AGENDA

Quality, Patient Care and Patient Experience Committee Meeting of the El Camino Hospital Board

Monday, February 29th, 2016, 5:30 p.m.
El Camino Hospital, Conference Room A & B
2500 Grant Road, Mountain View, California
Katherine Anderson will be participating via teleconference from the following address:
Alpha Motoazabu 3-8-48, Motoazabu, Minatu-ku, Tokyo

Purpose: The purpose of the Quality, Patient Care and Patient Experience Committee ("Quality Committee") is to advise and assist the El Camino Hospital (ECH) Board of Directors ("Board") in constantly enhancing and enabling a culture of quality and safety at ECH, and to ensure delivery of effective, evidence-based care for all patients. The Quality Committee helps to assure that excellent patient care and exceptional patient experience are attained through monitoring organizational quality and safety measures, leadership development in quality and safety methods and assuring appropriate resource allocation to achieve this purpose.

	AGENDA ITEM	PRESENTED BY		
1.	**CALL TO ORDER**	David Reeder, Chair Quality Committee		5:30 – 5:31 p.m.
2.	**ROLL CALL**	David Reeder, Chair Quality Committee		5:31 – 5:32
3.	**POTENTIAL CONFLICT OF INTEREST DISCLOSURES**	David Reeder, Chair Quality Committee		5:32 – 5:33
4.	**CONSENT CALENDAR ITEMS:** Any Committee Member may pull an item for discussion before a motion is made.	David Reeder, Chair Quality Committee	*public comment*	**Motion Required** 5:33 – 5:38
	Approval: a. Minutes of Quality Committee Meeting - February 1, 2016 b. Environment of Care Policies *i. New Policies – (1Policy)* - *Temperature in Humidity in procedure rooms* *ii. Policies with Major Revisions- (0 Policies)* *iii. Policies with Minor Revisions (8 Policies)* *iv. Policies with no Revisions – Reviewed (3 Policies)* *v. Policies to Archive (0 Policies)* **Information:** c. Pacing Plan d. Patient Story e. Research Article f. iCare Update **ATTACHMENT 4**			

A copy of the agenda for the Regular Committee Meeting will be posted and distributed at least seventy-two (72) hours prior to the meeting. In observance of the Americans with Disabilities Act, please notify us at 650-988-7504 prior to the meeting so that we may provide the agenda in alternative formats or make disability-related modifications and accommodations.

Agenda: El Camino Hospital Quality, Patient Care, and Patient Experience Committee Meeting
February 29th, 2016

	AGENDA ITEM	PRESENTED BY		
5.	**CMO TRANSITION PLAN**	David Reeder, Chair Quality Committee		**Discussion** 5:38 – 5:48
6.	**REPORT ON BOARD ACTIONS**	David Reeder, Chair Quality Committee		**Discussion** 5:48 – 5:53
7.	**PROPOSED FY17 COMMITTEE GOALS** **ATTACHMENT 7**	Eric Pifer, MD, Chief Medical Officer	*public comment*	**Possible Motion** 5:53 – 6:03
8.	**FY16 EXCEPTION REPORT** **ATTACHMENT 8**	Eric Pifer, MD, Chief Medical Officer		**Discussion** 6:03 – 6:23
10.	**PATIENT AND FAMILY CENTERED CARE THEME** **ATTACHMENT 10**	Mick Zdeblick, Chief Operating Officer		**Discussion** 6:23 – 6:33
11.	**GREELEY PROJECT UPDATE** **ATTACHMENT 11**	Eric Pifer, MD, Chief Medical Officer		**Discussion** 6:33 – 6:43
12.	**PUBLIC COMMUNICATION**	David Reeder, Chair Quality Committee		**Information** 6:43 – 6:47
13.	**ADJOURN TO CLOSED SESSION**			6:47 – 6:48
14.	**POTENTIAL CONFLICT OF INTEREST DISCLOSURES**	David Reeder, Chair Quality Committee		6:48 – 6:49
15.	**CONSENT CALENDAR** Any Committee Member may pull an item for discussion before a motion is made.	David Reeder, Chair Quality Committee		**Motion Required** 6:49 – 6:51
	Approval: Meeting Minutes of the Closed Session *Gov't Code Section 54957.2.* - February 1, 2016 **Information:** Report related to the Medical Staff quality assurance matters, *Health and Safety Code Section 32155.* - Meeting Minutes of Quality Council January 6, 2016			
16.	Report related to the Medical Staff quality assurance matters, *Health and Safety Code Section 32155.* Red Alert and Orange Alert Update	Eric Pifer, MD Chief Medical Officer		**Discussion** 6:51 – 7:06
17.	Report related to the Medical Staff quality assurance matters, *Health and Safety Code Section 32155.* Top Case Review	Eric Pifer, MD Chief Medical Officer		**Discussion** 7:06 – 7:21

Agenda: El Camino Hospital Quality, Patient Care, and Patient Experience Committee Meeting
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	AGENDA ITEM	PRESENTED BY		
18.	**RECONVENE OPEN SESSION/REPORT OUT**	David Reeder, Chair Quality Committee		7:21 – 7:24
	To report any required disclosures regarding permissible actions taken during Closed Session.			
19.	**ADJOURNMENT**	David Reeder, Chair Quality Committee		7:25p.m.

FY 16 Quality Committee Meetings

- **April 4, 2016**
- **May 2, 2016**
- **June 1, 2016**

FY 16 Board and Committee Educational Gatherings

- **March 23, 2016**

a. Minutes of Quality Committee Meeting - February 1, 2016

Minutes of the Open Session of the
Quality, Patient Care and Patient Experience Committee Meeting of the
El Camino Hospital Board
Monday, February 1st, 2016
El Camino Hospital, Conference Rooms A&B
2500 Grant Road, Mountain View, California
Katherine Anderson participated via teleconference from the following address:
Alpha Motoazabu 3-8-48, Motoazabu, Minatu-ku, Tokyo
Jeffrey Davis, MD will be participated via teleconference from the following address:
Diamante' Beachfront, Cabo San Lucas, Mexico

Members Present	**Members Absent**	**Members Excused**
Dave Reeder; Peter Fung, MD; Diana Russell, RN; RN; Nancy Carragee, Mikele Bunce, Wendy Ron, Lisa Freeman, Katie Anderson (via teleconference), Jeffrey Davis, MD; (via teleconference).	Melora Simon, Alex Tsao	Robert Pinsker, MD

A quorum was present at the El Camino Hospital Quality, Patient Care and Patient Experience Committee on the 1st day, February, 2016 meeting.

Agenda Item	Comments/Discussion	Approvals/Action
1. CALL TO ORDER	The meeting of the Quality, Patient Care and Patient Experience Committee of El Camino Hospital (the "Committee") was called to order by Committee Chair Dave Reeder at 5:37p.m.	***None***
2. ROLL CALL	Chair Reeder asked Stephanie Iljin to take a silent roll call.	***None***
3. POTENTIAL CONFLICT OF INTEREST DISCLOSURES	Chair Reeder asked if any Committee member or anyone in the audience believes that a Committee member may have a conflict of interest on any of the items on the agenda. No conflict of interest was reported.	***None***
4. CONSENT CALENDAR ITEMS	Chair Reeder asked if any Committee member wished to remove any items from the consent calendar for discussion. None were noted. **Motion:** To approve the consent calendar (Open Minutes of the December 7th, 2015 Meeting). **Movant:** Freeman **Second:** Russell **Ayes:** Anderson, Davis, Russell, Freeman, Bunce, Fung, Reeder, Carragee, and Ron. **Noes:** None **Abstentions:** None **Absent:** Simon, Tsao	***The Open Minutes of the December 7th, 2015 Meeting were approved.***

Agenda Item	Comments/Discussion	Approvals/Action
	Excused: Pinsker **Recused:** None	
5. REPORT ON BOARD ACTIONS	Chair Reeder reported on the recent purchase of the West Valley, South San Jose property in anticipation of launching a new Hospital, and the phasing out of the Rotocare Clinic. Chair Reeder also explained that due to the efforts involved with the Joint Commission Survey that agenda items Patient and Family Centered Care and Top Risk Case Review will be agendized at the next meeting on February 29th, 2016.	***None***
6. FY 16 EXCEPTION REPORT	Dr. Pifer, Chief Medical Officer, reviewed the exception report and noted the continued concern regarding the upward trend in Medication Errors. Dr. Pifer submitted the Weekly Medication Safety minutes to reflect the current action plans in place to address this trend. Dr. Pifer expressed gratitude to Cheryl Reinking, our Chief Nursing Officer and her team for their efforts in fall reduction; as a result there is a trend down in falls. Additionally specimen labeling and surgical site infections continue to stay down. In the midst of iCare, budget, and organizational goals, management's primary focus and aim continues to be Medication Safety. Dr. Pifer asked the Committee for feedback and discussion ensued.	***None***
7. ICARE UPDATE	Mick Zdeblick, Chief Operating Officer, gave a brief overview of the iCare Implementation and current post go-live metrics. Mr. Zdeblick reported the iCare system is stable and performing as expected. The focus now is the optimization of system and design. Mr. Zdeblick gave an overview of post go live governance, current taskforces, Epic's post go live visit & assessment, common themes and challenges, as well as new focused efforts. The Committee gave feedback for streamlining workflows and continued training opportunities.	***None***
8. PUBLIC COMMUNICATION	None	***None***
9. ADJOURN TO CLOSED SESSION	**Motion:** To adjourn to closed session at 6:35p.m. **Movant:** Freeman **Second:** Carragee **Ayes:** Anderson, Davis, Russell, Freeman, Bunce, Fung, Reeder, Carragee, and Ron. **Noes:** None	***A motion to adjourn to closed session at 6:35 p.m. was approved.***

Agenda Item	Comments/Discussion	Approvals/Action
	Abstentions: None **Absent:** Simon, Tsao **Excused:** Pinsker **Recused:** None	
10. AGENDA ITEM 14 RECONVENE OPEN SESSION/ REPORT OUT	*Agenda Items 10 – 13 were reported in closed session.*	***None***
11. AGENDA ITEM 15 ADJOURNMENT	There being no further business to come before the Committee, the meeting was adjourned at 7:11p.m.	***None***

Attest as to the approval of the Foregoing minutes by the Quality Committee and by the Board of Directors of El Camino Hospital:

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Dave Reeder
Patient Experience Committee

Environment of Care Policies

SUMMARY OF POLICIES/PROTOCOLS FOR REVIEW AND APPROVAL

NEW POLICIES				
Policy Number	**Policy Name**	**Department**	**Date**	**Summary of Policy Changes**
6.08	Temperature and humidity in procedure rooms	Environmental	2/24	
POLICIES WITH MAJOR REVISIONS				
Policy Number	**Policy Name**	**Department**	**Review or Revised Date**	**Summary of Policy Changes**
POLICIES WITH MINOR REVISIONS				
Policy Number	**Policy Name**	**Department**	**Review or Revised Date**	**Summary of Policy Changes**
	Life Safety: Operations Continuity During Construction and Maintenance Projects	Environmental	12/15	update language to match current equipment and building configurations.
	Fire Safety Management - 1.02 Fire Safety Management Work Group Responsibilities	Environmental	2/16	Revised A.3 to read, "Evaluate general fire safety, drill and fire safety & communications systems."
	Fire Safety Management - 1.03 Employees' Responsibility for Fire Prevention	Environmental	2/16	Added the last "S" (Sweep) to the PASS acronym Included contractors and volunteers to the statement
	Fire Safety Management - 1.04 Code Red - Fire Response	Environmental	2/16	Updated locations to include Cedar Pavilion; included the acronym "RACE" in the document.
	Fire Safety Management - 1.05 Fire Protection Plan	Environmental	2/16	wording and location updates to match current building configurations.
	Fire Safety Management - 1.06 Interim Life Safety Measures	Environmental	2/16	removed reference to additional fire drills in areas of construction exceeding 3 months.
	Fire Safety Management - 1.07 Fire Drills	Environmental	2/16	update language to match current equipment and building configurations.
	Sterile Processing	Environmental	2/24	Temp, humidity and pressure relationships- corrections to comply with TJC. Changed MSDS to the newer SDS
POLICIES WITH NO REVISIONS - REVIEWED				
Policy Number	**Policy Name**	**Department**	**Review or Revised Date**	
	Life Safety: Design Criteria for New, Altered or Renovated Space	Environmental	12/15	no changes
	Fire Safety Management - 1.01 Fire Safety Management Plan Development	Environmental	2/16	
	Fire Safety Management - 1.08 Fire Watch	Environmental	2/16	
POLICIES TO ARCHIVE				
Policy Number	**Policy Name**	**Department**	**DATE ARCHIVE**	

- Temperature in Humidity in procedure rooms

El Camino Hospital®
THE HOSPITAL OF SILICON VALLEY

TITLE:	6.08 Temperature and humidity in procedure rooms
CATEGORY:	Safety - Environment of Care
LAST APPROVAL:	

TYPE:	☑ Policy ☑ Procedure	☐ Protocol ☐ Standardized Process/Procedure	☐ Scope of Service/ADT
SUB-CATEGORY:	***Utilities Management***		
OFFICE OF ORIGIN:	***Safety Officer***		
ORIGINAL DATE:	February, 2016		

I. COVERAGE:

Procedure rooms such as operating rooms, interventional rooms and delivery rooms.

II. PURPOSE:

- To establish the guidelines for optimal humidity and temperature in procedural rooms ensuring patient safety, compliance with regulations and comfort of staff and physicians.

III. POLICY STATEMENTS:

The HVAC mechanical systems that serve procedure rooms shall be maintained to provide acceptable and appropriate temperatures and relative humidity. The temperature in a procedure room is determined by the clinical requirements of the procedure. During the course of normal activities in a procedure room, the temperature and relative humidity can vary and staff may get "warm" due to protective clothing, surgical lighting and equipment loads. Temperature and humidity are inter-related, so a change in temperature may affect relative humidity levels which must stay between 20% and 60%. Temperatures may be adjusted in 1 to 2 degree increments allowing sufficient time for the room to respond to these changes before other changes are made, but under no circumstance should the temperature go below 62 degrees Fahrenheit (F) or exceed 75 degrees (F), while maintaining the relative humidity in the prescribed range.

IV. PROCEDURE:

The staff in the procedure rooms has control over the temperature by adjusting the thermostat in the room. In addition to the in room display the actual temperature and humidity in the procedure rooms is monitored by the Building Automation System (BAS) in Facilities Engineering Central Utility Plant at the Mountain View Campus and in the Engineering Services Office at Los Gatos Campus. In the event that the temperature or relative humidity falls outside the desired or established ranges for a prolonged time period (more than 60 minutes) the conditions are to be reported to the area charge nurse and the Engineering Department for corrective actions.

V. DEFINITIONS (if applicable):

1. Relative Humidity (RH)- the ratio of the amount of water vapor in the air at a given temperature to the maximum amount air can hold at the same temperature, expressed as a percentage.

VI. REFERENCES:

El Camino Hospital®
THE HOSPITAL OF SILICON VALLEY

TITLE:	6.08 Temperature and humidity in procedure rooms
CATEGORY:	Safety - Environment of Care
LAST APPROVAL:	

1. ASHRAE/ASHE Standard 170-2008- Ventilation of Healthcare Facilities
2. Guidelines for Design and Construction of Healthcare Facilities, FGI, 2010.

APPROVAL:

APPROVING COMMITTEES AND AUTHORIZING BODY	APPROVAL DATES
Perioperative Committee	
Central Safety Committee	
ePolicy Committee:	
Pharmacy and Therapeutics (if applicable):	
Medical Executive Committee: (NA)	
Board of Directors:	
Historical Approvals:	

Pacing Plan

QUALITY, PATIENT CARE AND PATIENT EXPERIENCE COMMITTEE

FY2016 PACING PLAN (Revised 2.29.16)

FY2016: Q1		
JULY - No Meeting	**AUGUST 3, 2015**	**AUGUST 31, 2015**
Routine Consent Calendar Items: ▪ Approval of Minutes ▪ FY 2016 Committee Goal Completion Status ▪ Pacing Plan ▪ Quality Council Minutes ▪ Patient Story ▪ Research Article	▪ Review and discuss quality summary with attention to risks and overall performance ▪ Corporate scorecard trending **Standing Agenda Items:** ▪ Consent Calendar ▪ Exception Report ▪ Patient Centered Care Plan ▪ Drilldown on Quality Program ▪ Red and Orange Alert as Needed **Info: Research Article & Patient Story**	▪ APPROVE FY 2016 Organizational Goals (Metrics) ▪ Approve FY 15 Organizational Goal Achievements ▪ Update on PaCT Plan ▪ Year-end review of RCA **Standing Agenda Items:** ▪ Consent Calendar ▪ Exception Report ▪ Patient Centered Care Plan ▪ Drilldown on Quality Program ▪ Red and Orange Alert as Needed **Info: Research Article & Patient Story**
FY2016: Q2		
OCTOBER 5, 2015	**NOVEMBER 2, 2015**	**DECEMBER 7, 2015**
▪ Safety Report for the Environment of Care (consent calendar) **Standing Agenda Items:** ▪ Consent Calendar ▪ Exception Report ▪ Patient Centered Care Plan ▪ Drilldown on Quality Program ▪ Red and Orange Alert as Needed **Info: Research Article & Patient Story**	▪ Committee Goals for FY16 Update ▪ ICare Update **Standing Agenda Items:** ▪ Consent Calendar ▪ Exception Report ▪ Patient Centered Care Plan ▪ Drilldown on Quality Program ▪ Red and Orange Alert as Needed **Info: Research Article & Patient Story**	▪ iCare Update **Standing Agenda Items:** ▪ Consent Calendar ▪ Exception Report ▪ Patient Centered Care Plan ▪ Drilldown on Quality Program ▪ Red and Orange Alert as Needed **Info: Research Article & Patient Story**

QUALITY, PATIENT CARE AND PATIENT EXPERIENCE COMMITTEE

FY2016 PACING PLAN (Revised 2.29.16)

FY2015: Q3		
JANUARY – No Meeting	**FEBRUARY 1, 2016**	**FEBRUARY 29, 2016**
	▪ Patient and Family Centered Care ▪ Service Line Update ▪ Top Risk Case Review **Committee Members to complete on-line self-assessment tool.* **Standing Agenda Items:** ▪ Consent Calendar ▪ Exception Report ▪ Patient Centered Care Plan ▪ Drilldown on Quality Program ▪ Red and Orange Alert as Needed **Info: Research Article & Patient Story**	▪ Begin Development of FY 2017 Committee Goals (3-4 goals) ▪ Peer Review/Care Review Process ▪ Top Risk Case Review **Standing Agenda Items:** ▪ Consent Calendar ▪ Exception Report ▪ Patient Centered Care Plan ▪ Drilldown on Quality Program ▪ Red and Orange Alert as Needed **Info: Research Article & Patient Story**
FY2016: Q4		
APRIL 4, 2016	**MAY 2, 2016**	**JUNE 1, 2016**
▪ Finalize FY 2017 Committee Goals ▪ Proposed Committee meeting dates for FY2017 ▪ Review DRAFT FY2017 Organizational Goals ▪ Annual Review of Committee Charter ▪ Top Risk Case Review **Standing Agenda Items:** ▪ Consent Calendar ▪ Exception Report ▪ Patient Centered Care Plan ▪ Drilldown on Quality Program ▪ Red and Orange Alert as Needed **Info: Research Article & Patient Story**	▪ Review DRAFT FY17 Organizational Goals (as needed) ▪ Set proposed committee meeting calendar for FY 2017 ▪ Review Committee Assessment Results ▪ Top Risk Case Review **Standing Agenda Items:** ▪ Consent Calendar ▪ Exception Report ▪ Patient Centered Care Plan ▪ Drilldown on Quality Program ▪ Red and Orange Alert as Needed **Info: Research Article & Patient Story**	▪ PFAC Update (6 months since Jan) ▪ Review and Discuss Self-Assessment Results ▪ Develop Pacing Calendar for FY17 ▪ Top Risk Case Review **Standing Agenda Items:** ▪ Consent Calendar ▪ Exception Report ▪ Patient Centered Care Plan ▪ Drilldown on Quality Program ▪ Red and Orange Alert as Needed **Info: Research Article & Patient Story**

Patient Story

El Camino Hospital
THE HOSPITAL OF SILICON VALLEY

2500 Grant Road
Mountain View, CA 94040-4378
Phone: 650-940-7000
www.elcaminohospital.org

Patient Story

A 47 year old patient was admitted with chest pain and palpitations in the evening. The patient had poorly controlled blood sugars and a history of hypertension. The next morning a clinical nurse assistant (CNA) on 3B started her shift at 6 AM in the morning, caring for the patient – i.e. addressing hygiene needs, and assisting her with his meal. Around 9 AM, she rounded on the patient and noticed a very subtle change in her patient's speech from earlier conversations. After a close look, she also noticed that his face was drooping. She immediately notified the nurse, and both the flex nurse and Stroke Nurse arrived to further assess the patient. A stroke alert was called at 9:15. Following the stroke alert the patient was send immediately for an MRI and admitted to 3C for intensive care. The patient's symptoms eventually resolved and was discharged.

The Stroke Nurse and team commanded the CNA for picking up on the mildly slurred speech and facial droop. The rapid response of the CNA helped to preserve neurological functions for the patient. When interviewed, the CNA noted that – "All nurses were taught --Time is Cells – prompt action preserves neuro function – by Dr. Fung."

This is the second GOOD Catch by a CNA (last one on 3C) recognizing a Stroke Alert! We are ramping up for our Joint Commission Primary Stroke Center re-certification this late summer, and it is reassuring that staff are demonstrating great knowledge and awareness of stroke!

Research Article

The NEW ENGLAND JOURNAL of MEDICINE

Perspective

FEBRUARY 18, 2016

Zika Virus in the Americas — Yet Another Arbovirus Threat

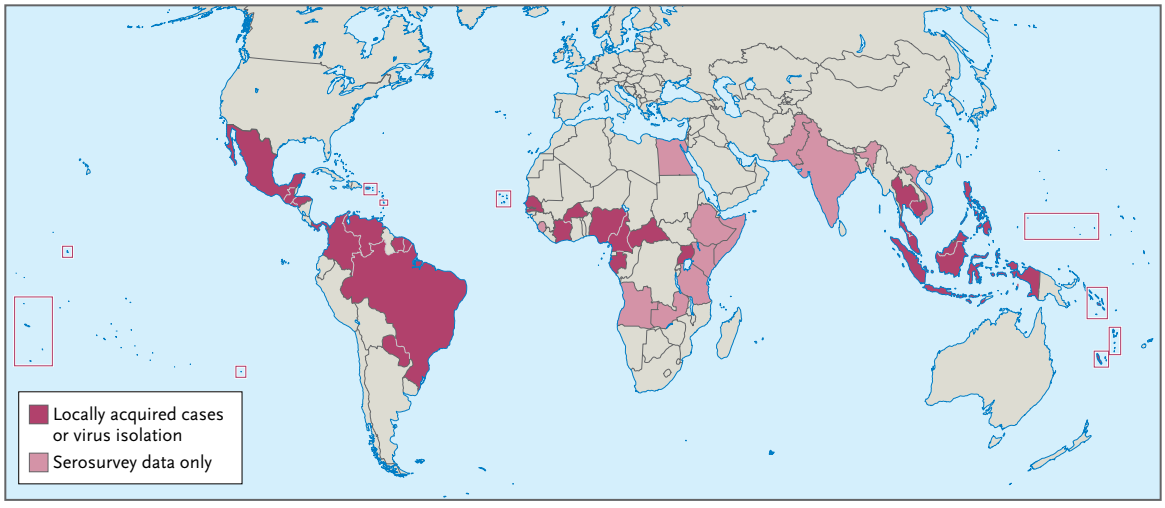
Anthony S. Fauci, M.D., and David M. Morens, M.D.

The explosive pandemic of Zika virus infection occurring throughout South America, Central America, and the Caribbean (see map) and potentially threatening the United States is the most recent of four unexpected arrivals of important arthropod-borne viral diseases in the Western Hemisphere over the past 20 years. It follows dengue, which entered this hemisphere stealthily over decades and then more aggressively in the 1990s; West Nile virus, which emerged in 1999; and chikungunya, which emerged in 2013. Are the successive migrations of these viruses unrelated, or do they reflect important new patterns of disease emergence? Furthermore, are there secondary health consequences of this arbovirus pandemic that set it apart from others?

"Arbovirus" is a descriptive term applied to hundreds of predominantly RNA viruses that are transmitted by arthropods, notably mosquitoes and ticks. Arboviruses are often maintained in complex cycles involving vertebrates such as mammals or birds and blood-feeding vectors. Until recently, only a few arboviruses had caused clinically significant human diseases, including mosquito-borne alphaviruses such as chikungunya and flaviviruses such as dengue and West Nile. The most historically important of these is yellow fever virus, the first recognized viral cause of deadly epidemic hemorrhagic fever.

Zika, which was discovered incidentally in Uganda in 1947 in the course of mosquito and primate surveillance,[1] had until now remained an obscure virus confined to a narrow equatorial belt running across Africa and into Asia. The virus circulated predominantly in wild primates and arboreal mosquitoes such as *Aedes africanus* and rarely caused recognized "spillover" infections in humans, even in highly enzootic areas.[2] Its current explosive pandemic reemergence is therefore truly remarkable.[3] Decades ago, African researchers noted that aedes-transmitted Zika epizootics inexplicably tended to follow aedes-transmitted chikungunya epizootics and epidemics. An analogous pattern began in 2013, when chikungunya spread pandemically from west to east, and Zika later followed. Zika has now circled the globe, arriving not only in the Americas but also, in September, in the country of Cape Verde in West Africa, near its presumed ancient ancestral home.

With the exception of West Nile virus, which is predominantly spread by culex-species mosquitoes, the arboviruses that recently reached the Western Hemisphere



Countries with Past or Current Evidence of Zika Virus Transmission (as of December 2015).

For countries with serosurvey data only, evidence of Zika virus transmission is derived from studies that detected Zika virus antibodies in healthy people. Outlined areas, all with locally acquired cases or virus isolation, include Cape Verde, Cook Islands, Easter Island, Federated States of Micronesia, French Polynesia, Martinique, New Caledonia, Puerto Rico, Solomon Islands, and Vanuatu. Data are from the Centers for Disease Control and Prevention (http://www.cdc.gov/zika).

have been transmitted by aedes mosquitoes, especially the yellow fever vector mosquito *A. aegypti*. These viruses started to emerge millennia ago, when North African villagers began to store water in their dwellings. Arboreal *A. aegypti* then adapted to deposit their eggs in domestic water-containing vessels and to feed on humans, which led to adaptation of arboreal viruses to infect humans. The yellow fever, dengue, and chikungunya viruses evolved entirely new maintenance cycles of human–*A. aegypti*–human transmission.[4] Now, 5000 years later, the worst effects of this evolutionary cascade are being seen in the repeated emergence of arboviruses into new ecosystems involving humans. Moreover, arboviruses transmitted by different mosquitoes have, in parallel, adapted to humans' domestic animals, such as horses in the case of Venezuelan equine encephalitis and pigs in the case of Japanese encephalitis virus, or to vertebrate hosts and non-aedes mosquitoes found in areas of human habitation, as West Nile virus did. The possibility that Zika may yet adapt to transmission by *A. albopictus*, a much more widely distributed mosquito found in at least 32 states in the United States, is cause for concern.

Through early epidemiologic surveillance and human challenge studies, Zika was characterized as a mild or inapparent dengue-like disease with fever, muscle aches, eye pain, prostration, and maculopapular rash. In more than 60 years of observation, Zika has not been noted to cause hemorrhagic fever or death. There is in vitro evidence that Zika virus mediates antibody-dependent enhancement of infection, a phenomenon observed in dengue hemorrhagic fever; however, the clinical significance of that finding is uncertain.

The ongoing pandemic confirms that Zika is predominantly a mild or asymptomatic dengue-like disease. However, data from French Polynesia documented a concomitant epidemic of 73 cases of Guillain–Barré syndrome and other neurologic conditions in a population of approximately 270,000, which may represent complications of Zika. Of greater concern is the explosive Brazilian epidemic of microcephaly, manifested by an apparent 20-fold increase in incidence from 2014 to 2015, which some public health officials believe is caused by Zika virus infections in pregnant women. Although no other flavivirus is known to have teratogenic effects, the microcephaly epidemic has not yet been linked to any other cause, such as increased diagnosis or reporting, increased ultrasound examinations of pregnant women, or other infectious or environmental agents. Despite the lack of definitive proof of any causal relationship,[5] some health authorities in afflicted regions are recommending that pregnant women take meticulous precautions to avoid mosquito bites and even to delay pregnancy. It is critically impor-

tant to confirm or dispel a causal link between Zika infection of pregnant women and the occurrence of microcephaly by doing intensive investigative research, including careful case–control and other epidemiologic studies as well as attempts to duplicate this phenomenon in animal models.

In a "pure" Zika epidemic, a diagnosis can be made reliably on clinical grounds. Unfortunately, the fact that dengue and chikungunya, which result in similar clinical pictures, have both been epidemic in the Americas confounds clinical diagnoses. Specific tests for dengue and chikungunya are not always available, and commercial tests for Zika have not yet been developed. Moreover, because Zika is closely related to dengue, serologic samples may cross-react in tests for either virus. Gene-detection tests such as the polymerase-chain-reaction assay can reliably distinguish the three viruses, but Zika-specific tests are not yet widely available.

The mainstays of management are bed rest and supportive care. When multiple arboviruses are cocirculating, specific viral diagnosis, if available, can be important in anticipating, preventing, and managing complications. For example, in dengue, aspirin use should be avoided and patients should be monitored for a rising hematocrit predictive of impending hemorrhagic fever, so that potentially lifesaving treatment can be instituted promptly. Patients with chikungunya virus infection should be monitored and treated for acute arthralgias and postinfectious chronic arthritis.

There are no Zika vaccines in advanced development, although a number of existing flavivirus vaccine platforms could presumably be adapted, including flavivirus chimera or glycoprotein subunit technologies. Zika vaccines would, however, face the same problem as vaccines for chikungunya,[4] West Nile, St. Louis encephalitis, and other arboviruses: since epidemics appear sporadically and unpredictably, preemptively vaccinating large populations in anticipation of outbreaks may be prohibitively expensive and not cost-effective, yet vaccine stockpiling followed by rapid deployment may be too slow to counter sudden explosive epidemics. Although yellow fever has historically been prevented entirely by aggressive mosquito control, in the modern era vector control has been problematic because of expense, logistics, public resistance, and problems posed by inner-city crowding and poor sanitation. Among the best preventive measures against Zika virus are house screens, air-conditioning, and removal of yard and household debris and containers that provide mosquito-breeding sites, luxuries often unavailable to impoverished residents of crowded urban locales where such epidemics hit hardest.

With its recent appearance in Puerto Rico, Zika virus forces us to confront a potential new disease-emergence phenomenon: pandemic expansion of multiple, heretofore relatively unimportant arboviruses previously restricted to remote ecologic niches. To respond, we urgently need research on these viruses and the ecologic, entomologic, and host determinants of viral maintenance and emergence. Also needed are better public health strategies to control arboviral spread, including vaccine platforms for flaviviruses, alphaviruses, and other arbovirus groups that can be quickly modified to express immunogenic antigens of newly emerging viruses. With respect to treatment, the arbovirus pandemics suggest that the one-bug–one-drug approach is inadequate; broad-spectrum antiviral drugs effective against whole classes of viruses are urgently needed.

As was realized more than 50 years ago, when enzootic Zika virus spread was linked to human activity, arboviruses continually evolve and adapt within ecologic niches that are increasingly being perturbed by humans. Zika is still a pandemic in progress, and many important questions about it, such as that of teratogenicity, remain to be answered. Yet it has already reinforced one important lesson: in our human-dominated world, urban crowding, constant international travel, and other human behaviors combined with human-caused microperturbations in ecologic balance can cause innumerable slumbering infectious agents to emerge unexpectedly. In response, we clearly need to up our game with broad and integrated research that expands understanding of the complex ecosystems in which agents of future pandemics are aggressively evolving.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

From the National Institute of Allergy and Infectious Diseases, Bethesda, MD.

This article was published on January 13, 2016, at NEJM.org.

1. Dick GW, Kitchen SF, Haddow AJ. Zika virus. I. Isolations and serological specificity. Trans R Soc Trop Med Hyg 1952;46:509-20.
2. Pierson TC, Diamond MS. Flaviviruses. In: Knipe DM, Howley PM, Cohen IC, et al., eds. Fields virology. 6th ed. Vol. 1. Philadelphia: Wolters Kluwer, 2014:746-94.
3. Marcondes CB, Ximenes MF. Zika virus in Brazil and the danger of infestation by *Aedes* (*Stegomyia*) mosquitoes. Rev Soc Bras

Med Trop 2015 December 22 (Epub ahead of print).
4. Morens DM, Fauci AS. Chikungunya at the door — déjà vu all over again? N Engl J Med 2014;371:885-7.
5. European Centre for Disease Prevention and Control. Microcephaly in Brazil potentially linked to the Zika virus epidemic: ECDC assesses the risk. Solna, Sweden: European Centre for Disease Prevention and Control, November 25, 2015 (http://ecdc.europa.eu/en/press/news/_layouts/forms/News_DispForm.aspx?ID=1329&List=8db7286c-fe2d-476c-9133-18ff4cb1b568&Source=http%3A%2F%2Fecdc.europa.eu%2Fen%2FPages%2Fhome.aspx).
DOI: 10.1056/NEJMp1600297

How Employers Are Responding to the ACA

Robert Galvin, M.D.

The Affordable Care Act (ACA) changed employers' role in the U.S. health care system. Employer-sponsored insurance, a long-standing system component, provides health coverage for more 160 million Americans. While preserving the employer-based system, the ACA fundamentally altered it by making the provision of health benefits mandatory rather than voluntary for employers with more than 50 employees and establishing minimum criteria for affordability and coverage. In addition, a "play or pay" model was created, providing employers with an exit: employees would no longer become uninsured if their employers dropped benefits but could instead purchase guaranteed and potentially subsidized insurance through public exchanges.

Two financial milestones are leading employers to evaluate whether they want to play or pay. In 2015, employers with more than 100 employees became subject to a shared-responsibility penalty for coverage that didn't meet federal standards; further down the road, a 40% excise tax on coverage over a maximum dollar value (the so-called Cadillac tax) is due to go into effect (implementation was originally set for 2018, but Congress recently voted to delay it by 2 years). Although it's still early in the game, employers are making key decisions that affect patients, health care providers, and insurers.

So far, almost all employers have continued to "play." Given that sponsoring health benefits is not a core business function, why are so few firms ceasing to do so? The biggest reason is that there is no cost advantage to discontinuing health coverage. The "simple math" that a $2,000 fine is less than the $10,000 average per-employee cost of coverage is complicated by the tax deductibility of employers' health care contributions. The increase in non–tax-deductible salaries that would be needed to keep projected health care costs from damaging employee recruitment and retention efforts exceeds the savings an employer could expect from dropping health care coverage.

A second reason is that the business community is skeptical that the government can manage large social programs efficiently and therefore expects the penalties to increase. And a third, underappreciated reason is that growth in health care costs has slowed substantially over the past several years, so employers don't feel compelled to make a change.

Private insurance exchanges have been promoted as a nongovernmental exit option. These products allow firms to outsource the design and delivery of health benefits. They differ from the public exchanges in that employers can continue to be regulated under the Employee Retirement Income Security Act (ERISA) and remain self-insured — which means lower costs and less exposure to regulation — but employees receive no means-based subsidies. Despite aggressive marketing by such exchanges, very few companies have adopted this strategy for active employees, according to the Employee Benefit Research Institute. Most of the big-name companies that have pursued this route compete in low-wage labor markets in which offering health benefits is not considered essential to finding employees; their move to private insurance exchanges is not indicative of a broader trend. There's no evidence that private exchanges can control costs any better than employers are doing on their own.

Employers will face a second financial milestone if the Cadillac tax becomes effective in 2020. The provision, levying a 40% nondeductible tax on the value of health benefit plans exceeding a specified amount (currently $10,200 annually for individuals), has captured the attention of chief executives, who are focusing more on health care than they have

BRIEF REPORT

Zika Virus Associated with Microcephaly

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SUMMARY

A widespread epidemic of Zika virus (ZIKV) infection was reported in 2015 in South and Central America and the Caribbean. A major concern associated with this infection is the apparent increased incidence of microcephaly in fetuses born to mothers infected with ZIKV. In this report, we describe the case of an expectant mother who had a febrile illness with rash at the end of the first trimester of pregnancy while she was living in Brazil. Ultrasonography performed at 29 weeks of gestation revealed microcephaly with calcifications in the fetal brain and placenta. After the mother requested termination of the pregnancy, a fetal autopsy was performed. Micrencephaly (an abnormally small brain) was observed, with almost complete agyria, hydrocephalus, and multifocal dystrophic calcifications in the cortex and subcortical white matter, with associated cortical displacement and mild focal inflammation. ZIKV was found in the fetal brain tissue on reverse-transcriptase–polymerase-chain-reaction (RT-PCR) assay, with consistent findings on electron microscopy. The complete genome of ZIKV was recovered from the fetal brain.

ZIKV, AN EMERGING MOSQUITO-BORNE FLAVIVIRUS, WAS INITIALLY ISOlated from a rhesus monkey in the Zika forest in Uganda in 1947.[1] It is transmitted by various species of aedes mosquitoes. After the first human ZIKV infection, sporadic cases were reported in Southeast Asia and sub-Saharan Africa.[2] ZIKV was responsible for the outbreak in Yap Island of Micronesia in 2007 and for major epidemics in French Polynesia, New Caledonia, the Cook Islands, and Easter Island in 2013 and 2014.[3,4] In 2015, there was a dramatic increase in reports of ZIKV infection in the Americas. Brazil is the most affected country, with preliminary estimates of 440,000 to 1.3 million cases of autochthonous ZIKV infection reported through December 2015.[5]

The classic clinical picture of ZIKV infection resembles that of dengue fever and chikungunya and is manifested by fever, headache, arthralgia, myalgia, and maculopapular rash, a complex of symptoms that hampers differential diagnosis. Although the disease is self-limiting, cases of neurologic manifestations and the Guillain–Barré syndrome were described in French Polynesia and in Brazil during ZIKV epidemics.[5,6] Recent reports from the Ministry of Health of Brazil suggest that cases of microcephaly have increased by a factor of approximately 20 among newborns in the northeast region of the country, which indicates a possible association between ZIKV infection in pregnancy and fetal malformations.[5]

We present a case of vertical transmission of ZIKV in a woman who was prob-

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ably infected with ZIKV in northeastern Brazil at the end of the first trimester of pregnancy. Our discussion includes details of fetal imaging and pathological and virologic analyses.

CASE REPORT

In mid-October 2015, a 25-year-old previously healthy European woman came to the Department of Perinatology at the University Medical Center in Ljubljana, Slovenia, because of assumed fetal anomalies. Since December 2013, she had lived and worked as a volunteer in Natal, the capital of Rio Grande do Norte state. She had become pregnant at the end of February 2015. During the 13th week of gestation, she had become ill with high fever, which was followed by severe musculoskeletal and retroocular pain and an itching, generalized maculopapular rash. Since there was a ZIKV epidemic in the community, infection with the virus was suspected, but no virologic diagnostic testing was performed. Ultrasonography that was performed at 14 and 20 weeks of gestation showed normal fetal growth and anatomy.

The patient returned to Europe at 28 weeks of gestation. Ultrasonographic examination that was performed at 29 weeks of gestation showed the first signs of fetal anomalies, and she was referred to the Department of Perinatology. At that time, she also noticed reduced fetal movements. Ultrasonography that was performed at 32 weeks of gestation confirmed intrauterine growth retardation (estimated third percentile of fetal weight) with normal amniotic fluid, a placenta measuring 3.5 cm in thickness (normal size) with numerous calcifications, a head circumference below the second percentile for gestation (microcephaly), moderate ventriculomegaly, and a transcerebellar diameter below the second percentile. Brain structures were blurred, and there were numerous calcifications in various parts of the brain (Fig. 1A and 1B). There were no other obvious fetal structural abnormalities. Fetal, umbilical, and uterine blood flows were normal on Doppler ultrasonography.

The clinical presentation raised suspicion of fetal viral infection. Because of severe brain disease and microcephaly, the fetus was given a poor prognosis for neonatal health. The mother requested that the pregnancy be terminated, and the procedure was subsequently approved by national and hospital ethics committees. Medical termination of the pregnancy was performed at 32 weeks of gestation. At the delivery, the only morphologic anomaly was the prominent microcephaly. Genetic consultation that included a detailed maternal family history revealed no suspicion of genetic syndromes or diseases. An autopsy was performed, as is mandatory in all cases of termination of pregnancy. The mother provided written informed consent for the publication of this case report.

METHODS

AUTOPSY AND CENTRAL NERVOUS SYSTEM (CNS) EXAMINATION

An autopsy of the fetus and placenta was performed 3 days after termination of the pregnancy, with an extensive sampling of all organs, placenta, and umbilical cord. Samples were fixed in 10% buffered formalin and embedded in paraffin. Fresh tissue samples were collected for microbiologic investigations. Brain and spinal cord were fixed in 27% buffered formalin for 3 weeks, after which a neuropathological examination was performed with extensive sampling of the brain and spinal cord. Sections of all tissue samples were stained with hematoxylin and eosin. Immunostaining for glial fibrillary acid protein, neurofilament, human leukocyte antigen DR (HLA-DR), CD3 (to highlight T cells), and CD20 (to highlight B cells) was performed on representative CNS samples.

ELECTRON MICROSCOPY

Tissue was collected from formalin-fixed brain and underwent fixation in 1% osmium tetroxide and dehydration in increasing concentrations of ethanol. The sample was then embedded in Epon. Semithin sections (1.4 μm) were made, stained with Azur II, and analyzed by means of light microscopy. Ultrathin sections (60 nm) were stained with uranyl acetate and lead citrate. In addition, a small piece of brain (5 mm^3) was homogenized in buffer. The suspension was then cleared by low-speed centrifugation, and the obtained supernatant was ultracentrifuged directly onto an electron microscopic grid with the use of an Airfuge (Beckman Coulter). Negative staining was performed with 1% phosphotungstic acid. Imaging of the ultrathin sections and brain homogenate was performed with the use of a 120-kV JEM-1400Plus transmission electron microscope (JEOL).

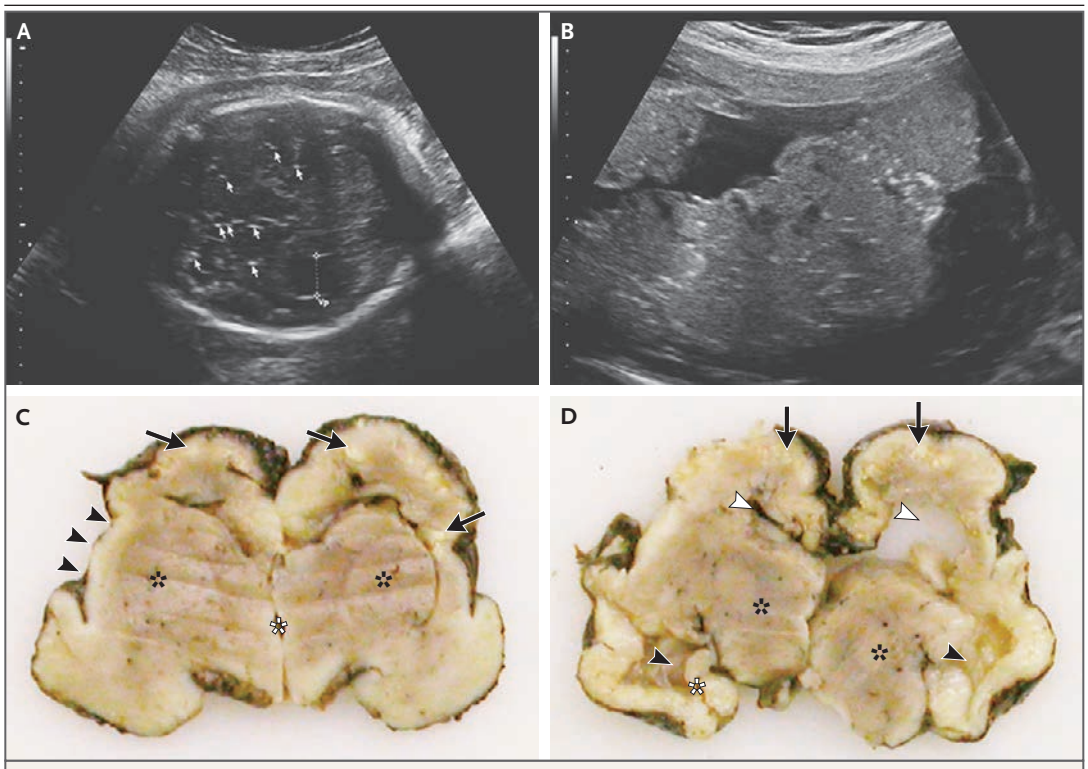

Figure 1. Prenatal Ultrasonographic Images and Photographs of Coronal Slices of Brain.

Panel A shows numerous calcifications in various parts of the brain (some marked with arrows) and the dilated occipital horn of the lateral ventricle (Vp, marked with a measurement bar) as seen on transverse ultrasonography. Panel B shows numerous calcifications in the placenta. Panel C shows multifocal cortical and subcortical white calcifications (arrows) and almost complete loss of gyration of the cortex. The basal ganglia are developed but poorly delineated (black asterisks), and the sylvian fissures are widely open on both sides (arrowheads on the left). The third ventricle is not dilated (white asterisk). Panel D shows dilated body of the lateral ventricles (white arrowheads); the left is collapsed. Temporal horns of the lateral ventricles (black arrowheads) are also dilated. The thalami (black asterisks) and the left hippocampus (white asterisk) are well developed, whereas the contralateral structure is not recognizable owing to autolysis.

INDIRECT IMMUNOFLUORESCENCE

Paraffin-embedded sections of the fetal brain tissue and brain tissue of an autopsied man as a negative control were incubated with serum obtained from the mother of the fetus (dilution, 1:10), followed by antihuman IgG antibodies labeled with fluorescein isothiocyanate (FITC) (dilution, 1:50). In addition, fetal brain tissue was incubated with a serum obtained from a healthy blood donor, as well as with FITC-labeled antihuman IgG antibodies only.

MICROBIOLOGIC INVESTIGATION

RNA was extracted from 10 mg of the placenta, lungs, heart, skin, spleen, thymus, liver, kidneys, and cerebral cortex with the use of a TRIzol Plus RNA purification kit (Thermo Fisher Scientific). Real-time RT-PCR for the detection of ZIKV RNA (NS5) and one-step RT-PCR for the detection of the envelope-protein coding region (360 bp) were performed as described previously.[7,8] In addition, next-generation sequencing was performed in samples of fetal brain tissue with the use of Ion Torrent (Thermo Fisher Scientific) and Geneious software, version 9.0.6. Reads from both runs were combined and mapped to the reference sequence (ZIKV MR766; LC002520) with the use of default measures. For phylogenetic analysis, complete-genome ZIKV sequences were used, and multiple sequence alignments (ClustalW) were performed. A neighbor-joining phylogenetic tree (GTR+G+I model) was constructed, with the use of the MEGA6 software system,[9] to show the phylogenetic relationships. The nucleotide sequence of ZIKV that was obtained in this study has been deposited in GenBank

under accession number KU527068. A detailed description of the molecular methods is provided in the Supplementary Appendix, available with the full text of this article at NEJM.org. The results of comprehensive serologic analyses of maternal serum and a description of the molecular differential diagnostic procedures used with fetal tissue samples are provided in Tables S1 and S2 in the Supplementary Appendix. All the authors vouch for the completeness and accuracy of the data and analyses presented.

RESULTS

AUTOPSY AND NEUROPATHOLOGICAL FINDINGS

The fetal body weight was 1470 g (5th percentile), the length 42 cm (10th percentile), and the head circumference 26 cm (1st percentile). The only external anomaly that was noted was microcephaly. The placenta weighed 200 g, resulting in a placental–fetal weight ratio of 0.136 (<3rd percentile). Macroscopic examination of the CNS revealed micrencephaly with a whole-brain weight of 84 g (4 SD below average), widely open sylvian fissures, and a small cerebellum and brain stem. Almost complete agyria and internal hydrocephalus of the lateral ventricles were observed. There were numerous variable-sized calcifications in the cortex and subcortical white matter in the frontal, parietal, and occipital lobes. The subcortical nuclei were quite well developed (Fig. 1C and 1D). In spite of some autolysis, microscopic examination revealed appropriate cytoarchitecture of the fetal brain. The most prominent histopathological features were multifocal collections of filamentous, granular, and neuron-shaped calcifications in the cortex and subcortical white matter with focal involvement of the whole cortical ribbon, occasionally associated with cortical displacement (Fig. 2A and 2B). Diffuse astrogliosis was present with focal astrocytic outburst into the subarachnoid space, mostly on the convexity of the cerebral hemispheres (Fig. 2C). Activated microglial cells and some macrophages expressing HLA-DR were present throughout most of the cerebral gray and white matter (Fig. 2D). Scattered mild perivascular infiltrates composed of T cells and some B cells were present in the subcortical white matter (Fig. S1 in the Supplementary Appendix). The cerebellum, brain stem, and spinal cord showed neither inflammation nor dystrophic calcifications. The brain stem and spinal cord showed Wallerian degeneration of the long descending tracts, especially the lateral corticospinal tract, whereas ascending dorsal columns were well preserved (Fig. 2E). Indirect immunofluorescence revealed granular intracytoplasmic reaction in destroyed neuronal structures, which pointed to a possible location of the virus in neurons (Fig. 2F, and Fig. S1 in the Supplementary Appendix). Histologic examination of the placenta confirmed focal calcifications in villi and decidua, but no inflammation was found. There were no relevant pathological changes in other fetal organs or in the umbilical cord or fetal membranes. Fetal karyotyping with the use of microarray technology showed a normal 46XY (male) profile.

ELECTRON MICROSCOPY

Although analysis of the ultrathin sections of the brain showed poorly preserved brain tissue with ruptured and lysed cells, clusters of dense virus-like particles of approximately 50 nm in size were found in damaged cytoplasmic vesicles. Groups of enveloped structures with a bright interior were also detected. At the periphery of such groups, the remains of membranes could be seen. Negative staining of homogenized brain revealed spherical virus particles measuring 42 to 54 nm with morphologic characteristics consistent with viruses of the Flaviviridae family (Fig. 3).

MICROBIOLOGIC INVESTIGATION

Positive results for ZIKV were obtained on RT-PCR assay only in the fetal brain sample, where 6.5×10^7 viral RNA copies per milligram of tissue were detected. In addition, all autopsy samples were tested on PCR assay and were found to be negative for other flaviviruses (dengue virus, yellow fever virus, West Nile virus, and tick-borne encephalitis virus), along with chikungunya virus, lymphocytic choriomeningitis, cytomegalovirus, rubella virus, varicella–zoster virus, herpes simplex virus, parvovirus B19, enteroviruses, and *Toxoplasma gondii* (Table S2 in the Supplementary Appendix).

A complete ZIKV genome sequence (10,808 nucelotides) was recovered from brain tissue. Phylogenetic analysis showed the highest identity (99.7%) with the ZIKV strain isolated from a patient from French Polynesia in 2013 (KJ776791)

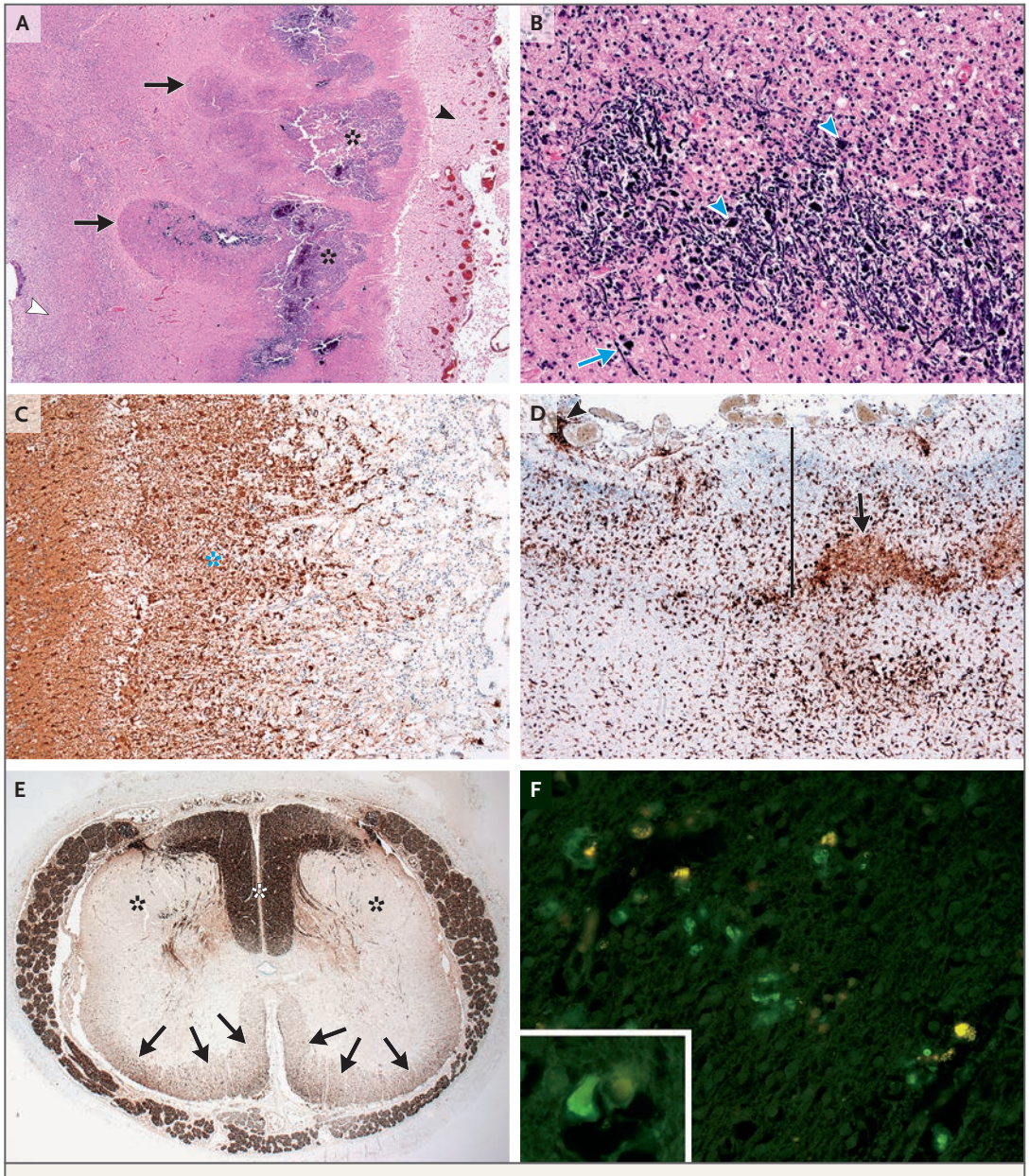

Figure 2. Microscopic Analysis of Brain Tissue.

Panel A shows thickened leptomeninges (black arrowhead) and irregular cortical and subcortical calcifications (asterisks) associated with cortical displacement (arrows), with preserved germinative matrix (white arrowhead); gyration is absent. Panel B shows higher magnification of calcifications with filamentous structures (arrow), possibly representing encrusted, damaged axons and dendrites, and oval and polygonal structures (arrowheads), possibly representing encrusted, damaged neuronal-cell bodies (hematoxylin and eosin staining in Panels A and B). Panel C shows immunohistochemical labeling of proliferated reactive astrocytes that extend into the subarachnoid space (asterisk) (glial fibrillary acid protein, clone 6F2 [Dako]). Panel D shows immunohistochemical labeling of numerous activated microglial cells and macrophages in the cortex (full thickness marked with a line) and subcortical white matter (lower part of the figure). Nonspecific staining of the calcifications is present (arrow). Focal leptomeningeal infiltrates of macrophages are seen (arrowhead) (HLA-DR, clone TAL 1B5 [Dako]). Panel E shows neurofilament immunohistochemical staining of axons in a cross-section of the lumbar spinal cord with severe Wallerian degeneration of the lateral corticospinal tracts (black asterisks), moderate involvement of other descending tracts (arrows), and well-preserved ascending tracts in the dorsal columns (white asterisk) (neurofilament, clone 2F11 [Dako]). Panel F shows indirect immunofluorescence of fetal brain tissue, revealing a green granular intracytoplasmic reaction (see also inset). The yellow signals adjacent to the green granules indicate autofluorescence of lipofuscin, suggesting that viral particles are located in the cytoplasm of neurons.

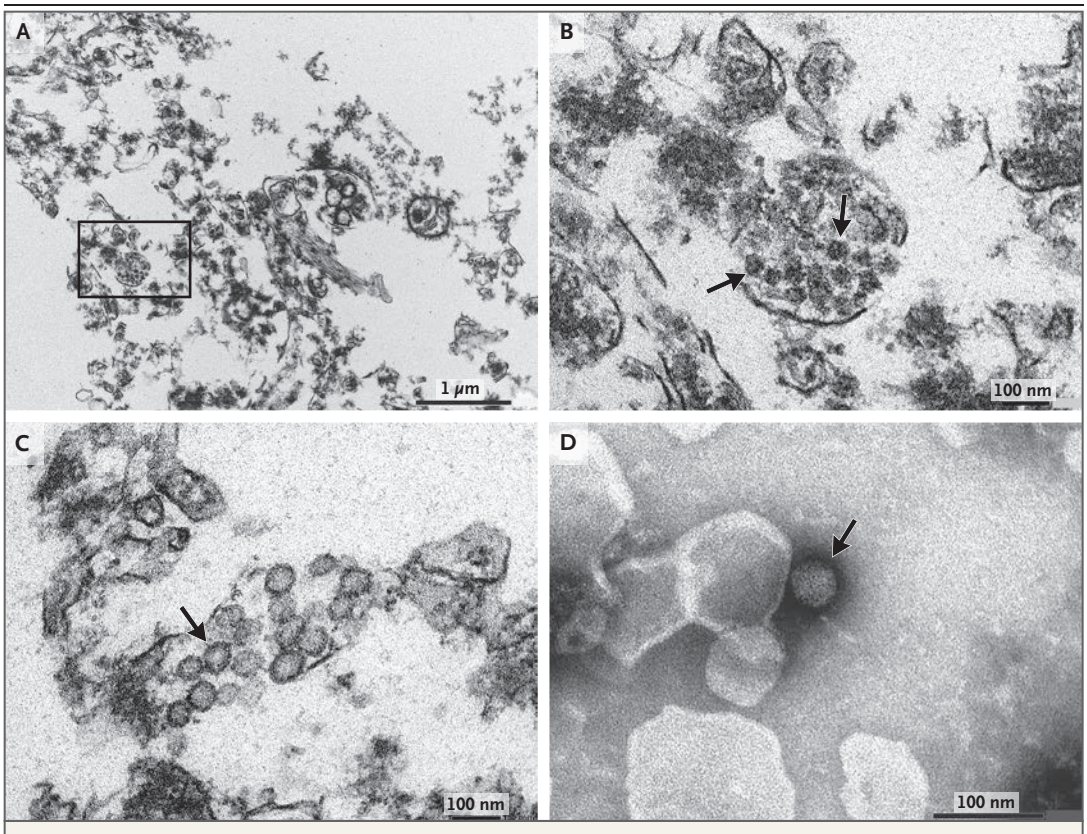

Figure 3. Electron Microscopy of Ultrathin Sections of Fetal Brain and Staining of a Flavivirus-like Particle.
Panel A shows a damaged brain cell with a cluster of dense virions located in the disrupted endoplasmic reticulum. Remains of membranes derived from different cellular compartments and filamentous structures are also seen. A magnified view of the boxed area with virions clearly visible (arrows) is shown in Panel B. Panel C shows a group of enveloped structures with a bright interior, presumably indicating viral replication (arrow). Panel D shows a negatively stained viral particle with morphologic characteristics consistent with those of Flaviviridae viruses (arrow).

and ZIKV detected in Sao Paolo, Brazil, in 2015 (KU321639), followed by a strain isolated in Cambodia in 2010 (JN860885, with 98.3% identity) and with a strain from the outbreak in Micronesia in 2007 (EU545988, with 98% identity) (Fig. 4). In the ZIKV polyprotein, 23 polymorphisms were detected in comparison with the strain from Micronesia and 5 polymorphisms in comparison with the isolate from French Polynesia; three amino acid changes were found in the NS1 region (K940E, T1027A, and M1143V), one in the NS4B region (T2509I), and one in the FtsJ-like methyltransferase region (M2634V).

DISCUSSION

This case shows severe fetal brain injury associated with ZIKV infection with vertical transmission. Recently, ZIKV was found in amniotic fluid of two fetuses that were found to have microcephaly, which was consistent with intrauterine transmission of the virus.[10] Described cases are similar to the case presented here and were characterized by severely affected CNS and gross intrauterine growth retardation. Calcifications in the placenta and a low placental–fetal weight ratio,[11] which were seen in this case, indicate potential damage to the placenta by the virus. Among the few reports of teratogenic effects of flaviviruses, investigators described the brain and eyes as the main targets.[12,13] No presence of virus and no pathological changes were detected in any other fetal organs apart from the brain, which suggests a strong neurotropism of the virus.

The localization of immunofluorescence signal and the morphologic appearance of the calcifications, which resembled destroyed neuronal structures, indicate a possible location of the

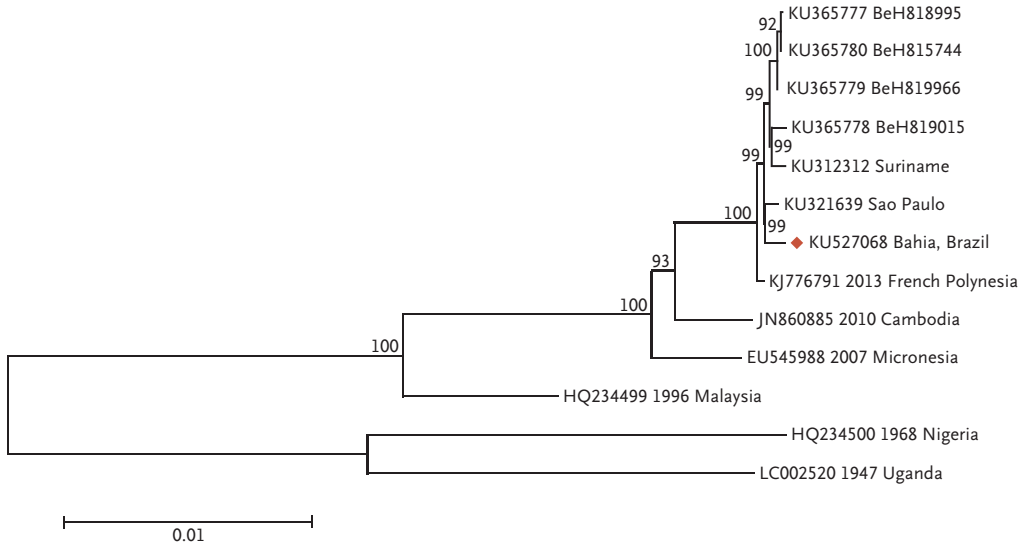

Figure 4. Phylogenetic Analysis of the Complete Genome of Zika Virus.

The evolutionary history was inferred by means of the neighbor-joining method under a GTR+G+I substitution model. The percentage of replicate trees in which the associated taxa clustered together in the bootstrap test (2000 replicates) is shown next to the branches. The GenBank accession number, year of isolation, and country of origin are indicated on the ZIKV branches for all strains except for those identified in 2015 and 2016. ZIKV strain Bahia, Brazil (KU527068), was obtained in this study. The complete genome sequence was recovered from fetal brain tissue. The 0.01 scale bar denotes the genetic distance in nucleotide substitutions per site.

virus in neurons. The consequent damage might cause arrested development of the cerebral cortex at the embryonic age of approximately 20 weeks.[14] The mechanism involved in the neurotropism of ZIKV is currently not clear. The association between ZIKV infection and fetal brain anomalies was also noted by findings on electron microscopy that were consistent with ZIKV detection in the fetal brain. Dense particles consistent with ZIKV were seen in damaged endoplasmic reticulum. Groups of enveloped structures with a bright interior resembling the remains of replication complexes that are characteristic of flaviviruses[15,16] indicate viral replication in the brain. The findings on electron microscopy suggest a possible persistence of ZIKV in the fetal brain, possibly because of the immunologically secure milieu for the virus. The number of viral copies that were detected in the fetal brain were substantially higher than those reported in the serum obtained from adult ZIKV-infected patients[17] but similar to those reported in semen samples.[18]

The complete genome sequence of ZIKV that was recovered in this study is consistent with the observation that the present strain in Brazil has emerged from the Asian lineage.[19] The presence of two major amino acid substitutions positioned in nonstructural proteins NS1 and NS4B probably represents an accidental event or indicates a process of eventual adaptation of the virus to a new environment. Further research is needed to better understand the potential implications of these observations. It is likely that the rapid spread of ZIKV around the globe will be a strong impetus for collaborative research on the biologic properties of the virus, particularly since the risk of neurotropic and teratogenic virus infections places a high emotional and economic burden on society.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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iCare Update

iCare Update

Quality Committee
February 2016

iCare Focus Points

- **Patient Movement:** Clarifying workflow to ensure that orders flow appropriately as patient is moved within the hospital.
- **AVS (After Visit Summary):** The following changes were made to ensure the AVS was patient-friendly and populated with accurate discharge information.
  - Revised format
  - Improved medication instructions
  - Removed hospital-applied medication end date
  - Discharge Med List Grid now optional to print in AVS
  - Principle diagnosis/problem auto-populates to correct field
- **Series of Manager Workshops:** Holding a series of manager workshops on chart investigation and reporting functions to empower managers to monitor quality initiatives in their areas.

iCare Focus Points

- **Medication Safety:**
  - Drug Calculation Weight has been added to all patient headers as a mandatory field to ensure appropriate dosing of weight-based medications.
  - Medications ordered for patients under the age of 13 in the ED will always require pharmacy verification. This will help ensure appropriate dosing.
  - Team continues to meet weekly to evaluate medication safety issues within iCare and influence system improvements
- **Clinical Documentation (Clin Doc):**
  - Updated Care Plan content as per Joint Commission guidance
  - Dietitians and Therapists now able to see all orders to ensure adequate care team communication.
  - Improved treatment plans and required documentation for BHS areas to ensure the capture of appropriate patient information.
  - Enhanced required documentation links redirect user to admission navigator to ensure the capture of appropriate patient information.

iCare Focus Points

- **Physician Workflows:**
  - Re-educating nurses on use of Care Everywhere and creation of accurate Medication List to ensure that the patients have an up-to-date record.
  - Updated and refined physician navigators to guide physicians through admit/discharge processes, including medication reconciliation.
- **Discharge Workflow:**
  - Multidisciplinary team used value stream-mapping to identify pain points in discharge process.
  - Investigating options to ensure that medication reconciliation is completed and AVS and discharge instructions print appropriately for patients being discharge.

ATTACHMENT 7

ECH BOARD COMMITTEE MEETING AGENDA ITEM COVER SHEET

	Item:	Proposed FY17 Quality Committee Goals Quality Committee Meeting Date: February 29, 2016
	Responsible party:	Eric Pifer, MD; Chief Medical Officer
	Action requested:	Possible Motion
	Background: Please find attached proposed goals for the coming fiscal year for the quality committee. As you can see, we are proposing the replacement of the patient centered care goal with the goal around medication safety. This is provided that the board quality committee approves a de-prioritization of the patient centered care program in favor of deeper work on patient safety and post iCare improvements.	
	Other Board Advisory Committees that reviewed the issue and recommendation, if any: None.	
	Summary and session objectives : N/A	
	Suggested discussion questions: N/A	
	Proposed Committee motion, if any: Motion to recommend that the Board Approve the Proposed FY17 Quality Committee Goals.	
	LIST OF ATTACHMENTS: Att 7b – Proposed FY17 Quality Committee Goals	

Quality, Patient Care and Patient Experience Committee
Goals for FY 2017 - PROPOSED

Purpose

The purpose of the Quality, Patient Care and Patient Experience Committee ("Quality Committee") is to advise and assist the El Camino Hospital (ECH) Hospital Board of Directors ("Board") in constantly enhancing and enabling a culture of quality and safety at ECH, to ensure delivery of effective, evidence-based care for all patients, and to oversee quality outcomes of all services of ECH. The Quality Committee helps to assure that exceptional patient care and patient experience are attained through monitoring organizational quality and safety measures, leadership development in quality and safety methods and assuring appropriate resource allocation to achieve this purpose.

Staff: Eric Pifer, MD, CMO

The CMO shall serve as the primary staff support to the Committee and is responsible for drafting the committee meeting agenda for the Committee Chair's consideration. Additional clinical representatives may participate in the Committee meetings upon the recommendation of the CMO and subsequent approval from both the CEO and Committee Chair. These may include the Chiefs/Vice Chiefs of the Medical Staff, VP of Patient Care Services, physicians, nurses, and members from the Community Advisory Councils or the community-at-large. The CEO is an ex-officio of this Committee.

Goals	Timeline by Fiscal Year (Timeframe applies to when the Board approves the recommended action from the Committee, if applicable.)	Metrics
1. Review the hospital's organizational goals and scorecard and ensure that those metrics and goals are consistent with the strategic plan and set at an appropriate level as they apply to the Quality, Patient Care, and Patient Experience Committee.	▪ Q1 – Goals ▪ Q3 - Metrics	▪ Review, complete, and provide feedback given to management, the governance committee, and the board.
2. Biannually review peer review process and medical staff credentialing process.	▪ Every other year	
3. Develop a plan to review exceptions for goals that are being monitored by the management team and report those exceptions to the El Camino board of directors.	▪ Q3	

Goals	Timeline by Fiscal Year (Timeframe applies to when the Board approves the recommended action from the Committee, if applicable.)	Metrics
4. Review and oversee a plan to ensure the safety of the medication delivery process. The plan should include a global assessment of adverse events and it should include optimizations to the medication safety process using the new iCare tool.	▪ Q2	Review the plan and approve.

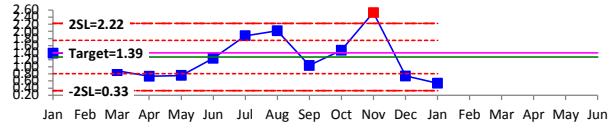
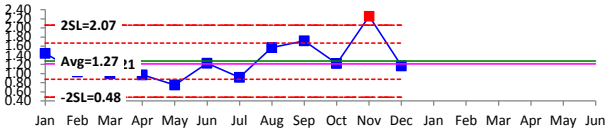
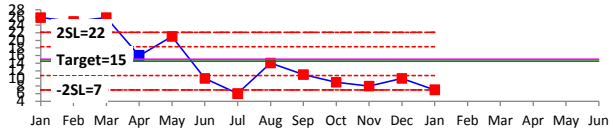
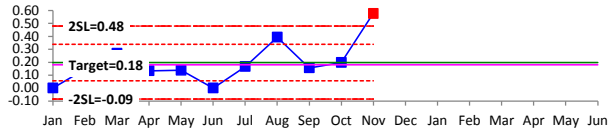
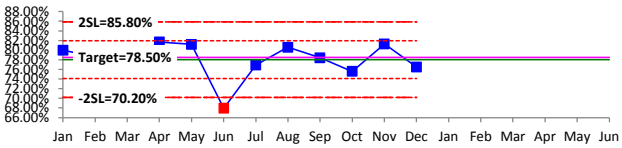
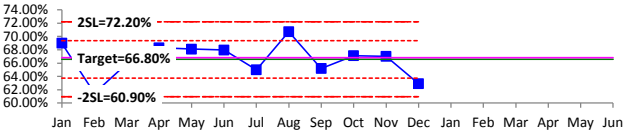
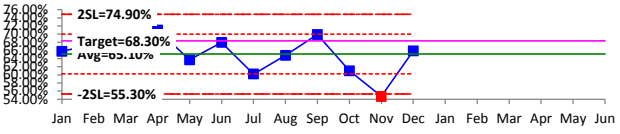
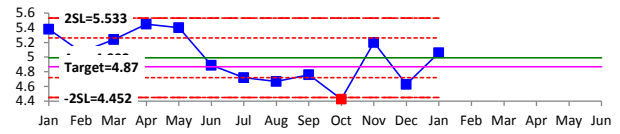
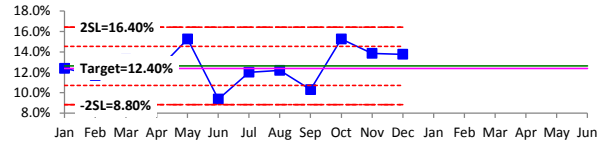
Submitted by:
Dave Reeder, Chair, Quality Committee
Eric Pifer, MD, Executive Sponsor, Quality Committee

ATTACHMENT 8

El Camino Hospital
THE HOSPITAL OF SILICON VALLEY

Quality and Safety Dashboard (Monthly)

Date Reports Run: 2/22/2016

		Performance		Baseline	FY16 Goal	Trend
SAFETY EVENTS				FY2015	FY2016	
1	**Patient Falls** *Med / Surg / CC Falls / 1,000 CALNOC Pt Days* *Date Period: January 2016*	3/5507	0.54	1.39	1.39	
2	**Medication Errors** *Errors / 1000 Adj Total Patient Days* *Date Period: December 2015*	17/14472	1.17	1.21	1.21	
3	**Specimen Labeling Errors** *# Specimen Labeling Errors / Month* *Date Period: January 2016*	7	7	23	15	
COMPLICATIONS		**Performance**		**FY2015**	**FY2016**	
4	**Surgical Site Infection (SSI)** *SSI per 100 Surgical Procedures* *Date Period: November 2015*	2/346	0.58	0.19	0.18	
SERVICE		**Performance**		**FY2015**	**FY2016**	
5	**Communication with Nurses** *(HCAHPS Score)* *Date Period: December 2015*	100/131	76.5%	78.5%	78.5%	
6	**Responsiveness of Hospital Staff** *(HCAHPS Score)* *Date Period: December 2015*	74/117	62.9%	66.8%	66.8%	
7	**Communication About Medicines** *(HCAHPS Score)* *Date Period: December 2015*	51/78	65.9%	68.3%	68.3%	
EFFICIENCY		**Performance**		**Jan-Jun 2015**	**Jan-Jun 2016**	
8	★Organizational Goal **Average Length of Stay (days)** *(Medicare definition, MS-CC, ≥ 65, inpatient)* *Date Period: January 2016*	**FYTD 1st 6m** 2310 **2nd 6m 637**	**FYTD 1st 6m** 4.75 **2nd 6m 4.77**	5.17	5.07 (Min) 4.97 (Target) 4.87 (Max)	
9	★Organizational Goal **30-Day Readmission (Rate, LOS-Focused)** *(ALOS-Linked, All-Cause, Unplanned)* *Date Period: December 2015*	**FYTD 1st 6m** 2313 **2nd 6m** TBD	**FYTD 1st 6m** 12.88 **2nd 6m** TBD	12.38	At or below 12.38	

Definitions and Additional Information

Measure Name	Definition Owner	Work Group	FY 2015 Definition	FY 2016 Definition	Source
Patient Falls	Joy Pao; Cheryl Reinking	Falls Committee	All Med/Surg/CC falls reported to CALNOC per 1,000 CALNOC (Med/Surg/CC) patient days CALNOC Fall Definition: The rate per 1,000 patient days at which patients experience an unplanned descent to the floor (or extension of the floor, e.g., trash can or other equipment, including bedside mat). All falls are reported and described by level of injury or no injury, and circumstances (observed, assisted, restrained at the time of the fall). Include Assisted Falls (when staff attempts to minimize the impact of the fall, it is still a fall). *Excludes Intentional Falls: When a patient (age 5 or older) falls on purpose or falsely claims to have fallen, it is considered an Intentional Fall and is NOT included. It is NOT considered a fall according to the CALNOC definition.*		**QRR Reporting and Staff Validation**
Medication Errors	Joy Pao; Cheryl Reinking	Medication Safety Committee; P&T Committee	5 Rights MEdication Errors: [# of Med Errors (includes: Duplicate Dose, Omitted Dose, Incorrect Patient, Incorrect Medication, and Incorrect Route.) divided by Adjusted Total Patient Days (includes L&D & Nursery)]* 1,000 *Excludes: Wrong Time, ADR, Contrast Reaction, Incorrect Dose, "Not Yet Rated" Med errors, No risk identified and near miss*		**QRR Reporting and Staff Validation**
Mislabeled Specimens	Edwina Sequeira; Cheryl Reinking	QIPSC	Number of blood and nonblood Laboratory specimens collected by non-Lab staff that are unlabeled or contain incomplete or incorrect information for patient ID, specimen source/site, date/time, collector initials. Soft ID GoLive in May 2015 for select units, MCH full GoLive date after iCare implementation in Nov 2015.		**Staff Manual Tracking (Thara Trieu, Laboratory)**
Surgical Site Infection	Catherine Nalesnik; Joy Pao; Carol Kemper, MD	Infection Control Committee	(Number of Deep Organ Space infections divided by the # of all sugery cases)*100 counted by the month infection was attributed to and not by the month it was discovered. All Surgery Cases in the 29 Surgical Procedural Categories required by the California Department of Public Health.		**IC Surveillance and NHSN Data Reporting**
Communication with Nurses	RJ Salus; Meena Ramchandani; Cheryl Reinking	Patient Experience Committee	Percent of inpatients responding "Always" to the following 3 questions [% Top Box]: 1. *During hospital stay, how often did the nurses treat you with courtesy and respect?* 2. *During hospital stay, how often did nurses listen carefully to you?* 3. *During hospital stay, how often did nurses explain things in a way you can understand?* CMS Qualified values are pulled from the Avatar website.Note: A complete month's data is available on the first Monday following 45 days after the end of the month.		**Press Ganey Tool**
Responsiveness of Hospital Staff	RJ Salus; Eric Pifer	Patient Experience Committee	Percent of inpatients responding "Always" to the following 2 questions [% Top Box]: 1. *During hospital stay, after you pressed the call button, how often did you get help as soon as you wanted it?* 2. *How often did you get help in getting to the bathroom or in using a bedpan as soon as you wanted (for patients who needed a bedpan)?* CMS Qualified values are pulled from the Avatar website.Note: A complete month's data is available on the first Monday following 45 days after the end of the month.		**Press Ganey Tool**
Communication About Medicines	RJ Salus; Cheryl Reinking; Bob Blair	Patient Experience Committee	Percent of inpatients (who received meds) responding "Always" to the following 2 questions [% Top Box]: 1. Before giving you any new medicine, how often did hospital staff tell you what the medicine was for? 2. Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand? CMS Qualified values are pulled from the Avatar website. Note: A complete month's data is available on the first Monday following 45 days after the end of the month.		**Press Ganey Tool**
Average Length of Stay	Eric Pifer, MD; Mick Zdeblick; Joy Pao; Petrina Griesbach	LOS Steering Committee	Average LOS of Medicare FFS, Paitents discharged from an Acute Care or Intensive Care unit. Excludes expired patients. Includes final coded patients aged 65 an older at the time of the encounter. The baseline period is from Jan-June 2015 and the performance period is from Jan-June 2016.		**EDW Data Pull, Department of Clinical Effectiveness**
30-Day Readmission (LOS-Focused)	Eric Pifer, MD; Margaret Wilmer; Joy Pao; Petrina Griesbach	Readmission Committee	Percent of Medicare inpatient discharges return for an unplanned IP stay for any reason within 30 days, aged ≥65. Excludes patients who die, leave AMA or are transferred to another acute care facility; excludes admits to ECH Rehab and Psych admissions and for medical treatment of cancer.		**EDW Data Pull, Department of Clinical Effectiveness**

Enterprise Medication Safety Committee Minutes
February 17, 2016

Attendees: see sign in sheet

Agenda Item	**Discussion**	**Outcome/Follow-Up**

New Business	iCare reports related to Medication Safety:
	• Admission Medication Reconciliation Compliance %
	  ○ MD, Nurse, and Rx Leadership – who owns?
	• BCMA Scanning Compliance %
	  ○ Chris Tarver will continue monthly compliance checks; it is available to all managers
	• Discharge Medication Reconciliation Compliance %
	  ○ MD, Nurse, and Rx Leadership – who owns?
	• Duplicate Discharge Orders – Discharge Med List
	  ○ MD, Nurse, and Rx Leadership – who owns?
	• PTA Meds Reviewed Compliance %
	  ○ Includes both "any user" and "medication-authorizing provider"
	  ○ MD, Nurse, and Rx Leadership – who owns?
	• Timely Medication Administrations %
	  ○ Includes admissions w/completely reconciled PTA meds; Partially Reconciled; Reconciled within a certain amt of time (ie 24hrs)
	  ○ MD, Nurse, and Rx Leadership – who owns?
	• Transfer Medication Reconciliation Compliance # and %
	  ○ Includes # of transfers w/active orders prior to	

	transfer; # of transfers w/ orders reconciled before transfer; % transfers w/reconciled active orders ○ MD, Nurse, and Rx Leadership – who owns?	
Old Business (15 min): • Alaris Drug Library Update • Ativan in Refrigerator • Vanco Special Meeting	 Request from Dr. Pinsker to remove Basic Infusion so that epidural drug library must be used … Lisa DelaRosa emailed CareFusion rep and cannot be removed. Ongoing discrepancies d/t difficulty with workflow Small group met re: errors in Vanco administration	 Set up meeting w/rep and Dr. Pinsker to discuss any other options – **any update?** Nursing and Pharmacy need to meet and figure out a workflow. – **update: Going to Core Clinical this Friday. Progress notes.**
iCare Related Issues	Please see info from weekly iCare Med Safety Committee meetings	
Heparin	Heparin Team Meeting is occurring every Monday, Topics include: • Continued refinement of order set • Drill down of errors/issues • Education Refinement	Continuing to meet. For Heparin Team: look at dc'ing of set vs. individual orders. Dr. Shin: Discuss units/hr

	• MAR-Flowsheet fanning of information • Review of all patients on heparin	– can it be the only standard? Idea: colored tape on pump to alert dosing as units/kg/hr – yeah Sherry on Ortho Mojgan looking into Alaris help.
MERP Trending for January 2016 (15 min)	See handout **Traveler back fill errors** – Education/PCR working together: July: 1- 3B omitted warfarin – terminated Aug: 1 - 4B omitted K+ replacement Sept: 7 Oct: 10 Nov: 2 Dec: 0 Jan: 0 RT Update: As of January 19, all inhalers to be given by RT – questions persisting re: workflow…. **4 QRRs in January** Same Day Chemo Orders: • Sept: 4 • Oct: 4 (Dormady, Li, Lai x3, Komlos) • Nov: 2 • Dec: 4 (Li x2, Chen, ?) • Jan: 0	For next month, will take this trending off the agenda as it seems stable iCare Weekly Med Safety team discussing will monitor

	Good Catch = OPS LG – need name of RN – caught inconsistencies in home med list Harm: January = none? QRRs related to iCare are being discussed at weekly iCare Med Safety Meeting – trends noted in January related to: NICU TPN/Labeling, PYXIS/auto-verification in ED; med rec	Good catch given at LG None as per Sheetal either As per Phuong: NICU TPN Labeling is fixed. PYXIS/auto-verification is being worked on – pedi changes going into effect Tuesday. Discussion about med rec: when is it NOT needed? Ie same day chemo patients, blood transfusion, cancelled patient? Dr. Shin: Can we have policy to cover no AVS – which patients? Discussion about how to define pts needing vs not needing AVS and how to fix Epic programming. Take to Friday discharge group. Vicky and Dr. Shin will work on committee – Jodi R and Chris T. volunteered

		also
MERP Site Visit June 1 – 4, 2015 Findings	8 citations were consistent with reported findings at exit; Plan of Correction submitted June 25 • QRR manager f/u timeliness • Flushing procedure for saline lock IV push med • MD on Med Safety Committee • Pain & POSS reassessment on PCA pt/fresh post-op • Medication freezer temperature • Administration of Zofran • Expired: antibx OPS; IV fld ED • Discrepancy resolution Audit update: • Med QRR • Zofran (LG) • IV push (MV) • Pain &POSS for PCA fresh post op (MV)	Plan of correction accepted by CDPH as of July 6; audits for IV Push completed; need final Zofran. Pain/POSS: relaunching audit Med QRR timeliness: at 74% last month – 5 days for original acknowledgement
Other needed MERP follow up as decided by command center	1. NICU use of guardrails – audit? 2. Old policies in ePolicy 3. Policy on Refrigerator/Freezer temps needs to be corrected as per Title 22: 36-46 4. Need to develop "MERP Policy" 5. Pharmacy Near Miss Report needs to come to Med Safety Committee 6. EPIC/ECHO: configuration of IV push and IVPB orders "over x minutes" 7. Flushing instructions inconsistent between Lippincott and different sections on Guideline on Toolbox 8. Post-op VS and PCA Policy could be more prescriptive	1. Will start audit once Jody returns from vacation –audit started in July 2. Joy, Sheetal & Chris to do first pass to scope issues 3. Bob Blair – approved at ePolicy 8/7/15 4. Chris Tarver & Poopak to draft 5. Added – closed

	9. 4B has extra anaphylaxis kits in med rooms 10. When pt tx from unit to 2B holding area to IR, did not find documentation in ECHO – could not see in record at all that pt spent time in 2B 11. ECHO: result is time of arrival of specimen in lab; very different from result time; makes critical values reporting look out of compliance 12. No co-signature for heparin on floors 13. Pts going to IR do not have orders suspend or held	6. On-going – **update: Phuong will work w/Pharmacists to come up with appropriate orders.** 7. Athena Lendvay corrected and is sending through approval 8. Updates under consideration 9. Extra kits removed 10. Meeting held – will need to revisit w/Epic go live; phases of care and how 2B was built in the system continued to lead to problems w/pt movement 11. Unable to change in ECHO; will test in Epic - 11/23/15 still noted to be issue in Epic – have escalated to IT/Lab leadership –

		contributed to confusion w/Heparin Orders 12. Chris to bring to Nurs-IS – fixed in iCare w/11-7-15 go live 13. MSIT?
Pharmacy's Medication Use Reviews (5 min) – Phuong Nguyen, Ph D & Poopak Barirani, Ph D	Narcan, Flumazenil, Controlled Substance Discrepancies; Pharmacy Fill PDSA/Near Misses	Phuong: January: 9 patients rec'd narcan (4 OD from home). One from Endo sent to Pinsker and Shin for review. 2 cases sent to Lynne McCoy for review – one pt was methadone; other was opioid naïve morphine CR. Near Miss MV: 46 caught before sent out. IV errors: 20 caught by dose edge; 14 caught by pharmacists. Monthly avg through dose edge 6000. Poopak will send last quarter info.

Next Meeting: March 9, 2016

ATTACHMENT 10

El Camino Hospital®
THE HOSPITAL OF SILICON VALLEY

Patient and Family Centered Care Theme
Quality Committee

February 29, 2016

Mick Zdeblick
Chief Operating Officer

Patient Family Centered Care: Discussion Document

Since our last Quality Committee meeting senior management held a FY16 & FY17 Priority Setting Retreat. At this retreat all of the efforts required to successfully close out FY16 were reviewed. We also outlined the major strategic efforts either already in play or those starting shortly.

The consensus of the discussion was that now may not be the best time to launch a new endeavor focused on Patient Family Centered Care.

Reasons for the recommendation:

- We need to stabilize all of the care centric work processes impacted by iCare, especially related to patient safety
- We need capacity and focus to continue the optimization of iCare
- Lean Principle: a process must be consistent before it can be improved: we are not yet consistent in all of work processes impacted by iCare. e.g. admitting, discharge, care transitions, care coordination, etc.

ATTACHMENT 11

ECH BOARD COMMITTEE MEETING AGENDA ITEM COVER SHEET

	Item:	Greeley Update – Peer Review Quality Committee Meeting Date: February 29, 2016
	Responsible party:	Eric Pifer, MD; Chief Medical Officer
	Action requested:	For Discussion
	Background: As part of our response to one of our red alert cases this past year, the management team has decided (and discussed with the board) that one of our actions is to evaluate our peer review process. The question is whether or not we are consistent across departments, campuses and in special circumstances. A second question relates to whether or not we are setting the appropriate tone with our peer review activities. That tone needs to be positive and educational when appropriate but we also need to ensure accountability. A third and final question is whether or not we are following through appropriately and consistently over time related to actions that stem from peer review issues. This consultation will be important for the organization as it coincides with the inauguration of a new group of medical staff leaders. Please take a few moments to look over the attached scope and plan and give comments and feedback as appropriate. This will be a good opportunity for the quality committee to get involved in the most important function of the independent medical staff.	
	Other Board Advisory Committees that reviewed the issue and recommendation, if any: None.	
	Summary and session objectives : N/A	
	Suggested discussion questions: N/A	
	Proposed Committee motion, if any: N/A	
	LIST OF ATTACHMENTS: Att 11b – Greeley Update – Peer Review Process	

Proposal for:

Quality and Peer Review Assistance

Presented to:

El Camino Hospital

January 26, 2016

The Greeley Company
75 Sylvan Street, Suite A-101
Danvers, MA 0192

January 26, 2016

Via email: Eric_Pifer@elcaminohospital.org

Eric Pifer, MD
Chief Medical Officer
El Camino Hospital
2500 Grant Road
Mountain View, CA 94040

Dear Dr. Pifer:

Thank you for your interest in the services of The Greeley Company. In follow up to our discussions and communications with you, it is my pleasure to submit this proposal outlining our recommended approach to El Camino Hospital regarding quality and peer review assistance.

Kindly confirm receipt of this proposal. To proceed with scheduling this engagement, please review the enclosed materials and sign in the appropriate area indicating your acceptance of the engagement and fees described, as well as the contract terms on pages 7-11. Please email a signed copy to my attention at tlaurie@greeley.com or you may fax it to 978-531-5601. Upon receiving the signed agreement, we will begin scheduling the engagement.

Thank you for the opportunity for The Greeley Company to propose on this important engagement. If you have any questions, please do not hesitate to contact me at (818) 772-4209. We look forward to working with you, your colleagues and the physician community at El Camino Hospital.

Sincerely,

Terry Laurie

Terry M. Laurie
Director, Business Development-West Region
The Greeley Company

Our Understanding of the Situation

El Camino Hospital (hereinafter El Camino) started as a single campus in Mountain View, CA. However, with the purchase of the Los Gatos campus, El Camino was able to expand its footprint in the community and expand its mission. The integration of the two campuses has provided opportunities and challenges to both the physicians and hospital administration. Additionally, the external challenges of providing quality healthcare with increasingly shrinking hospital budgets is prompting El Camino to explore ways to successfully integrate the two campuses and determine the optimum services to be provided at each location. Hospital leaders are seeking to promote collaboration with the medical staff to achieve success for the hospital as well as the physicians and to promote the same high standard of quality patient care at both campuses. To address these opportunities, El Camino is seeking assistance from The Greeley Company (hereinafter Greeley) to conduct an assessment of the scope of services and safety of hospital patient care processes on the Los Gatos campus. In addition, El Camino is requesting an assessment of the peer review program and activities across both campuses to determine the extent to which these are functioning effectively and efficiently and to identify opportunities for improvement. We are pleased to submit this proposal to assist El Camino with these opportunities.

Engagement Goal and Objectives

Goal:

The goal of this engagement is to assess the quality and scope of patient care services provided on the Los Gatos campus.

Objectives:

- Assess the quality and safety of patient care processes on the Los Gatos campus
- Assess the effectiveness of the medical staff peer review activities on the Los Gatos and Mountain View campuses in identifying and addressing practitioner performance issues
- Assess the scope of patient care services that can be safely provided on the Los Gatos campus

Scope & Approach

The scope of this engagement will ***include:***

- Assessing the quality and safety of patient care services provided on the Los Gatos campus
- Assessing the peer review activities related to care provided on the Los Gatos and Mountain View campuses
- Assessing the scope of services that can be safely provided on the Los Gatos campus

The scope of this engagement will ***exclude:***

- Designing or implementing changes to peer review or patient care services based on the assessment findings
- Designing or implementing changes to the scope of services for the Los Gatos campus
- Assessment of patient care services on the Mountain View campus

We propose the following activities to achieve the project goal and objectives. Our methodology includes establishing a solid project management infrastructure to support meeting the project

goals and objectives while our medical and clinical consultants focus on collaboration and delivery of key engagement deliverables.

Activity 1: Initiate, plan, and manage the engagement
We will schedule and conduct an initial call with the Executive Sponsor(s) and support staff to confirm project goals and objectives, scope and approach, deliverables, roles and responsibilities, and timeline. We will develop a draft project communique that El Camino will finalize and distribute to the stakeholders that describes the project and the roles of the stakeholders in it. We will provide project management support throughout the engagement.

Activity 2: Prepare for onsite assessment
We will request and review documents and available data relevant to the scope of services and quality and safety of patient care services for the Los Gatos campus. We will also request and review documents and available data relevant to peer review across both campuses. To the extent appropriate, we will review confidential peer review documents and data while onsite during Activity 3. We will schedule and conduct a planning call with Project Coordinator(s) to track the status of data/document collection, scheduled meetings, scheduled interviews, and onsite logistics to coordinate planning for the onsite interviews with key stakeholders.

Activity 3: Conduct onsite assessment
We will conduct an onsite assessment that will include a physician consultant onsite for three days and a nurse consultant onsite for three days. The physician consultant will conduct interviews with physicians and hospital staff involved in the medical staff peer review process across both campuses. The physician consultant will also review confidential peer review documents, data, and committee minutes related to peer review for both campuses. In addition the physician and nurse consultant will conduct interviews and review additional data related to the scope of services for the Los Gatos campus. The nurse consultant will conduct interviews and review additional documents and data to evaluate the quality and safety of patient care processes and processes related to staff competencies for the Los Gatos campus.

Activity 4: Analyze assessment results and develop report
Our consultants will synthesize the results of the document and data review and onsite activities into a report in PowerPoint format. The report will include findings from the assessment and recommendations derived from the assessment results. We will conduct a web meeting with the Executive Sponsor(s) to share a draft version of the PowerPoint report and solicit feedback before finalizing the report.

Activity 5: Present assessment findings and facilitate leadership decision making
Our consultants will return onsite to present the assessment findings and recommendations We will conduct a session of up to three hours with hospital and medical staff leaders to share the assessment results and recommendations. We will facilitate discussion and, to the extent appropriate, decision making regarding the report findings and recommendations.

Activity 6: Finalize project deliverables
Based upon the results of the final onsite meeting, we will finalize and submit all project deliverables.