MEDITECH

Surveillance Collaborative

July 31, 2024



Key Points

- Surveillance Enhancement: Create a way to Add Cumulative Number query responses for the Fact Dict Lookback period
- \rightarrow Microbiology Procedure Prompt integration with EHR
- Roadmap: Resuscitation Status Surveillance Data Field
- Signature and Valley Surveillance Alert Messages
- \Rightarrow Physician Champion: Helps identify key areas where quality meets surveillance

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

Our Client Members

- Signature Healthcare, MA
 - Nicholas Szymanski
 - Christopher Mitchell
 - Dee Dee Johnson
 - Jeff Gray
- Holyoke Medical Center, MA
 - Avadhoot Gokhale
 - Christi Giroux
 - Brian Stromwall
 - Debbie Lajoie
 - Debra Marum
 - Tara Garstka
- Citizens Memorial
 - Sherry Montileone
 - Cherilyn Michaelis
 - Michelle Williams
 - Katrina Mawhiney
 - Chad Cahow

- Frederick Health, MD
 - Jackie Rice
 - Lauren Small
 - Debbie Remsberg
 - Lisa Ledwell
- Golden Valley Memorial Healthcare, MO
 - Hayli E. Wade
 - Kaytie Stockdall
 - Kim Bybee
 - Nancy Engeman
- Valley Hospital, NJ
 - Michael Burke
 - Christopher Neumann
- Heywood Hospital, MA

 Jaime Valleios
- Royal Victoria Regional Health Centre
 - Sharon Avey, RN, MN
 - Shelli Hickey
 - Christianna Howes

- Logan Health, MT
 Pebbles Bates
- Thibodaux Regional Health, LA
 - Ashley Becnel
 - Michelle Toups
- HCA, TN
 - Stefanie Fine
 - Kayla Johnson
 - Ricardo Gonzalez
- Unity Health

 Ann Russell

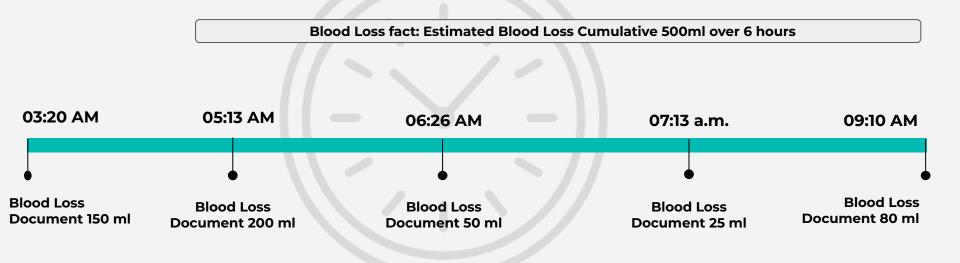
Development



Adding up with **MEDITECH Surveillance**

| | ACMS) 500ml over 6 hour 500ml over 6 hour Account Query Output, Estimated Equals 6H Yes 500 | Main Fact Embedded In | Viev More Viev Rep | er Close | CM-23419 CM-23419 Surveillance: Create a way to Add Cumulativ Number query |
|-----------------------|---|-----------------------|--------------------------|----------|--|
| Cancel Save 2 P G 🖂 A | | | Cancel Save | | way to Add Cumulativ |

Example Blood Loss



Surveillance will "Look Back" 6 hours and add up the documentation to 500 ml over

Adding up with **MEDITECH Surveillance**





CM-23419

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Surveillance: Create a way to Add Cumulative Number query responses for the Fact Dict Lookback period

Microbiology Result

CM-23686 Add Data Item for EMR MIC Results for Surveillance Facts

In progress: Road map 2024



| Name | Mnemonic |
|--------------------------|--------------------------------------|
| EMR MIC ProcPromptAbFlag | EMRACCTMIC.MICROPROCPROMPTABNFLAG |
| EMR MIC ProcPromptName | EMRACCTMIC.MICROPROCPROMPTNAME |
| EMR MIC ProcPromptResTxt | EMRACCTMIC.MICROPROCPROMPTRESULTTEXT |
| EMR MIC ProcPromptUnits | EMRACCTMIC.MICROPROCPROMPTUNITS |

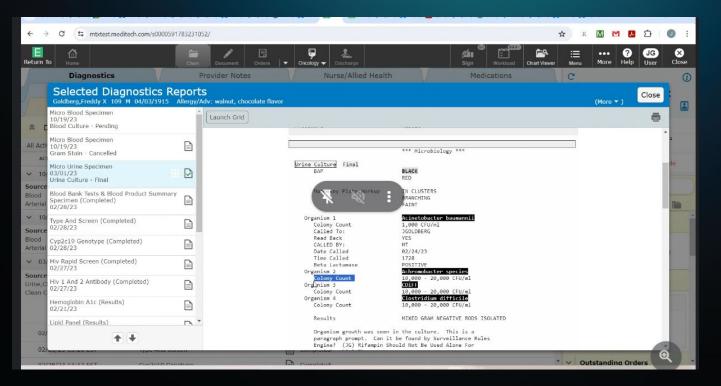
Microbiology Result

| | | | | AND AND AND A | |
|--|--|--|---|---------------------------------|--------------------------|
| ← → C == mtxtest.medited | :h.com/s0000591783231052/ | | | ☆ × 🕅 🕅 | <u>시</u> 한 🕘 : |
| Return To Home | Chart Document Orders | ↓ Oncology ↓ Discharge | (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) | r <u>Henu</u> •••• ? More He | |
| Diagnostics | Provider Notes | Nurse/Allied Health | Medications | C | 1 |
| History & Problems | Administrative | Other Clinical | Workload Items | Goldberg | Freddy X |
| Summary | Activity | Flowsheets | Health Mgmt | Acute 109, M · 0 MRN# MR | |
| Diagnostics | | | Activity Log 🐁 | ADM IN, 2N 2N11 -56 | |
| All Activity : All Time : Selected Ty | ypes | | Filter | 5ft 10in 190lb | BSA:2.04m ² |
| ACTIVITY DATE SOURCE Blood | ТҮРЕ | STATUS Procedure/Result Gram Stain - Cancelled | BY Hx | Acc# 4 MG000057540 | Full Code |
| Arterial Line | | Q Search Patient's | Q Search Patient's Chart | | |
| ✓ 03/01/23 17:09 EST | Micro Urine Specimen | | | | |
| Source Urine,Clean Catch Clean Catch Midstream | | Procedure/Result Urine Culture - Final Acinetobacter baumannii | | ✓ Allergies | - |
| | | Achromobacter species CDIFF Glostridium difficile | | walnut | Difficulty Swallowing |
| 02/28/23 13:28 EST | Blood Bank Tests & Blood Product Summary Specimen | Completed | | chocolate flavor | Nausea |
| 02/28/23 13:28 EST | Type And Screen | Medications | ✓ Medications | | |
| 02/28/23 13:13 EST | Cyp2c19 Genotype | ✓ Active | ✓ Active | | |
| 02/27/23 12:47 EST | Hiv Rapid Screen | | loratadine-pseudoephedrine | | |
| 02/27/23 12:47 EST | Hiv 1 And 2 Antibody | 10-240 mg ER (Loratadine-D) | | | |
| 02/21/23 13:44 EST | Hemoglobin A1c | Results | | 1 tab PO DAILY | |
| 02/21/23 13:44 EST | Lipid Panel | Results | | 🔹 🗸 🛛 Outstanding O | rders Q . |
| — 76°F | | 160 B - | | • 1 • | 10 AB 3:26 PM |

Epic: CHART-41660 Microbiology Procedure Prompt integration

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Microbiology Result



Epic: CHART-41660 Microbiology Procedure Prompt integration

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Resuscitation Status Roadmap 2025

IDEA-26432: Add Data Item in Rules Engine Fact dictionary to reference Resuscitation Status field in OM



Surveillance Messaging





| | | Background Jol | os) Me | ssages |
|---------|---------------------------|--|----------|--------|
| | Facility 🔻 | | ~ | |
| Signatu | re Healthcare Brockto | n | | |
| | | | | |
| | | | | |
| _ | | | | |
| | Event | • | ^ | |
| | alify for Profile (Auto) | | | |
| Qui | alify for Profile (Manual |) | | |
| Ren | nove from Profile (Auto |) | | |
| Ren | nove from Profile (Man | ual) | ~ | |
| | Surveillan | ce Profile 🔻 | | ^ |
| | Active Orders: ACS C | onsults | | |
| | Airborne Precautions | | | |
| | CDIFF - orders placed | against Quality | criteria | |
| | Contact Plus Precauti | and the second | | ~ |
| | | | | |
| | | lessage 🔻 | | ^ |
| | CDiff Surveillance | Message | | |
| | | | | |
| | | | | |
| | | | | ~ |

Disclaimer: Email messages may contain privileged and confidential information, including patient information protected by federal and state privacy laws. Please refer to the policies of this organization to determine what information can be included in an email message.

| Recipient Group | Infectious Disease |
|-----------------|-----------------------------|
| Send E-mail | Yes |
| E-mail Subject | [encrypt] Check CDIFF order |

C Diff Alert Messages

Surveillance Parameters Messages

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Automatic Message will send to Infectious Disease

Signature Healthcare

-----Original Message-----

From: <u>SystemMsgDoNotReply@Signature-Healthcare.org</u> [mailto:SystemMsgDoNotReply@Signature-Healthcare.org] Sent: Sunday, March 21, 2021 8:34 PM To: Mitchell, Christopher; Greenberg, Robert M.D.; Arshad MD, Saarah; Ryan, Stacey J; Ferreira, Vincent Subject: [encrypt] Check CDIFF order

An Order for CDiff has been placed that does not meet typical Quality criteria. Please review:



REG ER Emergency Dept Observation Attending Provider: Reg Date/Time: 03/21/21 14:41 Surveillance Alert Messages

| Return To Message/Task Parameters (DEV.CMS) | | ••• ? More Help | MJ User Close | |
|---|--|-------------------------------|------------------------|---|
| | Main Grouping Labels List Display Desktop Message/Task Lists * Separate Messages and Tasks Yes No * Top List Messages Messages * Allow Change in Access Dict Yes No * Remove from Old Folder Delay 30 30 Email Settings Allow Message Text for Email Regarding Account Account w For Message Task Type * For Message Task Type w * | Last Edit: 05/31/2023 5:03 pm | View Edit Report | Message/Task Parameters |
| | | | | Email including details from the messages |
| | History | Cancel Save | ?∥⊕⊠∧ | |



Valley Hospital 꾿

- Messages email to Informatica
- Informatica reads the message looking for keywords (HL7)
 - Vocera Stock communicates the message to the nurses care team system phones

Surveillance for Providers



Physician Champion

- Creates a collaborative environment between IT and Physicians
- >> Insight to Physician unique workflows
- > Communication
- Facilitate adoption
- > Helps identify key areas where quality meets surveillance.
 - "Boots on the ground" physician leaders



Surveillance Alert Options

| Alert Type | Data Item | Display Singular | Display Multiple | Considerations | |
|---|--|--|---|---|--|
| Alerts List | Surveillance Profile Elapsed or Qualified Date/Time | C-SSRS) | (High Fall Risk, CAUTI, ABX: 48+) | These should be reserved for the most urgent details; Define a concise label for each alert. | |
| Alerts Icon | Surveillance Profile Elapsed or Qualified Date/Time | • | | Clinicians must clearly understand what type of alert the icon represents, because one icon represents all qualifying Profiles associated to it. | |
| Indicator | Indicator Scheme Text or Icon Indicators | U Cath | High Fall Risk SEPSIS U Cath >2D | For icons, clinicians must clearly understand what types of alerts coincide with each icon. | |
| Surveillance Profile Elapsed Date/Time | Surveillance Profile Elapsed Date/Time | Urinary Catheter > 2 D 5H 47M | Urinary Catheter > 2 Days 4H 7M • • • | Passive indicators for informative details that | |
| Surveillance Profile Qualify Date/Time | Surveillance Profile Qualify Date/Time | Urinary Catheter > 2 D 10/24/19 10:21 | Urinary Catheter > 2 Days 10/24/19 10:21 | may still require action or physician attention, but are not urgent. | |

| E Return To Ho | and the second | | Chart Document | Orders ↓ | L Discharge | Image: Sign Ima |
|-------------------|--|-------------------------------|--|---------------------------|-----------------------|---|
| 🔳 Daniel | Seltzer | | | | | Acute - C Find Patient Q |
| My List 4 | ÷ | Any Location | v | I.ED.RN 38 | | BA.ED.RN- Condensed 38 W.ED.RNC 38 |
| Name | Age BirthSex | Repeat Visit C Al | ED Chief Con Documents, ED Status lerts List lerts List | | | Vital Signs Orders/Results |
| Ferlado,Ju | | | m 3 Back Pain/I raft ubstance Misuse Risk | njury Andres Rivera | Order | BP Pulse 94 Resp 20 Temp 99.2 F 02 Sat 96% Mar UTOX |
| Munson,Et | | | n 6 Shortness of ending ossible Sepsis | f Breath/Dyspnea | - | BP 88/56 Pulse 102 Resp 22 Temp 102.5 F 02 Sat 94% Mar Bilirubin CBC w/diff PTT Blood Cult BMP lactate Prothromt |
| Grant,Adar | | 2h 33m | Surveillance Possible Sepsis: <u>2H 24M</u> | ry, Upper Rachel Kelly | Order | BP 130/88 Pulse 75 Resp 20 Temp 99.1 F 02 Sat 97% Mar Saline loc BMP POC/NUR |
| Smith,Elen | | am Rooms - Roor 14h 42m No | n 2 Chest Pain o Document | Katherine Grant | Order | BP Pulse Resp Temp O2 Sat 96% (2L) |

| Return | To Home - | Trackers | Chart | Document | Orders ▼ | L Discharge | | Sign 50 | Vorkload | := Menu | ••• More | ? Help | DS User | × Close |
|--------|-----------------------------------|--------------------|----------------------|---|------------|-----------------------|----------------------|--------------|-----------------|------------|-------------|-----------|------------|------------|
| | Daniel Seltzer | | | | | | Ac | ute - C | Find Pa | tient | | | | Q |
| My I | | 02/28/1941 Allergy | | gies | | | | | | | | | Close | « |
| | Profile Qualified | Instance | | | | | | | | | | | | |
| s | Possible Sepsis 04/03/24 17:10 | 1 🚺 | ✓ Alert: Possit | le Sepsis | | | | | | | | | * | * |
| | | | This patient meets | ient meets criteria for possible sepsis. Alert care team immediately. | | | | | | | | | | |
| > | | | ✓ Qualifying C | riteria | | | | | | | | | | |
| F | | | Age Current | | | 83 | | | | | | | | |
| | | | Reg Status | | | REG | | | | | | | | • |
| > | | | Reg Type Category | | | ED | | | | | | | | |
| м | | | Sepsis Infection Cri | teria Present | | Sus | pected New Infection | n | | | | | | |
| | | | Sepsis Screen | | | Pos | sible Sepsis Risk | | | | | | | |
| > (| | | Pulse Rate | | | 96 | | | | | | | | |
| G | | | Respiratory Rate | | | 24 | | | | | | | | |
| | | | Temperature | | | 102 | .5 F | | | | | | | |
| > | | | ✓ Take Action | for Possible | e Sepsis | | | | | | | | | • |
| | | | ORD SET: ED S | Sepsis | | | | | | | | | 1 | |
| | • | ¥ | | | Add To P | rofile | move From Profile | Edit Reevalu | ate Time | | | | | |

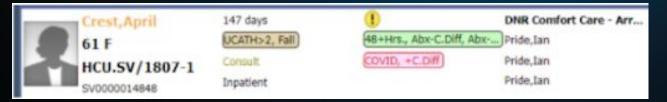
| Return | To Home - | Trackers | Chart Docume | ont Orders ▼ | 2. Discharge | | i≣ ••• ? DS More Help User | × Close |
|--------|-----------------------------------|----------|---|----------------|---------------------|--------------------------------|-------------------------------|------------|
| | Daniel Seltzer | | | | | Acute - C Find Patier | nt | Q |
| My L | | | teria y/Adv: No Known Allergies | | | | Close | |
| | Profile Qualified | Instance | | | | | | |
| SI | Possible Sepsis 04/03/24 17:10 | 1 🚺 | ✓ Take Action for Pos | sible Sepsis | | | | * |
| | | | ORD SET: ED Sepsis | | | | (i) | |
| , (| | | PROB: Sepsis | | | | (i) | • |
| É | | | PROB: Severe Sepsis | | | | (i) | - |
| Fe | | | PROB: Septic Shock | | | | (i) | |
| | | | DOC: Sepsis Event Not | e | | | (j) | • |
| > | | | ✓ Associated Data | | | | | |
| | | | Order | Result | t | Date | Specimen | |
| . 1 | | | Sepsis Screen | Possib | ble Sepsis Risk | 04/03/24 16:30 | | • |
| > • | | | Action Taken by Nursing | Physic | cian Notified | 04/03/24 16:30 | | |
| G | | | Name of Provider Notified | Dr. Ca | ameron | 04/03/24 16:30 | | |
| | | | Is the patient pregnant? | N | | 04/03/24 16:30 | | • |
| > | | | Infection Criteria Present | Suspe | ected New Infection | 04/03/24 16:30 | | |
| | | | Temperature | 102.5 | 5 F | 05/28/24 16:02 | | • |
| | • | ł | | Add To F | Profile Remove From | n Profile Edit Reevaluate Time | | |

Color Coding Alerts

Options Include: Aquamarine Blue Cyan, Green, Magenta, Orange, Sapphire Tan Violet and Wheat

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MEDITECH Example:



Logan Health Example:



Dictionary Setup - Color Coding

| Patient List Format Dictionary (SC.EXP22S | AND) | | | | | | ••• ? More Help | DS User | Clos |
|--|----------------------|---------------------|-------------|-----------|---------------|---------------|--------------------|------------|------|
| C.RN - RN Web with Surveillance | | | | | | Last Edit: 07 | 7/23/24 10:51 | | |
| | Main | Columns Detail | s | | | | ^ | | |
| Display Patient ID Banner? Yes | | | | | | | | | |
| * Patient ID Banner Field | Label | Sor | table Actio | nable | | | | | |
| Name and Preferred First Name | Name | Yes | Yes | | | | | | |
| Age BirthSex | Age/Birth Sex | | No | | | | | | |
| Legal Sex | Legal Sex | | No | Ψ. | | | | | |
| * Column | | Label | Sortable | Rel Width | Style | Actionable | | | |
| <multiple></multiple> | | | | | | | 1 | | |
| Orders Flag | | Acknowledge | Yes | | | Yes | | | |
| Next Int | | Next Intervention | Yes | | | Yes | | | |
| Orders Renewable Non-Series by Proc, Times Only | | Restraint Time Left | : | | | Yes | | | |
| Orders Renewable Non-Series by Proc | | | | | | Yes | | | |
| <multiple></multiple> | | | | | | | | Edit | |
| Next MAR - Display New Results | | Next Med | Yes | _ | | Yes Ves | | | |
| New Results | | | | | 2 19 19 | Tes | | | |
| * Multiple Field | | Lab | el Sorta | able St | yle Actiona | ble 🔺 | | | |
| Alerts List | | Surveillance | | | Yes | | | | |
| Alerts List | | T | | | Yes | | | | |
| Alerts List + → ★ ↓ × | | | | | Yes | Ŧ | | | |
| Override Background Color Orange | | | | | 1 | | | | |
| | | | | | - | | | | |
| Modif | ier | | * | | | | | | |
| Surveillance Profile Elapsed Date/Time | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | _ | | | | | | |
| Profile | Value D Fall Risk | isplay Text | * | | | | | | |
| High Fall Risk [SV.FALLRISK] Urinary Catheter > 2 Days [SV.UACTH >2D] | U Cath > 2D | | - | | | | | | |
| On Antibiotics for 48+ Hours [SV.ABX.48HOUR | | | * | | | | | | |
| OIT AIRUDIOLICS TOT 40 + HOURS [3V.ADA.4010014 | ABA. 10111 | | | | | | | | |
| | | | | | | Г | | 1 | |
| | History Cle | ear Rel Widths | | | | | Cancel Save | 728 | - |

Alert List

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Elapsed Date/Time Override Background Color Profiles

Surveillance Collaboration Communication



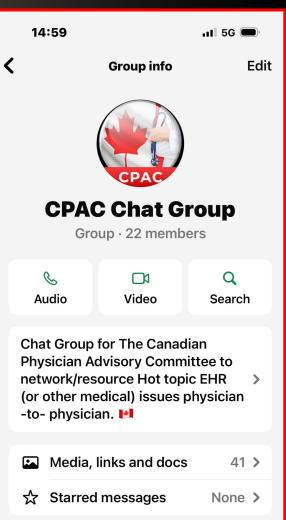


What's App CPAC Chat Group



Marsha Fearing, MD, MPH, MMSc. Physician Consultant, Region 5

Need for Internal Peer-to-Peer Group Discussion Group:



Key Points of Interest:



 Security and Encryption: End to End (Comfortable sharing screen shots)

WhatsApp-Security-Whitepaper.pdf

- No additional fees to call US to Canada
- Desktop vs. Mobile Phone usage
- Easy to Moderate; up to 256 members

| 13 | 3:32 | | | | al 3 | ? [| 13:20 | al * | ? ■ |
|---------------|--|--|--|---|------------|------------|---|----------|-----|
| < | CPAC | | | Group Andrea, Dere | | 6 < | CPAC Chat Group Allan, Amyeen, Andrea, Dere | | C |
| \sim \sim | | | | 16:20 | | | Dr. Tasleem Nimjee | | |
| | Allan Lo | ee, MD | | | 0000 | | Allan Lee, MD Different topic. My GI guys are asking | a to | |
| | | oes | | ot Rep | olac | e C | lient Services! | . | |
| | Allan Lee Roands Patients 0 40% 0% 40% 0% 40% 0% 40% 0% 40% 0% 10% 0% | 6m 23d M | harden and here and h | vn Hospital Rour Hospitalists | C Sign Out | | ours. They collaborate very we can't remember offhand what set up is, but I believe we have | are | |
| | 03/06/1977 ADM 3N 14/12/2022 Test,Logan ZSP | 45 M Status Not Ordered No Hix Avail 38 M Status Not Ordered No Hix Avail | 2-S-235-1 Doctor Inpatient.22 Doctor Inpatient.22 2-S-242-1 Lee.Allan Lee.Allan | please follow up on | | | third party software like you described. | 21:34 | |
| | С0/6/1377 4011 Л1 Наят 3/08/2023 Best, Isabella с1000084 FULL 2/08/2005 4001 Л1 2/08/2005 Test, Marcy/ICU | 45 F 6. Active Treatment ong and Valen Assistance 10 F Col 33 F Datase for Ordered for Inc. Anal 61 F | 2-S-246-1 Dector logation.22 Dector logation.22 2-S-323-1 Lee.Alian 2-S-325-1 Dector logation.22 Dector logation.22 Dector logation.22 Dector logation.22 | follow up with labs tomorrow, book family meeting | next week. | | Allan Lee, MD @Dr. Tasleem Nimjee I was just asked to look at AIMS as well | t | |

Topic: Successful Builds

77

What has been the most effective surveillance project your organization has done & why?





Chris Giroux Director of IS/IT

Holyoke Medical Center



Thank You!



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/surveillanc ecollaborative.htm

Style Guide https://customer.meditech.com/en/d/prwqm/otherfiles/qrmeiassurvalertsty leconsiderations.pdf

Collaborative Solutions

https://home.meditech.com/en/d/newmeditech/pages/collaborativesolutions.htm