelines is "Respiratory Hygiene."

II. REFERENCES

CAL OSHA, Title 8 Section 5199, Aerosol Transmissible Diseases July 2009

Hospital Infection Control Practices Advisory Committee (HICPAC), Centers for Disease Prevention and Control, "Guidelines for Isolation Precautions in Healthcare Settings," June 2007. (Downloaded 7/5/07)

Department of Health and Human Services, Centers for Disease Control and Prevention, "Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health Care Settings," MMWR, December 30, 2005, Vol. 54 No. RR-17

III. POLICY:

To minimize the transmission risk of communicable respiratory illness in the health care setting, Contra Costa Regional Medical Centers and Health Centers will adopt a series of measures known as "Respiratory Hygiene."

Respiratory Hygiene is comprised of infection control measures aimed at reducing the transmission of respiratory illness (e.g. influenza, colds etc.) by containing droplets at the source where they are produced (nose, mouth) through the use of tissues and masks.

IV. AUTHORITY/RESPONSIBILITY:

Infection Prevention and Control Program Manager
Ambulatory Care Clinical Services Managers
All Emergency Department Personnel
All Health Center Personnel

V. PROCEDURE:

A. Signs will be placed at hospital and clinic entrances encouraging people who are ill with a respiratory illness to cover their mouth and nose when coughing.
   - The signs will encourage persons with fever and cough and/or rash to ask for a mask.

B. At entry, triage or registration, all persons presenting with symptoms of a respiratory illness will be asked to wear a mask. The person will be instructed in the proper use and disposal of the mask after use.
   - CCRMC and CCHC employees are encouraged to ask coughing

persons to wear a mask or cover their cough with tissue.
- Triage and registration personnel will have access to an adequate supply of masks and tissues.
- A supply of masks will be available in publicly accessible areas.
- Trash containers will be located to facilitate appropriate disposal of masks and tissues.

C. Persons who cannot wear a mask will be provided with tissues to cover the nose and mouth when coughing or sneezing. The person will also be instructed in the appropriate disposal of used tissues.
- Designate a specific waiting area or section for these patients.
- Place the patient into a treatment or examination room.

D. Whenever possible, persons with respiratory illness will be physically separated from other patients.
- Minimize the number of areas within the hospital or clinic to which the person must travel.
- Advise ancillary departments to expedite the patient's time within their department.
- Alert the departments that the patient should remain masked.

E. If possible, expedite the person's visit within the Emergency or Ambulatory Care Center. Encourage Handwashing for both staff and patients.
- Increased availability of alcohol based hand gel dispensers.
- Adequate supplies of soap and towels at sink areas.

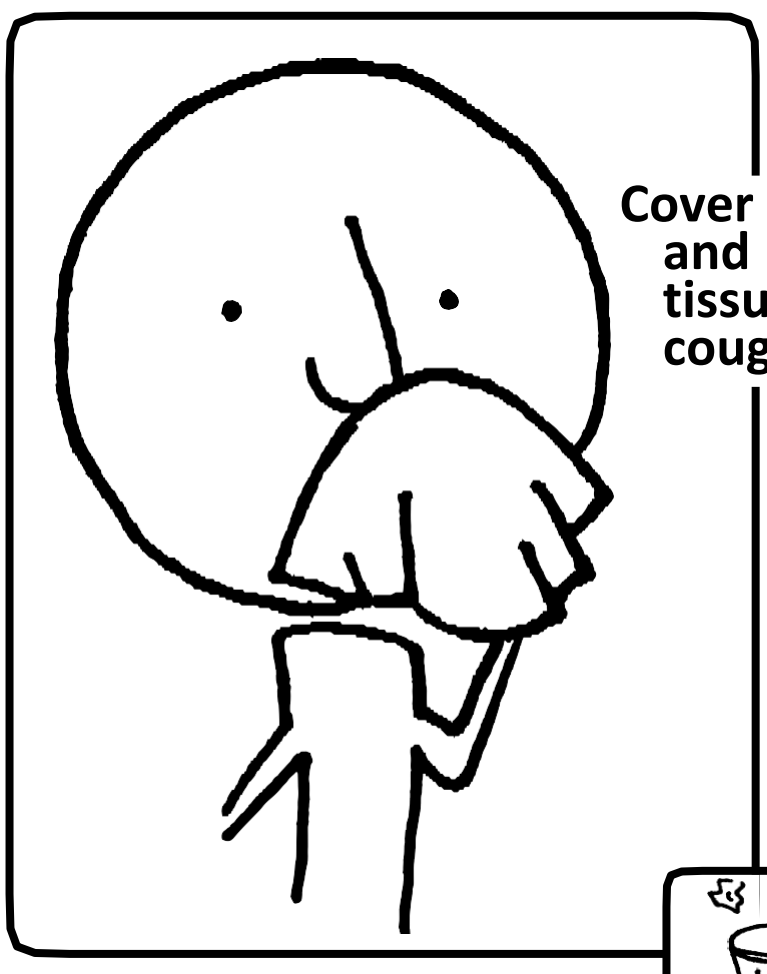
V. DOCUMENTATION:

Sign A Cover your Cough English
Sign B Cover your Cough Spanish

REVIEWED:
6/2008 (new), 6/2013, 8/2017, 2/2022

Stop the spread of germs that make you and others sick!

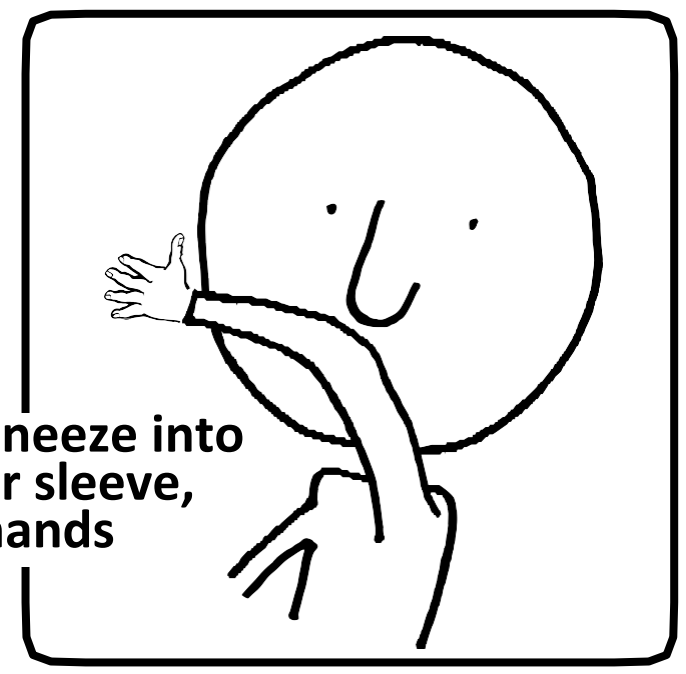
Cover your Cough



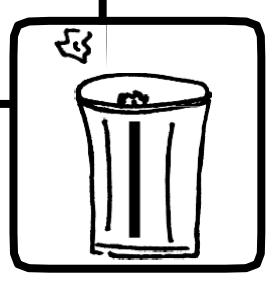
Cover your mouth and nose with a tissue when you cough or sneeze

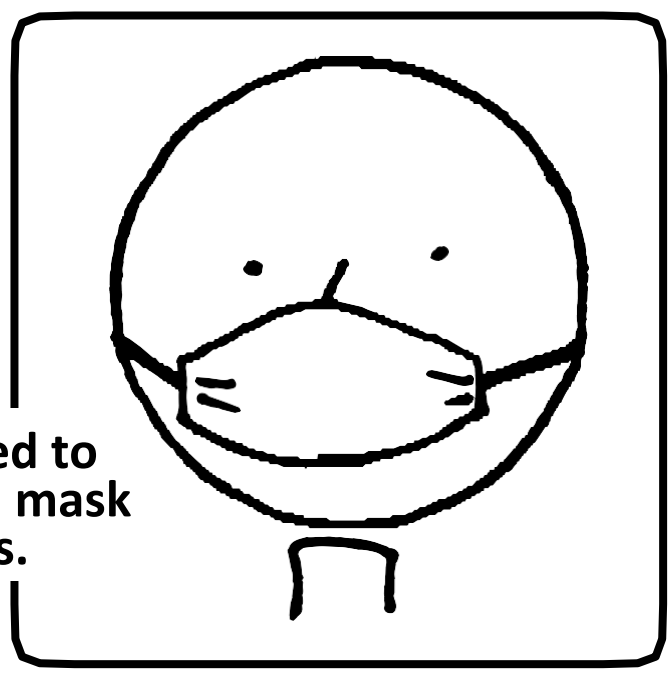
or

cough or sneeze into your upper sleeve, not your hands



Put your used tissue in the waste basket.

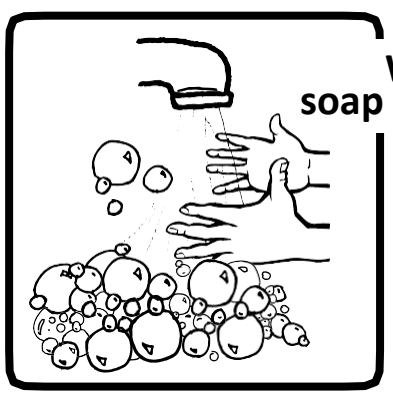




You may be asked to put on a surgical mask to protect others.

Clean your Hands

after coughing or sneezing.



Wash with soap and water

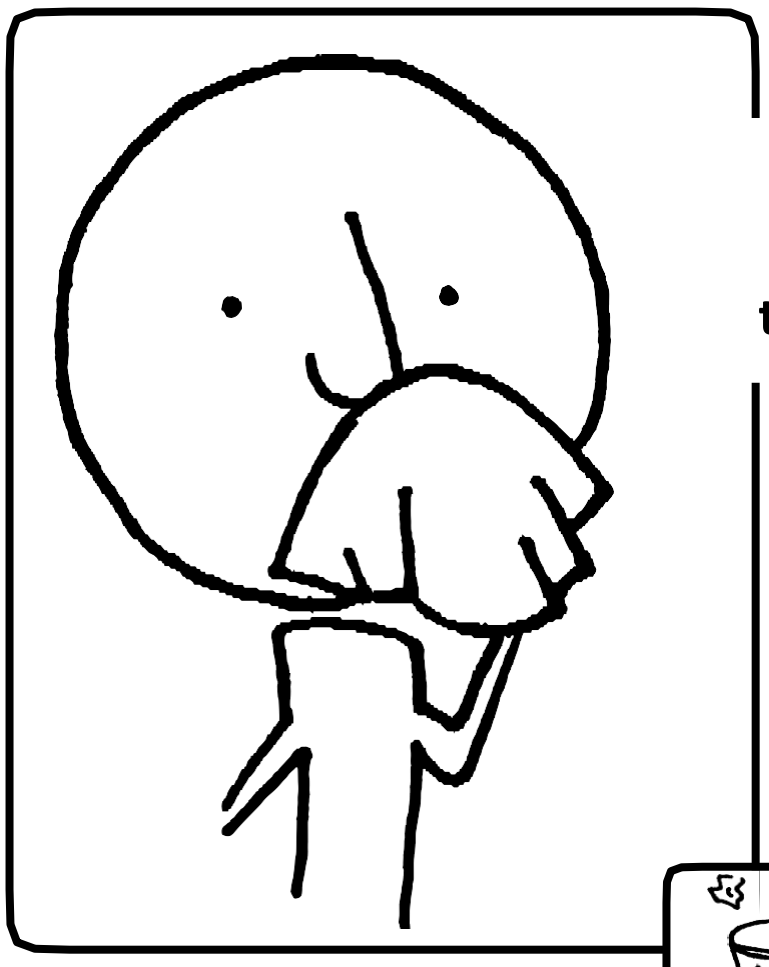
or

clean with alcohol-based hand sanitizer.

CONTRA COSTA HEALTH SERVICES

¡Pare la propagación de gérmenes que lo enferman a usted y a otras personas!

Cubra su tos

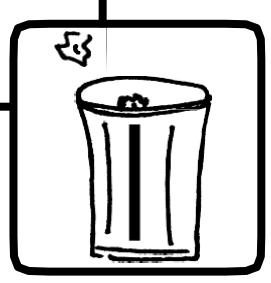


Cubra su boca y nariz con un kleenex cuando tosa o estornude

o

tosa o estornude en la manga de su camisa, no en sus manos.

Deseche el kleenex sucio en un basurero.



Quizás le pidan ponerse una mascarilla quirúrgica para proteger a otras personas.

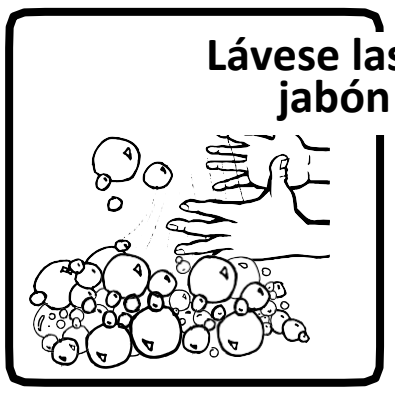
Lávese las manos

después de toser o estornudar

Lávese las manos con jabón y agua tibia

o

límpielas con un limpiador de manos a base de alcohol.



CONTRA COSTA HEALTH SERVICES

CONTRA COSTA REGIONAL MEDICAL CENTER **POLICY IC421**
HOSPITAL AND HEALTH CENTERS

CONTROLLED AIR PURIFYING RESPIRATOR (CAPR)

I. PURPOSE:

To provide a higher level of protection for employees who are performing aerosol-generating procedures on a patient with suspected or confirmed illness with an Airborne Transmissible organism.

To provide an alternative to the fit tested N95 respirator for the following persons or situations:

- Employee has facial hair in the mask area that precludes the use of a 95N Respirator
- Employee cannot achieve an adequate fit with a 95N Respirator
- There is a shortage of 95N Respirators

II. REFERENCES:

CAL OSHA, Title 8 Section 5199, Aerosol Transmissible Diseases July 2009

Hospital Infection Control Practices Advisory Committee (HICPAC), Centers for Disease Prevention and Control, "Guidelines for Isolation Precautions in Healthcare Settings, June 2007. (Downloaded 7/5/07)

Department of Health and Human Services, Centers for Disease Control and Prevention, "Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health Care Settings", MMWR, December 30, 2005, Vol. 54 No. RR-17

Maxair, CAPR Owner's Manual, training DVD.

III. POLICY:

Employees who have facial hair in the mask fit area may not use a N95 respirator and must use a CAPR when providing care to patients in Airborne Precautions.

Employees who cannot be fit tested or achieve an appropriate fit with the N95 respirator will also be required to use a CAPR when providing care to patients in Airborne Precautions.

When an Airborne Transmissible Disease is suspected, all persons in the room where an aerosol generating procedure (e.g., bronchoscopy, etc.) is being performed will wear a Controlled Air Purifying Respirator (CAPR).

When supplies of N95 respirators are low, the hospital may move to expand the use of CAPRs to patient care areas. Additionally, in any situation where a higher level of respiratory protection is needed, hospital administration may elect to move to the use of a

Controlled Air Purifying Respirator (CAPR). In an emergency, PAPRs may be used in addition to CAPRs

No fit testing is required to use a CAPR. Education and check-off are required.

IV. AUTHORITY/RESPONSIBILITY:

CCRMC personnel
Cardiopulmonary Personnel
Infection Prevention and Control Committee
Infection Prevention and control Program
Hospital and Health Center Administration

V. PROCEDURE:

A. OBTAINING AND USING A CAPR

1. Any employee with facial hair or who cannot wear a N95 respirator will utilize a CAPR when entering the room of a patient in Airborne Precautions.

2. CAPR and supply locations:
    a. Individual Nursing Units
    b. Detention – check with NPM or Charge nurse
    c. Ambulatory Care-Clinic charge nurse or CSM
    d. RT Department 3rd floor CCRMC

3. The CAPR will be used as follows:
    - The employee will place a surgical cap over his/her hair before donning the CAPR.
    - If Universal masking (masks required at all times while working) or masking if not immunized against influenza – the employee should wear a standard surgical mask while wearing the CAPR
    - CAPR donning and doffing reminders will be posted outside of the negative pressure airborne isolation room.
    - The employee will inspect the CAPR prior to use to verify that it is complete and functioning properly.
        - If soiled replace the front comfort band
        - Attach the disposable lens cover (DLC) prior to using the CAPR. The assembled device may be used for their entire shift.
        - Remove the Battery from the charger and attach to the CAPR unit.
            - Check lights to determine battery life and proper operation
    - At the end of the shift, the employee will remove and dispose of the lens cover and front comfort band. The surgical cap, lens cover and front comfort band should be discarded in the trash.

- The plastic helmet, battery and cable will be wiped with a disinfectant wipe before being placed on shelf/counter for storage.
- Attach the battery to the charging unit.
- If there is a shortage of the lens covers (DLC), the employee may use the same lens cover for their entire shift – should be wiped down with disinfectant wipe.

B. FILTER CHANGE AND BATTERY CHARGING

1. The Bio Medical Engineering Department is responsible for changing the filters and rotating the batteries.
    - Filters will be changed when indicated by light on the CAPR
    - Batteries will be rotated to ensure that they are appropriately discharged/charged

C. EMPLOYEE EDUCATION

1. Employees who are required to use a CAPR will be educated in its use.
    - Education and Skills Check-up will be performed annually
    - Education will be via E learning. Check-off is in person

.

APPROVED:
Patient Care Policy & Evaluation Committee: 09/2017

REVIEWED: 07/2017, 5/21, 2/22

REVISED: 7/2017, 5/21, 2/22

CONTRA COSTA REGIONAL MEDICAL CENTER
CONTRA COSTA HEALTH CENTERS

Attachment A

Diseases/Pathogens Requiring Airborne Infection Isolation

- Aerosolizable spore-containing powder or other substance that is capable of causing serious human disease (Anthrax/*Bacillus anthracis)*
- Avian influenza/Avian influenza A viruses (strains capable of causing serious disease in humans)
- Varicella disease (chickenpox, shingles)/Varicella zoster and Herpes zoster viruses; disseminated disease in any patient. Localized disease in immunocompromised patient until disseminated infection ruled out.
- Measles (rubeola)/Measles virus
- Monkeypox/Monkeypox virus
- Novel or unknown pathogens
- Severe acute respiratory syndrome (SARS)
    - SARS
    - MERS
    - COVID19
- Smallpox (Variola)
- Tuberculosis (TB)/*Mycobacterium tuberculosis* -- Extrapulmonary, draining lesion; Pulmonary or laryngeal disease, confirmed; Pulmonary or laryngeal disease, suspected
- Any other disease for which public health guidelines recommend airborne infection isolation

High hazard procedures.

Procedures performed on a person who is a case or suspected case of an aerosol transmissible disease or on a specimen suspected of containing an ATP-L, in which the potential for being exposed to aerosol transmissible pathogens is increased due to the reasonably anticipated generation of aerosolized pathogens.

Such procedures include, but are not limited to, sputum induction, bronchoscopy, aerosolized administration of pentamidine or other medications, and pulmonary function testing. High Hazard Procedures also include, but are not limited to, autopsy, clinical, surgical and laboratory procedures that may aerosolize pathogens.

CODE BLUE COVERAGE FOR MARTINEZ CAMPUS

I. PURPOSE:

To provide the necessary personnel and medical equipment needed in the event of a sudden or imminent life-threatening occurrence (Code Blue) in a patient or other person(s) present in the Contra Costa Regional Medical Center hospital , Martinez Health Infusion Clinic and Mobile CT trailer

.

If a Code Blue occurs in the remaining Martinez Health Center clinics or outside the main hospital building, **staff will call "9-911**" from any county phone **and provide BLS until EMS arrives (call 911 from the outside).**

To establish an organized Code Blue team that will attempt to restore adequate respiratory, hemodynamic, and neurologic function by providing basic (BLS) and advanced cardiac life support (ACLS) interventions.

II. REFERENCES:

Joint Commission on Accreditation and Healthcare Organizations Manual PC.9.30

, American Heart Association (AHA), 2020, *Advanced Cardiac Life Support Provider Manual*. Dallas, TX: AHA.

CCRMC/HCs Nursing Policy & Procedure Manual: Policy No. 201-CPR for Adults, Child and Infant; No. 204 – Code Blue Crash Cart Check; No. 206-Defibrilator, Directions for Testing and Use; No. 207-Crash Cart Exchange Program; No. 435 – Emergency Airway Support; No. 503 – Patient Expiration Policy

CCRMC Infection Control Manual, Section 400 – Employee Health

TJC PC.02.01.11, PC.02.01.20, PI.01.01.01, & PI.03.01.01 Standards for Resuscitation

III. POLICY:

All medical and direct care personnel will promptly recognize a life-threatening problem and provide BLS until the Code Blue or EMS personnel can assume care. For Code Blue in the Emergency Department See Policy #364 attachment A.

IV. AUTHORITY/RESPONSIBILITY:

The Code Blue Team is comprised of the following members:

1. MD Team Leader (one of the following):
   a. The Emergency Department (ED) Physician will be the Team Leader for Code Blues occurring throughout the hospital and Martinez Health Center Infusion Clinic, CT trailer with exception of the Operating Rooms (OR) and Post-Anesthesia Care Unit (PACU).
   b. In certain situations, the Hospitalist Physician - may support or take over from the ED Physician if there is verbal, explicit, eye-to-eye handoff.
   c. In the OR and PACU departments, the Anesthesiologist will run Code Blues unless the situation requires them to focus on the Airway. In those circumstances, the Anesthesiologist may delegate the role of MD team leader to the ED Physician with a verbal, explicit, eye-to-eye handoff.
2. Nurse Team Leader: Emergency Department (ED) RN

3. Medication Nurse: Intensive Care Unit (ICU) Charge Nurse
4. Recorder: 5D Floor RN
5. Compressor: 4B Floor RN/LVN
6. Respiratory Care Practitioner (RCP)
7. Medical Center Nursing Supervisor (MCS)
8. Nurse Program Manager (NPM) (Monday – Friday 0800 -1630).

V. PROCEDURE:

A. Staff will activate Code Blue by pressing wall Code Blue button (if applicable), or dialing "111" on any Martinez campus official county telephone to alert the operator to broadcast overhead announcement with the location and room number.

B. If Code Blue happen in Mobile CT trailer. Staff will call "111" for hospital Code Team and "911" for EMS

C. Upon notification of Code Blue the Operator will:
   - Activate an alert tone of three beeps and overhead announce "Code Blue," stating the exact location and the room number.
   - Repeat the announcement three times in succession. The announcement is repeated approximately 10 – 15 seconds after the initial call until the Code Blue is secured or cancelled.

D. If a Code Blue occurs in a locked unit or floor, see below:
   - If Code Blue occurs in the Operating Room (OR), the OR Charge Nurse will assign a person to be at the locked stairwell door to admit code team.

   Essential Code Blue Team members will NOT delay arrival (or be detained) for sterility concerns.
   - If Code Blue occurs in either of the locked psychiatric units, the Psychiatric Charge Nurse will assign a person to be at the locked door to admit the code team.
   - After hours the Medical Center Supervisor will ensure access to the locked locations.

E. Crash Carts with a defibrillator will be located in each patient care area as follows: ED third floor, Diagnostic Imaging, CT Trailer, Infusion Clinic, CCU, IMCU, Telemetry (4A), Medical Surgical (4B & 5D), Inpatient Psychiatry (4C &4D), - Psychiatric Emergency (3C), Labor and Delivery (5A), Postpartum (5C), in both Operating Room Areas on the 2nd and 5th Floors and Post Anesthesia Recovery Room (2C).
   Pediatric Color Coded Crash Carts will be located in the Emergency Department, Psychiatric Emergency, Diagnostic Imaging, CT trailer, - -
   Neonatal Crash Carts are located in the Nursery (5B), Labor and Delivery (5A) and in the 5th floor Operating room area.

F. After Initial Code Blue activation, staff will dial 111 to "Secure Code" ONLY when all Team Members have arrived, or to "Cancel Code" if Code was initiated accidentally.

G. Anesthesia will be overhead and beeper paged STAT for airway emergencies. Any anesthesiologist in-house will respond when available. Anesthesia will focus on airway securement. Apart from the OR/PACU, they will not serve as Code Blue MD Team Leader but rather as delegated by MD Team Leader.

H. Roles and Responsibilities:

At the beginning of each shift, the Nursing Office and Emergency Department (ED) will assign nursing and medical staff, respectively, to respond to Code Blue. A plan to relieve code members of their unit assignments for the duration of the code will also be established by the Charge Nurse at the beginning of each shift.

A team approach must be established and systematically followed by **all** healthcare staff involved in responding to Code Blues. All members of the code team are expected to identify themselves and their role upon arrival.

- The ED MD will respond to **ALL codes in the hospital regardless of the time of day.** The ED MD will lead all codes, with the exception of Anesthesia running codes in the OR/PACU (as stated above) unless otherwise requested.
- The ED MD can relinquish the responsibility of running a code to an experienced Hospitalist Physician if handoff is explicitly verbalized and agreed upon with a statement such as, "I am Dr. 'X' and I will be running this code."

Initial Responder Responsibility		
Personnel	Required Competency	Responsibilities
Initial Responder (s)	BLS	• Calls for help, activate Code Blue by pushing Code Blue button or dialing 111. • Initiates BLS algorithms • Brings Crash Cart • Brings anesthesia airway kit from the Omnicell, as soon as possible • Places Backboard from back of crash cart under patient • Places AED Pads on patient and turns on the defibrillator to AED mode.
Code Blue Team Member Responsibilities		
MD Team Leader • ED Physician • Hospitalist Attending (if there is a verbal, explicit, eye-to-eye handoff from ED Physician) • Anesthesiologist in OR/PACU (with exceptions if airway focus requires delegation of leadership role as stated above)	ACLS	• States "I am Dr. X and I will be running this code. • Directs and Coordinates the Code sequence • Coordinates the Code Team • Discourages any intervention which results in interruptions of CPR • Orders medications during the Code • Ends the Code when appropriate • Summarize the events and the final status in the Medical Record • Collaborates with MCS to conduct debriefing session with Team and to arrange communication with family. • Delegates necessary procedures (e.g.,

		intubation, compressions, intra-osseous catheter placement) to other team members.
Residents cont'd.	ACLS	• Under direct supervision of Attending Physician Team Leader. • Can function as Co-Team Leader if explicitly verbalized. • Can assist with procedures such as intubation or intra-osseous catheter placement (with supervision). • Can assist with compressions and forming compressor line. • Can assist with family communication.
Nurse Team Leader ED RN	ACLS	• Assists Physician Team Leader with procedural flow of Code • Manages Defibrillator and rhythm strips • Collects data, verbalizes vital signs, including rhythms, to MD and recorder. • Keeps track of Code Sequence. • Facilitates identification of members of the code team: MD Team Leader, Medication Nurse, Recorder and themselves. • Coordinates with MCS to Secure Code once all team members have arrived. • Assists with other duties as required, including providing Respiratory Care Practitioner with end-tidal CO2 tubing and monitor.
Medication Nurse ICU Charge Nurse or ICU Relief Charge Nurse	ACLS	• Obtains IV access as required • Administers Medication and communicates medication administration to MD team leader and recorder • Ensures the set up of Lines and Drips with required labels
Recorder Floor RN	BLS	• Identifies self on arrival and physically positions self alongside the MD Team Leader and Nurse Team Leader to facilitate effective communication of Code sequence and updates during the Code Blue. • Maintains written record of Code sequence. • Serves as Code time keeper and notifies team of 2 minute intervals.

		• Completes Code Blue under supervision of Nursing and Physician Team Leaders
Compressor Floor Nurse (RN/LVN)	BLS	• Performs chest compressions as required • Coordinates rotation of compressors every 2 minutes to ensure high quality CPR • Sets up compressor line (either on periphery of room or outside the room) in order to facilitate transitions between compressors
Respiratory Care Practitioner	ACLS	• Assist with airway establishment and maintenance • Provides artificial ventilation and supplemental oxygen as needed • Established end-tidal CO2 monitoring and secures it to patient
Medical Center Supervisor(MCS)/Nurse Program Manager (NPM) MCS/NPM cont'd.	ACLS	• Liaison between Hospital and Patient's family. Will arrange social support for family members who desire to bear witness to code blue. Will provide contact information for family who are not present. • Ensures distribution of needed personal protective equipment to Code Blue team members who may be at risk of body fluid exposure. • Arranges for additional coverage in the event of simultaneous Code Blues. • Assigns a runner and/or other resources as needed. • Coordinates with Nurse and MD team leader to confirm all Code Team members are present and call Code Secure to operator. • Ensures code blue debriefing occurs. • Completes Code Blue Critique Form after EVERY Code Blue. • Takes responsibility for yellow Code Blue record copy. • Arranges for ICU bed as appropriate.

I. Post-Resuscitation Care Responsibilities:
   1. After Return of Spontaneous Circulation (ROSC), the Code Blue Team is Responsible for providing intensive care and monitoring the patient until:
      a. Patient is transported to the next level of care

b. Patient is stable and the care is officially turned over to the patient's primary physician and nurse.

2. MD Team Leader:
   a. Remains at patient's bedside and accompanies patient to the next level of care or **ensures delegation** of responsibility to appropriate party.
   b. Reassesses patient's condition, orders/obtains labs if appropriate, arranges for appropriate invasive lines/tubes to be placed.
   c. Requests or provides expert consultation to determine if patient meets criteria for post-cardiac arrest therapeutic hypothermia, and if so, arranges for orders to be entered into ccLink and cooling to be started at the bedside.
   d. Writes "Code Documentation" note in patient's medical record in ccLink.
   e. Ensures that family has been contacted and that a physician will be available to speak to them upon their arrival.
3. Recorder
   a. Ensures that all required documentation is completed accurately with required signatures.
   b. Ensures that rhythm strips are attached to the back of the original Code Blue record and submitted to Medical Center Supervisor.
4. Medical Center Supervisor/Nursing Program Manager
   a. Ensures that Code Blue Critique Form is completed and submitted appropriately for Quality Review.
   b. Requests for rapid debriefing (if not already performed).

J. In the event of death:
   1. MD Team Leader will pronounce death and write Code Documentation note in the patient's medical record in ccLink.
   2. MD Team Leader (or designee) informs patient's family as soon as possible in a quiet, private area. The physician will inform family of the circumstances and cause of death, if known.
   3. Nursing personnel will prepare patient for family visit.
   4. Nursing Program Manager or Medical Center Supervisor will notify chaplain at family's request (if not already present), and support family and nursing staff. See Patient Expiration Policy #503 and Post-Mortem Care Policy #310.

K. Quality Review: Ongoing review of outcomes regarding resuscitation will be discussed at the Code Blue Committee Meetings.

L. Periodic Education and Training includes resuscitation procedures , protocol , equipment, roles and responsibility are provided to staff

VI. FORMS:

Code Documentation Note in ccLink
Code Blue Record MR 201 - 8
Code Blue Critique Form (A-601)

VII. ATTACHMENTS

364-A Code Blue in emergency department
364-B Code Blue Critique form

364-C Protected Code Blue (Code Blue during COVID19 Pandemic)
364-D Code Blue Record
364-E Physician on scene
364-F Code Blue Workflow in PES

VIII. RESPONSIBLE STAFF PERSON:

Chair of the Code Blue Subcommittee
Chair of the Critical Care Committee

Reviewed/Revised: 8/99, 9/03,2/03.2/04, 11/10, 9/13, 05/14, 3/2018, 7/2020, 8/2021, 2/2022

APPROVED BY:
Code Blue Committee 9/13, 3/2018, 8/2021
Critical Care Committee 9/13, 2/2022
Clinical Practice Committee 7/2020, 9/2021, 2/2022
Patient Care Policy & Evaluation Committee 8/2020, 9/2021, 3/2022
Medical Executive Committee 9/2020, 9/2021, 4/2022

PROTECTED CODE BLUE
(Code Blue during COVID19 Pandemic)

I. PURPOSE:

To supplement current Code Blue Policy during COVID-19 pandemic. To guide the Code Blue team that will attempt to restore adequate respiratory, hemodynamic, and neurologic function by providing basic (BLS) and advanced cardiac life support (ACLS) interventions. To establish the preferred medical equipment and Personal Protected Equipment (PPE) needed in the event of a sudden or imminent life-threatening occurrence (Code Blue) during the COVID-19 Pandemic in Contra Costa Regional Medical Center, Martinez Health Infusion Clinic and Mobile CT scan trailer during COVID-19 pandemic. If a Code Blue occurs in the remaining Martinez Health Center clinics or outside the main hospital building, **staff will call "9-911**" from any county phone **and provide BLS until EMS arrives (call 911 from the outside).**

II. REFERENCES:

AHA ACLS, PALs, And NRP Interim Guidance for Basic and Advanced Life Support in Adults, Children, and Neonates with Suspected or Confirmed COVID-19
Kaiser Permanente Northern California Mitigation Phase Playbook Coronavirus Disease 2019 (COVID-19)
Consensus statement: Safe Airway Society principles of airway management and tracheal intubation specific to the COVID-19 adult patient group. DJ Brewster, NC Chrimes, TBT Do, K Fraser
https://www.ahajournals.org/doi/full/10.1161/CIRCOUTCOMES.120.006779
Cardiopulmonary resuscitation during the COVID-19 pandemic: Maintaining provider and patient safety. B Sen-Crowe, M Sutherland, M McKenney, A Elkbuli. Am J Emerg Med 2020 Oct 15.

III. POLICY:

To safely manage patients with sudden cardiac arrest during the COVID-19 pandemic while protecting staff with proper PPE use.

IV. AUTHORITY/RESPONSIBILITY:

Hospital and Health Services Medical Director
Director Inpatient Nursing Operations
Code Blue Committee
Code Blue Team
Infection Control

V. PROCEDURE:

A. Personal Protective Equipment (PPE – as defined in this section, referred to as "PPE" through the remainder of this document**)**

a. Intubating team members (Physician Airway Manager and RT) should wear CAPRs
b. Anyone entering the patient's room must have donned appropriate PPE prior to entry (gloves, N95 or equivalent, eye shield; gowns are optional)

c. PPE are located in the bottom drawer of the adult crash cart include: 9 yellow gowns, 9 "goggles"/eye shields, 9 of each size of N95 mask, 1 clear plastic drape as optional protection
d. If patient transport is required after Return of spontaneous circulation (ROSC), appropriate PPE must also be worn in case rapid intervention is needed

B. The Code Blue Team Member Responsibilities:

INSIDE THE ROOM		
Personnel	**Required Competency**	**Responsibilities**
1st Responder	BLS	1. Confirms unresponsiveness. Checks for central pulse. 2. Calls for help 3. Dons PPE and role sticker 4. Applies NRB @15L/min and pulls sheet over patient's head. Does not bag valve mask until further instruction from airway physician. 5. Lays plastic drape over the patient's shoulder, neck, and face 6. Commences CPR 7. Places patient on cardiac monitor if available once 2nd responder takes over compressions. 8. Alternates compressions with 2nd responder and compressor 9. Gives report to Physician Team Lead and Code Team 10. Once Lucas is running, becomes the runner between inside and outside teams.
2nd Responder	BLS	1. Brings crash cart and leaves outside room 2. Dons PPE and role sticker 3. Brings in backboard, defibrillator, and defibrillator pads 4. Places backboard under patient 5. Places defibrillator at foot of bed, applies defibrillator pads and set to AED mode 6. Delivers shock if advised 7. Alternates compressions with first Responder and other available compressors inside the room as needed. 8. Doffs and leaves room once Lucas is running 9. Becomes the outside runner (retrieves items not on crash cart)
RN Team Lead	ACLS	1. Brings Lucas device to code 2. Dons PPE and role sticker 3. Places Lucas device on patient during pulse check 4. Manages Lucas
Medication RN	ACLS	1. Brings 2 CAPR bags to code 2. Dons PPE and role sticker 3. Verifies IV access/Obtains IV access 4. Manages defibrillator 5. Administers Meds
Recorder	BLS	1. Dons PPE and role sticker 2. Records events and keeps time

		3. Calls out 2-minute intervals for Pulse and Rhythm checks 4. Double checks documentation after code with RN Team Lead and Physician Team Lead
Compressor / Doffing Observer	BLS	1. Dons PPE only if third compressor needed. a) Alternates compressions with 1st and 2nd responders b) Doffs and leaves the room once LUCAS running 2. Observes Staff Doffing PPE 3. Ensures transport team changes gown and gloves prior to transport
PHYSICIAN TEAM LEAD (First experienced physician)	ACLS	1. Dons PPEand CAPR only if will also be intubating physician 2. Changes defibrillator to monitor mode. 3. Runs code 4. Places IO as needed 5. Double checks documentation with Recorder and RN Team Lead
AIRWAY PHYSICIAN (ED PHYSICIAN or most experienced airway physician)	ACLS	1. Brings CAPR bag to code blue, Butterfly US if desired 2. Dons PPE and CAPR 3. Prepares Glidescope 4. Reminds team to pause compressions and step back from patient immediately before intubating. 5. Once airway system is sealed, orders resume compressions. 6. Verifies tube location 7. Ensures ETT is clamped before switching to ventilator 8. Airway physician can consider bag valve mask a) RT to assemble ambu bag, PEEP valve (if applicable), viral filter, EtCO2 b) Strict two-handed mask technique must be used to avoid air escaping from mask into the environment of care 9. Once advance airway established, work to maintain closed circuit to minimize aerosolization
1st RT	ACLS	1. Dons PPE and CAPR 2. Sets up ETCO2 monitoring (for pre and post-intubation) 3. Sets up suction 4. Puts stylet in ETT 5. Receives assembled BVM from 2nd RT/inside runner and checks viral filter 6. Assists Airway Physician with intubation 7. Assists Airway Physician with 2 handed hold of BVM if needed 8. Clamps ETT if patient must be disconnected 9. Places patient on ventilator
OUTSIDE THE ROOM		
Unit Charge Nurse	BLS/ACLS	1. Designate unit clerk or other staff to call operator 111 2. Dons surgical mask and gloves 3. Manages crash cart - pass medications and supplies from crash cart to inside runner 4. Hands out PPE and role stickers, assists in donning
2nd RT	ACLS	1. Helps set up / obtain equipment for RT inside the room 2. Dons surgical mask and gloves
Outside	ACLS	1. Dons surgical mask and gloves with appropriate additional PPE

Physician Team Leader		ready if presence needed inside room 2. Assists and coordinates activities outside of the room, and leads post code debriefing 3. If there is a delay in Lucas delivery, then outside physician leader or MCS/NPM assigns 2 additional compression staff to don PPE and enter room to rotate as compressor
Medical Center Supervisor or Nurse Program Manager	ACLS	1. Establishes communication between outside team and inside team, crowd and noise control, assist with notifying family. 2. Secures code blue once verified that all team are present. Assigns unit clerk or staff to call operator to secure code blue. 3. Calls for debriefing after the code.
RRT Nurse	ACLS	Brings Glidescope and hands off to Outside Physician Team Lead

C. Post Code

a. Follow appropriate Infection Control Policies
b. Consider typical post ROSC medical procedures
c. Perform debriefing in an area that may permit physical distancing

D. Continuous Readiness - At the Beginning of Each Shift

a. 4B charge nurse will assign appropriately trained nurse compressor
b. 5D charge nurse will assign appropriately trained nurse recorder
c. ICU/Med RN will verify they have intubating physician and RT equipment in bag ready to bring to code blue:
   - 2 CAPRs + 4 shields/cuffs of each size
   - 2 charged battery packs (plug into helmet to confirm)
   - 2 bouffants (if available)
d. ER Code RN will confirm availability / functionality of Lucas Compression Device
   - Staff bringing equipment to code blue may need to use elevator given size/weight of the devices

VI. FORMS:

Code Documentation Note in ccLink
Code Blue Record MR 201 8
Code Blue Critique Form (A-601)

VII. ATTACHMENTS

364-A Code Blue in emergency department
364-B Code Blue Critique form
364-C Protected Code Blue (Code Blue during COVID19 Pandemic)
364-D Code Blue Record
364-E Physician on scene

VIII. RESPONSIBLE STAFF PERSON:

Chair of the Code Blue Subcommittee
Chair of the Critical Care Committee

Reviewed/Revised: 4/2020, 2/2022

APPROVED BY:
Code Blue Committee:
Critical Care Committee: 2/2022
Clinical Practice Committee: 2/2022
Patient Care Policy & Evaluation Committee: 9/2020, 3/2022
Medical Executive Committee:9/2020, 4/2022

CODE BLUE WORKFLOW in PES

Personnel	Responsibilities
Responder 1	Call help
Staff on the unit	Dial 111
Responder 2	Bring Crash Cart & Comfort Glide inflatable Hover mat 40'' x 80" from the clean utility room
Responder 1 & 2 or Charge Nurse	Slide patient to the floor (2 persons) if applicable
Responder 1	Perform CPR
Responder 2	Apply defibrillator pads and turn the knob to AED
Responder 2	Bring O2 tank, apply NRM with 100% O2: (BVM for COVID negative patient at 30:2)
Responder 2	Perform defibrillation when prompted for VT or V. Fib
Responder 1 & 2, Code Team	Put Comfort Glide under the patient during 10 sec. pulse check, **do not inflate the Hover mat**
Responder 1 & 2	Continue CPR for 5 cycles, provide SBAR to physician code team lead
Charge Nurse, or designee	Bring the -gurney to the hallway
Code Team Members	Move patient to hallway during 10 sec pulse check
Code Team Members	Lower the -gurney to the lowest level, utilize comfort glide to lift patient up to the stretcher
Code Team Members	Raise the -gurney, transfer patient to ED & Perform CPR on route
Code Team Members	Secure all devices and patient
Charge Nurse	Open doors for patient transport, ensure no PES patients AWOL
Code Team Members	Transfer patient from stretcher to ED gurney

Note:
NRM – non-rebreather mask
BVM – bag valve mask
Review 5/19/2021, 2/9/2022

CONTRA COSTA REGIONAL MEDICAL CENTER **NURSING PSYCHIATRIC POLICY: 403**
HOSPITAL AND HEALTH CENTERS

INPATIENT PSYCHIATRY PSYCHOLOGICAL TESTING

I. PURPOSE:

To provide guidelines for the neuro-psychological testing needs of patients on the Inpatient Psychiatric Service.

II. REFERENCES:

TJC 2021 Standards: PC.02.01.05.
Title 22: Section 71205.

III. POLICY:

Patients hospitalized on an Inpatient Psychiatry Unit may receive neuro-psychological testing by a psychologist if the attending psychiatrist determines that it is necessary.

IV. AUTHORITY/RESPONSIBILITY:

Psychiatry Chief(s), Psychiatrists, Nursing Program Managers (NPMs), Nursing Staff, Mental Health Clinical Specialist/Medical Social Worker (MHCS/SW)

V. PROCEDURE:

A. On site neuro-psychological testing is requested by the attending psychiatrist.
   1.
B. The attending psychiatrist uses these guidelines to determine if Neuro-Psychological testing may be helpful:
   1. Patient diagnosis is uncertain.

   2. Patient remains confused, delusional, violent or regressed, and demonstrates no improvement. Patient demonstrates no significant improvement with medication.

C. The coordination of the testing is arranged by the MHCS or SW and communicated to the Charge Nurse.

D. Within one (1) day of completing neuro-psychological testing, the testing psychologist will contact the attending physician with a verbal report of their findings.

E. A written report by the psychologist is sent to the attending psychiatrist. Or when feasible, a consulting note is completed in the Electronic Medical Record.

DOCUMENTATION:

Patient Care Record in ccLink

APPROVED BY:

Clinical Practice Committee 1/2018, 2/2022
Patient Care Policy & Evaluation Committee 3/2022
Medical Executive Committee 4/2022

CODE GRAY AND ASSISTANCE CALLS

I. PURPOSE:

Provide guidelines for Code Gray and Assist Team calls throughout the Hospital in order to safely manage patients with behavioral escalations or emergencies.

II. POLICY:

Code Gray calls are requests to manage escalating patient behavior that can be considered an emergent threat to the safety of the patient and/or others.

Assist calls are non-emergent requests to assist managing patients with challenging behavioral issues.

The Team members who respond to these calls are certified in safe de-escalation and take-down techniques by the Crisis Prevention Institute (CPI). Team members are scheduled to respond to calls during the shifts they work in their primary roles. Team members receive additional pay from the County for this work.

All staff at CCRMC complete annual workplace safety training to recognize the early signs of escalating behavior, and to take appropriate steps to prevent or mitigate workplace violence. All nursing staff at CCRMC must also complete required C.P.I. training for their department and role to safely manage aggressive or escalating behavior and behavioral emergencies.

III. AUTHORITY/RESPONSIBILITY:

Psychiatry Chief(s), Director of Inpatient Nursing Operations, Nursing Program Managers (NPMs), Medical Center Supervisor(s), Code Grey/Assist Team members, Hospital Security Chief, Hospital Security Officers, Nursing Staff, Psychiatrists and other Physicians, Social Services Staff, Clerks, Hospital Telephone Operators.

IV. PROCEDURE:

A. Calls to request Code Gray Response:

1. These calls are made for behavioral emergencies such as:
   a. Behavior that is threatening to self or others.
   b. A patient on a legal hold actively leaving the specific unit.
   c. A patient who is assaultive / highly agitated and requires a hold for emergency medications for agitation and/or requires restraints and/or seclusion.

2. How to call: Dial "333" and state to the operator, "Code Gray Team to the specified unit (or specific location in the hospital)"

3. The Code Gray response team:
   a. Consists of a minimum of 5 staff members.
3. The team will consist of a minimum of 3 clinical staff members.
   b. To be on the team, members have to be available to respond to the calls for the entirety of their shift.

4.The operator will overhead call the Code Gray Team and notify Hospital Security as well as group page the Code Gray Team. The operator will continue to overhead page until a staff member from the unit calls the operator to say the code is either canceled or secured.

5. The charge nurse or the primary nurse of the receiving unit will direct the team to the location where the Code Gray responses needed.

B. Calls to request the Assist team:

1. These calls may be made for non-emergent needs for assistance with patients with escalating or challenging behaviors such as:.

a. Giving medications to patients that have challenging behaviors.

b. Setting limits for challenging behaviors.

c. Transporting patients that have challenging behaviors.

d. Applying or Changing restraints if a patient is not an imminent threat to the safety of self or others.

2. How to Call: Dial "333" and state to the operator, "Assist Team to the specified unit (or specific location in the hospital)."

3. The Assist Team:

a. Consists of a minimum of 5 staff members, including at least 3 clinical staff.

b. To be on the team, members must be available to respond to the calls for the entirety of their shift.

4. The operator will group page the Assist Team **and** will only overhead call as well if the team is **not** complete (per the Assist Team staffing assignments for that day). The operator will overhead call "All Trained Assist Team" to respond to that particular unit/location until a staff member from the unit/location calls the operator to say the code is either canceled or secured.

5. The charge nurse or primary nurse in the receiving unit will direct the team to the location where the Assist Team response is needed.

C. Code Gray/ Assist Team Members and Unit Staff agree on these safety guidelines:

. 1. In the event where the team applies physical interventions they will use safety training principles learned from the Crisis Prevention Institute (CPI) training that is required for all nursing staff and Code Gray/Assist Team members.

2. The primary nurse or designee of the receiving unit is to monitor the patient's respiratory status during physical intervention.

3. The nurse may halt the intervention any time he/she assesses the patient to be having respiratory status compromised.

3. The patient's primary nurse and/or charge nurse is to direct the clinical care of the patient. Discuss the necessary medical precautions, provide relevant history, and offer support as needed throughout the call.

4. Primary nurse will document care during physical intervention in patients' medical record.

D. Code Gray /Assist Team responsibilities:

1. Code Gray and/or assist team members will report to the unit in a timely manner.
2. Immediately stop what you are doing and walk purposefully and swiftly to the designated area of the call.
3. Follow safety training principles (CPI).
4. Follow Standard Precautions.
5. Document any unusual occurrences in safety event reporting system (SERS) and inform your manager and/or medical center supervisor.

E. Code Gray- Team Captain: whether "Assist" or "Code Gray," the captain directs the team throughout the call.

1. The captain conducts the debriefing of the incident.
2. Captain completes the critique form and turns it in to the designated staff member who collects these forms and enters the information into a database.
3. The code gray team captain announces when the team is cleared to return to regular duty.

F. Hospital Security Officer Role in Code Gray/Assist Calls:
Hospital Security Officers **are not members of the Assist/Code Gray Team**.

Assist Calls: Hospital Security Officers are **not expected to** respond to Assist Team calls.

Code Gray Calls: Hospital Security Officers receive communication about Code Gray calls via overhead page and two-way radio (either from the Hospital Operator or from the Unit Charge Nurse). If not occupied with another priority security issue, they will respond to Code Gray calls to be on standby. Hospital Security Officers may take over the lead from the Captain of the Code Gray team by request from the Team Captain, for example in the event of an imminent threat to the safety of patients, staff, providers, or visitors on the unit.

V. DOCUMENTATION:

Patient Care Record - ccLink
Code Gray and Assist Critique Form

APPROVED BY:

Clinical Practice Committee 1/2018, 2/2022
Patient Care Policy & Evaluation Committee 3/2022
Medical Executive Committee 4/2022

Reviewed: 3/99, 9/99, 9/03, 8/06, 8/09, 7/11, 10/17, 4/18
Revised: 3/99, 9/99, 9/03, 8/06, 8/09, 7/11, 10/17, 4/18, 02/22

CONTRA COSTA REGIONAL MEDICAL CENTER **AC NURSING POLICY NO: 4107**
CONTRA COSTA HEALTH CENTERS

DIRECT ADMISSIONS TO CONTRA COSTA REGIONAL MEDICAL CENTER (CCRMC)

I. PURPOSE:

To outline the correct procedure for directly admitting patients from an ambulatory care health center to CCRMC.

II. REFERENCES:

CCRMC Policy #552, "Accepting Patient Transfers from Outside Facilities."

TJC 2020 Standard PC.02.01.01, "The hospital provides care, treatment and services for each patient."

III. POLICY:

All direct admissions to the medical/surgical units must be medically accepted by the Medical Officer of the Day at CCRMC and must be cleared for resource availability by calling pager 346-4243. This must occur prior to transport. The patient should not be sent to CCRMC without final approval of the Medical Center Supervisor and the Medical Officer of the Day. If direct admission is accepted, patient shall be sent directly to the appropriate inpatient unit.

IV. AUTHORITY/RESPONSIBILITY:

All nursing personnel and Providers

V. PROCEDURE:

A. Once the decision that a direct admission to CCRMC may be necessary, the Health Center provider will do the following:
   1. Patients considered appropriate for direct admission to CCRMC must be discussed with and approved for admission by the inpatient Medical Officer of the Day prior to transfer.
   2. If the direct admission is accepted, the Medical Officer of the Day will contact the Medical Center Supervisor to confirm bed availability for the recommended level of care. The Medical Center Supervisor will then coordinate the next steps for the patient's admission with the patient's current care team in clinic.

B. The Medical Center Supervisor will:
   1. Assign the patient to the appropriate unit/bed.
   2. Inform receiving inpatient unit.
   3. Call clinic where patient is being directly admitted from to assure the following:
      a. Confirm that resources are available, and that direct admission is accepted,
      b. Provide information on admitting unit/bed, and to confirm that clinic nurse will call the inpatient unit nurse with clinical information about the patient,
      c. Confirm estimated time of arrival.

4. Inform admitting office.

C. Clinic Nurse will:

1. Receive a call from the Medical Center Supervisor as outlined in Section B above. If Medical Center Supervisor does not call the clinic nurse shortly after the transferring physician called the accepting physician, clinic nurse should call Staffing Office (370-5132). The patient should not be sent to CCRMC without final approval of Medical Center Supervisor.
2. Call the inpatient unit nurse and report on the care provided at the clinic and the estimated time of arrival of the patient.
3. Complete documentation in ccLink.
4. Give patient (if transportation is by private car) or ambulance attendant the "Patient Information Handbook" [A-543-9], and instructions as to which in-patient unit the patient should go. If family is available, they should be instructed to go to Admissions at CCRMC to admit the patient. If the family is not available, the admissions' clerk will go to the nursing unit to obtain necessary admission information.
   - Give ambulance staff a copy of the patient's face sheet for patients being transported to the hospital by ambulance.
5. General Guidelines
   a. Patients potentially needing surgery should remain NPO.
   b. Patients suspected of having a contagious respiratory condition should be given a mask and instructed to wear it.
   c. Patients shall be determined to be stable prior to transfer. Mode of transportation to the hospital to be determined by the medical provider.
   d. Patients felt to be stable who become unstable en route will be evaluated in the Emergency Department upon arrival.
   e. In some cases, referral to the Emergency Department is appropriate to determine need for admission. The on-duty Emergency Department physician shall be consulted prior to referral. (See Policy #3055, "Referrals to Emergency Department from Regional Health Centers")

REVIEWED, REVISED AND APPROVED BY ACPC:
6/2009 (new), 3/2012, 4/2017, 02/2022

REVISED AND APPROVED BY APC: 03/2022

REVIEWED AND APPROVED BY MEC: 04/2022

JCC/BOARD APPROVAL: pending