MEDITECH

Surveillance Collaborative

October 3, 2024

Key Points

→ Behind the Scene Transactions: File-based operations and their role.

→ Surveillance and Genomics: Intersection of these fields and implications.

→ IT Analyst Troubleshooting: Best practices and strategies.

→ Flowsheets Workflow: Use of flowsheets web applications.

MEDITECH

VISION

Advance digital health record technology so every patient and their providers can access their health information and participate in their care. We believe every healthcare organization can better serve its community with open access to electronic health records, clinical knowledge, and data.

MISSION

Enable global healthcare organizations to deliver safe, efficient, and impactful care to the communities they serve through our comprehensive software, services, and technology

VALUES

Integrity

Investing in the future: people, process, and technology

Sustainability and focus

Fiscal responsibility

Ensuring a positive long-term impact on customers, staff, and the industry

Our solutions drive organizations to improve efficiency; guide clinical, financial, and operational decisions; and connect clinicians across a dynamic healthcare ecosystem in support of holistic, person-centered care.

Surveillance Collaboration
Our Mission

To incorporate **Surveillance** throughout healthcare organizations. To **enhance safety practices and access to information**. The Surveillance Collaborative Forum will serve as subject matter experts and provide guidance, recommendations, and conceptualization on Surveillance Best Practices through the use of MEDITECH software and provide feedback for the future design of the Surveillance application.

Our MEDITECH Members

- Daniel Seltzer, Quality & Toolkits

- Gregory Ayers, HCA Surveillance

- Brett Muirhead, MaaS Implementation

- Jennifer Ford, Strategy Division

- Jonathan Hallman, Client Services

- Jonathon Junker, Client Services

- Ilana Gutierrez, Implementation

- Israel Perez, EMT Client Services

- Scott Gooch, Development

- Spencer Dolan, Development

- Larissa DeGregorio, Client Services

- Dr. Marsha Fearing, MD, MPH, MMSc., Physician Specialist

Our Client Members

SIGNATURE HEALTHCARE
The mark of personal care™

Golden Valley Memorial HEALTHCARE

Valley Health System

Holyoke Medical Center

HCA Healthcare®

Unity HEALTH

Heywood Hospital
Member of the Heywood Healthcare Family

broadlawns MEDICAL CENTER

Frederick Health

FRANCES MAHON DEACONESS HOSPITAL

LOGAN HEALTH

THIBODAUX REGIONAL® HEALTH SYSTEM

Waypoint
CENTRE for MENTAL HEALTH CARE
CENTRE de SOINS de SANTÉ MENTALE

RVH Royal Victoria Regional Health Centre

NMC health®
Your Health. Our Focus.

cmh

Behind the Scene: File-Based Surveillance

Behind the Scene: File-Based Surveillance

- Surveillance requires a system file to trigger patient evaluation

- Background jobs rely on the presence of a file to initiate patient evaluation

- Utilizing certain field in the system to help trigger for elapsed time
  - Queries
  - Orders
  - Registration Status

Special indicator

Lab Verified Date/Time

Component Type	* Component🔗	Group
Fact	EMR Result > 2.0	4
Operator	And	
Fact	Lab Test: Lactic Acid Level	4
Operator	And	
Fact	EMR Item Verified DT w/in previous 48 hours	4 ▾

➕ ➡ ⬆ ⬇ ✖

Rule

[f-g4] EMR Result > 2.0 <And> [f-g4] Lab Test: Lactic Acid Level <And> [f] EMR Item Verified DT w/in previous 48 hours

Component Description

EMR Item Verified DT w/in previous 48 hours

Surveillance & Genomics

Genomics
at the Point of Care

IMPORT & CONSUME
genetic test results from outside labs and other facilities

STORE & DISPLAY
key genetic data directly within patient records

INFORM & GUIDE
at the point of care with clinical decision support

EMPOWER YOUR
PHYSICIANS

PERSONALIZED MEDICINE
Improve efficacy and reduce risk based on unique genetic profiles

CUTTING-EDGE CARE
In the convenience of your own *community* with your own *physicians*

IMPROVED OUTCOMES
The right therapies, at the right time, for the right patient

EMPOWER YOUR
PATIENTS

Diagnostics

Diagnostics	Provider Notes	Nurse/Allied Health	Medications
History & Problems	Administrative	Other Clinical	
Summary	Activity	Flowsheets	Health Mgmt

Miller,Steven
Amb   49, M · 09/18/1972
MRN# M3009450

Intake   REG AMB, A.PRECBANK

6ft 2in   BSA: 2.04m²
79.379kg   BMI Percentile: 22.4%

Visit Date: 05/13/2022

Resus Status Needs Update
Hx Avail

Search Chart

Diagnostics

Subcategory

All Activity : All Time : All Subcategories   Exclude POC   Filter

Laboratory	Imaging	Microbiology	Pathology	Blood Bank Tests	Cardiovascular	Other Specialty

Fullscreen ⤢

All

Hematology

Chemistry

Urines

Toxicology

Genetics

Genetic Orders

ORDER	RESULT	REPORT	DATE	LINKED SPECIMEN
Pro-GeneX MyBestMed	See report	📄	05/06/2022	

Patient's Genetic History

Germline

GENE/ROI	GENETIC FINDING/GENOTYPE	PHENOTYPE	REPORT	DATE
ABCG2	G|G	G|G		05/06/2022
ANKK1 (+)	G|G	G|G		05/06/2022
APOE (+)	E3/E4	E3/E4		05/06/2022
CYP2B6 (+)	*4|*9	Intermediate Metabolizer		05/06/2022
CYP2C19 (+)	*1|*2	Intermediate Metabolizer		05/06/2022
CYP2C9 (+)	*1|*1	Normal Metabolizer		05/06/2022
CYP2D6 (+)	*4A|*4A	Intermediate Metabolizer		05/06/2022
CYP3A4 (+)	*1|*1	Normal Metabolizer		05/06/2022
CYP3A5 (+)	*1A|*3A	Intermediate Metabolizer		05/06/2022
CYP4F2 (+)	*1|*2	Normal Metabolizer		05/06/2022
DPYD (+)	*1|*5	Normal Metabolizer		05/06/2022

> Special Indicators

> Health Management

> Allergies

> Medications

> Problems

> Outstanding Orders

> Pharmacies

> Vitals

> My Widget

SURVEILLANCE
AND GENOMICS

Genomics research starting for Surveillance in October 2024

Currently included with Registries

Behavioral Health and Medications focus

IT Troubleshooting

Surveillance Status

Review Management | Surveillance

Surveillance Reader

Status	Start Date/Time	Last Upd Date/Time	Client	Message
Running	09/24/24 2:20 pm	09/24/24 2:40 pm	DEVMTX-BG03	Processing...

Surveillance Evaluator

Status	Start Date/Time	Last Upd Date/Time	Client	Message
Running	09/24/24 2:20 pm	09/24/24 2:39 pm	DEVMTX-BG05	Processing...

Surveillance Workers

Status	Start Date/Time	Last Upd Date/Time	Client	Message
Running	09/24/24 2:20 pm	09/24/24 2:39 pm	DEVMTX-BG03	Processing Account: MG0000000875
Running	09/24/24 2:20 pm	09/24/24 2:39 pm	DEVMTX-BG05	Idle...

Surveillance Backlog

Accounts Waiting	1

Surveillance Monitor Data Workers

Status	Start Date/Time	Last Upd Date/Time	Client
Running	09/24/24 2:19 pm	09/24/24 2:39 pm	DEVMTX-BG05

Surveillance Monitor Data Backlog

Accounts Waiting	0

Surveillance Cleanup

Start Date/Time	End Date/Time
09/24/24 12:10 pm	09/24/24 12:11 pm

Skip Surveillance for Orders

Xgeva
Avandia
Avandia

Accounts Waiting To Be Processed

Accounts Waiting
MG0000000875

Back

Profile and Rule Validation

CM-21935

Expanse 2.1.61
Expanse 2.2.49

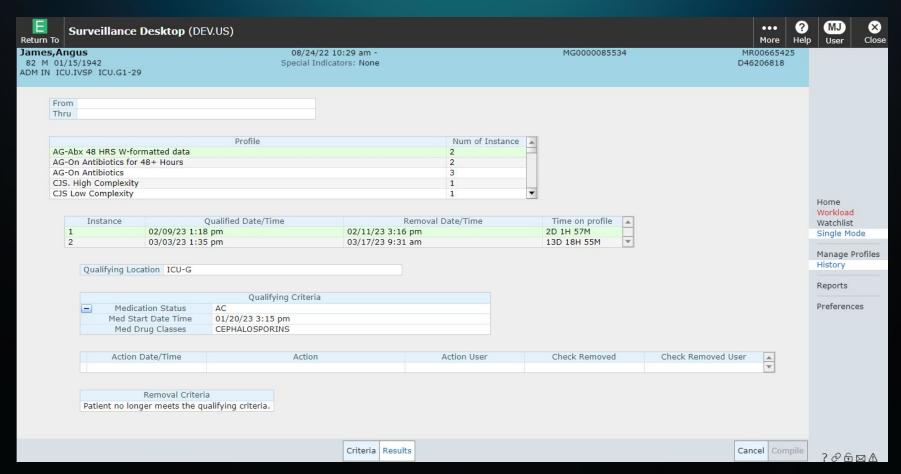*Fast Track: Enhance Rule Validation and Surveillance Profile Validation Screens to show Pass/Fail Icons for each Component Type*

Surveillance Desktop History

Flowsheets

Flowsheets

- IDEA-9965: Action to Launch Clinical Panels

- Using Flowsheets to look into potential diagnosis

- Pull Relevant data to one place

Sepsis

Daniel Seltzer

Find Patient

Rou...

Surveillance Profile Criteria

QUINN,MARGO 36 F   Allergy/Adv: No Known Allergies

Close

Profile Qualified	Instance
Possible Sepsis 04/09/24 18:08	1 ⓘ

Close Chart

∨ Take Action for Possible Sepsis

ORD SET: Sepsis 3 Hour Bundle	ⓘ
ORD SET: Sepsis 6 Hour Bundle	ⓘ
PROB: Sepsis	ⓘ
PROB: Severe Sepsis	ⓘ
PROB: Septic Shock	ⓘ
DOC: Sepsis Event Note	ⓘ

∨ Associated Data

Order	Result	Date	Specimen
Sepsis Screen	Severe Sepsis Risk	04/11/24 16:06	
Action Taken by Nursing	Physician Notified	04/11/24 16:06	
Name of Provider Notified	Dr. Smith	04/11/24 16:06	
Is the patient pregnant?	N	04/11/24 16:06	
Infection Criteria Present	Suspected New Infection	04/11/24 16:06	

Add To Profile   Remove From Profile   Edit Reevaluate Time

ADM IN

NOTE

Diagnostics | Provider Notes | Nurse/Allied Health | Medications

History & Problems | Administrative | Other Clinical | Workload Items

Summary | Activity | **Flowsheets** | Health Mgmt

⌃ Summary

● Widget data for 09/15/23 (ADM IN)

⌄ ● I & O 24 Hour Summary

05/28/24 17:19 - 05/29/24 17:19

Total Intake	3160 mL
Total Output	917 mL
Balance	2243 mL
Urine Output	0.34 (mL/kg/hr)

Intake:

Intake, IV Amount	2860
Intake, Oral Amount	300

Output:

Output, Stool Amount	300
Output, Urine Amount	617

Other:

Continuous Bladder Irrigation Fluid - Amount Drained	50
Number of Bowel Movements	1

⌄ ● Arrival Notification

⌄ ● Lab Results Last 24 Hrs   Most Recent

⌄ Hematology		
WBC (4.8-10.8)	**18.4 K/mm3 H***	Today 11:05
Plt Count (125-400)	318 K/mm3	Today 12:02

⌄ Coagulation		
PT (11.0-14.0)	**22.0 Seconds H***	Today 12:02
INR (0.8-1.10)	**3.23 H***	Today 12:02

⌄ Chemistry		
Lactate (0-2)	**3.8 mmol/L H (+)**	Today 14:05
Total Bilirubin (0.1-1.2)	**1.7 mg/dL H**	Today 12:02
Procalcitonin	4.6	Today 12:02

⌄ Scanned Documents   Most Recent

↻   ⓘ

Quinn,Margo
Acute   36, F
MRN# MR152   ➕

ADM IN, MED MED1 -F

5ft 6in 167lb	BSA:1.89m² BMI:27.0kg/m²

Acc# AC366 ⚠	Full Code

🔍 Search Patient's Chart

⌂   📈   📋   📁

⌄ **Allergies**

No Known Allergies

⌄ **Problems**

⌄ ● **Vital Signs**

	Today 15:15
BP	118/76
Pulse	**92 H**
Resp	16
Temp	99.6 F
O2 Sat	98

Diagnostics | Provider Notes | Nurse/Allied Health | Medications

History & Problems | Administrative | Other Clinical | Workload Items

Summary | Activity | **Flowsheets** | Health Mgmt

⌃ Flowsheets

Click here to select a panel

Search

Specialty Care Desktop	➔
Sepsis	⭐
ADHD (AMB)	☆
Abnormal Pap Smear	☆
Abnormal Uterine Bleeding	☆
Acute Coronary Syndrome	☆
Adalimumab therapy - 1 year	☆
Adult Female HealthMaintenance	☆
Adult Intensive Care (AICU)	☆
Adult Male Health Maintenance	☆

Quinn,Margo
36, F
MRN# MR152

Acute

ADM IN, MED MED1 -F

5ft 6in   BSA:1.89m²
167lb   BMI: 27.0kg/m²

Acc# ⚠   Full Code
AC366

🔍 Search Patient's Chart

⌄ **Allergies**

No Known Allergies

⌄ **Problems**

⌄ ● **Vital Signs**

	Today 15:15
BP	118/76
Pulse	**92 H**
Resp	16
Temp	99.6 F
O2 Sat	98

Flowsheets

Fullscreen | Panel: **Sepsis** | Time Interval: **1 Hour** | ADM IN - AC366 | Visits

	05/29/24 10:00-10:59	05/29/24 11:00-11:59	05/29/24 12:00-12:59	05/29/24 13:00-13:59	05/29/24 14:00-14:59	05/29/24 15:00-15:59	
Sepsis Screening Tool							
Sepsis Screen	Severe Sepsis Risk	Severe Sepsis Risk	Severe Sepsis Risk	Severe Sepsis Risk			
General							
Temperature	101.8 F H	100.6 F H	100 F H	99.3 F	100.1 F H	99.6 F	
Pulse Rate	110 H	102 H	102 H	95 H	93 H	92 H	
Respiratory Rate	30 H	28 H	26 H	17 (+)	20	16	
Edema Degree				1+			
Inflammatory							
WBC (4.8-10.8 K/mm3)		18.4 H*					
Procalcitonin			4.6				
Hemodynamic							
Blood Pressure							
Left Arm							
Blood Pressure [Left Arm]	110/86 H	106/80 H	100/76	90/60	104/70	118/76	
Blood Pressure Mean [Left Arm]	94	88	84	70	81	90	

Quinn,Margo
36, F
MRN# MR152

Acute

ADM IN, MED MED1 -F

5ft 6in 167lb	BSA: 1.89m² BMI: 27.0kg/m²

Acc# AC366 ⚠ | Full Code

🔍 Search Patient's Chart

Allergies

No Known Allergies

Problems

● Vital Signs

	Today 15:15
BP	118/76
Pulse	92 H
Resp	16
Temp	99.6 F
O2 Sat	98

Flowsheets

Fullscreen ⬈ | Panel: Sepsis ▼ | Time Interval: 1 Hour ▼ | ADM IN - AC366 | Visits

	05/29/24 10:00-10:59	05/29/24 11:00-11:59	05/29/24 12:00-12:59	05/29/24 13:00-13:59	05/29/24 14:00-14:59	05/29/24 15:00-15:59	
Organ Dysfunction							
INR (0.8-1.10)			3.23 H*				
Plt Count (125-400 K/mm3)			318				
Total Bilirubin (0.1-1.2 mg/dL)			1.7 H				
Intake and Output							
Intake Total	100 ml	100 ml		2860 ml			
Output Total	65 ml	32 ml	20 ml				
Balance	35 ml	68 ml	-20 ml	2860 ml			
Urine Output (Average ml/kg/hr)	0.86 (ml/kg/hr)	0.42 (ml/kg/hr)	0.26 (ml/kg/hr)				
Intake							
IV				2860 ml			
Ringer's Solution,Lactated 1,000 ml In 1,000 ml @ Wide Open 999 mls/hr IV ONCE SCH Rx#:00000021 6				2860 ml			

Quinn,Margo
36, F
MRN# MR152

Acute

ADM IN, MED MED1 -F

5ft 6in
167lb

BSA: 1.89m²
BMI: 27.0kg/m²

Acc# ⚠
AC366

Full Code

Search Patient's Chart

Allergies

No Known Allergies

Problems

● Vital Signs

	Today 15:15
BP	118/76
Pulse	92 H
Resp	16
Temp	99.6 F
O2 Sat	98

Flowsheets

Fullscreen | Panel: Sepsis | Time Interval: 1 Hour | ADM IN - AC366 | Visits

	05/29/24 10:00-10:59	05/29/24 11:00-11:59	05/29/24 12:00-12:59	05/29/24 13:00-13:59	05/29/24 14:00-14:59	05/29/24 15:00-15:59	
Tissue Perfusion							
Lactate (0-2 mmol/L)		6.3 H*			3.8 H		
Infection Source							
Micro Blood Specimen				📄			
Diagnostic Imaging							
Chest X-Ray		📄					
Medications Administered							
Enoxaparin Sodium					40 MG		
LACTATED RINGERS 1,000 ml In 1,000 ml @ Wide Open 999 mls/hr IV ONCE SCH				999 MLS/HR			
Respiratory							
Oxygen Delivery Method	Nasal Cannula	Nasal Cannula	Nasal Cannula	Nasal Cannula	Room Air	Room Air	
Oxygen Flow Rate	2	2	2	2			
O2 Sat by Pulse Oximetry	92 L	94 L	96	97	96	98	

Quinn, Margo
36, F
MRN# MR152

PCS

ADM IN, MED MED1 -F

5ft 6in 167lb | BSA: 1.89m² BMI: 27.0kg/m²

| Acc# AC366 | Full Code |

🔍 Search Patient's Chart

Allergies

No Known Allergies

Problems

● **Vital Signs**

	Today 15:15
BP	118/76
Pulse	92 H
Resp	16
Temp	99.6 F
O2 Sat	98

Heart Failure

Flowsheets

Smith,Elena 85 F 08/02/1938   Allergy/Adv: Not Recorded

Viewing: ▼   Selected Visits ▼

	09/04/23 00:00-23:59	09/11/23 00:00-23:59	09/19/23 00:00-23:59	09/21/23 00:00-23:59
∨ CHF				
EF %				<20% (+)
B-Natriuretic Peptide	950			
Troponin I	0.6			
INR (0.8-1.10)	1.01			
∨ Vital Signs				
Pulse Rate			98 H	98 H
Blood Pressure			146/84 H	132/85 H
Blood Pressure Mean			104	100
Respiratory Rate			26 H	25 H
Pulse Oximetry			98	100
Temperature			99.1 F	98.3 F
∨ Intake & Output				
∨ Other:				
Weight				135 lb 0.001 oz
∨ Labs				
∨ Hematology				
WBC (4.8-10.8 K/...)	6.5			
Hgb (12.0-16.0 g/...)	14.3			
Hct (36-40 %)	42 H			
MCHC	34.0			

Topic: Telemetry Profiles

RVH Royal Victoria Regional Health Centre

" Does anyone have an active telemetry profile, and if so how does it function? "

Sharon Avey
RN, MN, Regional Applications Analyst
Royal Victoria Regional Health Centre

Topic: Restraint Profiles

"Are other sites utilizing surveillance to ensure that nursing documentation gets completed per legal requirements? Or centered solely on just the orders? Do you utilize a stoplight setup?"

Christopher Mitchell
Senior Clinical Systems Analyst
Signature Healthcare

SIGNATURE HEALTHCARE
The mark of personal care

Topic: Key Issues

" As a clinical analyst, new to Surveillance, what are the key issues to keep in mind? "

Katrina Mawhiney
Clinical Systems Analyst
Citizens Memorial Hospital

Whatsapp Surveillance Collaborative Group

Thank You!

Resources

Customer Showcase Recordings and Resources:
https://customer.meditech.com/en/d/prwqm/pages/qmebfesurvshowcase.htm

Surveillance Collaborative Page:
https://home.meditech.com/en/d/customercollaboration/pages/surveillancecollaborative.htm

Surveillance Troubleshooting:
https://customer.meditech.com/en/d/prwqm/otherfiles/qrmeiassurveillancetroubleshootingguidelines.pdf