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SEPTEMBER PHYSICIAN PHOTOGRAPHER
JOHN WIEMANN M.D.

Orthopedic Surgery, CMC

Photography for me started as a hobby and then became a
great way to pay for college and medical school while traveling
the country and the world. Orthopaedic residency work schedule
didn’t quite tolerate flying away every weekend for photo shoots
so now it has come full circle back to hobby status. When I am
not busy taking care of broken or crooked children I still enjoy
photography not only for its ability to preserve memories but
also to transport the viewer into different realms and cultures
than experienced in everyday life. These images were taken on
assignment in Cuba in 2001. My goal was to capture the vibrancy
of the Cuban culture, the beauty of the landscape, and the degree
to which the hard-working tobacco farming industry shapes the
lives of the rural families. Having moved recently to Fresno, I see
some parallels with regard to the importance of agriculture to the
economy and its impact on daily life.

Physician Editor:
David L. Slater M.D., FCAP
Managing Editor:
Laurie Smith
Manager, Physician Education
and Communication

Deadline to submit articles for the October 2016 issue of
Physicians’ Edition is Friday, September 23.
Training Physicians in the Community Medical System

By Michael W. Peterson M.D.
Valley Medical Foundation Professor of Medicine, UCSF Fresno Chief of Medicine, UCSF Fresno Associate Dean

In 1975, the UCSF Fresno Medical Education Program was established by the California legislature and the Department of Veteran’s Affairs to help address the physician shortage in the Central Valley. In 1995, Community Medical Centers entered into an agreement with Fresno County and became the principle training hospital for UCSF Fresno students, residents and fellows. In 2007, the program transitioned the inpatient training from University Medical Center to Community Regional Medical Center and the outpatient transition was completed in 2010. CMC receives special funding through MediCare as a teaching hospital but also makes a substantial financial commitment to UCSF Fresno to support the training programs. We recently completed an evaluation of the outcomes of the programs as they relate to retention of the physicians who completed their training between 1999 and 2016. As shown in graphs 1 and 2, 45% of the graduates are practicing in the Central Valley as of 2016, and 85% are practicing in California. Especially rewarding (shown in graph 3) is that the number of graduates remaining in Central California has been increasing since 2007, and almost 70% of the graduates in 2016 remained in the Central Valley. With the expected growth in medical student education (topic of a future article), we expect this number to continue to grow. CMC should be proud of the investment that they are making to improve the health of the population not only in Fresno County but throughout the region.

UCSF Fresno Doctors Academy: Medical Minds in the Making

Editor’s Note: Many readers will be familiar with this innovative and strategic regional program to familiarize young people with medical careers and provide mentoring exposure to some of those options, at ages when crucial education and career decisions lie just ahead.

A recent Blog on Community’s web site offers a great overview of the Doctors Academy and illustrates the type of mentorship and professional support needed to insure ongoing success and growth. This is a program which benefits the entire regional medical community in addition to supporting young people whose lives are highly enriched by a bit of inspiration and the opening of doors. Print Readers can find it at communitymedical.org > blogs > July 22 Medical Minds in the Making.

Learn more about the program, including how you as a medical professional can get involved as a mentor for an Academy student. Print readers can visit the Latino Center section of the UCSF Fresno website.
Initial Appointment to the Medical Staff effective July 14, 2016

New Medical Staff Members Approved by the Medical Executive Committee and the Board of Trustees

Melissa Adrouny M.D.
Department: OB/GYN
Specialty: OB/GYN

Soe Myint Aung M.D.
Department: Medicine
Specialty: Neurology

Prakriti Bista M.D.
Department: Medicine
Specialty: Internal Medicine

Thianchai Bunlalai M.D.
Department: Pediatrics
Specialty: Pediatric Intensive Care

Ria D’Souza M.D.
Department: Medicine
Specialty: Internal Medicine

Luis Dehesa M.D.
Department: Medicine
Specialty: Dermatology

Erica Delsman M.D.
Department: Family Medicine
Specialty: Family Medicine

Jyostna Ganta M.D.
Department: Medicine
Specialty: Internal Medicine

Forough Ghavami-Shirehjini D.O.
Department: Medicine
Specialty: Neurology

Alicia Hardcastle D.O.
Department: Pediatrics
Specialty: Pediatrics

Richard Kiel M.D.
Department: Cardiology
Specialty: Cardiovascular Disease

Afshenafi Legesse M.D.
Department: Medicine
Specialty: Internal Medicine

Tiffany Lin M.D.
Department: Pediatrics
Specialty: Pediatrics Hematology-Oncology

Corinna Liu D.O.
Department: OB/GYN
Specialty: OB/GYN

Amitasha Mann M.D.
Department: Medicine
Specialty: Internal Medicine

Jaspreet Kaur Mann D.O.
Department: Medicine
Specialty: Critical Care

Galen Maze-Rothstein M.D.
Department: Medicine
Specialty: Neurology

Sarah Minasyan M.D.
Department: Surgery
Specialty: Thoracic Surgery

Athira Nair M.D.
Department: Pediatrics
Specialty: Pediatric Cardiology

Chandrasekar Palaniswamy M.D.
Department: Cardiology
Specialty: Cardiovascular Disease

Nicholas Pappas M.D.
Department: Emergency Medicine
Specialty: Emergency Medicine

Mitul Patel M.D.
Department: Pediatrics
Specialty: Pediatrics

Saqib Rashid M.D.
Department: Medicine
Specialty: Pulmonary Disease

Ali Rashidian M.D.
Department: Medicine
Specialty: Pulmonary Disease

Gregory Richardson M.D.
Department: Emergency Medicine
Specialty: Emergency Medicine

Jason Yue Shen M.D.
Department: Medicine
Specialty: Neurology

Sarah Stender M.D.
Department: Pediatrics
Specialty: Pediatrics

Anneli Von Reinhart M.D.
Department: Emergency Medicine
Specialty: Emergency Medicine

Jasmine Walker M.D.
Department: Pediatrics
Specialty: Pediatrics

Initial Appointment to the Medical Staff effective July 14, 2016

New Allied Health Professionals Approved by the Medical Executive Committee and the Board of Trustees

Christine Card N.P.
Department: OB/GYN
Specialty: OB/GYN

Claire A. Austin P.A.
Department: Medicine
Specialty: Neurology

Dani Ellen N.P.
Department: OB/GYN
Specialty: OB/GYN

Maribel Manriquez P.A.
Department: Surgery
Specialty: Neurosurgery

Veronica Marquis N.P.
Department: OB/GYN
Specialty: OB/GYN

Greggory Mentele, CRNA
Department: Surgery
Specialty: Anesthesiology

Stacey Montes N.P.
Department: OB/GYN
Specialty: OB/GYN

John Ramos P.A.
Department: Emergency Medicine
Specialty: Emergency Medicine

Julie Schafer C.R.N.A.
Department: Surgery
Specialty: Anesthesiology
Initial Appointment to the Medical Staff effective August 11, 2016

New Medical Staff Members Approved by the Medical Executive Committee and the Board of Trustees

- Anubhav Agrawal M.D.  
  Department: OB/GYN  
  Specialty: OB/GYN

- Lee Michael Audd M.D.  
  Department: Surgery  
  Specialty: Anesthesiology

- Francis Cunanan M.D.  
  Department: Family Medicine  
  Specialty: Family Medicine

- Nahalla Dolle M.D.  
  Department: Medicine  
  Specialty: Internal Medicine

- Firdose Gill D.O.  
  Department: Medicine  
  Specialty: Internal Medicine

- Stuart Glassner D.O.  
  Department: Medicine  
  Specialty: Neuro-Critical Care

- Shaikh Husnain M.D.  
  Department: Medicine  
  Specialty: Internal Medicine

- Crystall Ives Tallman M.D.  
  Department: Emergency Medicine  
  Specialty: Emergency Medicine

- Andrea Long M.D.  
  Department: Surgery  
  Specialty: General Surgery

- Peral Ma M.D.  
  Department: Surgery  
  Specialty: General Surgery

- Jessica Mason M.D.  
  Department: Emergency Medicine  
  Specialty: Emergency Medicine

- Liana Milanes M.D.  
  Department: Family Medicine  
  Specialty: Family Medicine

- Hau Nguyen M.D.  
  Department: Medicine  
  Specialty: Internal Medicine

- Kelsey Pappas M.D.  
  Department: Family Medicine  
  Specialty: Family Medicine

- Manju Pillai M.D.  
  Department: Medicine  
  Specialty: Internal Medicine

- Gilbert Ramirez M.D.  
  Department: Emergency Medicine  
  Specialty: Emergency Medicine

- Bisharah Rizvi M.D.  
  Department: Medicine  
  Specialty: Internal Medicine

- Jusel Ruelan D.O.  
  Department: Family Medicine  
  Specialty: Family Medicine

- Kalavagunta Satish-Balaji M.D.  
  Department: Medicine  
  Specialty: Internal Medicine

- Dan Savage M.D.  
  Department: Emergency Medicine  
  Specialty: Emergency Medicine

Initial Appointment to the Medical Staff effective August 11, 2016

New Allied Health Professionals Approved by the Medical Executive Committee and the Board of Trustees

- Whitney Jacobsmeyer P.A.  
  Department: Emergency Medicine  
  Specialty: Emergency Medicine

- Carol Wacker R.N.F.A.  
  Department: Surgery  
  Specialty: Cardiothoracic

“Realize what traditions you will need to carry forward but also question what is also out there that will help make a difference and achieve new things.”

– Aida Batlle, coffee entrepreneur, El Salvador
Editor’s Note: This just-published compendium holds a wealth of pertinent information for our readers – for our many physician leaders, our clinical care colleagues, our administrative leadership, and for practitioners making care decisions each day. Please take time to explore and download the publication – either in whole or the parts relevant to your professional activities. Print readers can easily find it by searching the title above. Here is the introductory section of the Compendium, reprinted with permission. There are links to the entire document and also to its individual tool kits:

Over the past two decades, and the past five years in particular, a national discussion has emerged focused on managing rising health care costs. Perhaps of greater importance, these increases have not always led to improved outcomes. At the same time, medical knowledge has increased exponentially and clinical knowledge is doubling as fast as every two years. But with all this knowledge looms a larger debate, when are we doing too much and how do we decide?

Care providers endeavor to provide the most appropriate care to patients regardless of cost, but all too often there isn’t enough discussion with patients about what is appropriate. As medical societies, provider organizations and others look for ways to drive appropriate use, hospitals and health systems can play an important role in supporting and guiding these efforts.

Developed with guidance from the AHA’s Committee on Clinical Leadership, the Appropriate Use of Medical Resources white paper identifies some of the drivers of health care utilization and its contributing factors. More importantly, the paper recommends a way to move forward that will place hospitals at the forefront of innovative change for reducing non-beneficial services while improving care. The paper identifies a “top five” list of hospital-based procedures or interventions that should be reviewed and discussed by a patient and physician prior to proceeding.

This paper builds on the Ensuring a Healthier Tomorrow report which identified two interconnected strategies to improve care while achieving a sustainable level of health care spending: promote and reward accountability and use limited health care dollars wisely. As an outgrowth of the latter, the AHA, with guidance from its Committee on Clinical Leadership, Physician Leadership Forum, regional policy boards and governing councils and committees, closely examined the appropriate use of medical resources.

To begin the discussion in your hospital and community, share Appropriate Use of Medical Resources with your board, medical staff and community leaders. Further, to support your efforts, AHA has gathered toolkits targeting each of the five procedures or interventions:

Patient Blood Management. Clinical research has shown that restrictive transfusion practices are generally associated with better patient outcomes as well as reduced health care resource utilization.

Antimicrobial Stewardship. Antibiotics are one of the great discoveries in medicine and the most important weapon in fighting bacterial diseases. However, when it comes to antibiotics, more is not always better. The CDC reports that over half of all antibiotic prescriptions written in the United States are either unnecessary or used inappropriately.

Ambulatory Care Sensitive Conditions. As resource-intensive settings, emergency department and inpatient hospital care need to be carefully monitored to ensure the most appropriate use. Significant research has shown that for several Ambulatory

See Medical Resources on page 7
More on CMS’s Proposed Bundled Payment Program for Cardiac Care and Expansion of the Joint Replacement/Fracture Care Model

By James Michael Cole, Director, Government Reimbursement

Editor’s Note: This article is similar to one run in the August Time-Sensitive packet. However this topic is very important. Programs like these are intended to accelerate the transition of Medicare from volume-based to value-based payment. Read below how you can comment on the Proposed Rule through 10/3/2016.

Also – courtesy of CMC Surgeon Dr. Amir Fathi, we strongly recommend the comprehensive article “The Case for Bundled Payments in Health Care” in the July-August Harvard Business Review. For all of us headed down this road together, the article is a must-read. Find it at HBR.org (free registration required).

On July 25, 2016, CMS proposed a new bundled payment model for cardiac care that will require hospitals to become accountable for the cost and quality of care provided to patients receiving bypass surgery or treatment for a heart attack beginning July 1, 2017. CMS also proposed an expansion of its comprehensive care for joint replacement (CJR) model – which began on April 1, 2016 – to include episodes of care arising from treatment of hip/femur fractures.

Under the new model, hospitals in 98 geographic areas including Fresno will be held accountable for episodes of care relating to an acute myocardial infarction or coronary artery bypass graft that include an inpatient stay and 90 days following discharge. To facilitate the transition into this mandatory payment model, CMS proposes to phase in downside risk. Participating hospitals (in both models) may qualify for the advanced alternative payment model for purposes of reimbursement under MACRA’s quality payment program.

Each year, CMS would set target prices for different episodes based on historical data on total costs related to the episode of care for Medicare fee-for-service beneficiaries admitted for heart attacks, bypass surgery, or surgical hip/femur fracture treatment, beginning with the hospitalization and extending 90 days following discharge. Target prices would be adjusted based on the complexity of treating a heart attack or providing bypass surgery. For example, CMS proposes to adjust prices upwards for those heart attack patients who need to be transferred to a different hospital during their care to reflect the most resource-intensive cardiac care provided during the hospitalization. For heart attack patients, target prices would also differ depending on whether the patient was treated with surgery or medical management.

One of the major goals of bundled payments is to encourage coordination among all providers involved in a patient’s care: for example, collaboration between hospitals and physicians and skilled nursing facilities. Therefore, as in the CJR model, CMS is proposing to allow hospital participants to enter into financial arrangements with other types of providers (for example, skilled nursing facilities and physicians), as well as with Medicare Shared Savings Program Accountable Care Organizations (ACOs). Those arrangements would allow hospital participants to share reconciliation payments, internal cost savings, and the responsibility for repayment to Medicare with other providers and entities who choose to enter into these arrangements, subject to the limitations outlined in the proposed rule.

These bundled payment models underscore the government’s interest in healthcare payment and delivery reform and the importance of value-based care. CMS will accept public comments to the rule until October 3, 2016.

Here is the link to the CMS fact sheet, from which there are other links – including to the proposed rule itself and how to comment on it: https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2016-Fact-sheets-items/2016-07-25.html.

Medical Resources

Continued from page 6

Care Sensitive Conditions (ACSCs) access to primary care, urgent care clinics, outpatient services and other subacute settings can improve patient outcomes, reduce hospital admissions and readmissions and lower costs.

**Elective Percutaneous Coronary Intervention.** According to the American College of Cardiology, American Heart Association, the Society for Cardiovascular Angiography and Interventions and other experts, immediate coronary angiography with PCI is recommended for patients with ST-elevation myocardial infarction (STEMI). Research has shown, though, for patients with non-acute coronary artery disease, PCI has little to no effect on outcomes.

**Aligning Treatment with Patient Priorities in the Context of Progressive Disease for Use of the ICU.** The most appropriate use of the ICU can improve outcomes, improve the care experience and lower costs. Hospitals and health care systems should encourage early intervention and discussion about priorities for medical care in the context of progressive disease and robust communication between patients and their providers to understand patients’ preferences and goals.
In the January 2016 issue of *Physicians Edition* (pg 13-14) we provided an article titled “Physician’s Burnout: It is Getting Worse.” That article detailed some findings indicating that American physicians were worse off in 2014 than they were in 2011. Those findings were consistent with what I have encountered in a casual review on the literature on physician stress and burnout. Unfortunately that trend has continued over the past two years. For example, survey results show that physician reports of burnout have increased every year since 2011, with as many as 88% of all physicians identifying themselves as moderately to severely stressed and/or burned out on an average day in 2015. Studies using clinical indicators of burnout suggest that 40% to 55% of physicians suffer burnout. Burnout appears to be an equal opportunity experience. It occurs to varying degrees across specialties, genders, and age groups – though there is a tendency for burnout to be higher in late career physicians. Alarmingly, physician stress begins early in the process of becoming a doctor. An interesting finding from one study is that future physicians begin medical school with healthier mental health profiles than those of college graduates who pursue other fields. Those profiles are reversed within two years of beginning medical school.

Each May the Riverside County Medical Association hosts the Western States Regional Conference on Physicians’ Well-Being. Every year there is a focus on the issues which can interfere with a physician’s well-being and affect performance. In recent years much of that focus has been on dissatisfaction with career paths, especially for middle to late career doctors. This past May one of the presenters rather dramatically referred to physicians as an endangered species. The idea of endangerment comes from a variety of data points. The Association of American Medical Colleges predicts a shortage of more than 90,000 physicians by 2020, and more than 130,000 by 2025. Approximately 25% of physicians in the United States are older than 65. In one survey 55% of physicians said they contemplated leaving medicine in the past few years. The majority of that 55% identified issues of stress and burnout as the primary reasons for considering a career change or retiring.

Fortunately, all is not as bleak as the information above would suggest. The vast majority of physicians still enjoy working with patients and making a difference in their lives. Also, most doctors enjoy the intellectual stimulation and challenges integral to their practice of medicine. The American Medical Association is addressing burnout issue aggressively with research articles and online modules for physicians to access. These provide information and ideas on how to manage stress and enhance well-being. Hospital systems around the country are beginning to design and implement programs to assist doctors in balancing the demands of a busy professional life with maintenance of a healthy personal lifestyle.

In the next few issues of the *Physicians Edition* I will provide updated stress management resources beyond those I first brought to the attention of CMC colleagues in 2010-2011. Any CMC physician who has ideas for assisting colleagues with handling burnout or who has concerns about themselves or any colleague on the medical staff may contact me at (559) 284-8686.

“The greater part of our happiness or misery depends upon our dispositions, and not upon our circumstances.”

– Martha Washington, first US first lady

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Are You an Endangered Species?!

Submitted by Rick Adams, PhD, CRMC and CCMC Well Being Committee Chairperson

There will be an interactive session on this topic at the 2017 Winter Symposium, led by expert DiKe Drummond M.D. See pg. 19 of this issue.
The summer has passed, we're into a new school year... the heat is decreasing ever so slightly, and things feel – fresh! Informatics is busy, looking to provide support for lots of new initiatives. Here are several:

**E-Prescribing of Controlled Substances** is rolling out across the organization. We started with CRMC ED physicians and the providers at ACC. The general timing (barring issues with overwhelming the medical staff office) is:

- **September 12-30:** All Surgeons and Obstetrics/Gynecology (all facilities)
- **October 3-21:** Department of Medicine (all subspecialties) and all Hospitalists
- **October 24-November 11:** Department of Pediatrics and all others (all facilities)

Each member of the medical staff will need to view an online e-learning module within HLC (Click here) and then present in person to the medical staff office (MSO) to have their identity verified. The HLC will provide further information about the process of EPCS and requirements for Identity Proofing. Don’t forget to bring your completed information sheet with you to MSO – that is your certificate of completion.

**New Epic Modules:** *Beacon*, the chemotherapy ordering module, will be going live for Clovis AIC first, at the end of October, beginning of November. We’ve done a lot of work to get protocols reviewed, help staff get better acquainted with Epic Ambulatory for general patient care, and working to continue to move through review of protocols that will be applicable for CRMC’s AIC and inpatient patients. Those latter locations will likely still go live in the new year, but we’re making good progress.

Finally, we’re still working to bring the Radiology module (Radiant) live next year – and as I’ve mentioned before, we will have a number of ‘name changes’ for radiology exams. Some are as simple as CTA > CT Angiogram, US guided > US, with and without > W WO, while others are a bit more complicated: IR unilateral arterial extremity runoff left > IR angiogram extremity upper left. The proposed date for these to go into production (in order sets and ‘searchable’ orders) is late September. As of now, there is no identified impact to your favorites... the underlying test is still predominantly the same as only a few tests are being 'retired'. I hope to have a list available for you to review in detail, including those being discontinued, in the next few days.

**Working on Change Requests:** Jamie Franklin and I are working with both our teams to continue to move the large volume of change requests through JIC, and into build... hopefully you’re seeing some changes that were requested a while ago finally making it into the production system. Additionally, we’ve been working to move to a monthly change release plan, to help with the dissatisfaction voiced about ‘things always changing’ in Epic... this will give us more time to communicate to all users of changes, ensure that we test thoroughly, and help you have more stability in the system.

Enjoy the lingering warm weather... I for one am looking to the glorious fall colors here; we never got that in Phoenix!
Think We’ve Had A Privacy Breach? Make Sure You Report Timely to CMC

Submitted by Janet Paul VP Corporate HIM, Privacy Officer

California has a very short deadline to report privacy incidents to patients and regulatory authorities. In September 2014, Assembly Bill 1755 extended the reporting deadline from five (5) calendar days to fifteen (15) business days after an unauthorized access, use, or disclosure of protected health information is detected. A $100 per-day fine is assessed to health care entities for failure to report a breach incident timely, with a maximum penalty of $250,000. Fifteen (15) business days is much more reasonable than the previous five (5) calendar days. It allows time for more internal investigation, since if a complaint or incident is found to be unsubstantiated after investigation, it is non-reportable.

If you are aware of a privacy incident, please contact Community’s Privacy Office immediately, even if you don’t have all the details. You can also report an incident by accessing the Compliance Alert Line 888-394-2301, website at www.MySafeWorkplace.com, or via IRIS.

Timely internal reporting of suspected breaches helps to ensure CMC notifies patients and agencies within the required external reporting deadlines (thus avoiding unnecessary fines), as well as ensuring immediate mitigation to prevent further harm.

Non-Pressure Ulcer Documentation


Avoid Queries for clarification by documenting ulcer depth. Enhanced documentation of ulcer depth = assigning codes that accurately reflect the patient’s severity of illness and risk of mortality.

Non-pressure ulcers (e.g., diabetic) should be specified as:

- Skin breakdown
- Fat layer exposed
- Muscle necrosis
- Bone necrosis

Please also document the site, laterality, underlying cause, and any associated gangrene.

If you would like more information or have any questions, please do not hesitate to contact Sandra Sidel. I can be reached at 559-459-6003/Ext.: 56003 or ssidel@communitymedical.org.
The current edition of “Your Community at Work,” the Community Medical Centers corporate social responsibility report, takes a look at growth in our Neurosciences. The September edition details efforts to bring more technology, neurologists and neurosurgeons to the Valley so patients don’t have to go elsewhere. Until recently the Valley had the highest rates of Parkinson’s disease in California but no neurologist to do deep brain stimulation maintenance and adjustments. Community and UCSF are changing that. Now 15+ stroke patients a month are transferred for expertise found only at Community Regional and 46% of all the brain cancer surgeries in a 7-county area are performed at the downtown hospital.

“Your Community at Work” runs monthly in The Fresno Bee. It's also published in the Business Journal and the California Advocate – and delivered to our patients in the hospital and mailed out to our donors. And most recently we’ve begun mailing to healthcare providers in Fresno and Madera counties. Its content also is available on www.CommunityMedical.org/Community-at-Work and through our social media. This month many of you may also see it mailed to your homes as we work to get the word out further.

Here’s a link to the Web page that contains the current report as well as previous editions. You can click through the “Your Community at Work” archive by year and by month to find printable PDF versions as well as the larger individual online stories.

http://www.communitymedical.org/Community-at-Work

Print readers: Go to Communitymedical.org > Community Involvement (on the top tab) > Your Community at Work (on the right side menu in the page).
Community’s Advanced Cardiac Sonography Training is Nation’s First Accredited Program

By Erin Kennedy, Corporate Communications

Community Regional Medical Center is the first facility in nation to receive accreditation to train Advanced Cardiac Sonographers. These professionals are crucial to high quality cardiology care and enhance Cardiologists’ workflow efficiencies.

Joy Guthrie Ph.D., A.C.S., R.D.M.S., R.D.C.S., R.V.T., director of the sonography training at the downtown Fresno hospital and assistant professor of medicine at UCSF Fresno (Echocardiography), helped push for the new advanced practice designation. She teamed up with Dr. Teresa Daniele, a board certified cardiologist and assistant professor of medicine at UCSF, to create the training program for sonographers who practice at an advanced level in an echocardiography laboratory. Dr. Daniele has been extremely supportive and provides consistent assistance and mentorship to the ACS students, said Guthrie.

“We have a well-established sonography program and a well-established cardiology fellowship program so this aligns perfectly with our hospital,” said Guthrie. Community also has a history of pioneering this profession, becoming the first hospital-based training program in the region and currently the only program accredited to teach in all four learning concentrations – General Sonography, Adult Cardiac Echo, Pediatric Cardiac Echo and Vascular Sonography. Even programs teaching ultrasound techniques at the Mayo Clinic and Johns Hopkins do not have pediatric cardiac echo approval from the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

CAAHEP gave Community’s Advanced Cardiac Sonography training program its official approval, making it the first accredited program in the nation. Mayo Clinic is starting a similar program which is also working towards accreditation, said Guthrie.

Community’s 18-month program is taught mostly online with three weeks of required on-site residency at Community Regional, so eventually, Guthrie said, the program would be able to educate sonographers from all over the U.S. Graduates of the program are prepared to take the rigorous credentialing exam to become an Advanced Cardiac Sonographer and become clinical or administrative leaders.

“These will be sonographers that can look at an echocardiogram and give a preliminary analysis for quality assurance and accuracy to assist the interpreting physician,” explained Guthrie. “They can oversee quality control of other sonographers and they’re trained in research and submissions to the IRB (Institutional Review Board for research with human subjects). It is similar to the difference between being a nurse and a nurse practitioner.”

Sonographers continue to be in short supply nationally and the profession was projected by the U.S. Bureau of Labor Statistics to grow 30% between 2012 and 2022. Having a way for sonographers to show advanced proficiency has long been needed, said Guthrie. “We’ve been working on an advanced practice educational pathway and credential for a decade so this is exciting to see it come to fruition,” she said.

The rigorous credentialing test is only open to sonographers with 10 years of experience if they have not been through an advanced practice-training program, said Guthrie. But Community’s program is open to credentialed sonographers in adult echocardiography (RDCS or RCS) with three years of clinical experience so that the path to becoming an Advanced Cardiac Sonographer is shortened to 4-1/2 years, Guthrie pointed out.

Currently Community has three sonographers in its Advanced Cardiac training program – two from Community Regional and one from a Modesto hospital. For more details on the Advanced Cardiac Sonography Program go to www.communitymedical.org/careers/adv-cardiac-sonography-program.
Currently, Community Medical Centers diagnoses roughly 3,500 cancer cases each year. On average, about 1,000 of those patients elect to receive cancer care outside of Community and the Valley. That out-migration imposes burdens on patients and families, and represents lost opportunities for Community and its physicians to deliver the excellent cancer care we’re capable of. Community has committed to change that by creating a seamless, unified cancer program which will include a nearly 100,000-square-foot comprehensive cancer center on the Clovis Community Medical Center campus.

A 2015 Advisory Board Oncology Roundtable Patient Survey found that the top patient preference was to receive all outpatient care in one building. Today at Community that’s not possible. Our cancer services and oncology experts are spread among multiple facilities. Given projected growth over the next decade in our six-county region of 16% for chemotherapy, 26% for radiation therapy and 29% for cancer-related surgeries, expansion of our cancer services will be crucial. Achieving that expansion by bringing it all together in a coordinated fashion in one place will be paramount.

Community’s Board of Trustees has already approved preliminary funding for design and pre-construction services to develop a Cancer Center. We hope to go to the board in November for further construction and funding approvals. Our vision is to become a National Cancer Institute “Designated Cancer Center” – the 11th in California and the first in the central San Joaquin Valley.

Cancer patients should ultimately be able to see multiple physician specialists in a single location. This vision will require additional staff and resources, and a highly collaborative medical team that includes both academic and private physicians. This will be a different way of delivering care at Community.

Currently Community’s top volume of cancer cases is led by GI cases, followed by breast, urology/prostate, and lung cancer. Lung cancer is expected to grow the fastest at 32% in the next 10 years.

We know we serve a particularly challenging region with more than 26% of Valley residents considered in “poor or fair health” compared to national rates of 18%. Additionally, 21% of Valley residents are uninsured compared to 12% nationally. Preventative health screenings are particularly poor in the Valley contributing to higher rates of certain types of cancers and cancers being caught at later stages. The cancer model we come up with will have to include community outreach and education and better care for the underserved communities.

Over the past year we’ve been working with a steering committee that includes clinical leadership to craft a detailed vision and system-wide priorities for cancer services at Community. Key elements of that vision include:

- Redesigning the cancer governance structure to provide more seamless care. Currently six physicians are involved in that governance to help set priorities for cancer services.
- Securing a place in the new CMS Oncology Care Model, a five year pilot project that creates a framework for more efficient patient care.
- Building Centers of Excellence around specific tumor locations.
- Developing systematic communication and coordination with medical staff.
- Developing a process to expedite new patient appointments.
- Implementing proactive symptom management and urgent care pathways to retain patients across the care continuum.
- Equipping cancer services with the appropriate resources in administration, medical oncology and infusion, clinical research, oncology support services and analytics.
- Focusing awareness and communications on cancer services and philanthropy for cancer care.

In the coming year we will continue momentum and I will be bringing you periodic updates in this publication. We’re well aware that cancer is bound to affect us all, with projections that every one out of three women and every two out of three men will get cancer in their lifetime. We want to make sure Community is well placed to care for the family and friends we know will be affected by cancer.

For further details of our plans and progress, contact me at 451-3672 or portiz@communitymedical.org.
Medical staff members who order transfusion must be aware of its risks and benefits. We have used the pages of this newsletter multiple times to facilitate that education and awareness. To that end, a comprehensive analysis of the important relationship between blood transfusion and risk of infection has just been published (title above): Shander, A et al; Expert Review of Hematology vol 9, pg 597-605 (2016). Dr. Shander, an Anesthesiologist, is a world expert in blood safety and blood management. These excerpts will be of interest. Please contact me for a copy of the entire article.

“ ln essence, transfusion of allogeneic blood is live tissue transplantation. The interaction between the allogeneic blood and the body is infinitely complex and it can have far-reaching consequences...While the long list of risks and complications of transfusion is enough to alarm anyone, the more disturbing revelation comes from studies that have compared the outcome of patients who were transfused with those who were not. A growing number of reports indicate that patients who are transfused are at increased risk of mortality (short and long term), various morbidities (e.g. stroke, multiorgan dysfunction, respiratory distress/failure, longer ventilator dependency, renal injury, cardiac complications, thromboembolic events, sepsis, and infection) and longer length of hospital stay in various patient populations... Even though these observations are often challenged due to the retrospective nature of the studies and the residual risk of bias, the high reproducibility of the results is supportive of the existence of a causal link.”

“The link between allogeneic blood transfusions and unfavorable outcomes is supported by a wealth of data. One of these unfavorable outcomes is infection. This type of infectious risk is fundamentally different from the classic transfusion-transmitted infections, in which infectious agents are primarily present in the donated and stored blood and enter the body through the transfusion. In this case, the supposition is that allogeneic blood itself does not transmit the infectious agents, but it acts to make the body more susceptible to other infectious agents that it normally encounters, as is the case with nosocomial (hospital-acquired) infections.”

The fact that allogeneic blood can make the body more prone to acquire infections can come as a surprise to some. Allogeneic blood is immunologically active and various types of immunological and hypersensitivity reactions can occur following transfusion of allogeneic blood, but what most of these reactions have in common is that they involve activation of domains of immune system. On the other hand, allogeneic blood can also work to suppress the immune system and the immunosuppressive effects of allogeneic blood have been long recognized. Reports of improved survival of organ transplants following allogeneic blood transfusion date back to the1960s. Other potential consequences of the immunosuppressive effects of allogeneic blood known as transfusion-related immunomodulation (TRIM) are not as favorable and include increased risk of cancer recurrence and infection. The underlying mechanism of TRIM is not well understood and is thought to be related to the presence of white blood cells, residual plasma, and other mediators and bioactive agents found in stored allogeneic blood.”

“Nosocomial and hospital-acquired infections continue to top the list of infectious complications of transfusions. The flow of evidence on the impact of allogeneic blood transfusions on worsening the clinical outcomes of patients – including the increased risk of infections – is expected to continue, with the lion share of the evidence from observational studies. The current debate over the causative relationship between transfusions and unfavorable outcomes – whether transfusion is a cause of worse outcome or a marker of worse baseline – is not expected to be settled. Nonetheless, restrictive transfusion strategies advocating more judicious use of allogeneic blood components are expected to continue to grow and gain in popularity in the clinical arena. While this is expected to reduce the prevalence of infections (and many other unfavorable outcomes of transfusion), it is yet to be seen whether this positive change will be outweighed by the likely increase in other risk factors.
Transfusion

Continued from page 14

of infections in hospitalized patients in the years to come (e.g. increased comorbidities and heavier burden of chronic diseases). While Hb concentrations (alongside with some clinical indicators) remain the key factor to make transfusion decisions, the quest for more physiologically relevant transfusion triggers will continue.”

NOTE: To connect the above to Community’s recent blood transfusion data, the pie chart on the prior page shows the blood utilization “opportunity” at each CMC facility over the past year – being defined as the % of OUR use that exceeded the mean use at other subscribing hospitals, for same diagnoses and procedures. Granting that precise comparison between hospitals is challenging, this IS pretty good benchmarking. Did we get better outcomes for that extra 22.2% of blood use? Not sure, perhaps we did.

But Dr. Shander presents the case that we did in any case certainly have some extra morbidity from that 22.2% “opportunity” of use.

Lead Exposure and Its Toxicity: A Primer for Valley Health Care Providers

Submitted by Ken Bird M.D., Fresno County Public Health Officer

Homeowners in northeast Fresno concerned with discolored water, recently brought to our attention a frequently overlooked, but serious and significant public health problem in this country: lead exposure and lead poisoning.

Thorough testing of the water in many of the affected homes has led to the conclusion that the discoloration is coming from breakdown of previously stable mineral scale (built up over years in the plumbing line) after surface water with significantly different chemistry was introduced. In some cases lead is among the metals being leached from that scale material, especially in homes with galvanized piping and with fixtures installed prior to 2010.

Lead is a very common heavy metal used extensively in automobile fuel (until 1985) and paints (until 1978) that poisons by inhibiting a wide variety of cellular functions, especially those requiring calcium (which the lead replaces). It affects a multitude of organs and body systems resulting in a wide range of symptoms and adverse effects including behavior and attention problems, failure at school, hearing problems, kidney damage, reduced IQ, slowed body growth, abdominal pain, aggressive behavior, anemia, headaches, decreased appetite, and fatigue. Very high levels of lead in the body can result in vomiting, muscle weakness, seizures, coma, and even death.

Measures families can take to reduce lead exposure include:

- Making sure children do not have access to peeling paint or chewable surfaces painted with lead based paint
- Preventing children from playing in bare soil
- Getting rid of all toys possibly painted with lead paint
- Avoiding canned goods from foreign countries
- Being wary of lead in traditional folk remedies, cosmetics, and imported foods (especially candies)
- Showering and changing clothes after finishing work or hobby activities with lead based products
- Not storing wine, spirits, or vinegar based salad dressing in lead crystal for long periods of time
- Keeping homes as dust free as possible, particularly window sills that may contain lead paint dust
- Letting tap water run for a minute before drinking or cooking with it
- Only using water from the cold side of the kitchen faucet for drinking, cooking, and baby formula

See Lead Exposure on page 16
Sampling to date in the affected homes indicates the presence of lead in the water of a very small percentage of these homes, and levels above the 15 ppb actionable level are present in a handful of tests. Those levels reduce further when water lines that have sat over extended periods are flushed for several minutes.

While it is clear that this is not a major source of lead exposure, as it has been in Flint, Michigan (where the bulk of the plumbing lines are lead), we know that there is no identified safe blood lead level for children. Even low levels have been known to affect IQ, ability to pay attention, and academic achievement. These effects cannot be corrected. “... [A] current dilemma is the nearly impossible task of eliminating all lead exposure in children.”

Even worse, “because lead crosses the placenta, mothers can be a source of exposure for infants in utero.” Lead in bone, from chronic prior exposure, can be mobilized in pregnancy and lactation. “Lead exposure during pregnancy and breastfeeding can result in lasting adverse health effects independent of lead exposure during other life stages.” It is estimated that 1% of women of childbearing age have blood lead levels greater than, or equal to, 5 mcg / dl.

Today, even though lead has been removed from automobile fuels and paints, the CDC estimates that 500,000 children between the ages of 1 and 5 continue to have blood lead levels over 5 mcg/dl. Most of this exposure is from paint chips and paint dust from pre-1978 homes. Exposures can also occur from soil contaminated in the past with leaded fuel exhaust (particularly near highways and urban areas), hobby and occupational exposures, lead soldered plumbing fixtures, lead contaminated consumer products (such as toys and pottery), old cribs, and some imported foods.

Risk factors for lead poisoning include age under 6 (esp. 1 to 2 years old), living in pre-1978 housing (especially those with paint that is in poor condition), low income, pica behavior (ingestion of non-food items), and exposure to contaminated consumer products.

Early effects of lead poisoning are difficult to detect and its symptoms are both vague and commonly encountered in daily practice. The only way of knowing if a child, or anyone, is being affected by exposure to lead is to test for lead in the blood. Both the Centers for Disease Control and Prevention and the American Academy of Pediatrics recommend targeted testing of all Medicaid enrolled and eligible children, as well as those born outside the United States. The Advisory Committee on Childhood Lead Poisoning Prevention recommends that all children enrolled in Medicaid be tested at 12 and 24 months of age or at 36 to 72 months if not previously tested.

It is further recommended that all children be screened for possible lead exposure, and screening tools are available. A good example can be found at www.health.ny.gov/environmental/lead/exposure/childhood/risk_assessment.htm.

Lead exposure in California is monitored primarily through the California Department of Public Health’s Childhood Lead Poisoning Prevention Branch and the Occupational Lead Poisoning Prevention Program, and I encourage you to visit their websites.

Neither of these programs adequately addresses the current situation in northeast Fresno, and your patients may come to you for guidance. Recommendations to healthcare providers and to water consumers have been made by the Fresno County Department of Public Health and are posted on our website at: www.fcdph.org/healthmessages. Patients concerned about lead in their water supply should have their water tested at their primary source(s) for drinking and cooking. If levels of lead are found they should consult with their healthcare provider regarding blood lead testing.

Recommendations for reducing lead levels in water are posted, and special recommendations have been made for those at highest risk (children under the age of six and pregnant women).

Finally, prenatal care providers may wish to review guidelines from the CDC at www.cdc.gov/nceh/lead/publications/leadandpregnancy2010.pdf.

References:
Protecting Your Patients
Prevention of Healthcare Associated Infections (HAIs)

Submitted by Beverly Kuykendall, Manager Infection Control, CRMC

According to a 2013 JAMA Internal Medicine article, an estimated $9.8 billion is spent each year treating hospital-acquired infections (HAIs). Of the top 5 HAIs, surgical site infections (SSIs) contributed the most to overall costs (33.7%), followed by ventilator-associated pneumonia (VAP) 31.6%; central line associated bloodstream infections (CLABSIs) 18.9%; Clostridium difficile (C.diff) infections 15.4%; and catheter-associated urinary tract infections (CAUTIs) <1%.

On a per-case basis, CLABSIs were found to be the most costly HAIs, adding an average of $45,814 to a patient’s medical bill. VAPs were a close second at $40,144 per case, followed by SSIs at $20,785, C.diff infections at $11,285 and CAUTIs at $896. These HAIs are not only costly but can lead to extended hospital stays and increased risk of morbidity and mortality.

Regulatory agencies, such as California Department of Public Health (CDPH), Consolidated Medical Services (CMS/Medicare) and Joint Commission are now involved in this growing concern by mandating that health care facilities implement best practice guidelines aimed at preventing HAIs and publishing facility specific infection rates for the general public to review.

What can you do to prevent HAIs?

First and Foremost... HAND HYGIENE.. HAND HYGIENE.. HAND HYGIENE. Use soap & water or alcohol hand-gel before and after every patient contact.

CLBSI Prevention. During central line insertion wear maximum barrier precautions, use a full body drape to cover patient and a chlorhexidine/alcohol skin antiseptic, avoid using the femoral vein, daily assess the line necessity and discontinue as soon as possible.

CAUTI Prevention. Order foley catheters only when necessary and discontinue as soon as possible, use aseptic technique for insertion.


SSI Prevention. Instruct patient to shower with CHG the night before and morning of the procedure, use a CHG/alcohol patient skin prep, administer appropriate perioperative antibiotic prophylaxis, use clippers to remove hair, maintain perioperative glucose control.

MDRO/C.diff Prevention. Follow Contact Precautions (gowns & gloves) for patient care, use stethoscopes, blood pressure cuffs, etc. dedicated to one patient (or clean/disinfect equipment between patient use), prescribe antibiotics only when necessary, use disinfectant wipes to clean environmental surfaces or equipment that becomes contaminated.

For additional information regarding infection prevention best practice guidelines, a copy of the JAMA article or individual facility rates, contact Infection Control: CRMC, 459-2047; CCMC, 324-4033; FHSH, 488-8071.
DON’T MISS THE OPPORTUNITY TO ATTEND THE 2017 WINTER CME SYMPOSIUM IN SCOTTSDALE, ARIZONA

12th ANNUAL WINTER CME SYMPOSIUM
PURSUIT OF EXCELLENCE

The Symposium will be held at the luxurious Fairmont Scottsdale Princess that provides world-class hospitality in the Valley of the Sun.

Wednesday, February 22 – Saturday, February 25, 2017
GOLF TOURNAMENT - Friday, February 24th

Join the golf tournament that will take place on Arizona’s dazzling TPC Golf Course at the Fairmont Scottsdale Princess, home of the PGA Waste Management Phoenix Open. Hosted by Santé Health Foundation and Community Medical Centers.

HIGHLIGHTS INCLUDE:

Benjamin Carson, MD
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Mayo trained Family Practice Physician with a unique combination of ground level experience in medicine, coaching and personal and business development. As CEO of TheHappyMD.com, Dr. Drummond has come full circle from career ending burnout to become a leading executive coach to burned out physicians and physician leaders.

Dike Drummond, MD

ZDoggMD (Zubin Damania, MD)
ZDoggMD is a physician, off-white rapper, and the founder of Turntable Health. A hospitalist at Stanford for almost 10 years, Dr. Z is an internationally renowned healthcare speaker and man of mild-to-moderate mystery.

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SAVE THE DATE
WATCH FOR YOUR INVITATION!
New Antimicrobial Stewardship Standard: Putting it into Action at Community

Submitted by Marisa Méndez PharmD., M.P.H., B.C.P.S., Antimicrobial Stewardship Coordinator and Naiel Nassar M.D., UCSF Fresno Infectious Diseases Director, Antibiotic Subcommittee Chair

With the lack of novel antimicrobial agents in the medication development pipeline, increasing antimicrobial resistance, and limited antimicrobial armamentarium due to manufacturer discontinuation or medication shortages, antimicrobial stewardship has become a hot topic. You may recall last month’s Physician's Edition featured an article regarding the Centers for Disease Control and Prevention (CDC) and National Quality Forum’s core elements of hospital antimicrobial stewardship programs. The regulatory requirements for antimicrobial stewardship continue to expand as The Joint Commission (TJC) announced its new Antimicrobial Stewardship standard, which becomes effective January 1, 2017.

The new Medication Management standard has eight elements of performance, which include the seven core elements recommended by NQF and CDC.

- **Leadership Commitment**
  - Dedicating necessary human, financial, and information technology resources

- **Education of Staff and Licensed Independent Practitioners**

- **Education of Patients and Families as Needed**

- **Antimicrobial Stewardship Multidisciplinary Team**
  - Including Infectious Diseases physician, infection preventionist, pharmacist, and practitioner

- **Inclusion of NQF/CDC Core Elements**
  - I. Leadership Commitment
  - II. Accountability
    - · Appointing a single leader responsible for the program
  - III. Drug Expertise
  - IV. Action
    - · Implementing recommended practices
  - V. Tracking
  - VI. Reporting
  - VII. Education

- **Organization-Approved Multidisciplinary Protocols**

- **Antimicrobial Data Collection and Analysis**
  - Stewardship activities
  - Prescribing patterns
  - Resistance patterns

- **Performance Improvement**

Some examples of organization-approved multidisciplinary protocols recommended by TJC include antibiotic formulary restrictions, assessment of appropriateness of antibiotics for community-acquired pneumonia, skin and soft tissue infections, or urinary tract infections, care of the patient with Clostridium difficile, guidelines for antimicrobial use in adults/pediatrics, plan for parenteral to oral antibiotic conversion, and preauthorization requirements for specific antimicrobials.

Thanks to the Antibiotic Subcommittee and its efforts to expand antimicrobial stewardship practices, Community Medical Centers has several of these protocols in place (e.g., Reserved Antimicrobial policy, Pharmacy Managed IV-to-PO Medication Conversion Program, Pneumonia order sets, etc.). In addition, Community Regional Medical Center (CRMC) is preparing to launch its physician led Antimicrobial Stewardship Program (ASP) this fall. Members of the CRMC ASP team will be attending various medical staff Advisory meetings to discuss some of the upcoming changes physicians may notice to improve the appropriate use of antimicrobials.

As part of the tracking and reporting requirements, facility-specific antibiograms are published and used. The antibiogram is a valuable tool physicians can utilize to assist with empiric antimicrobial selection (see article Analysis and Presentation of Cumulative Antimicrobial Susceptibility Test Data on page 21 of this issue for additional information).

The ASP team is currently working on improving antimicrobial data collection and analysis methods. Presently, the majority of antimicrobial stewardship activities are captured during the order verification process and include the following intervention categories:

<table>
<thead>
<tr>
<th>Intervention Category</th>
<th>Example Protocols</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antibiotic Allergy Clarified</td>
<td>Antibiotic Pharmacokinetics Performed</td>
</tr>
<tr>
<td>Antibiotic De-escalation</td>
<td>Antibiotic Prior Authorization Obtained</td>
</tr>
<tr>
<td>Antibiotic Discontinued</td>
<td>Antibiotic Recommendations</td>
</tr>
<tr>
<td>Antibiotic Dose Adjusted</td>
<td>Antibiotic: Reserved Antimicrobial Evaluation</td>
</tr>
<tr>
<td>Antibiotic IV-to-PO</td>
<td>Antibiotic: Unapproved Reserved Antimicrobial Discontinued</td>
</tr>
<tr>
<td>Antibiotic Level Avoided</td>
<td>Antibiotic: Unnecessary Antibiotic Combination Discontinued</td>
</tr>
<tr>
<td>Antibiotic Orders for Home Health Clarified</td>
<td>Antibiotic and Pathogen Mismatch (new category)</td>
</tr>
</tbody>
</table>

See *Antimicrobial* on page 21
Below is a summary of the total number of antimicrobial stewardship activities tracked for each facility since November 20151.

It is anticipated the number of antimicrobial stewardship interventions will continue to rise as ASP services expand. Stay tuned as the ASP team works to optimize patient outcomes while minimizing any unintended consequences of antimicrobial use, such as toxicity and emergence of resistant pathogens.

References
CDC. Core Elements of Hospital Antibiotic Stewardship Programs. Atlanta, GA: US Department of Health and Human Services, CDC; 2014. Available at www.cdc.gov/getsmart/healthcare/implementation/core-elements.html

Analysis and Presentation of Updated Cumulative Antimicrobial Susceptibility Test Data


Each year the Community Regional Medical Center Laboratory Microbiology Department works in close collaboration with Community Medical Centers Pharmacy Department to generate a report showing the cumulative data from antibiotic susceptibility testing of bacteria from cultures tested on CMC hospitals’ patients during the previous year. This report is referred to as the antibiogram and is an element of regulatory compliance for antimicrobial stewardship.

The primary aim of the antibiogram is to provide information to clinicians in the selection of the most appropriate agents to guide choices of initial empiric antimicrobial therapy. To be useful for this purpose, only the susceptibility testing results from the first isolate of a given type of bacteria from a patient will be used for the antibiogram data. Changes in susceptibility patterns may occur once the bacteria have been exposed to antibiotics, so collection of data from additional isolates of the same organism on a patient might skew the data which is aimed for guiding empiric treatment.

Antibiogram data collected each year is helpful in selection of initial antimicrobial therapy, but should not be substituted for the complete susceptibility data for each See Antimicrobial Susceptibility on page 22
Antimicrobial Susceptibility

Continued from page 21

individual patient when that information becomes available. Definitive antimicrobial therapy should be based on susceptibility results, which may allow for de-escalation or require broadening of antimicrobial therapy coverage. Optimally, definitive antimicrobial therapy should provide the narrowest spectrum of coverage at the right dose, route of administration, and duration of therapy.

Antimicrobials reported for each type of bacteria are chosen to reflect the corporation’s antimicrobial formulary following the guidelines presented in the Clinical Laboratory Standards Institute documents. In addition to valuable susceptibility information, the antibiogram contains important information regarding dosing of the most frequently utilized antimicrobials.

Four different antibiograms were prepared to separate out possible differences in resistance patterns at the different CMC hospitals. The four reports are:
- CRMC – Includes all non-ICU sites
- CRMC – ICU only
- CCMC – all departments
- FSHS – all departments

The antibiograms can be accessed on CMC’s Forum under the Documents tab > Reference folder > Antibiograms. They will also be posted to the Laboratory’s Intranet page on the Forum (Departments > Laboratory).

A few examples of the changes or similarities seen over the years and across the corporation are shown in the following graphs. As expected, there were some minor fluctuations in susceptibilities. The antibiograms for this year include piperacillin/tazobactam susceptibilities reported for additional Gram-negative isolates. A note added to the antibiogram states that ciprofloxacin is more sensitive than levofloxacin against P. aeruginosa for all facilities.
The Microbiology Lab at Community Regional is pleased to announce that Mycoplasma pneumoniae identification by PCR is now available at our facility. Testing can be ordered from all CMC facilities on inpatients and outpatients.

This highly sensitive and specific RT-PCR test replaces the less sensitive and specific Mycoplasma IgM EIA test. We have worked with our Infectious Disease experts on this change, and we appreciate their guidance.

Until recently, the IgM antibody test was the only readily available way to detect this non-culturable organism. IgM antibodies take several days to become positive and typically remain positive for weeks or months after infection resolves. Best test performance required comparison of acute and convalescent IgM levels weeks apart. Because of that, antibody testing is of little help in detecting current infection. Since hospitalized patients with Mycoplasma pneumoniae need to be kept in droplet isolation, relying on IgM serology with its poor specificity for current infection is less than ideal. This results in increased demand for isolation rooms. The new PCR testing method will provide accurate and timely results to help identify patients with active infections to guide decisions about isolation rooms.

Keep in mind that PCR testing – like serology testing – detects both asymptomatic carriage and active disease. The importance of “pre-test probability” to obtain a meaningful result requires that testing is ordered on patients clinically suspected to have active Mycoplasma disease. Testing asymptomatic patients is NOT recommended.

For additional information or questions, please contact:
- Dr. David Slater, Laboratory Medical Director, dslatermd@communitymedical.org
- Hap Morrissey, Administrative Laboratory Director, 459-6504, gmorrissey@communitymedical.org
- Marilyn Mitchell, Microbiology Supervisor, 459-2021, mmitchell@communitymedical.org

### IMPORTANT DETAILS

#### SPECIMEN
Acceptable Specimen: NP Swab (nasopharyngeal swab)
Collection: Swab the back of the nasopharynx. Swab both nostrils using 1 or 2 swabs and submit swabs together in a single tube of Viral Transport Media (VTM).

#### Transport/Specimen Stability:
- Room Temperature storage in VTM for up to 4 hours.
- Refrigerator temperatures for up to 48 hours.
- Freezer temperatures for up to 30 days.

#### TESTING
Availability
7 days per week: Testing is available 6:30am-10:00pm. Specimens received during other hours will be tested and resulted by early the following day.
Testing time on the instrument is less than 2 hours.

#### HOW TO ORDER
Test is orderable from the EPIC facility list:
- **MPPCR**: Mycoplasma Pneumoniae by PCR

**NOTE:** Mycoplasma PCR testing is the preferred method of detection. Mycoplasma serology (IgM, IgG) testing is no longer on the CMC test menu.

### Other Rapid PCR testing is also available for many other respiratory viruses and bacteria.

**Current test options include:**

<table>
<thead>
<tr>
<th>Order code</th>
<th>Description in EPIC</th>
<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLUPC</td>
<td>Influenza A and B by PCR</td>
<td>Influenza A, Influenza A H1, Influenza A H3, Influenza B</td>
</tr>
<tr>
<td>RSVPC</td>
<td>RSV by PCR</td>
<td>RSV A, RSV B</td>
</tr>
<tr>
<td>ADNVP</td>
<td>Adenovirus by PCR</td>
<td>Adenovirus</td>
</tr>
<tr>
<td>BPTUP</td>
<td>Bordetella pertussis Group by PCR</td>
<td>B. pertussis, B. holmesii, B. parapertussis/B. bronchiseptica</td>
</tr>
<tr>
<td>VRPPC</td>
<td>Viral Respiratory PANEL PCR Includes:</td>
<td>RSV A, RSV B</td>
</tr>
<tr>
<td></td>
<td>· RSV by PCR</td>
<td>Adenovirus</td>
</tr>
<tr>
<td></td>
<td>· Adenovirus by PCR</td>
<td>Parainfluenza 1, 2, 3, 4</td>
</tr>
<tr>
<td></td>
<td>· Human Metapneumovirus by PCR</td>
<td>Human Metapneumovirus</td>
</tr>
<tr>
<td></td>
<td>· Rhinovirus by PCR</td>
<td>Rhinovirus</td>
</tr>
</tbody>
</table>

Notes:
- Test time for these organisms takes approximately 2 hours.
- Acceptable Specimen is the NP Swab in Viral transport media (VTM).
The California Poison Control System’s 24-hour hotline manages hundreds of poisoning cases of all kinds each day—from children who accidentally eat soap to adults with severe overdoses. Two groups we hear about commonly are teenagers and those who get into trouble with adverse effects from over the counter pain medications. We need everyone’s help to make sure these patients and their doctors have the resources and knowledge to make safe decisions, and these infographics are designed to answer the most common questions we get about these issues. Please distribute these materials to your patients, parents and teacher groups, and colleagues who deal with issues of poisoning. And of course, call Poison Control anytime you need them. It’s a great idea to have its emergency hotline number (800-222-1222) programmed into your contacts list for easy access when needed.
"In all human affairs there are efforts, and there are results, and the strength of the effort is the measure of the result."

– James Allen, writer
A Local Zika Update

Submitted by Ken Bird M.D.
Fresno County Public Health Officer

Since the initial widespread awareness of this public health threat early this year, a week doesn’t pass without hearing new information or developments in its spread across the Americas.

This single-stranded RNA Flavivirus (closely related to dengue, yellow fever, and West Nile virus) was first identified in Uganda in 1947 and is rapidly advancing across this hemisphere via the Aedes mosquito species, aegyptii and albopictus (both aggressive daytime biters that readily follow people into their homes).

Fresno County has had pockets of Aedes aegyptii mosquitoes since 2013 and, despite herculean efforts by local mosquito abatement districts, these pockets are spreading.

Local transmission of Zika virus in the continental U.S. (as is currently occurring in areas of Florida) was not unexpected. However, it is not expected to spread with the alacrity exhibited in other areas of the Americas due to better public health infrastructure and mosquito abatement efforts.

That being said, it is critical that local health care providers stay abreast of the latest developments in this emerging infectious disease, including its clinical presentation, transmission, recommendations for testing, and what advice to give your patients regarding travel as well as conception avoidance following Zika illness or possible exposure.

While the illness itself is invariably mild, with only 20% of those infected experiencing the characteristic fever, rash, arthralgia, and non-purulent conjunctivitis (usually 3 to 12 days after exposure), the possible effects on infants infected by their mothers during pregnancy are devastating.

Complicating control of the spread of the illness is the fact that it can also be transmitted through sexual contact, lab exposure, and blood transfusion.

At the time of this writing, there has been only one confirmed travel-associated Zika virus infection in Fresno County. The individual resides in an area of the county not thought to host Aedes mosquitoes. Also at the time of this writing, Fresno County Department of Public Health (FCDPH) has received reports of tests, or requests for tests, on 33 other individuals. Of these, 16 were negative, 6 are pending, and 11 were not tested due to insufficient suspicion.

Current recommendations call for testing of:
- Any individual with any symptoms of Zika who has traveled to an area with active local transmission or has had sex without barrier protection with anyone confirmed to have Zika virus infection or traveled to an area where transmission is ongoing (this now includes areas in Florida)
- Any pregnant woman with possible exposure to Zika virus (either through travel or sex without barrier protection with someone infected or who has traveled). This risk of exposure should be assessed at EACH prenatal visit.

Because Fresno County does have populations of the Aedes aegyptii mosquito, and thus the possibility of local transmission, heightened surveillance is warranted and testing should be considered for anyone presenting with two or more of the hallmark symptoms for which other possible pathology has been ruled out. It should also be considered for any woman with a pregnancy complicated by microcephaly without an alternative explanation.

Testing for Zika virus infection consists of real time reverse transcriptase-polymerase chain reaction (rRT-PCR) for viral RNA in serum and urine, serology for IgM and neutralizing antibodies in serum, and plaque reduction neutralization testing (PRNT) for presence of virus-specific neutralizing antibodies in paired serum samples. The correct testing sequence is dependent on time since onset of symptoms or last possible exposure. Cross-reacting antibodies among the Flaviviruses complicate the testing. Excellent guidance on testing is available at www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm and at www.cdc.gov/mmwr/volumes/65/wr/mm6521e1.htm. FCDPH has staff available to assist with questions regarding testing at 559-600-3332.

Advice to your patients regarding Zika virus exposures should include strict protection from mosquito bites while traveling and for at least 3 weeks after returning home, whether ill or not. It should also include the strong recommendation for pregnant women and their partners, as well as couples planning pregnancy, to not travel to areas with on-going transmission.

Additionally, it is critical that you counsel couples to avoid conception for:
- 8 weeks after symptom onset for women who have Zika virus disease
- 6 months after symptom onset for men who have Zika virus disease
- 8 weeks after last exposure for women or men with possible exposure to Zika virus either through travel or sex without barrier protection with someone who traveled to an area with on-going transmission.


All pregnant women diagnosed with Zika virus infection

See Zika on page 27
In several 2015 and in May 2016 issues we introduced readers to TEDMED Talks available online. TEDMED arose from TED Talks (which have a loyal following, and with which you may be familiar from NPR programming).

TEDMED describes itself as “…a global community of leading doers and thinkers from every walk of life. Our goal is to seed the innovations in health and medicine of today, making the breakthroughs of tomorrow possible. We are best known for our annual three-day gathering that brings together inspiring speakers, influential Delegates and innovative start-ups.

TEDMED curates a unique and provocative program featuring brilliant short talks and stunning artistic performances that reframe the way we think and inspire critical new possibilities for the future of health and medicine. The result is an immersive experience that challenges us to recharge our brains, ignite new thinking, energize our work and enlarge our worldview. We leave TEDMED imagining fresh possibilities and solutions for the future of health and medicine.”

Find the entire menu of short and highly engaging talks from the 2015 conference (and earlier years) here: www.tedmed.com/videos.

**Stirring up political change from the kitchen**
http://tedmed.com/talks/show?id=529946

Urban chef, educator and author Bryant Terry puts the culture back into agriculture by using an anthropological lens to examine how food can spark revolutionary shifts in people’s habits, attitudes, and politics.

**The Paradox of Incentive Insensitivity**
http://tedmed.com/talks/show?id=528930

Entrepreneur and theoretical neuroscientist Vivienne Ming describes how we can best harness and maximize our human potential, and the personal transformations that can take place once that potential is unleashed.

**Insights from an athlete, advocate, and survivor**
http://tedmed.com/talks/show?id=528924

Cancer survivor and Olympic hopeful Seun Adebiyi astounds us with stories from his quest to conquer the impossible – and what he has learned about himself along the way.

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**Tox Tidbits**

Continued from page 26

or suspected of having Zika virus infection must be reported to FCDPH to ensure their inclusion in the national Zika Pregnancy Registry, established to collect data to develop recommendations on clinical care, plan for services for pregnant women and families affected by Zika, and improve prevention of Zika virus infection during pregnancy.

Finally, guidance on care for pregnant women with possible Zika virus exposure is available at www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm and guidance on evaluation and management of infants with possible congenital Zika virus infection can be found at www.cdc.gov/mmwr/volumes/65/wr/mm6533e2.htm.

This deceptively beautiful image shows an immunostaining of Zika-infected developing brain tissue, imaged using confocal microscopy. Infected cells are shown in green, vulnerable neural progenitor cells are shown in red, and cell nuclei are shown in blue. The image was on the cover of July's Transfusion journal. It was provided by Hongjun Song, Director of Stem Cell Program in the Institute of Cell Engineering at The Johns Hopkins University School of Medicine. Used with permission.
“People think you’re crazy if you talk about things they don’t understand.”
– Elvis Presley

The following passage is taken from the author’s (soon to be) self-published collection of stories entitled “Palliative Care: A Different Kind of Hope”

I met Harris Preston Kinnard, Sr. after my mentor and colleague, Dr. Stephen Lloyd, left our primary care practice shortly after I joined. Steve had many patients over the course of his career, and when he left, I think he lined up all the characters and gave them to me. Harris was one of those characters. He was a Chief Petty Officer in the US Navy, and lived with his wife, Lyrecia, in Stony Creek, Tennessee. Some people might call that “God’s Country.” Harris did not suffer fools, except for me. It was a pleasure to be his doctor and friend.

Harris attended naval leadership school in Memphis in 1953. Harris reminisced once about a friend in Memphis who was raving about a young man that was tearing up the music scene. His friend repeated, “This guy Elvis is going to be the next big thing.” As Harris listened, the friend began to describe this music phenomenon and then referred to him by his full name. Harris finally said, “Oh you mean Aaron?” Elvis Aaron Presley. Harris had struck up a friendship with Elvis and they played music on the corner in Memphis together before “The King” became a household name in 1954.

His deep Southern accent sauntered as each syllable told the story of his place of birth. Harris continued to play music throughout his life. He played guitar and sang for the veterans with his wife at the Mountain Home VA as often as possible.

I savored his visits to the office so I could hear more stories about his life. In between stories we would discuss his health, especially his emphysema or COPD. Harris required supplemental oxygen and was susceptible to infections like many folks with advanced COPD. The metered pulse of the portable oxygen canister followed the rhythm of his words like a bass guitar keeping time in a Johnny Cash song.

It was getting tougher to manage his health and he was making more trips to the hospital requiring intubation. I saw him in the hospital that last time, then he came to see me in the clinic. I had a difficult discussion with him about hospice. Harris was a musician but he was a warrior, too.

I presented the hospice option like I do with most folks – it’s not giving up, it’s an intervention that gives you more quality of life (outside the hospital) and can potentially add days to your life. Harris seemed skeptical at first but he trusted me and agreed to try hospice.

Harris was doing fine, however, after some months he began to decline, which is expected for someone on hospice. However, Harris was not having more difficulty breathing. He was getting weaker. I went out to see him at his home. He did not look like the person I had seen several months ago, and the pallor on his face reminded me of freshly fallen morning snow. Harris was on a blood thinner, so I asked the nurse to draw a CBC, which measures contents of the blood such as red and white blood cells as well as hemoglobin and hematocrit. When we got the results back, Harris had lost over half his blood supply as indicated by his low hemoglobin and hematocrit. I immediately sent him to the ER.

I expected him to be admitted and get the work up for active bleeding. What I got instead was a call from our nurse saying the admitting physician considered admitting Harris “inappropriate” because he was on hospice and his code status was DNR/DNI (Do Not Intubate). I became upset. It was 8 p.m. at night, and I was getting resistance for sending an actively bleeding patient to the hospital.

I quickly called the hospital to explain my reasoning for sending a hospice patient to the ER. I explained that Harris was on hospice for his lung condition, that we were obligated to treat him because he’s bleeding, and that his goals of care did not include allowing him to bleed to death. After a few exchanges, the physician agreed to admit Harris. Harris received blood and went home feeling much better.

See DNR on page 29
DNR ≠ DNT

Continued from page 27

few days later. We stopped the blood thinner and he had no reoccurrence of bleeding.

The conversation about DNR (Do Not Resuscitate) and hospice comes up frequently. First, if any patient is DNR, it means you treat as aggressively as needed, except you exclude chest compressions if the heart stops beating. You might even place a person on a ventilator if that aligns with their advance healthcare directive. It could mean that they want everything else to be attempted, including giving medications to help your heart beat normally, such as atrial fibrillation or ventricular tachycardia (rhythms that are dangerous to the heart and body). DNI is when folks do not want to be placed on a mechanical ventilator, which requires an endotracheal tube (ET tube) to be placed in the trachea so a patient can breathe.

Likewise, a person can be on hospice and still get treatment in a hospital. It happens. Some folks on hospice get admitted for intractable pain or hip fractures. Being on hospice does not exclude treating acute medical issues that are unrelated to the hospice diagnosis. A family or patient may elect to avoid the hospital but they can always go if suffering cannot be alleviated in the home, such as happens in a pain crisis. Certainly, many things can be taken care of in the home. Hospice trained nurses and physicians are very good at keeping patients out of the hospital, but certain issues need the attention of an acute care facility.

Many non-medical people have misconceptions about hospice care. Unfortunately, some in the medical profession still do as well.

I was in a family meeting the other day with the primary attending physician and the patient's family. We were discussing goals of care and we introduced the topic of hospice care. You could see the reaction immediately on their faces. They told us they were informed that once in hospice the patient would never be able to return to the hospital and that essentially his brother's life was over. It took us awhile before we calmed their concerns. What is true is that hospice agencies prefer you call them if a crisis emerges before you dial 911, but the choice to go to the hospital always remains. My colleagues and I spend a lot of time educating people in the medical field about all the misconceptions about palliative care, hospice and advance directives.

Harris embodied a larger than life persona and traversed an unlikely path that somehow intersected with mine in a part of the country that seemed to mass-produce likable individuals. Who knows, maybe if Harris chose a different road he might have been one of the legendary Sun Studio musicians created in Memphis, Tennessee. As it turned out, his path led him to the military and later to the hills of East Tennessee.

Harris passed away at home with his lovely wife at his side. He was a long way from Bowling Green, Mississippi yet he had returned home. When I think of Harris, I remember his warmth and conviction. I remember what mattered most to him: family, country and music.

SEPTEMBER PHYSICIAN PHOTOGRAPHER: JOHN WIEHANN M.D.

Vinales, Cuba: a predominantly tobacco-producing valley, tobacco farmers and their families.
This is the first part of a two-part edition of Choosing Wisely. Items 11-15 will be continued in the October 2016 issue of Physicians’ Edition.

### Fifteen Things Nurses and Patients Should Question

1. **Don’t automatically initiate continuous electronic fetal heart rate (FHR) monitoring during labor for women without risk factors; consider intermittent auscultation (IA) first.**

   Continuous electronic FHR monitoring during labor, a routine procedure in many hospitals, is associated with an increase in cesarean and instrumental births without improving Apgar scores, NICU admission or inarapartum fetal death rates. IA allows women more freedom of movement during labor, enhancing their ability to cope with labor pain and utilize gravity to promote labor progress. Upright positions and walking have been associated with shorter duration of first stage labor, fewer cesareans and reduced epidural use.

2. **Don’t let older adults lie in bed or only get up to a chair during their hospital stay.**

   Up to 65% of older adults who are independent in their ability to walk will lose their ability to walk during a hospital stay. Walking during the hospital stay is critical for maintaining functional ability in older adults. Loss of walking independence increases the length of hospital stay, the need for rehabilitation services, new nursing home placement, risk for falls both during and after discharge from the hospital, places higher demands on caregivers and increases the risk of death for older adults. Bed rest or limited walking (only sitting up in a chair) during a hospital stay causes deconditioning and is one of the primary factors for loss of walking independence in hospitalized older adults. Older adults who walk during their hospital stay are able to walk farther by discharge, are discharged from the hospital sooner, have improvement in their ability to independently perform basic activities of daily living, and have a faster recovery rate after surgery.

3. **Don’t use physical restraints with an older hospitalized patient.**

   Restraints cause more problems than they solve, including serious complications and even death. Physical restraints are most often applied when behavioral expressions of distress and/or a change in medical status occur. These situations require immediate assessment and attention, not restraint. Safe, quality care without restraints can be achieved when multidisciplinary teams and/or geriatric nurse experts help staff anticipate, identify and address problems; family members or other caregivers are consulted about the patient's usual routine, behavior and care; systematic observation and assessment measures and early discontinuation of invasive treatment devices are implemented; staff are educated about restraints and the organizational culture and structure support restraint-free care.

4. **Don’t wake the patient for routine care unless the patient’s condition or care specifically requires it.**

   Studies show sleep deprivation negatively affects breathing, circulation, immune status, hormonal function and metabolism. Sleep deprivation also impacts the ability to perform physical activities and can lead to delirium, depression and other psychiatric impairments. Multiple environmental factors affect a hospitalized person’s ability for normal sleep. Factors include noise, patient care activities and patient-related factors such as pain, medication and co-existing health conditions.

5. **Don’t place or maintain a urinary catheter in a patient unless there is a specific indication to do so.**

   Catheter-associated urinary tract infections (CAUTIs) are among the most common health care-associated infections in the United States. Most CAUTIs are related to urinary catheters so the infections can largely be prevented by reduced use of indwelling urinary catheters and catheter removal as soon as possible. CAUTIs are responsible for an increase in U.S. health care costs and can lead to more serious complications in hospitalized patients.

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These items are provided solely for informational purposes and are not intended as a substitute for consultation with a health professional. Patients with any specific questions about the items on this list or their individual situation should consult their physician or nurse.

See Choosing Wisely on page 31
Choosing Wisely
Continued from page 30

Don’t use aloe vera on skin to prevent or treat radiodermatitis.

Radiodermatitis can cause patient pain and pruritus that affect quality of life, body image and sleep. Severe radiodermatitis can necessitate dose reductions or treatment delays that negatively impact the ability to adequately treat the cancer. The incidence of radiodermatitis can be as high as 95% depending upon the population of patients receiving treatment. Studies documenting incidence have primarily occurred in women receiving treatment for breast cancer.

Many Internet sites market aloe to individuals for what is commonly termed “sunburn type” reactions from radiation therapy. Research evidence shows that aloe vera is not beneficial for the prevention or treatment of radiodermatitis, and one study reported worse patient outcomes with use of aloe vera.

Patients undergoing radiation therapy need to know that aloe vera should not be used to prevent or treat skin reactions from radiation therapy, since it has been shown to be ineffective and has the potential to make skin reactions worse.

Don’t use L-carnitine/acetyl-L-carnitine supplements to prevent or treat symptoms of peripheral neuropathy in patients receiving chemotherapy for treatment of cancer.

Peripheral neuropathy is a chronic side effect of some chemotherapeutic agents. This can be a significant quality of life issue for patients, affecting functional ability and comfort. In the public realm, numerous Internet sites that sell herbal and dietary supplements have specifically recommended L-carnitine/acetyl-L-carnitine for symptoms of peripheral neuropathy. This supplement is available without a physician prescription. Evidence not only has shown use of carnitine supplements to be ineffective, but research also has shown it may make symptoms worse. Current professional guidelines contain a strong recommendation against the use of L-carnitine for prevention of chemotherapy-induced peripheral neuropathy.

Nurses need to educate patients not to use this dietary supplement while undergoing chemotherapy for cancer.

Don’t neglect to advise patients with cancer to get physical activity and exercise during and after treatment to manage fatigue and other symptoms.

During treatment for cancer, up to 99% of patients will have fatigue and many individuals continue to experience persistent fatigue for years after completion of treatment. It is the natural tendency for people to try to get more rest when feeling fatigued and health care providers have traditionally been educated about the importance of getting rest and avoiding strenuous activity when ill. In contrast to these traditional views, resistance and aerobic exercise have been shown to be safe, feasible and effective in reducing symptoms of fatigue during multiple phases of cancer care. Exercise has also been shown to have a positive effect on symptoms of anxiety and depression. Current professional guidelines recommend 150 minutes of moderate-level exercise such as fast-walking, cycling or swimming per week along with 2–3 strength training sessions per week, unless specifically contraindicated.

Don’t use mixed medication mouthwash, commonly termed “magic mouthwash,” to prevent or manage cancer treatment-induced oral mucositis.

Oral mucositis is a painful and debilitating side effect of some chemotherapeutic agents and radiation therapy that includes the oral mucosa in the treatment field. Painful mucositis impairs the ability to eat and drink fluids and impacts quality of life. Oral mucositis can result in the need for hospitalization for pain control and provision of total parenteral nutrition in order to maintain adequate nutritional intake during cancer treatment. Mixed medication mouthwash, also commonly known by other names such as “magic mouthwash,” “Duke’s magic mouthwash,” or “Mary’s magic mouthwash,” is commonly used to prevent or treat oral mucositis. These are often compounded by a pharmacy, are expensive and may not be covered by health insurance. Research has shown that magic mouthwash was reported to cause taste changes, irritating local side effects and is no more effective than salt and baking soda (sodium bicarbonate) rinses. Instead, frequent and consistent oral hygiene and use of salt or soda mouth rinses can be used.

Don’t administer supplemental oxygen to relieve dyspnea in patients with cancer who do not have hypoxia.

Reports of the prevalence of dyspnea range from 21 to 90% overall among patients with cancer, and the prevalence and severity of dyspnea increase in the last six months of life, regardless of cancer diagnosis. Supplemental oxygen therapy is commonly prescribed to relieve dyspnea in people with advanced illness despite arterial oxygen levels within normal limits, and has been seen as standard care. Supplemental oxygen is costly and there are multiple safety risks associated with use of oxygen equipment. People also experience functional restriction and may have some distress from being attached to a device. Palliative oxygen (administration in nonhypoxic patients) has consistently been shown not to improve dyspnea in individual studies and systematic reviews. Rather than use a costly and ineffective intervention for dyspnea, care should be focused on those interventions which have demonstrated efficacy such as immediate release opioids.
ANNOUNCING UPDATED ORDER SETS BEING RELEASED

Submitted by Clinical Informatics/Clinical Content Team

Please see below for a list of Order Sets that were released into production between 05/24/2016 to 08/16/2016. If you identify a problem with one of the order sets please follow the procedure for corrective action or contact a member of the Clinical Content Team.

<table>
<thead>
<tr>
<th>Epic PRL#</th>
<th>Order Set Name</th>
<th>Description of Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>571</td>
<td>Acute Coronary Syndrome</td>
<td>Change Request: Added duration to nitroglycerin ointment order</td>
</tr>
<tr>
<td>629</td>
<td>Adult Burn Service</td>
<td>Change Request: Precheck Functional Mobility in the IP consult to PT orders.</td>
</tr>
<tr>
<td>10</td>
<td>Adult Hemostatic Medications for Trauma</td>
<td>Biennial Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clarified Tranexamic acid indication related to Massive Transfusion Protocol (MTP)</td>
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<tr>
<td>1319</td>
<td>Alcohol Withdrawal Orders</td>
<td>Change Request: Improved Work List tasks related to lorazepam (ATI-VAN) dosing.</td>
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<td>1355</td>
<td>Anesthesia Post-Op Cardiothoracic Surgery Ventilator</td>
<td>Biennial Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ventilator orders updated</td>
</tr>
<tr>
<td>10</td>
<td>Adult Hemostatic Medications for Trauma</td>
<td>Biennial Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clarified Tranexamic acid indication related to Massive Transfusion Protocol (MTP)</td>
</tr>
<tr>
<td>1355</td>
<td>Anesthesia Post-Op Cardiothoracic Surgery Ventilator</td>
<td>Biennial Review</td>
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<tr>
<td></td>
<td></td>
<td>Ventilator orders updated</td>
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<tr>
<td>45</td>
<td>Anesthesia SS Level 2 Recovery - Adult</td>
<td>Biennial Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Modified pain management section</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Added discharge criteria</td>
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<tr>
<td>1275</td>
<td>Antepartum/ Special Services Supplemental orders</td>
<td>“HIV” added as a synonym</td>
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<tr>
<td>1217</td>
<td>Botulinum Antitoxin Adult/Pediatric Acquisition Orders</td>
<td>Change Request: Removed Pediatric Orders and changed name to “Botulism Antitoxin Adult Acquisition Orders”</td>
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<tr>
<td>1437</td>
<td>Cardiac MRI Pharmacological Stress Test</td>
<td>Restrict cardiology orders (ECH07, ECH06, O70796, CAR06, 070795) to CCMC and FHSH. Create a new section for CRMC only with the Cardiac Stress Test order</td>
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<td>Delirium Management Adult</td>
<td>Biennial Review</td>
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<tr>
<td></td>
<td></td>
<td>Clarified dosing, hold parameters for haloperidol</td>
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<tr>
<td>1497</td>
<td>ED Cardiac Syncope</td>
<td>Change Request: Added duration to nitroglycerin ointment order</td>
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<td>1447</td>
<td>Gyn Post Op Short Stay Discharge</td>
<td>Biennial Review</td>
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<tr>
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<td>Minor edits to paper version</td>
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<tr>
<td>1305</td>
<td>HIV Exposed Newborn Infant</td>
<td>Change Request: Replace HIV screen order with HIV AG AB 4th Gen with RFLX, Rapid</td>
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<td>HIV Exposed Newborn Infant</td>
<td>“HIV” added as a synonym</td>
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<td>1472</td>
<td>ICU General Medical Admission</td>
<td>Change Request: Update embedded order set (PRL1348)</td>
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<tr>
<td>1245</td>
<td>Intracerebral Hemorrhage Admission Order</td>
<td>Change Request Cardiology orders updated</td>
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<tr>
<td>1274</td>
<td>Intrapartum C-Section/ Special Services Supplemental Orders</td>
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<td>Intrapartum Labor/ Rupture of Membranes/ Special Services Supplemental Orders</td>
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<td>18</td>
<td>Labor Orders</td>
<td>Change Request: Removed meperidine and updated butorphanol to include maximum doses</td>
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<tr>
<td>1435</td>
<td>Management Of Adult HHS</td>
<td>Change Request Epic search synonyms added (HHNK and Insulin)</td>
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<td>1827</td>
<td>MRI Minimal Sedation</td>
<td>New Order Set</td>
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<td>1290</td>
<td>Neonatal Parenteral Nutrition</td>
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<td>Updated to mirror Epic build and added appropriate weight-based dosing to paper version</td>
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<td>1314</td>
<td>NICU Gastrochisis Orders</td>
<td>Biennial Review</td>
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<tr>
<td></td>
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<td>*Respiratory orders removed</td>
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<td></td>
<td>*Normal Saline modified</td>
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<td></td>
<td></td>
<td>*Medications dosing to be ordered as weight based</td>
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<td>Order Set Name</td>
<td>Reason for Retirement</td>
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<tr>
<td>1613</td>
<td>Dobutamine Stress Echo</td>
<td>Biennial Review: Zero usage in past year</td>
</tr>
<tr>
<td>1640</td>
<td>Staple Dressing Removal Post Op</td>
<td>Biennial Review: Zero usage in past year</td>
</tr>
<tr>
<td>1415</td>
<td>Ventricular Assist Device</td>
<td>Biennial Review: Zero usage in past year</td>
</tr>
</tbody>
</table>

The following order sets were retired

*Character cannot be developed in ease and quiet. Only through experience of trial and suffering can the soul be strengthened, vision cleared, ambition inspired, and success achieved.*

– Helen Keller, writer and political activist
Community’s Foundation: We’re on the Move!

By Katie Zenovich, Vice President Corporate Development, Community Medical Foundation

Some of you may remember the $10 million property gift Community Medical Centers received last April from local real estate developers Richard and Mimi Gunner and George Andros – one of the largest philanthropic gifts in Community’s history. And now, a little over a year later, more than 300 corporate employees are just about all moved in, including me and my Community Medical Foundation team!

We are now conveniently located on Shaw Avenue with easy access to Highways 41 and 168 – it’s a win-win!

As you know, Community has significantly expanded over the years and we needed a central hub for support services and recruiting. We are so very grateful to the Gunners and George for their generous gift and their commitment to help this region’s largest healthcare network continue growing and delivering the highest level of care.

Although this office complex doesn’t house clinical services, it does directly support them, including all medical programs vital to Community’s mission to create a healthier tomorrow for all ages.

I can’t tell you how excited I am for all of the great things Community has planned for the years ahead! This is just the beginning. I would love to talk with you further about our plans and ways YOU can take part in them and make a difference. Please call Community Medical Foundation at 559-459-2670 or visit www.CommunityMedical.org/Foundation.

Vinales, Cuba: a predominately tobacco-producing valley
CME HIGHLIGHTS

UCSF Fresno
Department of Psychiatry
Title: “Shamanic Treatment of Psychiatric Illness in Peru”
Date: Thursday, September 8, 2016
Speakers: Dr. Kourosh Kolahi
Time: 4:00 p.m.
Place: UCSF Fresno Center, 155 N. Fresno Street, Room 116
CME: 1 CME

UCSF Fresno
Department of Surgery
Title: “Critical Care and Trauma Conference – Hand Trauma”
Date: Thursday, September 15, 2016
Speakers: Dr. Kourosh Kolahi
Time: 12:00 p.m.-1:00 p.m.
Place: CRMC-Sequoia East Conference Room
CME: 1 CME

CRMC Perinatal M & M
Title: “What's New in Neonatal Resuscitation Program (NRP)?”
Date: Wednesday, September 21, 2016
Speaker: Anand Rajani M.D. and Annette Wassell R.N.C., N.N.P.
Time: 12:30 p.m.-1:30 p.m.
Place: UCSF Fresno Center, 155 N. Fresno St., Fresno, CA 93701, Rm 136
CME: 1 CME

Central Valley Chronic Disease Partnership
Title: “Diabetes Update in the Valley”
Date: Thursday, September 22, 2016
Time: 5:30 p.m.-8:00 p.m. (dinner provided)
Speaker: Kelvin Higa M.D.
Place: Piccadilly Inn, 2305 W. Shaw Ave, Fresno, CA
Contact: Ana Cruz ancruz@co.fresno.ca.us or Alvishia Johnson ajohnson@co.fresno.ca.us or 559-600-6449
Fee: $20
CME: 1.0 CME

UCSF Fresno
Title: “Ready, Steadi (CDC Initiative), Balance-Preventing and Assessing Falls in the Elderly”
Date: Wednesday, September 28, 2016
Time: 6:00 p.m.-8:30 p.m. (dinner provided)
Speakers: Peggy R. Trueblood Ph.D., P.T. and David Jeffcoach M.D.
Place: H. Marcus Radin Conference Center, Clovis Community Medical Center
RSVP: Eliana Troncale 559-459-4450 or etroncale@communitymedical.org
CME: 2 CME

Sponsored by a grant from the Walter A Rohlfing Foundation Fund

University Centers of Excellence
Title: “2016 Dermatology Symposium”
Date: Thursday, September 29, 2016
Speakers: Drs. Greg Simpson, Luis A. Dehesa and Leslie Storey
Time: 6:00 p.m.-8:00 p.m. (dinner provided)
Place: Limon Restaurant 9455 N. Fort Washington, Suite 101, Fresno, CA
RSVP: Donald Standridge
email: Donald.Standridge@ccfmg.org
by September 22, 2016
CME: 1.5 CME

Please also see the enclosed individual flyers for more on these & other upcoming local CME activities to meet your CME needs.
UCSF Fresno Department of Pediatrics Presents:

Vehicle Passenger Safety- A Lifetime Commitment

A Comprehensive evaluation of the evidence and recommendations from birth to adulthood

DATE:  
September 20, 2016

TIME:  
12:30-3:30pm  
Lunch will be provided

LOCATION:  
UCSF Fresno  
155 N. Fresno Street  
Room 136

RSVP:  
Crystal Sutton-  
http://evite.me/Cj5VvTSuhV

Please include your organization name, number of attendees and any food preferences or allergies

Community Medical Centers is accredited by the Institute for Medical Quality/California Medical Association (IMQ/CMA) to provide continuing medical education for physicians.

Community Medical Centers designates this live activity for a maximum of 2.0 AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This credit may also be applied to the CMA Certification in Continuing Medical Education.

Speakers Kristina Pasma, Axel Reyes, and Martha Tessmer have no disclosures  
Organizers Allison Crisp DO, Eliana Truncale, Serena Yang MD, an Christina Faulkenberry-Miranda MD have no disclosures

In Collaboration with:
Wednesday, September 21, 2016 from 12:30pm – 1:30pm

UCSF – Fresno, Room: 136
155 N. Fresno Street, Fresno, CA 93701

Principal Discussants
Nursing: Annette Wassell, RNC, NNP
Neonatology: Dr. Anand Rajani

Target Audience
Any staff physician, resident physician, nurse, nurse practitioner, nurse midwife, physician assistant, or allied health professional working with the perinatal, neonatal, and/or pediatric population.

Objectives
At the end of the session, attendees will be able to:

1) Apply to practice, current clinical evidence and guidelines relating to NRP.
2) Gain insight into NRP, thereby improving patient safety & outcomes.
3) Identify ethical concerns that apply to the clinical situation and anticipate barriers that may adversely impact outcomes if not addressed across a diverse population.

1 CME will be offered
RSVP is not required
Lunch will be provided

Program Director Dr. K. Rajani; and Program Planner Bernadette Neve have no relevant commercial relationships to disclose.

This is an activity offered by Community Medical Centers, a CMA-accredited provider. Records of attendance are based on sign-in registration and are maintained only for Community Medical Centers staff members who are credentialed as an MD, DO, CNM, NP, or PA.

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Save the Date!
Central Valley Chronic Disease Partnership Presents:
Diabetes Update in The Valley

Dinner and Symposium

Thursday, September 22, 2016 | 5:30 p.m. - 8:00 p.m.
Picadilly Inn | 2305 W Shaw Ave, Fresno CA 93711

Please save the date for this event. We invite Physicians, Nurse Practitioners, Physician Assistants, Nurses, Medical Assistants, Health Educators, Social Workers, Community Outreach Workers, Community Advocates and Allied Health Professionals.

Featuring:

Kelvin D. Higa, MD, FACS, FASMBS
Clinical Professor of Surgery, UCSF - Fresno Medical Education Program
Program Director Minimally Invasive and Bariatric Surgery, Fresno Heart and Surgical Hospital
Title: Treatment of Metabolic Syndrome...The Paradigm Shift!
Objectives:
1) Will increase recognition of benefits for surgical treatment to treat/resolve metabolic syndrome and incorporate competency to one’s practice to improve patient care.
2) Will better understand the latest science behind surgical treatment of metabolic syndrome to improve patient care through the application in physician practice.

Dr. Steven Chen, Pharm.D., FASHP, FCSHP, FNAP
Associate Professor and Chair, University of Southern California School of Pharmacy
Title: Comprehensive Medication Management for Patients with Diabetes: Partnering with Pharmacists to Promote Optimal Medication Use
Objectives:
1) Attendees will be able to identify and resolve medication-related problems commonly seen in the comprehensive medication management of diabetic patients and apply knowledge to practice to improve overall care.
2) Attendees will gain awareness of the role of pharmacists in providing comprehensive medication Management (CMM) service for diabetic patients and add this competency to one’s practice.
3) Attendees will gain competency in techniques for engaging patients in medication self-management and incorporate knowledge to practice to improve patient care.

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Disclosures: Speaker Kelvin Higa, M.D. and Steven Chen, Pharm.D. and event planner Melanie Ruvalcava have no disclosures.

Dinner and event cost: $20.00 | Registration information coming soon. Check www.fresnodiabetes.org for updates!
For questions, please contact Ana Cruz: ancruz@co.fresno.ca.us or Alvishia Johnson: ajohnson@co.fresno.ca.us
Or call (559) 600-6449

Central California Asthma Collaborative | Health Net/CalViva Health | Anthem Blue Cross | California Health Collaborative | AllergyOne | Community Volunteers | Fresno County Department of Public Health | Fresno Diabetes Collaborative
READY, STEADI (CDC INITIATIVE), BALANCE Preventing and Assessing Falls in the Elderly
KEYNOTE SPEAKERS
Peggy R. Trueblood, PhD, PT
David Jeffcoath, MD, ACS Fellow, UCSF Fresno
Sponsored by a grant from the Walter A. Rohlffing Foundation Fund

Wednesday, Sept. 28, 2016 6:30-8:30 pm
H. Marcus Radin Conference Center
Clovis Community Medical Center
6 pm
Dinner | Senior Service Information Tables
6:30-7:30 pm
Keynote Speakers
7:30-8:30 pm
Roundtable Group Discussion
Tools to Assess Risk for falls and the Use of Assistive Devices
Deborah Walker, MPT, DPT, OCS, GCS, CEEAA

Moderators
Alex Sherriffs, MD, UCSF Fresno
Alzheimer’s & Memory Center
Adriana Padilla, MD, Family and Community Medicine, UCSF Fresno
Eliana Troncale, Injury Prevention Specialist, Trauma Program CRMC

No cost to attend
Registration
etroncale@communitymedical.org
or call (559)459-4450

Objectives
At the end of the session, attendees will be able to:
Describe 3 key interventions to lower the risk of falls and injury
Meet CDC Guidelines for fall assessment and prevention
Identify key history questions, key examination findings and know when to image when assessing falls
Become familiar with tools to assess the elderly for falls and to recommend appropriate assistive devices to help with prevention

Accreditation: Community Medical Centers is accredited by the Institute for Medical Quality/California Medical Association (IMQ/CMA) to provide continuing medical education for physicians. Community Medical Centers designates this live activity for a maximum of 2.0 AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity. This credit may also be applied to the CMA Certification in Continuing Medical Education. Certificates available upon signing in. Disclosures: Activity Directors, Adriana Padilla and Eliana Troncale have no disclosures; Moderator, Alex Sherriffs, MD has no disclosures, Speakers Peggy Trueblood, PhD, PT and David Jeffcoath, MD have no disclosures.
University Centers of Excellence presents

2016 Dermatology Symposium

Greg Simpson, M.D.
Medical Director, University Dermatology Associates
Associate Clinical Professor, UCSF at UCSF Fresno
General Dermatology and Pediatric Dermatology

Luis A. Dehesa, M.D.
Assistant Clinical Professor, UCSF at UCSF Fresno
General and Surgical Dermatology for Adult and Pediatric Care

Leslie Storey, M.D.
Assistant Clinical Professor, UCSF at UCSF Fresno
Mohs/Dermatological Surgery and General Dermatology

Thursday, September 29th, 2016 • 6 PM

Limon ▼ 9455 N. Fort Washington, Suite 101 ▼ Fresno, CA 93730
6:00 - 6:30 PM Complimentary Dinner
6:30 - 8:00 PM Dermatology For The Primary Care Provider

Please submit your RSVP to Donald Standridge at Donald.Standridge@ccfmg.org by September 22, 2016

Participants will be able to:

1. Identify dermatology resources and use that knowledge to communicate with patients available options to improve patient care, patient safety and outcomes.
2. Recognize dermatological manifestations of chronic disorders increasing physician competency, provide more effective care and achieving better patient outcomes.

Target Audience:
Pediatricians, Internists, Family Practitioners, General Practitioners, Physician Assistants and Nurse Practitioners

Program director: Dominic Dizon, M.D., Speakers: Luis A. Dehesa M.D., Leslie Storey, M.D., Greg Simpson, M.D., and Planner Donald Standridge have no relevant commercial relationships to disclose. This CME activity has no commercial support associated with it. Food or refreshments provided by University Dermatology Associates.

Community Medical Centers is accredited by the Institute for Medical Quality/California Medical Association (IMQ/CMA) to provide continuing medical education for physicians. Community Medical Centers designates this live activity for a maximum of 1.5 AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity. This credit may also be applied to the CMA Certification in Continuing Medical Education.
September 2016

September 1
No Grand Rounds – Resident Open Meeting

September 8
“Shamanic Treatment of Psychiatric Illness in Peru”
Joanna Gedzior, MD
VA Central California Healthcare System
Assistant Clinical Professor

September 15
“Coming of Age in the 21st Century – Part II”
Karen Kraus, MD
Associate Clinical Professor
Department of Psychiatry

September 22 (Room Change UCSF Fresno, Room 136)
“Delirium Update”
James A. Bourgeois, O.D., M.D.
Clinical Professor and Vice Chair, Clinical Affairs
Department of Psychiatry/Langley Porter Psychiatric Institute
University of California, San Francisco
UCSF Weill Institute for Neurosciences

September 29
Paramedic Behavioral Health Support Project
Craig Campbell, MD
Associate Clinical Professor, Psychiatry
Program Director, UCSF Fresno Psychiatry Residency Program

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This credit may also be applied to the CMA Certification in Continuing Medical Education.
The Department of Surgery
SURGICAL GRAND ROUNDS
September 2016

September 2, 2016  How to Achieve World Peace in 45 Minutes
Dr. Leo Fong

September 9, 2016  AAST Preview
Drs. Siada, Kwok, Davis

September 16, 2016  TBA
Dr. Anne Prentice

September 23, 2016  TBA
Dr. Robert Bertellotti

September 30, 2016  TBA
Dr. Frank Kennedy
7:30 a.m. – 8:30 a.m.
CRMC Sequoia West

Target Audience: CMC Faculty, community physicians, house officers, mid-level providers, nurses and others potentially involved with patient care.

Objectives: At the end of the session the attendees will be able to:
• Demonstrate a commitment to carry out professional responsibilities while adhering to ethical principles
• Achieve increased competency and performance using newly integrated surgical techniques
• Improve the performance and competency of the faculty in teaching and increase the knowledge of resident trainees

Drs. and Program Planner Denise Goodman have no relevant financial disclosures.

Community Medical Centers is accredited by the Institute of Medical Quality/California Medical Association (IMQ/CMA) to provide continuing medical education for physicians.

Community Medical Centers designates this live activity for a maximum of 1.0_ AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This credit may also be applied to the CMA Certification in Continuing Medical Education.
Department of Surgery
Critical Care/ Trauma Conference
Thursday 12p.m-1p.m
September 2016
Updated 9.8.16km

Date    Topic                                      Location        Speaker
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9/1/16  Pediatric Acute Respiratory Failure         Sequoia East  Maher Eldadah, MD
9/8/16  Penetrating Neck Trauma                    Sequoia East  Dr. Schroeder
         Combined ED/Surgery Conference               Rachel Caiafa, MD
9/15/16 NO Conference
9/22/16 TBD                                        Sequoia East  Rachel Caiafa, MD
9/29/16 Renal & Genitourinary Trauma               Sequoia East  Hunter Benvenuti, MD

Target Audience: CMC Faculty, community physicians, house officers, physician assistants, nurse practitioners, nurses and others potentially involved with patient care.

Objectives:
- Increased knowledge and improved proficiency in the management of critically ill patients.
- Increased knowledge and awareness of the utility of comprehensive trauma and critical care management.
- Improved awareness and management of the physiologic alterations associated with trauma.

BCPS and Program Director Nancy Parks, MD and Program Planner Kelley Medico Montgomery have no relevant commercial relationships to disclose.

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DATE:
Saturday, November 5, 2016
7:00 am — 8:00 am Registration
8:00 am — 12:30 pm Symposium
Breakfast & Lunch will be provided

LOCATION:
H. Marcus Radin Conference Center
on the Clovis Community campus

ATENDEES WILL:

- Increase the ability to appropriately utilize new techniques in breast screenings when making assessments for patient care and apply these current guidelines for patient care.

- In order to improve patient safety, physicians will become more aware of the indications and contraindications in evolution of commonly seen breast disease processes and will be more proficient with diagnoses.

- Increase physician recognition in the management of complex breast cases and use this knowledge in practice to develop better management plans for a diverse patient population and apply this to achieve better outcomes.

- Review case studies of patients with positive findings (cancer) and gain a better understanding of the ethical decision making process physician’s use when diagnosing and treating breast disease and apply this knowledge in practice.

TARGET AUDIENCE:
All physicians, nurses and allied health professionals.

CME: 4.5

TO RSVP, PLEASE CLOCK ON:

FOR MORE INFORMATION:
Jessica Lipsius at:
(559) 324-4002
jlipsius@communitymedical.org
COURSE ACTIVITIES INCLUDE:

<table>
<thead>
<tr>
<th>SPEAKERS</th>
<th>PHYSICIAN TITLES</th>
<th>PRESENTATION TITLES</th>
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<tbody>
<tr>
<td>Deanna Attai, MD</td>
<td>Assistant Clinical Professor of Surgery at the David Geffen School of Medicine at the University of California, Los Angeles; Past-President of the American Society of Breast Surgeons</td>
<td>Life After Breast Cancer Treatment: How to Help Your Patients Thrive</td>
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<tr>
<td>Judy Champaign, MD</td>
<td>Breast Imaging Radiologist, CMI Radiology Group, Fresno, CA</td>
<td>Breast Imaging</td>
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<tr>
<td>Dawn DeLozier, PHD</td>
<td>Medical Geneticist, Clovis Community Medical Center, Clovis, CA</td>
<td>Evolution of Genetic Testing for Hereditary Cancers</td>
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<tr>
<td>Vassi Gardikas, MD, FACS</td>
<td>Breast Surgeon, Valley Surgical Specialists, Fresno, CA</td>
<td>Benign Diseases of the Breast</td>
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<tr>
<td>Andrea Stebel, MD</td>
<td>Breast Oncologist at California Oncology of Central Valley, Fresno CA</td>
<td>Update in Breast Cancer Care</td>
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<tr>
<td>Deborah Gumina, MD, FACS</td>
<td>Breast Surgeon, Valley Surgical Specialists, Fresno, CA</td>
<td>Case Study – Panel Discussion</td>
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</tbody>
</table>

COURSE ACTIVITY DIRECTOR: Deborah Gumina, MD, FACS, Breast Surgeon with Valley Surgical Specialists
COURSE MODERATOR: Uma Swamy, MD, Radiation Oncologist with Oncology Care Providers at Community Medical Centers

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Disclosures: Activity Director Deborah Gumina, MD, MD has no Commercial Disclosures to make. Speaker Andrea Stebel, MD would like to disclose that he has a financial interest/arrangement or affiliation with the following corporation or other organization that sell or develop products or drugs for medical use: Celgene – Speakers Bureau. Speakers Deanna Attai, MD, Judy Champaign, MD, Dawn DeLozier, PhD, Vassi Gardikas MD, and Christopher Perkins, MD have no Commercial Disclosures to make. Moderator Uma Swamy, MD has no Commercial Disclosures to make. Planner Jessica Lipsius has no Commercial Disclosures to make.
36th Annual Central Valley Cardiology Symposium
Saturday, October 29, 2016 - 8 am
Madera County Office of Education, Madera CA

Feature Topics:
- Pulmonary Hypertension in the Heart Failure Patient – Distinguishing Primary from Secondary and How to Best Treat It
- Update on Sleep Disorders and Heart Disease
- Angiotensin Receptor – Neprilysine Inhibition: The Role in the Management of Heart Failure
- An Update on New Oral Anticoagulants for Stroke Prevention in Atrial Fibrillation: Assessing Risks and Individualizing NOAC Therapy
- Open, Endovascular, and Hybrid Techniques for Treatment of Thoracic Aortic Aneurysms and Complicated Dissections
- A Comparative Overview and Update on the Evolving Aortic and Mitral Valve Surgical and Transcatheter Therapies – (TVAR, Mitral Clip)

Speakers:
Jay D. Pal, MD, PhD
Assistant Professor, Division of Cardiothoracic Surgery, University of Washington

Richard F. Wright, MD, FACC
Chairman of the Board, Pacific Heart Institute, Research Director, Pacific Heart Institute,
Director, Heart Failure Center, Pacific Heart Institute

Roblee Allen, MD
Medical Director, Advanced Lung Disease/Lung Transplant Service, University of California Davis Medical Center

For more information or to register visit www.fmms.org or call (559) 2244-4224 ext. 118
$75 registration free for Physicians, Fresno Madera Medical Society members are free.

CME 6.0 Applied for, invitation to follow
Understanding Pain

The healthcare community in Central Valley has seen an increase in problems arising from the use of prescription pain management medications.

The Central Valley Opioid Safety Coalition has planned a lecture series that will raise the level of understanding of this critical issue. The 3-part lecture series includes topics about Understanding Pain, the Management of Chronic Pain, and Safe Prescribing.

**September 21, 2016 - Understanding Pain**

**November 9, 2016 - Management of Chronic Pain**

**January 18, 2017 - Safe Prescribing**

**September 21, 2016 Speakers**

**Ming-Chih Kao, PhD, MD**
*Pain specialist, General musculoskeletal physiatrist*
Clinical Assistant Professor, Orthopaedic Surgery,
Clinical Assistant Professor, Anesthesiology, Perioperative & Pain Medicine,
Associate Division Chief of Operations at Stanford Pain Management,
Stanford Health Care

**Scott Pritzlaff, MD**
*Pain specialist, Anesthesiologist*
Clinical Instructor, Anesthesiology, Perioperative and Pain Medicine,
Stanford Health Care

46 the number of people who die everyday from prescription opioid overdose

**CME Dinner Event**
*2.0 Applied for - Invitation to Follow*
September 21, 2016 - 6 PM to 9 PM
Fort Washington Country Club
10272 N Millbrook Ave., Fresno, CA

**Preregistration is required - No charge**

Please register online at www.fmms.org or by calling (559) 224-4224. Registration must be received by September 16 to be a guarantee participant.
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**CONTINUING MEDICAL EDUCATION**  September 2016

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<td>Orthopaedic X-Ray GR Ortho Surgery Conf. Rm.</td>
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<td>Ortho Surg-Adult Recon GR Ortho Surgery Conf. Rm</td>
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<td>Cancer Conference CRMC-Sequoia West Conf. Rm</td>
<td>7:30 - 8:30 am</td>
<td>HPB Planning Conf. CRMC-Sequoia West Conf. Rm</td>
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<td><strong>Neurovascular Conference CRMC-Sequoia East Conf Rm</strong></td>
<td>7:30 - 8:30 am</td>
<td>Cardiac Cath &amp; Intervention Cath Lab (7 West)</td>
<td>8:00 - 12:00 pm</td>
<td>Emergency Medicine UCSF Rm 136</td>
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<td>Brain Tumor/Cyberknife Conf- CRMC- Sequoia West Conf. Rm</td>
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<td>Psychiatry GR UCSF Rm 116</td>
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<td>As of 8/23/16</td>
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**Labor Day Holiday**

1. **Monday**: CRMC Ob-Gyn
   - CRMC Sequoia East Room
2. **Tuesday**: CIDP
   - CRMC Sequoia East Room
3. **Wednesday**: CRMC Pediatrics
   - CRMC Sequoia West Room
4. **Thursday**: CRMC Cardiology
   - CRMC Sequoia East Room
5. **Friday**: CRMC Utilization Review
   - CRMC Sequoia East Room