LAB Dept MEETING – Huddles

Date of Meeting: 6/21/2018
Attendees: Jocelyn Ybarra, Alan Dandridge, Juliet Garlejo, Raquel Lecaro, Maria (Mhae) Villafuerte, Mark Gomez, Elliott Faure, Francisco Loza, Melanie Magee, Juanita Fernandez, Vanessa Cardenas, Erica Torres, Marissa Calilung, Marie Rutledge, Theda Bryant

Topic	Details	Action Item, responsible person, date due, or informational only
KUDOS SAFETY TIP	• Thank you to everyone who works extra hours, days and shifts to cover staff shortage. YOU ARE AWESOME!!! • Congratulations to lab phlebotomy team for achieving zero misdirected specimens thru May, 2018 and for zero cancelled urine cultures April-May,2018!!! • Congratulations to all for great attendance – the MV lab SCL is under 3 days! • In a recent trash audit, vacutainer tubes were found in regular trash in 2nd floor. Be sure to dispose trash in appropriate containers.	Informational
	• Welcome to the team Frank Loza and Erica Torres!!! Frank will be working FT nights (temp) and Erica is PT limited day shift. • Quiet at night- 2200-0500. "The committee is working on a 5 week quiet at night implementation strategy pilot that we are hoping to kick-off in a couple of units on June 25th. While we have a strong plan for the nursing units, our support departments' plan needs your help." More information to follow on this one. • GTT will be performed in house soon. This is in an effort to follow KP med center standard test menu. More on this to follow. • Sepsis Alert presentation by Dr. Choudhary today, 6/21/18 @ 1230.	ALL STAFF
	• Print "All Pending" at least 2x in your shift and file in pending log binder. Print all departments- Hematology, Coagulation, Chemistry, Urinalysis, Microbiology, Immunology, whether there's pending or not. There was a Cdiff that was missed and went on for multiple shifts not being done. A simple pending check would have caught this. The specimen was logged in. • Downtime forms- These were revised as part of our corrective action for a CAP deficiency. When we need to use downtime forms for a computer	CLS

	downtime use the following: ➢ Chemistry- (DXC600 and Access2) Instrument print out. You need to put all patient demographics to have and reflect correct reference ranges ➢ Hematology- Instrument print out. It needs to be the chartable copy. You need to put all patient demographics to have and reflect correct reference ranges. ➢ Urinalysis- Use manual downtime form ➢ Microbiology- Use manual downtime form ➢ Coagulation>>**go to files>>then select Customer print out>>then press F6** ➢ Immunology>>use manual downtime form ➢ Blood Bank>>use manual downtime form ➢ Random audits of all final downtimes will be performed for compliance. Osmolality, UDS, Gentamicin and Digoxin are on manual forms. Sedrate and BFCC are on manual forms as well. The downtime forms in master log and folder were updated	
	• Stool will be processed by lab phlebotomist (C2/C3, D2 and H Op). ED and floors don't keep any O&P bottles or cultures. We will no longer call nursing to process this specimen. Lab knows better how to process this specimen especially when there's multiple tests ordered.	Phlebotomist
UBT	Thank you to all those who respond to the People Pulse survey sent by Raquel. We got 3 responses Action Plans: • As part of the action plan UBT will be posting this slogan **"Smile… Patients Need You"** It's an encouragement to be ready to work and care for our members when we come in. • Please announce to everyone when going on break or if you're leaving your work area. Do not just say it to one co-worker. Your co- workers cover for you when you're not in your area so let everyone know. • Information in lab huddles are meant to remind everyone, to facilitate communication and to ensure everybody gets the information and be all on the same page. They're not meant to be punitive or personal.	

This concludes the Minutes of the _June 21, 2018_____ Lab Staff Meeting.

Prepared by:
Marissa Calilung, Marie Rutledge, Theda Bryant Date: 6/27/2018

Lab Informatics Announcement

SCPMG Laboratory System – Laboratory Informatics Department

EFFECTIVE 06/20/2018

KPHC Order Updates

Announcement: Six (6) orders will be inactivated due to test discontinuation by Regional Reference Laboratories or Quest Diagnostics.

Changes: Below is the list of KPHC Orders impacted and the reason for change.

KPHC Order Code INACTIVATION		
Order to be Inactivated	***Alternate Replacement Order***	**Reason for Change**
CLOSTRIDIUM DIFFICILE, DONOR STOOL, TOXIGENIC + NAP1 STRAIN, [247948]	CLOSTRIDIUM DIFFICILE ANTIGEN AND TOXINS A AND B W REFLEX TO PCR [231607]	Test discontinued by Regional Reference Laboratories - Virology
MEAT FIBERS SMEAR, STOOL [89160A]	None available	Test discontinued by Outside Lab
BUTABARBITAL [80345D]	None available	Test discontinued by Outside Lab
AMOBARBITAL LEVEL, SERUM [80345M]	None available	Test discontinued by Outside Lab
PENTAZOCINE LEVEL, GC [80307A]	None available	Test discontinued by Outside Lab
CHLORAL HYDRATE LEVEL, GAS CHROMATOGRAPHY [82441C]	None available	Test discontinued by Outside Lab

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11668 Sherman Way, North Hollywood, CA 91605
Phone: (818) 503-6894 or Tie Line: 8-397-6894

Issue Date: June 5, 2018

Technical Bulletin

Laboratory Care Delivery System – Regional Reference Laboratories

PHENOSENSE GT PLUS INTEGRASE ELECTRONIC ORDERABLE AVAILABLE IN KP HEALTHCONNECT

The Laboratory Care Delivery System is pleased to announce that, effective Wednesday, **June 20, 2018**, the **PHENOSENSE GT PLUS INTEGRASE [253259]** test order, which is a send-out to the Monogram Biosciences LabCorp Specialty Testing Group, will be made available electronically through KP HealthConnect. This change will serve to ease the current burden to providers of filling out and submitting a manual requisition.

TEST INFORMATION

Test Location	Monogram Biosciences LabCorp Specialty Testing Group
KPHC Order Display Name	HIV 1 PHENOTYPIC AND GENOTYPIC SUSCEPTIBILITY W INTEGRASE (NNRTI, NRTI, PI, INI)
KPHC Order Code	253259
Specimen Source	Blood
CPT Codes	• 87900 • 87901 • 87903 • 87904 x14 • 87906

QUESTIONS?

Client Service Center: 1-888-4LAB NFO, or tie line 8-397-7077

Jonathan Craig Gullett, MD, Physician Director of Microbiology, jonathan.c.gullett@kp.org

Ken Van Horn, PhD, D(ABMM), Technical Director of Microbiology, ken.van-horn@kp.org

Technical Bulletin

Laboratory Care Delivery System – Regional Reference Laboratories

NEW TEST PANEL FOR NON-ALCOHOLIC FATTY LIVER DISEASE (NAFLD) RISK SCORE

The Laboratory Care Delivery System is pleased to announce that, effective Wednesday, **June 20, 2018**, there will be a new SmartGroup panel for assessing a liver fibrosis risk score for patients with non-alcoholic fatty liver disease (NAFLD); this order will be available in the outpatient setting only.

The Smartgroup panel allows convenient, one-click ordering of four lab tests needed for the risk score calculation: AST, ALT, platelet count, and albumin. Other clinical risk score components will come from the patient's medical record (i.e., patient age, BMI, history of diabetes; see reference 1). The final calculation will be performed and made available in a HealthConnect tool (AURA). Please note that the liver fibrosis risk score does not need to be re-calculated more frequently than every 4-6 months on eligible patients.

TEST INFORMATION

KPHC SmartGroup Panel Display Name	PNL NON-ALCOHOLIC FATTY LIVER DISEASE (NAFLD) PANEL SCAL
4 Tests (EAPs) included in NAFLD Panel	• AST [84450B] • ALT [84460B] • PLATELET AUTOMATED COUNT [85049D] • ALBUMIN [82040B]
NAFLD Score Formula (result will be calculated in AURA)	NAFLD Score = -1.675 + (0.037*age [years]) + (0.094*BMI [kg/m2]) + (1.13*IFG/diabetes [yes = 1, no = 0]) + (0.99*AST/ALT ratio) – (0.013*platelet count [×109/L]) – (0.66*albumin [g/dl])

Reference: Angulo P, Hui JM, Marchesini G, Bugianesi E, George J, Farrell GC, Enders F, Saksena S, Burt AD, Bida JP, Lindor K, Sanderson SO, Lenzi M, Adams LA, Kench J, Therneau TM, Day CP. The NAFLD fibrosis score: a noninvasive system that identifies liver fibrosis in patients with NAFLD. Hepatology. 2007 Apr;45(4):846-54.

QUESTIONS?

Client Service Center: 1-888-4LAB NFO, or tie line 8-397-7077

JiYeon Kim, MD, MPH; Physician Director, Esoteric Chemistry & Immunology, Special Coagulation: 818-503-6710 or tie line 8-397-6710

Vincent Dizon; Director of Operations, Chemistry: 818-503-7050 or tie line 8-397-7050

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http://kpnet.kp.org:81/california/scpmg/labnet/index.htm

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Technical Bulletin

Laboratory Care Delivery System – Regional Reference Laboratories

MTB PCR ELECTRONIC ORDERABLE AVAILABLE IN KPHC

The Laboratory Care Delivery System is pleased to announce that, effective Wednesday, **June 20, 2018**, the ***MYCOBACTERIUM TUBERCULOSIS* (MTB) PCR** test order will be made available electronically through KPHC, which will serve to ease the current burden to providers of filling out and submitting a manual requisition.

TEST INFORMATION

Test Location	Regional Reference Laboratories		
KPHC Order Display Name	MYCOBACTERIUM TUBERCULOSIS COMPLEX, DIRECT DETECTION, AMPLIFIED PROBE		
KPHC Order Code	87556B		
Specimen Source	Multiple		
CPT Code	87556		
KPHC Result Components	**Display Name**	**CID**	**Base Name**
	PRELIMINARY RESULT	12118654	
	GRAM STAIN RESULT	1201436	GS
	FINAL RESULT	12122422	FINALRESULT
	CORRECTED REPORT	12123221	
	AMENDED REPORT	12123222	

QUESTIONS?

Client Service Center: 1-888-4LAB NFO, or tie line 8-397-7077

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Ken Van Horn, PhD, D(ABMM), Technical Director of Microbiology, ken.van-horn@kp.org

Technical Bulletin

Laboratory Care Delivery System – Regional Reference Laboratories

MEAT FIBERS SMEAR, STOOL SEND-OUT TEST DISCONTINUED

Effective **immediately**, the Laboratory Care Delivery System will discontinue the following test: **MEAT FIBERS SMEAR, STOOL [89160A]**. This test was formerly transitioned to a send-out due to low test utilization, but is now no longer available as a send-out per Quest Diagnostics.

TEST INFORMATION

Inactivated Test Order	
KPHC Order Display Name	MEAT FIBERS SMEAR, STOOL
KPHC Order Code	89160A

QUESTIONS?

Client Service Center: 1-888-4LAB NFO, or tie line 8-397-7077
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Lab Informatics Announcement

SCPMG Laboratory System – Laboratory Informatics Department

EFFECTIVE 06/13/2018

KPHC Order Display Name Changes

Announcement: The KPHC Order Display Names have been updated to be more descriptive of the testing performed. The order codes remain the same.

Changes: Below is the list of KPHC Orders with the old and new Display Names.

Order Code	**87505A**
Old Name	BACTERIAL GASTROINTESTINAL PATHOGEN PANEL (4 COMPONENTS), STOOL, MULTIPLEX PCR
New Name	**BACTERIAL GI PANEL (SALMONELLA, SHIGELLA/EIEC, CAMPYLOBACTER, SHIGA TOXIN DNA), STOOL, MULTIPLEX PCR**

Order Code	**247022**
Old Name	OSMOLALITY GAP
New Name	**OSMOLALITY, MEASURED AND CALCULATED W OSMOLALITY GAP**

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Technical Bulletin

Laboratory Care Delivery System – Regional Reference Laboratories

INACTIVATION OF *CLOSTRIDIUM DIFFICILE*, DONOR STOOL, TOXIGENIC + NAP1 STRAIN, PCR

Effective Wednesday, **June 20, 2018**, the Laboratory Care Delivery System will inactivate the ***CLOSTRIDIUM DIFFICILE*, DONOR STOOL, TOXIGENIC + NAP1 STRAIN, PCR** test due to inappropriate ordering.

TEST INFORMATION

Inactivated Test Order

KPHC Order Display Name	CLOSTRIDIUM DIFFICILE, DONOR STOOL, TOXIGENIC + NAP1 STRAIN, PCR
KPHC Order Code	247948

QUESTIONS?

Client Service Center: 1-888-4LAB NFO, or tie line 8-397-7077

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Technical Bulletin

Laboratory Care Delivery System – Regional Reference Laboratories

CHANGE TO TEST CODE AND TESTING LOCATION FOR LYMPHOCYTIC CHORIOMENINGITIS VIRUS ANTIBODY KPHC ORDERABLE

Effective Wednesday, **June 20, 2018**, the KP HealthConnect order for **LYMPHOCYTIC CHORIOMENINGITIS VIRUS ANTIBODY** will be replaced due to a change in testing location. Medical Centers will be sending this test directly to ARUP, instead of Quest Diagnostics, moving forward.

TEST INFORMATION

	Existing Orderable	New Orderable
Test Location	Quest Diagnostics Test Code: Discontinued	ARUP Test Code: 2001635
KPHC Order Display Name	LYMPHOCYTIC CHORIOMENINGITIS VIRUS ANTIBODY	LYMPHOCYTIC CHORIOMENINGITIS VIRUS IGG, IGM, SERUM
Specimen Source	Blood	Blood
KPHC Order Code	86727B	253258
CPT Code	86727	86727 x2
LRR Display Name [CID]	REPORT [12122402]	LCM VIR IGG, TITER, SER, QN, IF [12010681] LCM VIR IGM, TITER, SER, QN, IF [12010684]

QUESTIONS?

Client Service Center: 1-888-4LAB NFO, or tie line 8-397-7077

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Technical Bulletin

Laboratory Care Delivery System – Regional Reference Laboratories

CMV QUANTITATIVE TESTING NOW IN-HOUSE, QUALITATIVE TESTING DISCONTINUED

The Laboratory Care Delivery System is pleased to announce that, effective Wednesday, **June 20, 2018**, **CYTOMEGALOVIRUS (CMV) DNA QUANTITATIVE PCR** testing **[87497A]** on EDTA plasma samples will be performed in-house in the Reference Regional Laboratory Immunology Department. Concurrent with this change, the Quest Diagnostics send-out orderable 'Cytomegalovirus DNA Qualitative PCR Testing [87496A]' for plasma/whole blood will be discontinued. The Regional Reference Laboratories will continue to send the following specimens to Quest until validated for in-house testing: CSF, urine, amniotic fluid, bronchoalveolar lavage and eye fluid samples.

For plasma samples, Medical Centers must aliquot the plasma to a secondary tube before sending to the Regional Reference Laboratory.

The Limit of Detection (LoD) will improve from 200 IU/mL to 34.5 IU/mL for plasma samples. Please refer to LabNet (http://kpnet.kp.org:81/california/scpmg/labnet/testmenu/testmenu.jsp?TID=3540) for more detailed information on the new CMV DNA Quantitative PCR test, including processing instructions.

Due to the potential for viral load variability when introducing a new test methodology, for monitoring purposes it is recommended that all patients be re-baselined where appropriate.

TEST INFORMATION			
Test Location	Regional Reference Laboratories		
KPHC Order Display Name	CMV DNA, QUANTITATIVE, PCR		
KPHC Order Code	87497A		
Specimen Source	EDTA Plasma		
CPT Code	87497		
KPHC Result Components	**Display Name**	**CID**	**Base Name**
	CMV DNA, PCR (LOG IU/ML)	12425940	CMVDNALOG
	CMV DNA VIRAL LOAD, IU/ML, PCR	12427268	CMVDNAPCR
Inactivated Test Order			
KPHC Order Display Name	CMV DNA, QUALITATIVE, PCR		

QUESTIONS?

Client Service Center: 1-888-4LAB NFO, or tie line 8-397-7077
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Ken Van Horn, PhD, D(ABMM), Technical Director of Microbiology, ken.van-horn@kp.org

Technical Bulletin

Laboratory Care Delivery System – Regional Reference Laboratories

GLUCOSE TOLERANCE TESTS FOR POST-2-HOURS (CYSTIC FIBROSIS) AND POST-1-HOUR

The SCPMG Laboratory Care Delivery System is pleased to announce that starting on **June 20, 2018**, there will be two additional glucose tolerance tests available for 1-hour and 2-hours. Please see the two pages below for additional details, and update any filters and personal preference lists if needed.

The new order for "**GLUCOSE TOLERANCE TEST, 2 HRS (FBS, 2 HR GLUCOSE), CYSTIC FIBROSIS [253260]**" is designed for the cystic fibrosis patient population. It includes an initial fasting blood sugar collection, a 75g glucola administration, and a post-2-hour glucose level. The reference ranges and critical values for glucose results will reflect the existing ones for "GLUCOSE, FASTING [82947B]" and "GLUCOSE, 2 HR POST 75 GM PO GLUCOSE [82950I]", respectively.

The new order for "**GLUCOSE TOLERANCE TEST, 1 HR (FBS, 1 HR GLUCOSE) [253261]**" is meant to better support providers and patients who would like to get a fasting blood sugar collection prior to the 1-hour post-50g glucola screening protocol for gestational diabetes. It includes an initial fasting blood sugar, a 50g glucola administration, followed by a post-1-hour glucose level. The reference ranges and critical values for glucose results will reflect existing ones for "GLUCOSE, FASTING [82947B]" and "GLUCOSE, 1 HR, POST PO GLUCOSE, GESTATIONAL DIABETES [82950E]", respectively.

TEST INFORMATION

KPHC Order Display Name	GLUCOSE TOLERANCE TEST, 2 HRS (FBS, 2 HR GLUCOSE), CYSTIC FIBROSIS	GLUCOSE TOLERANCE TEST, 1 HR (FBS, 1 HR GLUCOSE)
KPHC Order Proc Code	253260	253261
LRR Result Component Names	1. GLUCOSE, FASTING, PRE 75 G GLUCOSE PO, SER/PLAS 2. GLUCOSE 2H POST 75 G GLUCOSE PO	1. GLUCOSE, FASTING, PRE 50 G GLUCOSE PO, SER/PLAS 2. GLUCOSE 1H POST 50 G GLUCOSE PO
LRR Result Component ID	1. 25392 2. 1396	1. 24841 2. 1388
LRR Result Component CID	1. 12125288 2. 1201396	1. 12124738 2. 1201388
BaseName	1. FBS 2. GTT2HR	1. FBS 2. GTT1HR
KRMS Proc Description	GTT 2HR CF	GTT 1 HR
KRMS Proc Code	8295112	8295114

QUESTIONS?

Client Service Center: 1-888-4LAB NFO, or tie line 8-397-7077
JiYeon Kim, MD, MPH; Physician Director, Esoteric Chemistry & Immunology, Special Coagulation: 818-503-6710 or tie line 8-397-6710

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LABORATORY TESTS FOR DIAGNOSING AND MONITORING DIABETES

DIAGNOSTIC FOR DIABETES MELLITUS (DM) OR GESTATIONAL DIABETES, choose from following:

Test Name	Interpretation	Follow-up
Glucose, Random [82947A]	Normal 70-140 mg/dL Elevated: 140-199 mg/dL DM: >200 mg/dL *in setting of classic symptoms of hyperglycemia or hyperglycemic crisis*	Confirm with fasting glucose or A1c
Glucose, Fasting [82947B]	Normal: 70-99 mg/dL Pre-DM: 100-125 mg/dL DM: ≥126 mg/dL *FBS, or fasting blood sugar, is defined as glucose level after no caloric intake for at least 8hrs.*	Confirm any new diagnosis of diabetes with repeat testing.
Glucose, 2 hr, Post 75 g PO Glucose [829501]	*Post-75g Glucola 2hr* Normal: 70-139 mg/dL Pre-DM: 140-199 mg/dL DM: ≥200 mg/dL	
Hemoglobin A1c, screening or prediabetic monitoring [83036H]	Normal: 4.5-5.6% Pre-DM: 5.7-6.4% DM: ≥6.5%	
NEW GLUCOSE TOLERANCE TEST, 2 HRS (FBS, 2 HR GLUCOSE), CYSTIC FIBROSIS [253260]	*FBS* Normal 70-99 mg/dL Pre-DM: 100-125 mg/dL DM: ≥126 mg/dL *Post-75g Glucola 2hr* Normal 70-139 mg/dL Pre-DM: 140-199 mg/dL DM: ≥200 mg/dL	

DIAGNOSTIC FOR GESTATIONAL DIABETES MELLITUS (GDM), choose from following:

Test Name	Interpretation	Follow-up
Glucose Tolerance Test, 2 hours, Gestational Diabetes [82951AR]	***One-step GDM strategy*** *FBS* • Fasting: 70-91 mg/dL *Post-75g Glucola 2hr* • 1hr: 70-179 mg/dL • 2hr: 70-152 mg/dL	Perform when fasting and at 24-28wks gestation, one abnormal result is diagnostic of GDM.
Glucose, 1 hour, Gestational Diabetes [82950E]	***Two-step GDM strategy – Part 1*** *Post-50g Glucola 1hr* Normal: 70-134 mg/dL *Upper cutoff can vary from 129 mg/dL for greater sensitivity to 139 mg/dL for greater specificity*	Nonfasting result, perform at 24-28wks gestation; if abnormal, proceed to Glucose Tolerance Test, 3 Hours, Gestational Diabetes [82951A].
Glucose Tolerance Test, 3 hours, Gestational Diabetes [82951A]	***Two-step GDM strategy – Part 2*** *Post-100g Glucola multiple* • Fasting: 70-94 mg/dL • 1hr: 70-179 mg/dL • 2hr: 70-154 mg/dL • 3hr: 70-139 mg/dL	Perform when fasting, two abnormal results of the 4 time points confirm diagnosis of GDM.
NEW GLUCOSE TOLERANCE TEST, 1 HR (FBS, 1 HR GLUCOSE) [253261]	*FBS* Normal 70-99 mg/dL Pre-DM: 100-125 mg/dL DM: ≥126 mg/dL *Post-50g Glucola 1hr* Normal: 70-134 mg/dL *Cutoff can vary from 130 mg/dL for greater sensitivity to 140 mg/dL for greater specificity*	Perform when fasting; if only the post-50g glucola result is abnormal, proceed to Glucose Tolerance Test, 3 Hours, Gestational Diabetes [82951A].

MONITORING TEST FOR GLYCEMIC CONTROL

Test Name	Interpretation	Follow-up
Hemoglobin A1C, diabetic monitoring [83036I]	0-17yrs: <7.5% 18-64yrs: <7.0% 65-75yrs: <7.5% ≥76yrs: <8.0%	Reflects ~3 mo of glycemic control, except in conditions impacting RBC life span; susceptible to some interference with Hg variants
Fructosamine [82985B]	Normal: 205-285 µmol/L	Reflects ~2 wks of glycemic control, perhaps better for GDM monitoring Less well-studied than A1c in any context

References:

- American Diabetes Association. Classification and Diagnosis of Diabetes. Diabetes Care. 2017 Jan;40(Suppl 1):S11-S24
- Committee on Practice Bulletins—Obstetrics. ACOG Practice Bulletin No. 190: Gestational Diabetes Mellitus. Obstet Gynecol. 2018 Feb;131(2):e49-e64.
- Carpenter MW, Coustan DR. Criteria for screening tests for gestational diabetes. Am J Obstet Gynecol 1982;144:768–773

KAISER PERMANENTE- MORENO VALLEY MEDICAL CENTER
S/N 8077180 STAGO "B"

27300 Iris Ave, Moreno Valley, CA 92555
Lab Medical Director - Mark Taira,MD
SCAN DOCUMENT INTO HEALTH CONNECT

Accesion#: [redacted]
Name: [redacted] [redacted]
RIV MC

Coagulation 06/21/2018

Test Name	Patient Results	Reference Range
Prothrombin Time	30.5 sec. 2.75 INR	12.0 ... 15.4 sec.

DOWNTIME LABORATORY REPORT (SCAN DOCUMENT INTO HEALTH CONNECT)

KAISER PERMANENTE MORENO VALLEY MEDICAL CENTER LABORATORY

Medical Director: Mark T. Taira, M.D.
27300 Iris Ave., Moreno Valley, CA 92555
Ph: 951-251-6720 Fax: 951-251-6722

☐ STAT ☐ TIMED ☐ ROUTINE

COLLECTION INFO
DATE: TIME: NUID:

RECEIVED IN LAB INFO
DATE: TIME: NUID:

PATIENT:

MRN: DOB: SEX: M F

PROVIDER: DEPT:

PHONE: REPORT FAX:

BLOOD BANK

☒ ORDERED TESTS

☐ T & S

ABO/Rh_____

Screen ☐ Positive ☐ Negative

(reference) Negative

☐ Antibody ID _____

☐ Cord ABO/Rh

ABO/Rh_____

☐ DAT

DAT_____

reference) Negative

COMPLETED
DATE/TIME NUID:

FAX/CALLED
DATE/TIME NUID:

PLACE DOWNTIME ACCESSION LABEL HERE

DOWNTIME LABORATORY REPORT (SCAN DOCUMENT INTO HEALTH CONNECT)

KAISER PERMANENTE MORENO VALLEY MEDICAL CENTER LABORATORY

Medical Director: Mark T. Taira, M.D.
27300 Iris Ave., Moreno Valley, CA 92555
Ph: 951-251-6720 Fax: 951-251-6722

☐ STAT ☐ TIMED ☐ ROUTINE

COLLECTION INFO
DATE: TIME: NUID:

RECEIVED IN LAB INFO
DATE: TIME: NUID:

PATIENT:

MRN: DOB: SEX: M F

PROVIDER: DEPT:

PHONE: REPORT FAX:

MISCELLANEOUS TESTS

☒ ORDERED TESTS

☐ RAPID FLU A+B

FLU A ☐ POSITIVE ☐ NEGATIVE
☐ INVALID (reference) Negative

FLU B ☐ POSITIVE ☐ NEGATIVE
☐ INVALID (reference) Negative

☐ RAPID RSV ☐ POSITIVE ☐ NEGATIVE
(reference) Negative

☐ FFN ☐ POSITIVE ☐ NEGATIVE
(reference) Negative

☐ MONO TEST ☐ POSITIVE ☐ NEGATIVE
(reference) Negative

☐ HIV ☐ REACTIVE ☐ NONREACTIVE
☐ INDETERMINATE
reference) Negative

COMPLETED DATE/TIME NUID:

FAX/CALLED DATE/TIME NUID:

PLACE DOWNTIME ACCESSION LABEL HERE

LABORATORY REPORT *CHEM (UDS,OSMO,TDM)/BACTERIOLOGY*

Laboratory Medical Director: Mark Taira, MD
Kaiser Permanente Moreno Valley Medical Center
27300 Iris Ave
Moreno Valley, CA. 92555

☐ STAT
☐ TIMING CRITICAL
☐ ROUTINE

Patient: _____
Medical Record #: _____ DOB_____
Physician: _____
Location: _____
Date/Time Collected_____ By:_____

☐ **URINE DRUG SCREEN**

		(ADULT REFERENCE RANGE)
THC	_____	(Negative)
Phencyclidine	_____	(Negative)
COC	_____	(Negative)
mAMP	_____	(Negative)
Opiates	_____	(Negative)
Amphetamine	_____	(Negative)
Benzodiazepines	_____	(Negative)
Tricyclic	_____	(Negative)
Barbiturates	_____	(Negative)

CHEMISTRY

		(THERAPEUTIC RANGES)
	_____	
☐ Digoxin, CHF	_____	(0.5-1.1 ng/mL)
Atrial Arrythmia	_____	(0.8-2.0 ng/mL)
No Indication	_____	(0.8-2.0 ng/mL)
☐ Gentamicin	_____	Trough (<2 mcg/mL)
	_____	Peak (4-10 mcg/mL)
	_____	Synergy Peak (3 mcg/mL)
	_____	SDDA (8.0-10.0 mcg/mL)
	_____	Random (2-10 mcg/mL)

		(ADULT REFERENCE RANGE)
☐ Serum Osmolality	_____	(280-305 mOsm/kg)
☐ Urine Osmolality	_____	(50-1200 mOsm/kg)
	_____	

☐ Osmo Bld Panel (Na= Gluc= BUN=)

Calc Osmo	_____	(280-305 mOsm/kg)
Bl Osmo	_____	(280-305 mOsm/kg)
Osmo Gap		(<=10 mOsm/kg)

BACTERIOLOGY

☐ WETMOUNT

WBC	_____	(None Seen)
Yeast	_____	(None Seen)
Trichomonas	_____	(None Seen)
Clue Cells	_____	(None Seen)

☐ SPUTUM Q-SCORE

PMN's	_____	
Mucus	_____	Q Scores of 1+ or greater favor a pulmonary specimen over an oral specimen (saliva). Specimen will be processed for bacterial culture.
Squamous Epith Cells	_____	
Sputum Gram Stain	_____	

☐ GRAM STAIN

SOURCE: _____
RESULT: _____
_____
_____

☐ OTHER _____
_____

Barcode | Barcode | Barcode

*** SCAN DOWNTIME FORM INTO HEALTH CONNECT***

DATE/TIME COMPLETED: BY:	DATE/TIME FAXED/CALLED TO: BY:

LABORATORY REPORT *HEMATOLOGY & UA*

Laboratory Medical Director: Mark Taira, M.D.
Kaiser Permanente Moreno Valley Medical Center
27300 Iris Ave
Moreno Valley, CA 92555

☐ STAT
☐ TIMING CRITICAL
☐ ROUTINE

Patient:_____
Med. Record #:_____ DOB_____
Provider:_____
Location:_____
Date/Time Collected:_____ By:_____

HEMATOLOGY:

☐ **CBC W/O DIFF** ☐ **CBC W/ DIFF**

		(Adult Reference Range)
WBC_____		(4.0-11.0 x1000/mcL)
RBC_____	Female	(4.20-5.40 mill/mcL)
	Male	(4.7-6.10 mill/mcL)
Hemoglobin_____	Female	(12.0-16.0 g/dL)
	Male	(14.0-18.0 g/dL)
Hematocrit_____	Female	(37-47%)
	Male	(42-52%)
Platelets_____		(130-400 x1000/mcL)
Differential:		
Segs_____		(1.8-7.7 x1000/mcL)
Lymphs_____		(1.0-3.6 x1000/mcL)
Mono_____		(0.1-1.0 x1000/mcL)
Eos_____		(0.0- 0.7 x1000/mcL)
Baso_____		(0.0-0.2 x1000/mcL)
Others _____		
_____		

☐ **SED RATE:** _____

Age 15-49 yrs.	
Female	(0-20 m/hr.)
Male	(0-15 mm/hr.)
Age > 49 yrs.	
Female	(0-30 mm/hr.)
Male	(0-20 mm/hr.)

☐ **RETICS:**_____ (0.4 - 2.5 %)

☐ **Other:**_____

_____

_____

☐ **URINALYSIS:**

	(Adult Reference Range)
Glucose:_____	(Negative)
Protein:_____	(Negative/Trace)
Bilirubin:_____	(Negative)
Urobilinogen:_____	(Negative)
pH_____	(5.0 - 8.0)
Blood_____	(Negative)
Ketones:_____	(Negative)
Nitrite_____	(Negative)
Leukocyte Esterase_____	(Negative)
Specific Gravity: _____	(1.005 - 1.030)

☐ **URINE MICROSCOPIC:** Yes or No

WBC_____		(0 - 5/HPF)
RBC_____	Female	(0 - 3/HPF)
_____	Male	(0 - 2/HPF)
Sq. Epithelial Cells_____		(None)
Bacteria_____		(None)
Mucus _____		(None)
Other _____		

BODY FLUID: **CSF**_____ **Other**_____

☐ **Cell Count**

WBC _____	RBC_____
Segs _____	Eos _____
Lymphs _____	Baso _____
Mono _____	Other _____

☐ **Glucose:**_____ **Protein:**_____

Barcode	Barcode	Barcode

*** SCAN DOWNTIME FORM INTO HEALTH CONNECT***

DATE/TIME COMPLETED: BY:	DATE/TIME FAXED/CALLED: BY:

KAISER PERMANENTE® MORENO VALLEY MEDICAL CENTER

SEPSIS ALERT Lab Requisition Form

Affix Patient Name Label

EMERGENCY DEPARTMENT

Sepsis Labs ordered in HealthConnect? ☐ Yes ☐ No (Please ensure that lab orders are entered into HealthConnect prior to sending specimen to prevent unnecessary / avoidable delays in lab processing time)

Date / Time of Specimen Collection: _____ Drawn by: ☐ RN ☐ Phlebotomist

Date / Time Specimen Sent from ED to Lab: _____

Diabetic Patient? ☐ Yes ☐ No (If yes, test for A1C, Lipid, and Microalbumin if urine available)

ED Registered Nurse Name / Signature: _____

INSTRUCTION: ED RN please mark check box for all applicable labs and indicate total number of colored specimen tubes drawn before signing lab requisition slip to be sent with specimen to Lab

Ordered Sepsis Labs - STAT	Colored Specimen Tube Top							LAB - Confirm Receipt				Comments
	Blue	Red	Gold	Purple	Lt Green	Gray	Other	Rec'd	Not Rec'd	Missing	Unlabeled	
☐ Lactic Acid						1		☐	☐	☐	☐	
☐ Blood Cultures x 2							2	☐	☐	☐	☐	
☐ Other Labs	1	1	1	1	1			☐	☐	☐	☐	
Total # of Colored Specimen Tubes:												

Urine Specimen (Place in Separate Bag)

☐ Urinalysis
☐ Urine Culture

LAB DEPARTMENT

Date / Time Specimen Received in Lab: _____

Date / Time Logged / Accessioned: _____

Phlebotomist Name / Signature: _____

Please fax completed form to Quality Management Dept. at tie line 8-258-5739.
For questions, call Judy Curran, RN, QMC at tie line 8-258-3491.

Revised 6/18/2018

Sepsis Update

KP Riverside Medical Center
KP Moreno Valley Medical Center

NIRAJ MAHAJAN, MD, ASSISTANT CHIEF OF INTERNAL MEDICINE, PULMONOLOGIST SEPSIS PHYSICIAN CHAMPION

RAJIV CHOUDHARY, MD, INTERNAL MEDICINE – HOSPITALIST SEPSIS PHYSICIAN CHAMPION

JUDY CURRAN, RN, QUALITY COORDINATOR, SEPSIS IMPROVEMENT ADVISOR

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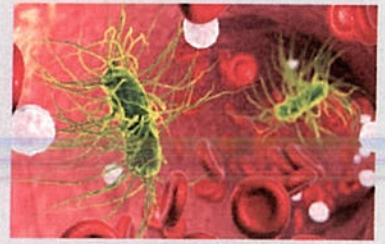
Why Focus on Sepsis?



- Severe sepsis is a significant healthcare challenge as it is the 10th leading cause of death overall
- Sepsis is the leading cause of death in non-coronary care intensive care units, with a mortality rate between 30% and 50%[1]
- Over 2,047,038 patients were admitted with a sepsis-related illness from 2007 to 2009[1]:
  - 52.4% diagnosed in the ED
  - 34.8% on the hospital units
  - 12.8% in the ICU
- US healthcare costs for sepsis doubled compared to the overall hospital charges to $54 billion per year[1][2]
- Hospitalization rates for sepsis doubled from 2000 through 2008[3].
- Average length of stay for sepsis patients >65 y.o. was 8.4 days compared to 4.8 days for other hospitalizations[3]

[1] Hall, M.J., et al. NCHS data brief, 62. Hyattsville, MD: National Center for Health Statistics. 2011
[2] Reed K et al. Health Grades. June, 2010 2011; The First Annual Report(1):1-28
[3] CDC/NCHS, National Hospital Discharge Survey, 2000-2008.

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Scope of the Problem

85% OF SEPSIS CASES enter through the Emergency Department

KP -1/9 hospital discharges
BUT ½ of Hospital Deaths

MORE THAN **1 in 5** patients are readmitted to the hospital **within 30 days**

SEPSIS SURVIVORS ARE **3X** more likely to develop a cognitive impairment

MORTALITY INCREASES **8%** every hour that treatment is delayed

CMS SEP-1 Early Management Bundle of Severe Sepsis / Septic Shock

- October, 1, 2015: CMS began requiring hospitals to collect data for the Core Measure SEP-1
- July 25, 2018: SEP-1 Bundle compliance rates will be publicly released by CMS (1Q 17 through 3Q 17)

What's new?

- Top KP RMC / MVMC PI priority: SEP-1 Bundle Rate compliance: Goal to improve to *75% (CMS 90th percentile)*
- Reported as one bundle rate – All or None (no partial credit for completing some of the measure)

- **SEVERE SEPSIS BUNDLE**

  Within 3 hours of presentation:
  - **Initial lactate*** level measurement
  - **Blood cultures** drawn prior to antibiotics
  - **Broad spectrum IV antibiotics** monotherapy administered

  Within 6 hours of presentation:
  - **Repeat lactate** level if initial lactate level >2 mmol/L

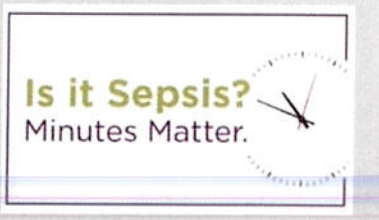
*1-hour turnaround from order to result

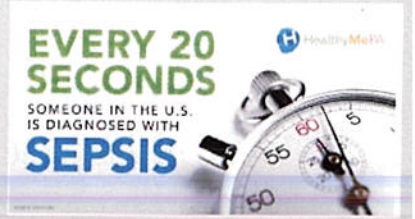
- **SEPTIC SHOCK BUNDLE**

  Within 3 hours of presentation:
  - Resuscitation with **30 ml/kg crystalloid IV fluids** for initial hypotension or initial lactate ≥4 mmol/L

  Within 6 hours of presentation:
  - **Vasopressor** administration for persistent hypotension in the 1st hour after IVF administration consisting of 2 or more consecutive BP readings (SBP <90, MAP <65, ↓ SBP >40)
  - **Repeat Volume Status or Tissue Perfusion Assessment - Complete Focused Exam** consisting of All 5 (vital signs (T P R BP), cardiopulmonary exam, capillary exam, peripheral pulse, and skin exam).

Sepsis Disease Continuum





INFECTION

SIRS 2+

- Temp <96.8F or >100.9F
- HR >90
- RR >20 / min
- WBC >12K or <4K or >10% bands

Severe Sepsis All 3

- MD documented infection / suspected infection
- 2 or more SIRS criteria
- 1 or more organ dysfunction criteria*

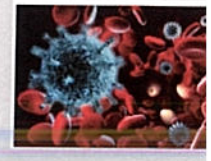
Septic Shock

- Severe sepsis + Persistent hypotension s/p 30 ml/kg IVF
  OR
- Severe sepsis + Initial lactate level ≥4 mmol/L

***1 or more Organ Dysfunction Criteria**

- SBP<90, MAP<65, or SBP↓ >40 mmHg
- Acute resp Failure + mech ventilation
- Cr >2 or U.O. <0.5 ml/kg/hr x 2 hrs
- Total Bilirubin >2 mg/dL
- Platelet <100K
- INR >1.5 or aPTT >60 sec
- Lactate >2 mmol/L

Proposed Sepsis Goals for KP Riverside Medical Center / KP Moreno Valley Medical Center



- Provide the highest quality sepsis care for our KP patients
- Decrease sepsis mortality rate at both KP Riverside Medical Center & KP Moreno Valley Medical Center
- Increase recognition of sepsis to early treatment & survival
- Decrease length of stay & hospital costs
- Close gaps between coding & documentation
- Close gaps in sepsis care
- Improve the CMS Sep-1 Bundle Rate compliance to 75% (proposed regional goal)
- Provide staff / physician education
- Increase alignment by role and team collaboration (ED, Hospitalists, Intensivists, Nursing, & Lab)
- Provide seamless coordination of sepsis care for KP patients

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1/2017-1/2018 CMS Trended Preliminary Report – KP RIV / KP MV

Trend shows trajectory improvements for both 4Q 2017 and 1Q 2018

4Q 17 64.9%

Jan 18 73.3%

KP Riverside Medical Center CMS Sepsis Bundle Trended Data Report 2017

	1Q 17	54.3%	Rank 8th	2Q 17	56.0%	Rank 5th	3Q 17	59.4%	Rank 10th	4Q 17	64.9%	Rank 5th			1Q 18 prelim
Indicator	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	YE 2017	SCAL Q3 2017 Avg / SCAL Avg	Jan-18
Core SEP1 - Early Management Bundle Severe Sepsis/Septic Shock (Overall Rate)	53.8%	50.0%	58.8%	60.0%	44.4%	64.7%	66.7%	77.8%	36.4%	61.5%	69.2%	63.6%	58.2%	61.2%	73.3%
OFI Group	6	8	7	6	10	6	4	2	7	5	4	4	69		4
Numerator	7	8	10	9	8	11	8	7	4	8	9	7	96		11
Denominator	13	16	17	15	18	17	12	9	11	13	13	11	165		15
Mortality Rate Monthly	8.9%	6.2%	12.6%	10.9%	9.8%	8.1%	9.0%	5.0%	6.2%	7.4%	17.9%	10.8%	9.3%	11.9%	20.0%
Numerator	11	6	14	13	13	10	13	7	8	10	21	11	137		11
Denominator	123	97	111	119	135	123	145	141	129	135	117	102	1477		55
Sepsis Coding - ICD10	63%	70%	68%	81%	81%	75%	76%	77%	74%	83%	83%	73%	75%	74%	72%

4Q 17 73.9%

Jan 18 66.7%

KP Moreno Valley Medical Center CMS Sepsis Bundle Trended Data Report 2017

	1Q 17	66.7%	Rank 2nd	2Q 17	51.2%	Rank 6th	3Q 17	63.6%	Rank 6th	4Q 17	73.9%	Rank 2nd			1Q 18 prelim
Indicator	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	YE 2017	SCAL Q3 2017 Avg / SCAL Avg	Jan-18
Core SEP1 - Early Management Bundle Severe Sepsis/Septic Shock	64.7%	76.5%	60.9%	50.0%	42.9%	60.0%	60.0%	88.9%	37.5%	83.3%	83.3%	63.6%	62.5%	61.2%	66.7%
OFI Group	6	4	9	7	8	6	2	1	5	1	1	4	48		4
Numerator	11	13	14	7	6	9	3	8	3	5	5	7	80		8
Denominator	17	17	23	14	14	15	5	9	8	6	6	11	128		12
Mortality Rate Monthly	9.8%	7.9%	6.3%	9.8%	6.8%	13.7%	8.9%	7.9%	3.3%	8.0%	14.3%	7.1%	8.3%	11.9%	6.5%
Numerator	6	3	4	4	4	7	5	5	2	2	3	2	47		2
Denominator	61	38	63	41	59	51	56	63	60	25	21	28	566		31
Sepsis Coding - ICD10	85%	70%	56%	68%	81%	69%	55%	80%	81%	74%	68%	75%	70%	74%	72%

KP Riverside Medical Center – YE 2017 = 58.2%

Top Areas of Opportunity for Improvement:

- Initial lactate (24 fall outs)
- Crystalloid IV fluids (16 fall outs)
- Broad spectrum antibiotics (14 fall outs)
- Blood cultures (6 fall outs)
- Repeat lactate (5 fall outs)

KP Moreno Valley Medical Center – YE 2017 = 62.5%

Top Areas of Opportunity for Improvement:

- Initial lactate (17 fall outs)
- Broad spectrum antibiotics (14 fall outs)
- Blood cultures (8 fall outs)
- Repeat lactate (7 fall outs)
- Crystalloid IV fluids (5 fall outs)

KP Insight Sepsis Report - Lactate Resulted within 1 hour of Order for Sepsis Patients – March 2018

MAR2018		Anaheim	Baldwin Park	Downey	Fontana	Irvine	Los Angeles	MORENO VALLEY	Ontario	Panorama City	RIVERSIDE	San Diego	South Bay	West Los Angeles	Woodland Hills	SC REGION	Target
Total Sepsis Cases		178	163	237	268	139	195	75	196	127	152	363	144	139	127	2503	
Patients Expired	Number	20	16	23	29	11	27	2	21	12	11	38	21	21	8	260	
	Percent	11.2	9.8	9.7	10.8	7.9	13.8	2.7	10.7	9.4	7.2	10.5	14.6	15.1	6.3	10.4	
Test Combinations Ordered for Sepsis Discharges while in the ED																	
Blood Culture Only	Number	5	9	9	15	5	6	3	3	4	4	9	5	5	3	85	
	Percent	3.3	6.1	4.1	8.0	4.2	4.2	5.4	2.1	3.8	3.6	2.7	3.9	4.3	3.4	4.6	
Lactate and Blood Culture	Number	124	117	179	204	85	116	48	123	76	86	276	110	96	78	1718	
	Percent	81.6	79.1	80.6	81.6	72.0	80.6	85.7	87.9	72.4	78.2	84.1	85.3	83.5	87.6	81.6	90%
	RANK	7	9	8	7	12	8	3	1	11	10	5	4	6	2		
Lactate Resulted w/in 1 Hour of Order for a Sepsis Discharge at Any Time During Hospital Admission																	
	Number	100	63	103	90	89	97	28	62	40	59	176	38	64	66	1075	
	Percent	69.0	47.0	50.7	37.8	76.7	63.0	42.4	37.6	43.0	49.6	57.0	30.4	54.7	63.5	51.5	
	RANK	2	9	7	12	1	4	11	13	10	8	5	14	6	3		
Lactate Resulted (while in the ED) w/in 1 Hour of Order (Sepsis Dx only)																	
	Number	93	62	102	88	79	88	25	57	38	52	166	38	60	61	1009	
	Percent	72.7	50.0	55.1	41.1	82.3	72.1	51.0	45.6	48.1	57.1	57.6	34.2	60.6	74.4	56.3	70%
	RANK	2	10	8	13	1	4	9	12	11	7	6	14	5	3		
Average Length of Stay in ED (mean hours) Among Sepsis Cases																	
	Hours	6:23	9:37	8:05	14:57	5:18	8:54	7:50	9:24	6:49	6:22	12:01	6:10	6:56	5:12	9:00	
	RANK	5	12	9	14	2	10	8	11	6	4	13	3	7	1		

LACTATE RESULTED w/in 1 hr. of ORDER

Sepsis Diagnosis in ED:

Riverside – 57.1% (Ranked 7th)

Moreno Valley – 51% (Ranked 9th)

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KP Riverside Medical Center Pilot Project Rolled Out 12/5/2018
Proposed KP Riverside ED / LAB Turnaround Time Goal: Overall TAT Initial Lactate Order to Result: 45 Minutes

Initial Lactate Order to Result Turnaround Time Monthly Average January 2018

SEPSIS INITIAL LACTATE RESULTED WITHIN 1 HOUR OF ORDER	2017		2018
	Sep	Dec	Jan
	N / D %	N / D %	N / D %
Overall Compliance Rate - Initial Lactate Resulted within 1 Hour of Order	15 / 33 45.5%	31 / 40 77.5%	9 / 17 52.9%
REGIONAL TARGET GOAL	*70%*	*70%*	*70%*
Average TAT (mins) from Initial Lactate Order to Blood Draw	22.7	12.1	21.3
KP RIVERSIDE MC TARGET GOAL (MINS)	*15*	*15*	*15*
Initial Lactate drawn by: RN	32	37	17
Phlebotomist	0	3	0
Average TAT (mins) from Blood Draw to Specimen Sent to Lab		6.0	6.4
KP RIVERSIDE MC TARGET GOAL (MINS)	*5*	*5*	*5*
Average TAT (mins) from Specimen Sent to Accessioned / Logged in Lab	27.7	8.1	10.8
KP RIVERSIDE MC TARGET GOAL (MINS)	*5*	*5*	*5*
Average TAT (mins) from Specimen Accessioned / Logged in Lab to Resulted	30.5	25.0	33.2
KP RIVERSIDE MC TARGET GOAL (MINS)	*20*	*20*	*20*
Overall Average TAT (mins) from Initial Lactate Order to Resulted	65.0	45.8	56.9
KP RIVERSIDE MC TARGET GOAL (MINS)	*45*	*45*	*45*
% Initial Lactate Ordered for Severe Sepsis Patients	32 / 36 88.9%	40 / 40 100.0%	17 / 17 100.0%
REGIONAL TARGET GOAL	*90%*	*90%*	*90%*
Initial Lactate Order / Priority Ordered			
Not Ordered	4	0	0
Routine once	1	0	0
STAT once	19	1	1
Reflex to Repeat once	12	39	16

LACTATE RESULTED w/in 1 hr. of ORDER:

Monthly Average showed improvement from baseline of 65 minutes and remained well below regional target of 1 hr. since pilot initiated:

12/2017 – 45.8 minutes

1/2018 – 56.9 minutes

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Newly Proposed Sepsis Alert Workflow Process for KP Moreno Valley MC ED

- Once BPA icon triggers for SIRS criteria in HealthConnect, ED RN will alert ED MD who will decide whether or not to order sepsis lab work up
- For all sepsis lab work up ordered, an overhead internal "Sepsis Alert" is called in the ED at which time MD and available nursing staff will report to the bedside for additional assistance needed
- Once sepsis lab work has been collected, ED RN will initiate Sepsis Alert Lab Requisition Form and place the completed form with the lab specimens into a biohazard bag which will have a SEPSIS sticker placed on the outside of the bag
- ED RN will then hand carry specimens to Lab to be expedited and prioritized as Sepsis labs

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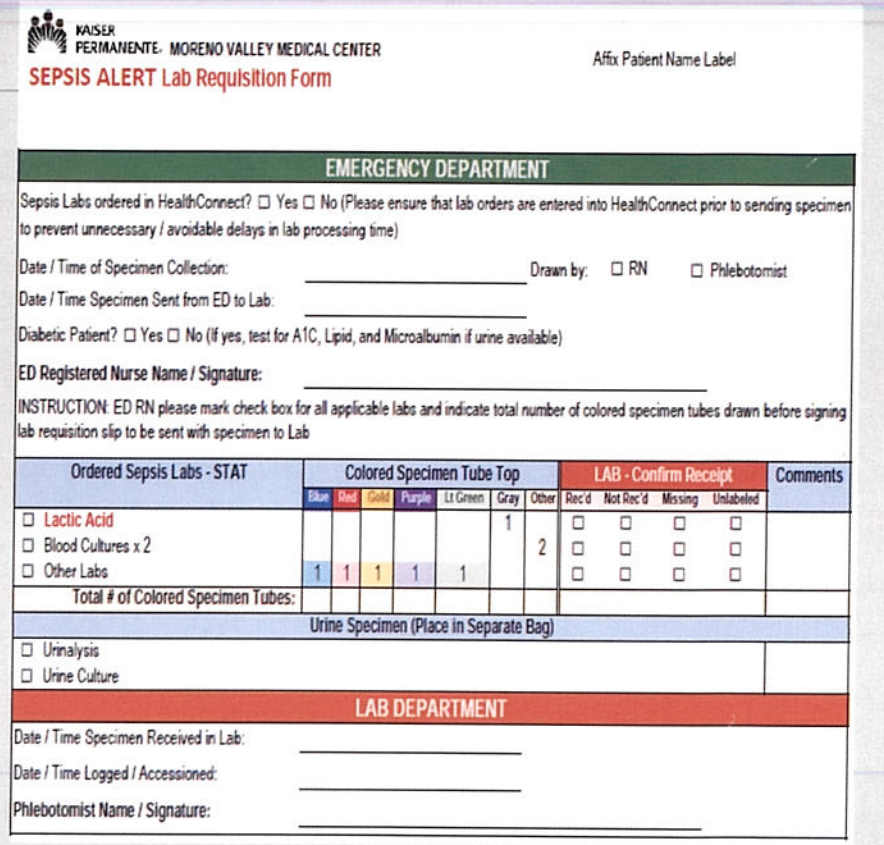
New KP Moreno Valley Medical Center Sepsis Alert Lab Requisition Form / Workflow Process

The new Sepsis Lab Requisition slip will be filled out by the ED nurses on all patients meeting severe sepsis or septic shock criteria. This requisition slip will be included with all sepsis specimens drawn. A pink Sepsis sticker will be placed on the outside of the specimen bag to differentiate it from other STAT blood draws which will assist the lab staff in quickly identifying sepsis specimens for expedited processing. Once the sepsis specimens reach the Lab, the phlebotomist will then apply a colored dot sticker on all sepsis specimens and announce "Sepsis Alert" before distributing specimens to the appropriate CLS stations for processing. The phlebotomist will then complete the Lab Department section of the requisition slip and fax to tie line 8-258-5739 to Quality Management Department for tracking and monitoring.



KAISER PERMANENTE · MORENO VALLEY MEDICAL CENTER

Affix Patient Name Label

SEPSIS ALERT Lab Requisition Form

EMERGENCY DEPARTMENT

Sepsis Labs ordered in HealthConnect? ☐ Yes ☐ No (Please ensure that lab orders are entered into HealthConnect prior to sending specimen to prevent unnecessary / avoidable delays in lab processing time)

Date / Time of Specimen Collection: _____ Drawn by: ☐ RN ☐ Phlebotomist

Date / Time Specimen Sent from ED to Lab: _____

Diabetic Patient? ☐ Yes ☐ No (If yes, test for A1C, Lipid, and Microalbumin if urine available)

ED Registered Nurse Name / Signature: _____

INSTRUCTION: ED RN please mark check box for all applicable labs and indicate total number of colored specimen tubes drawn before signing lab requisition slip to be sent with specimen to Lab

Ordered Sepsis Labs - STAT	Colored Specimen Tube Top							LAB - Confirm Receipt				Comments
	Blue	Red	Gold	Purple	Lt Green	Gray	Other	Rec'd	Not Rec'd	Missing	Unlabeled	
☐ Lactic Acid						1		☐	☐	☐	☐	
☐ Blood Cultures x 2							2	☐	☐	☐	☐	
☐ Other Labs	1	1	1	1	1			☐	☐	☐	☐	
Total # of Colored Specimen Tubes:												

Urine Specimen (Place in Separate Bag)

☐ Urinalysis
☐ Urine Culture

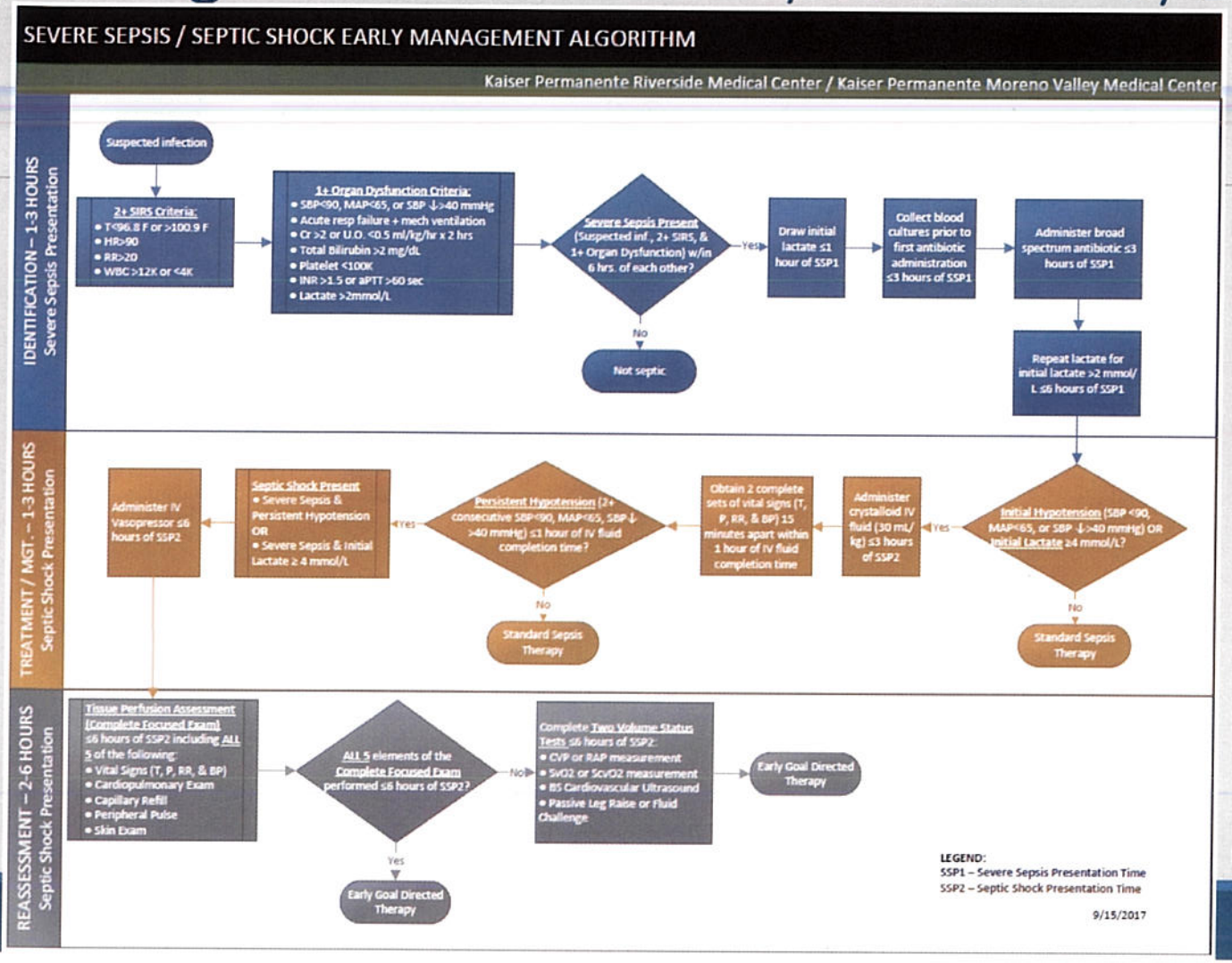
LAB DEPARTMENT

Date / Time Specimen Received in Lab: _____

Date / Time Logged / Accessioned: _____

Phlebotomist Name / Signature: _____

New Sepsis Algorithm for KP RIV / KP MV – 9/15/2017



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How Can I Help?

- Follow the newly established Sepsis Alert workflow / TAT goals for sepsis lab specimens
  - Specimen Sent to Log / Accession Time: 5 minutes
  - Log / Accession Time to Result Time: 20 minutes
  - Phlebotomist to complete Lab section of the new Sepsis Lab Requisition Slip and fax to Quality Management at ext. 5739
- Fail Safe Measure
- Round the Clock Involvement and Coverage
- Access to Sepsis Champions in case of issues or questions, call:
  - Niraj Mahajan, MD, Assistant Chief of Internal Medicine, Pulmonologist Sepsis Physician Champion
    - 951-203-6697 (work mobile)
  - Rajiv Choudhary, MD, Hospitalist Sepsis Physician Champion
    - 951-675-8957 (work mobile)
  - Judy Curran, RN, Quality Coordinator, Sepsis Improvement Advisor
    - 951-353-3491 (office)

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