

#### Reminders

- Phone lines will be muted
- Chat questions into me at any time
- Must have an 83% participation in order to receive PACE credits
- PACE certificates will be emailed to you Wednesday

#### **Upcoming Webinars & Virtual Events**

COVID-19 Rapid Results Platform
Oct. 28, 2020
10:00 AM PT /1:00 PM ET

Virtual Thought Leadership Event

The Lab's "New Normal": Thought Leadership to Navigate and Embrace Industry Change

Nov. 12, 2020

10:00 AM PT /2:00 PM ET



### COVID-19 News

#### Current trending topics



#### Multiplex Testing EUAs

- Roche Liat
  - SARS-CoV-2 and Flu A/B
- Roche 6800/8800
  - SARS-CoV-2 and Flu A/B
- BioFire Film Array 2.0
  - SARS-CoV-2 plus 20 other viral and bacterial respiratory pathogens
- Quidel Sofia 2
  - SARS-CoV-2 and Flu A/B
- Cepheid GeneXpert
  - SARS-CoV-2/Flu/RSV



#### **Testing Data Resources**

- COVID-19 STAT Intelligence Briefings from The Dark Daily covid19briefings.com
- Go to the *Testing Data* tab
- COVID-19 data provided by 4 different vendors on various metrics
- Let's take a quick look!



#### PROGRAM OBJECTIVES

At the end of the session, the participant will be able to:

- Understand how to access, view, and monitor their lab's key performance indicators
- Be able to drill-down into result details from dashboards to analyze trends
- Understand how to interpret lab dashboard analytics into actionable steps they can take within their lab to change workflow or improve lab processes

### Part I

What is a Quality Management System (QMS)?

### Part II - Lab Intelligence

- I. Minimum requirements to get started using Lab Intelligence
- II. Basic Setup
- III. Main Components (Dashboards, Widgets, and Pivot Tables)
- IV. Key Performance Indicators (KPI)
- V. KPI Workshop

### Quality Management System



Laboratory Quality - accuracy, reliability, and timeliness of the reported test results



Quality Management System coordinated activities to direct and control an organization with regard to quality



# CLIA and ISO 15189 for QMS

- CLIA Clinical Laboratory Improvement Amendments. CLIA sets the regulations for accreditation for clinical laboratories within U.S.
- ISO 15189 International Standard for Accreditation of Clinical Laboratories.
   Part 4 of standard provides guidelines for Quality Management Systems (QMS).

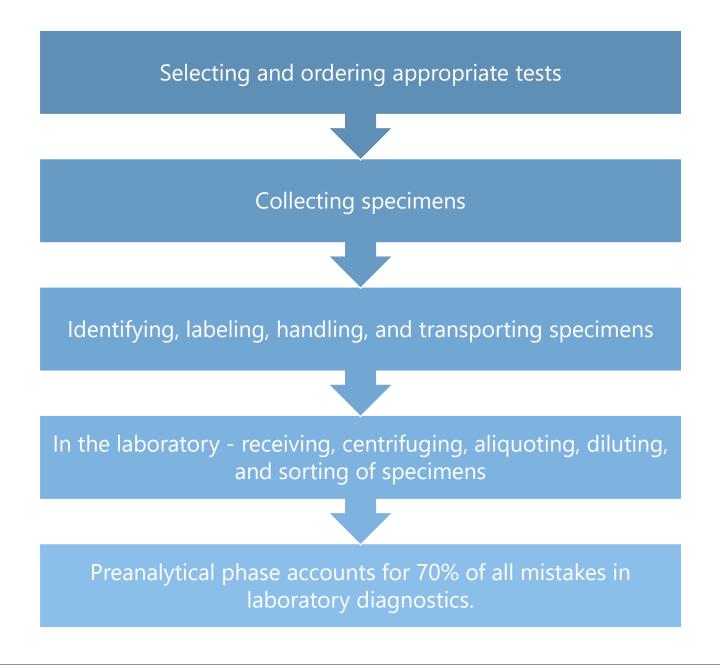
### Commonality in QMS?

Laboratories are to create standard operating procedures that ensure assessment of the total testing process (TTP), the procedures define how to monitor and evaluate performance throughout the critical aspects of TTP

# Phases of the Total Testing Process (TTP)

- Preanalytical
- Analytical
- Postanalytical

### Preanylitical Phase

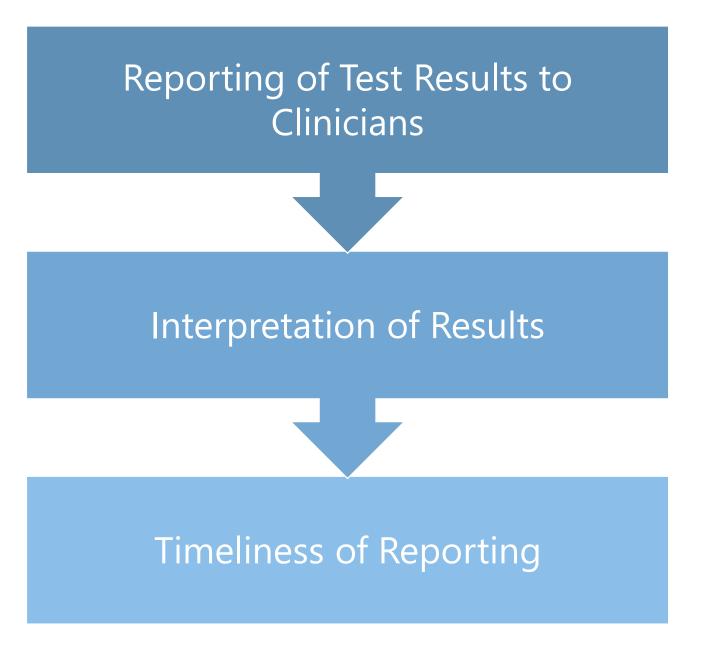


### **Analytical Phase**

Examples of Processes within the analytical phase:

- Quality Control (Precision and Trueness)
- Monitoring Temperatures
- Instrument Maintenance and Function Checks
- Timeliness of analysis

### Postanalytical Phase



### **Quality Indicators**

It is necessary to define Quality Indicators (QIs) to that are designed to reduce laboratory errors in preanalytical, analytical, and postanalytical phases.

Establishing Quality Indicators enable laboratories to:

- Detect laboratory errors
- Determine root causes
- Establish corrective action plans
- Monitor QI for defined period to measure effectiveness of corrective action.

### Part II - Lab Intelligence

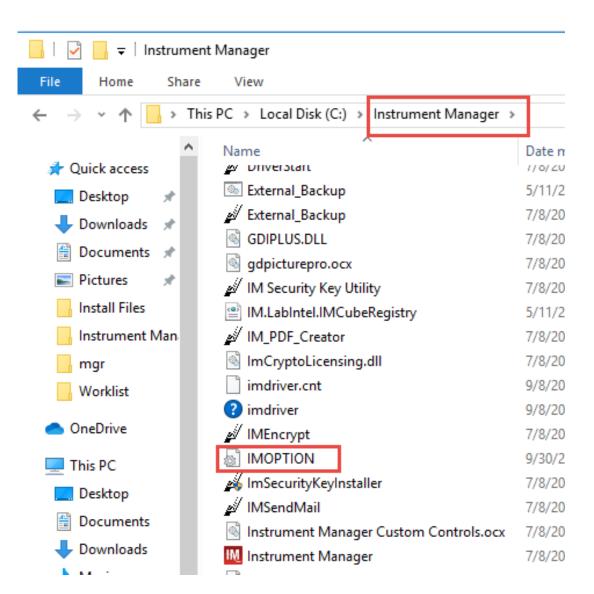
- I. Minimum requirements to get started using Lab Intelligence
- II. Basic Setup
- III. Main Components (Dashboards, Widgets, and Pivot Tables)
- IV. Performance Indicators (KPI)
- V. KPI Workshop

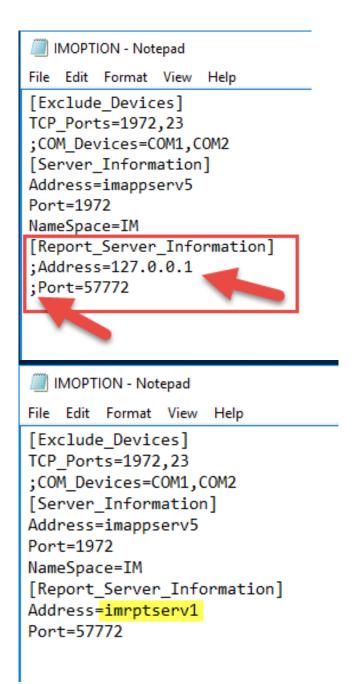
# Minimum Requirements to get started with Lab Intelligence

- 1. Lab Intelligence License
- 2. Specimen Management License
- 3. Enable Archiving of Specimen Management Data
- 4. Dedicated Report Server



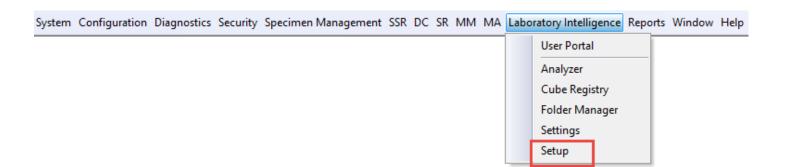
- ✓ Install Instrument Manager on a dedicated Report Server
- ✓ Load License Files on Report Server
- ✓ Add Report Server to Mirror
- ✓ Update the IMOPTION.INI on the Primary Server
- Define TAT Timestamps in Laboratory Intelligence Setup
- Enable Laboratory Cube Synchronization for Specimen Management and Archive Specimen Management
- Site and Location (Connection Assignment)
- Configure Cube Synchronization Plans and perform initial Build of Specimen and Test Cubes for Specimen Management and Archive Specimen Management.

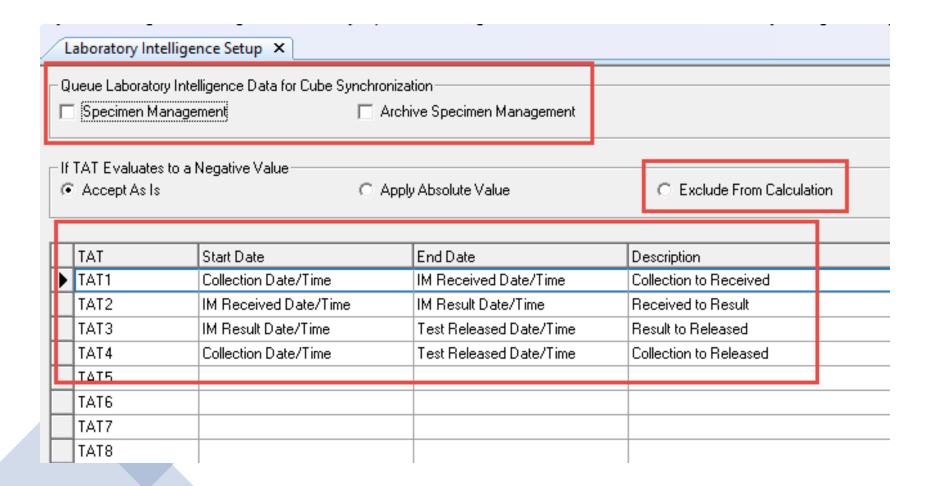






- Install Instrument Manager on a dedicated Report Server
- Load License Files on Report Server
- Report Server is added to Mirror
- Update IMOPTION.INI on the Primary Server
- ✓ Enable Laboratory Cube Synchronization for Specimen Management data and for Archived Specimen Management data
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#### Laboratory Intelligence Setup 🗶

IM Received Date/Time

TAT7

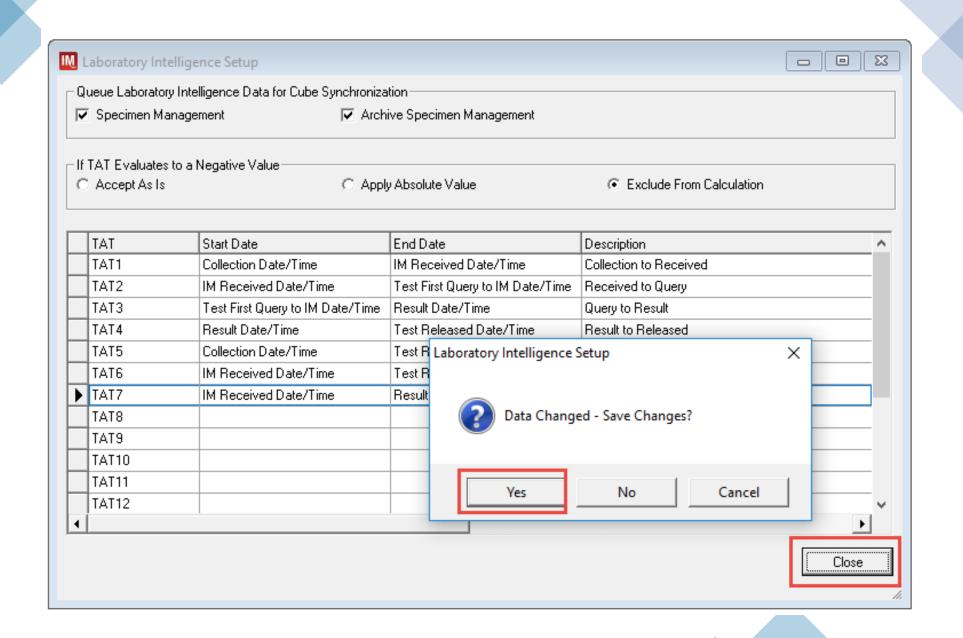
TAT8

TAT9

Queue Laboratory Intelligence Data for Cube Synchronization-✓ Specimen Management Archive Specimen Management If TAT Evaluates to a Negative Value: Accept As Is: Apply Absolute Value Exclude From Calculation. Start Date End Date TAT Description Collection Date/Time Collection to Received TAT1 IM Received Date/Time TAT2 IM Received Date/Time Test First Query to IM Date/Time Received to Query TAT3 Test First Query to IM Date/Time Result Date/Time Query to Result TAT4 Result Date/Time Test Released Date/Time Result to Released TAT5 Collection Date/Time Test Released Date/Time Collection to Released TAT6 IM Received Date/Time Test Released Date/Time Received to Released

Result Date/Time

Received to Result





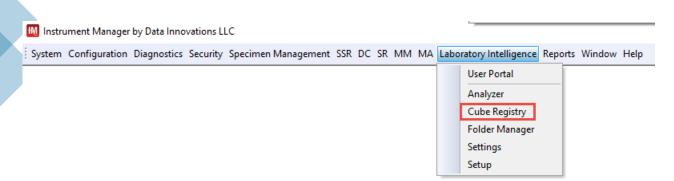
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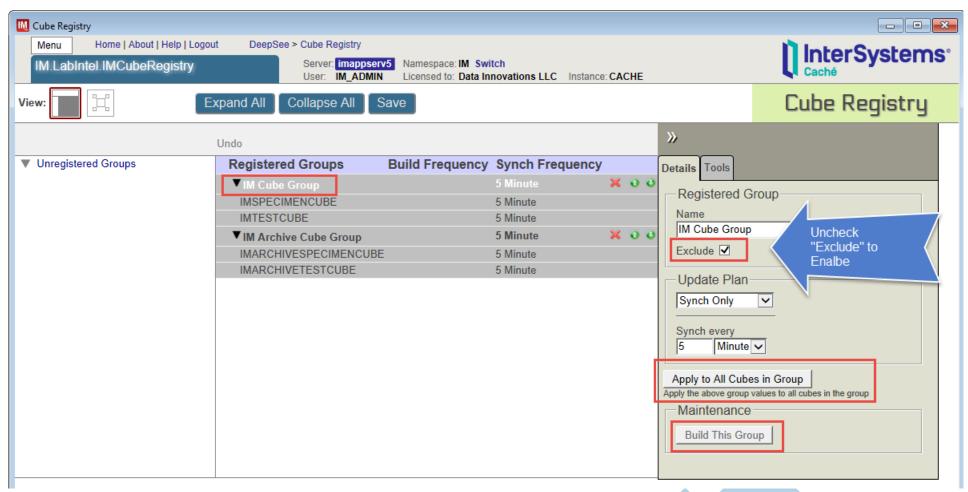


M Connection Pro	perties - Abbott Heme 01		×
Connection Name	Abbott Heme 01	Number of Days to Keep	
Configuration Name		Incoming Messages 999	-
	St Joseph 🔻	Outgoing Messages 999	
Location	Hematology	Communications Trace 999	-
	Start on System Start	Error Messages 999	-
Destination Line(s)	Abbott Heme 02	Driver Data 999	
Integrated QC	Automated Storage    Beckman Heme 01   Cell Counter   Chem Inst 01   Chem Inst 02   Chem Inst 03   Chemistry MREI   Coag Inst 01   MA Chemistry   Molecular1   MREI   Orders In (LIS 01)   Results Out (LIS 01)   Sysmex Heme 01   Urinalysis MREI	Advanced Options  Explode Coded Entries for this Connection  Include in Specimen Management  Default userid  Update Specimen Management on Statu Messages  Overwrite Patient Data  Include in Specimen Storage and Retrieval  Shared Orders DB Connection  Device Timezone  None -	is v
		Character Encoding - None -	<u>-</u>
		Device Parameters Clo	ose

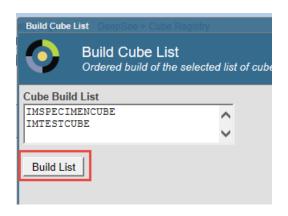


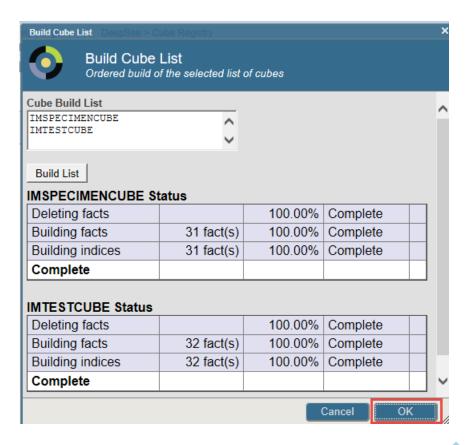
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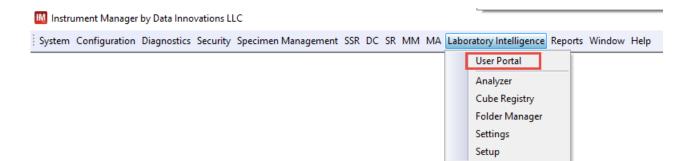


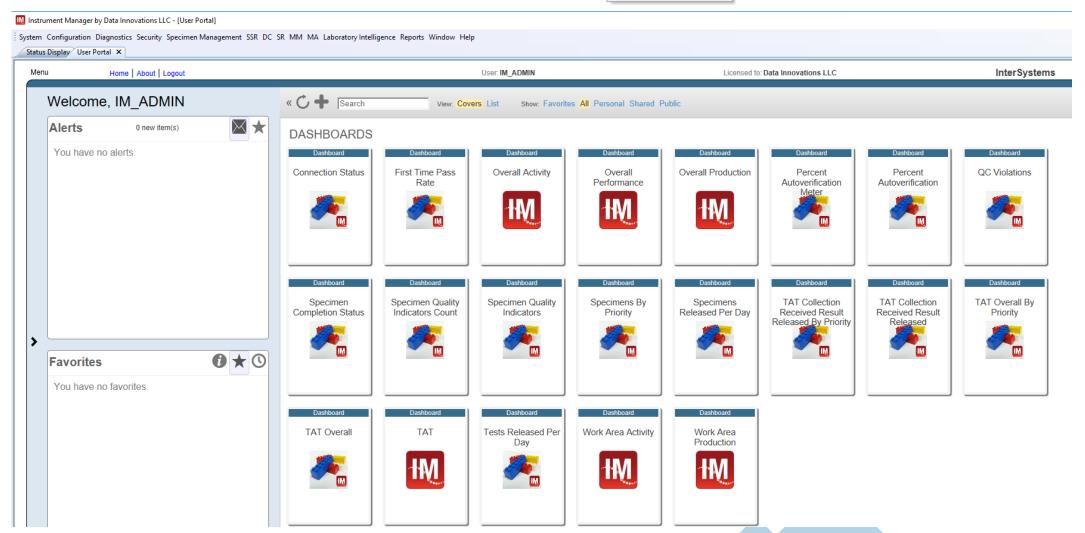
## Components of Lab Intelligence

- 1. User Portal
- 2. Dashboards
- 3. Widgets
- 4. Pivot Tables (Analyzer)

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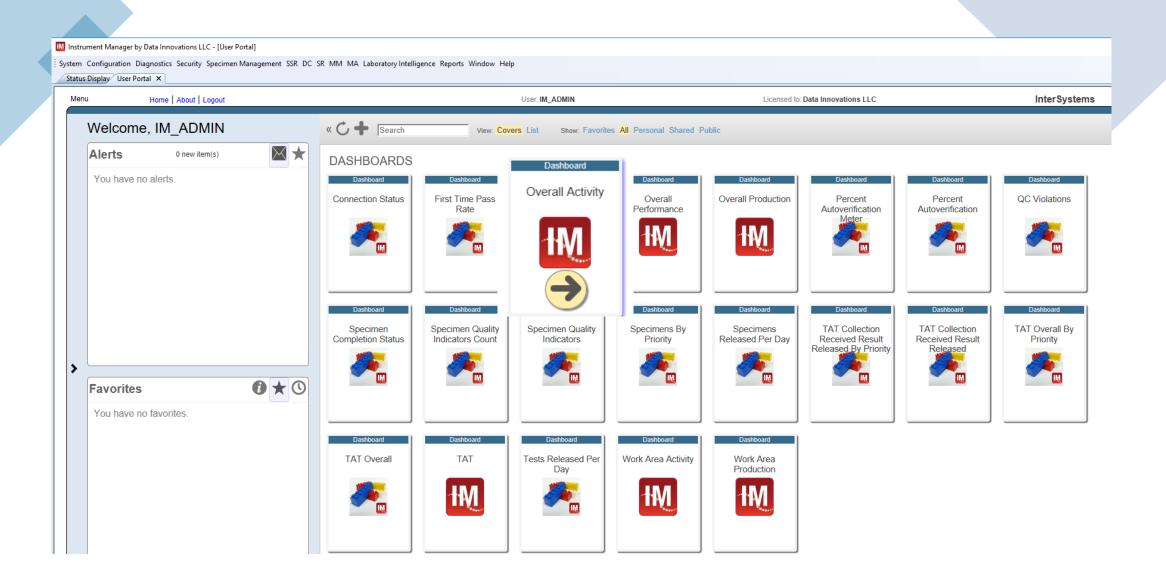
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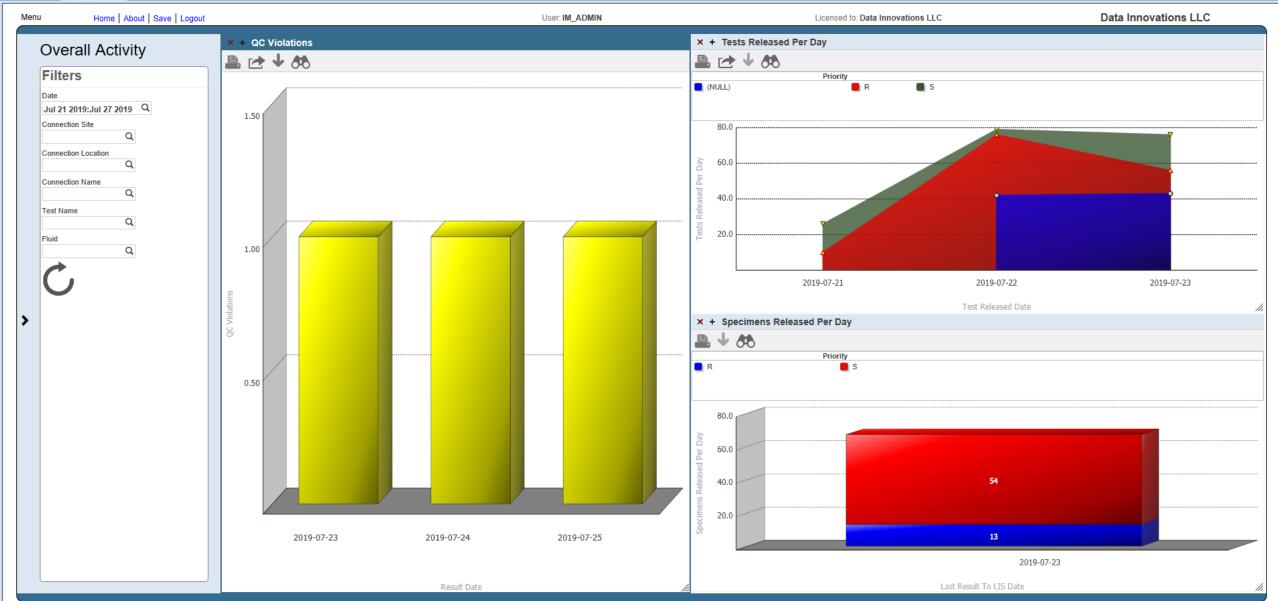


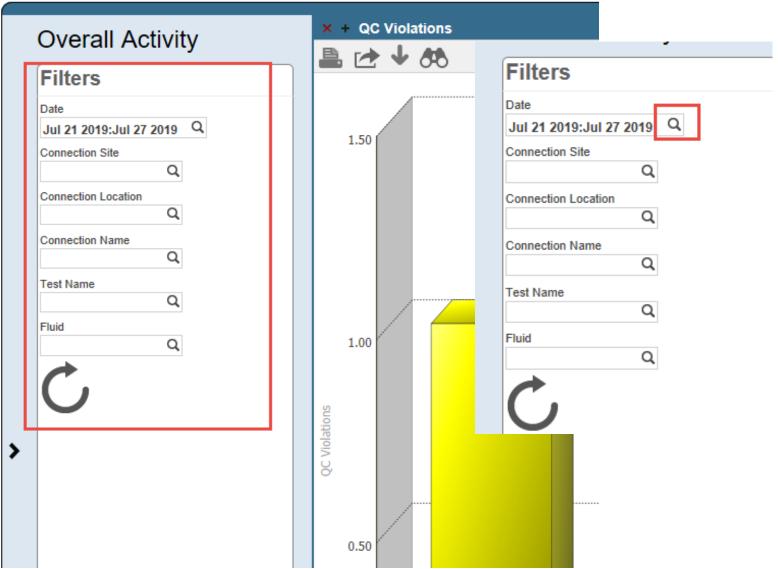
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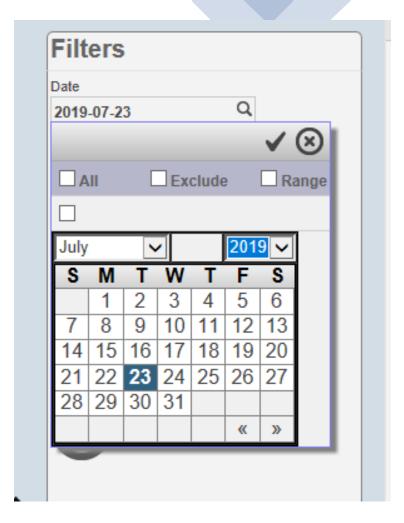
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Status Display User Portal X



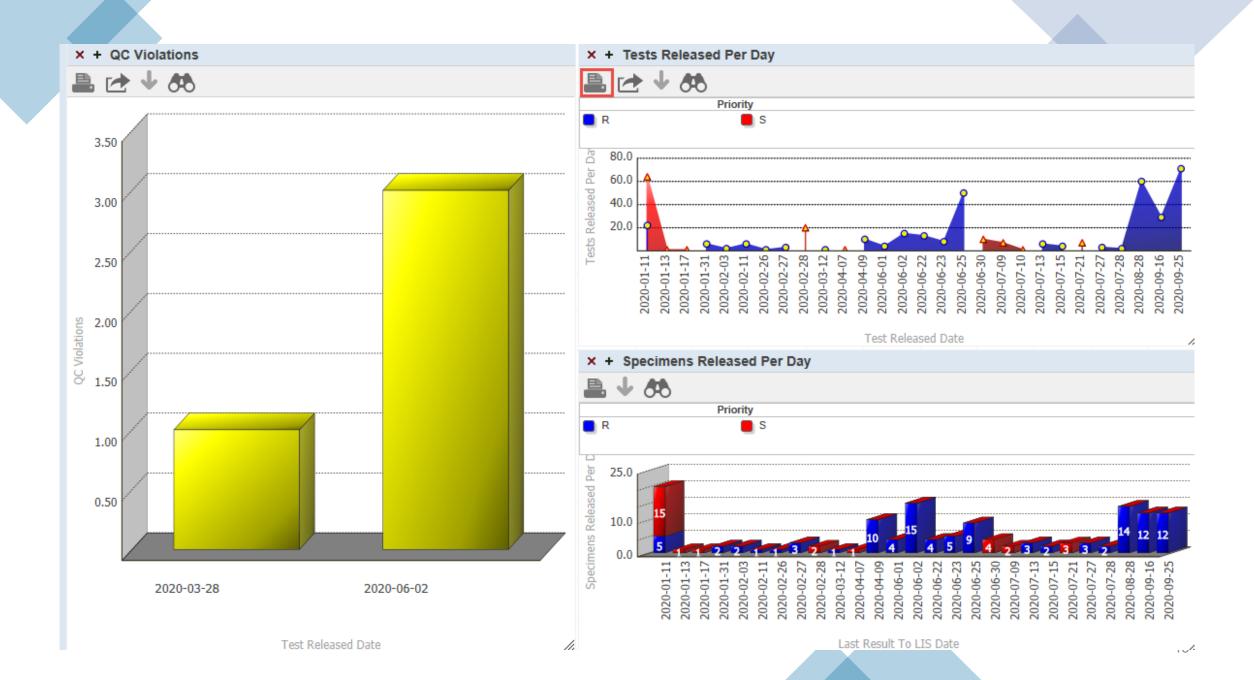




# Components of Lab Intelligence

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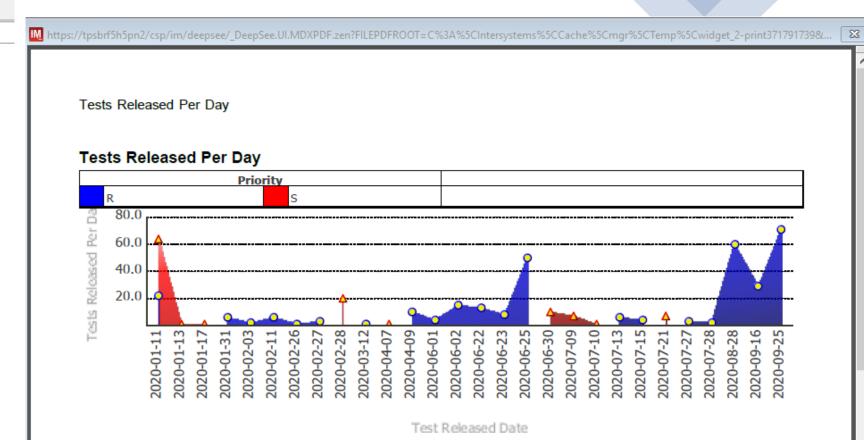


### Priority

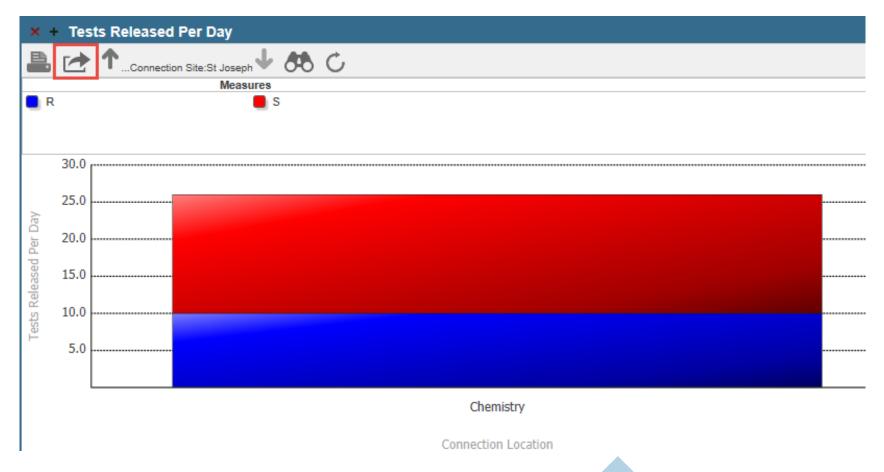


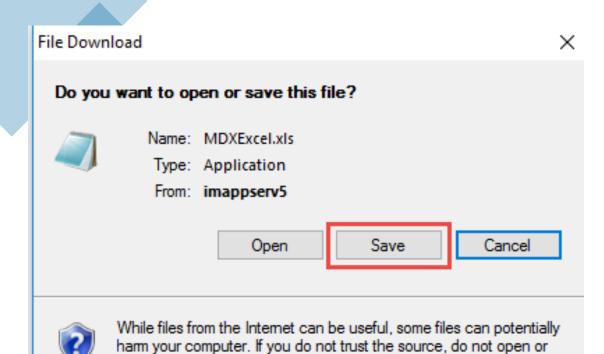
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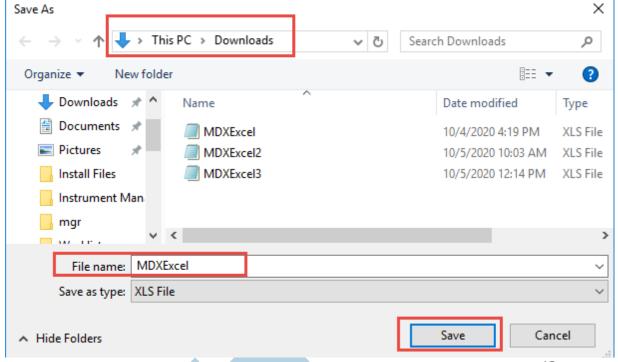




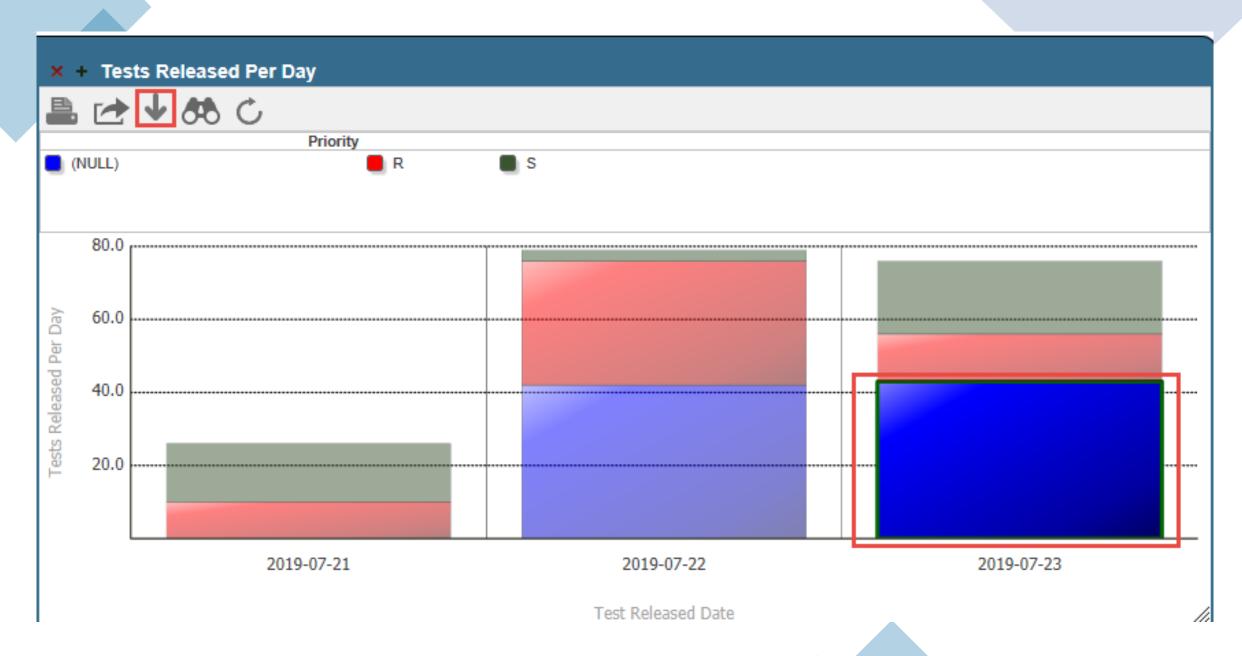




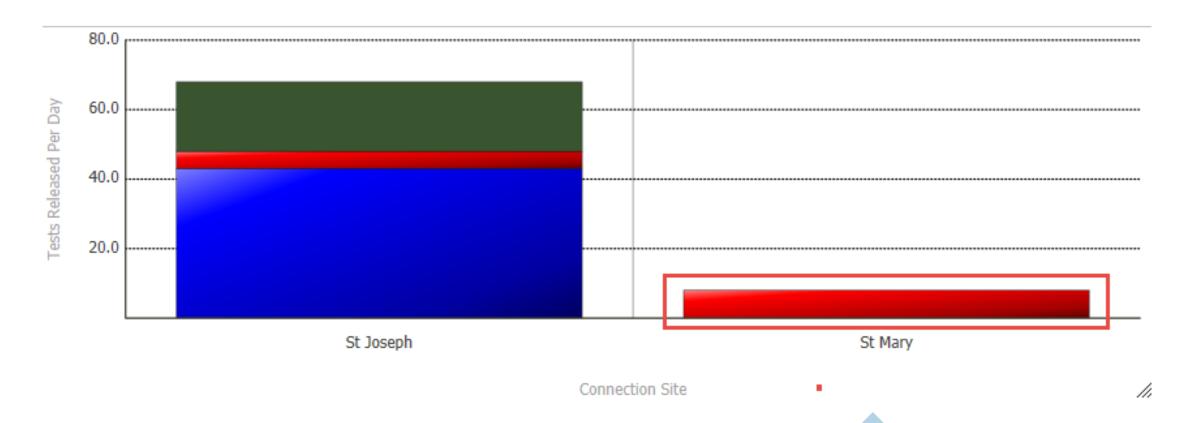
save this file. What's the risk?

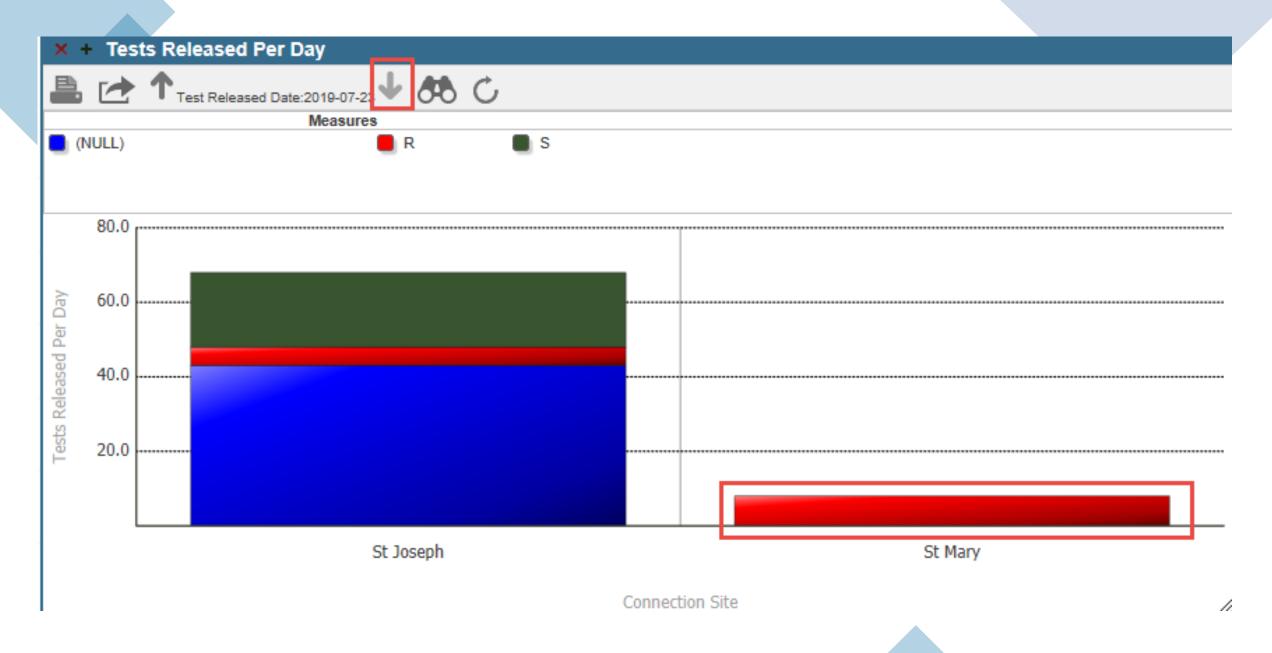


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2		Tests Released Per Day
3		
4	Drilldown Level 1	Test Released Date:2019-07-21
5	Drilldown Level 2	Connection Site:St Joseph
6	Date	Jul 21 2019:Jul 27 2019
7		
8	R	S
9 Chemistry	10.00	16.00
10		
11		
12		
13		



### 





## × + Tests Released Per Day







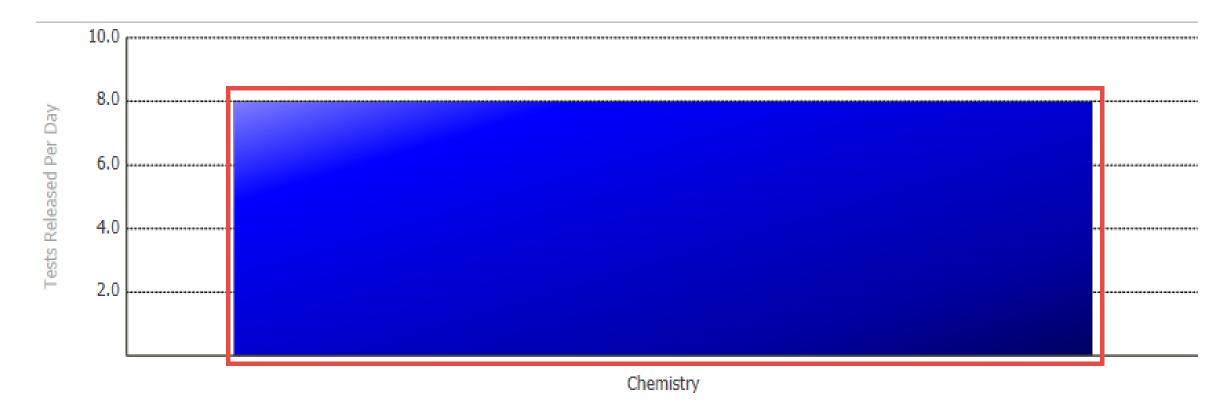




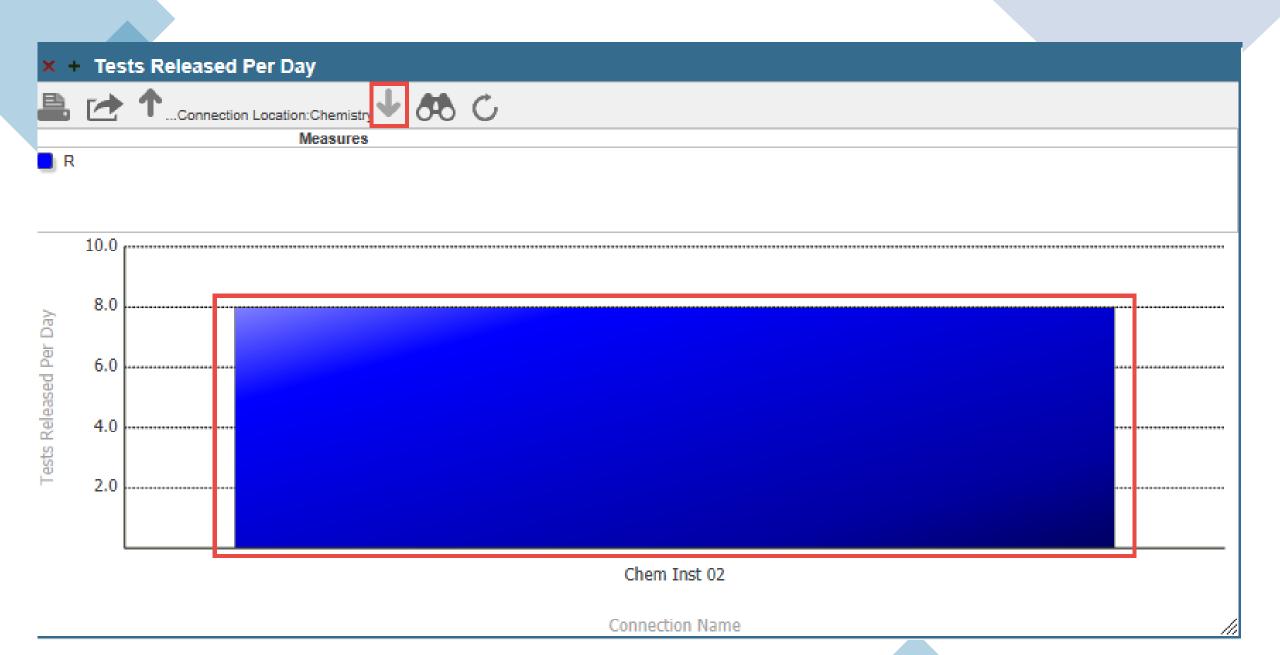


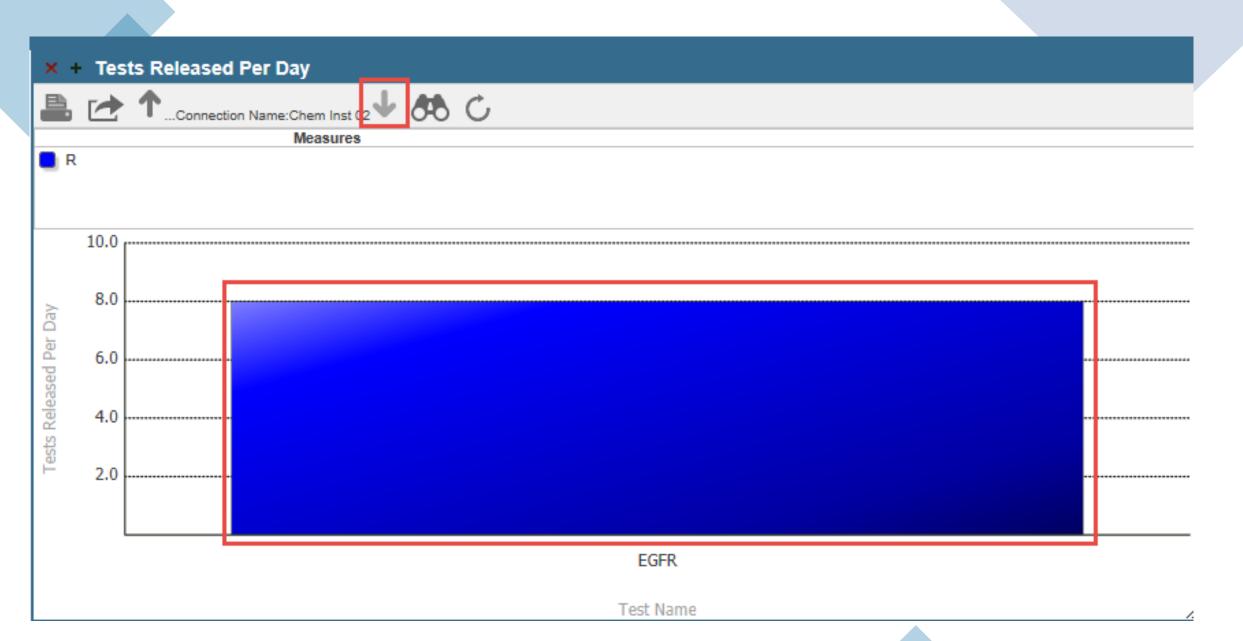


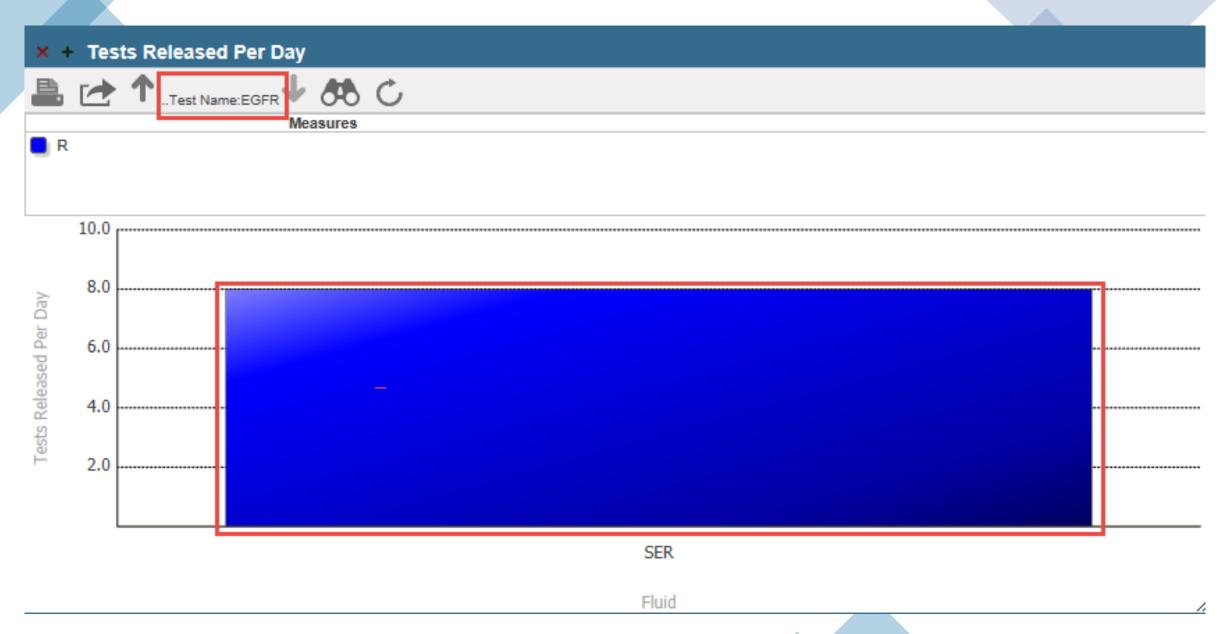




Connection Location

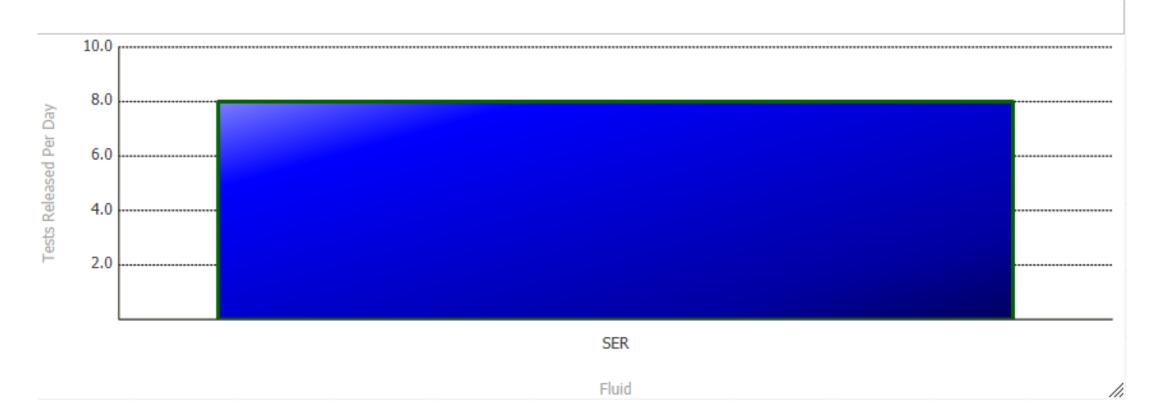


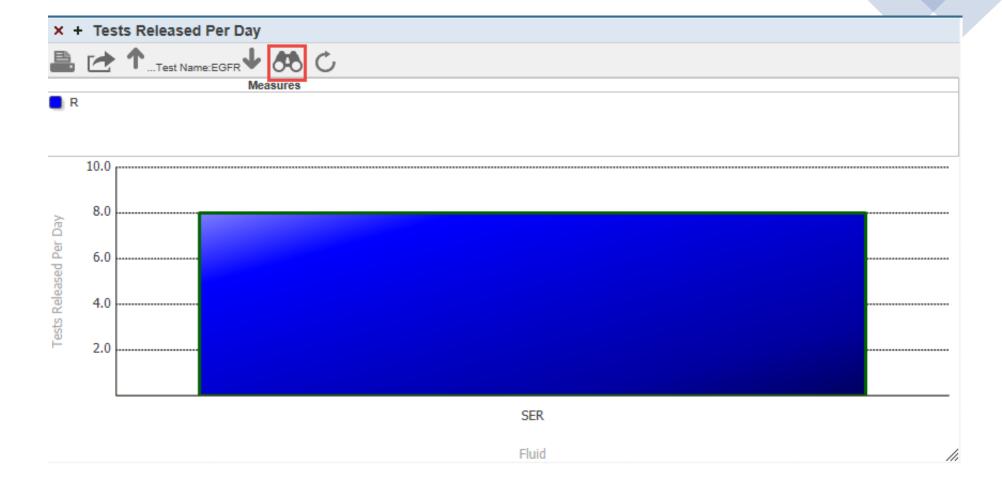






## X + Tests Released Per Day ↑. Test Name:EGFR ↓ ↑ ↑ Measures R





### × + Tests Released Per Day

•







#	SID	ConnectionSite	ConnectionLocation	ConnectionName	TestDisplayName	FluidDisplay	Priority	TestStatus	Co
1	C123663	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released	20
2	D789457	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released	20
3	D789458	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released	20
4	D789459	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released	20
5	D789460	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released	20
6	D789461	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released	20
7	D789463	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released	20
8	E456132	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released	20

### × + Tests Released Per Day

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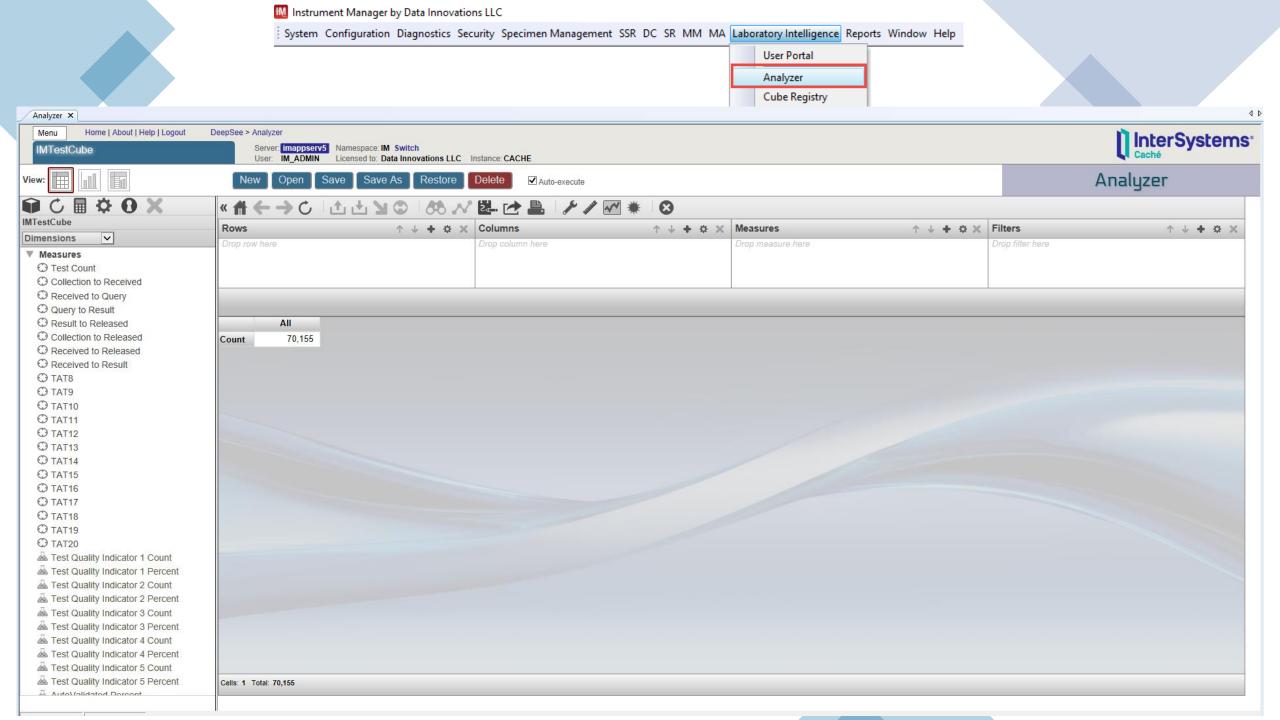
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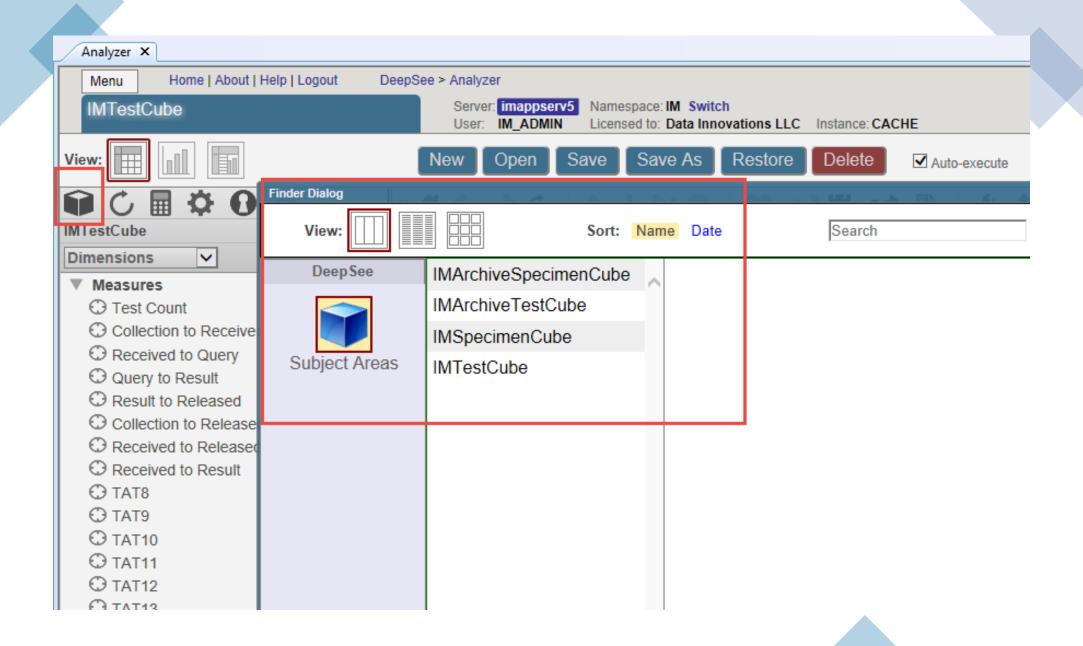
#	SID	ConnectionSite	Connection Location	$Connection {\color{red}Name}$	TestDisplayName	FluidDisplay	Priority	TestStatus	Co
1	C123663	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released	20
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3	D789458	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released	20
4	D789459	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released	20
5	D789460	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released	20
6	D789461	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released	20
7	D789463	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released	20
8	E456132	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released	20

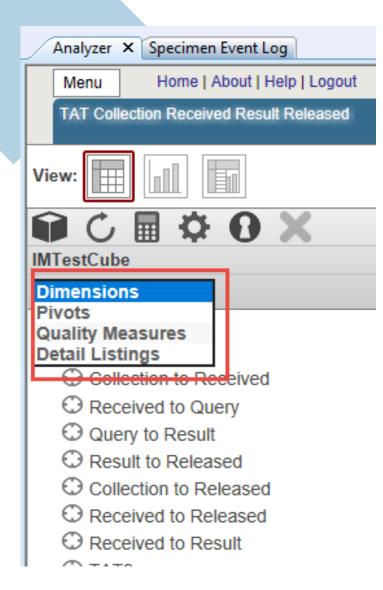
2			Tests Released Per Da	y				
3								
4		Drilldown Level 1	Test Released Date:2019-07-23					
5		Drilldown Level 2	Connection Site:St Mary					
6		Drilldown Level 3	Connection Location:Chemistry					
7		Drilldown Level 4	Connection Name:Chem Inst 02					
8		Drilldown Level 5	Test Name:EGFR					
9		- Selected Cell Context -						
10		\$\$\$Date/IMDEEPSEE	Jul 21 2019:Jul 27 2019					
11		Fluid	SER					
12		Priority	R					
13								
14	SID	ConnectionSite	ConnectionLocation	ConnectionName	TestDisplayName	FluidDisplay	Priority	TestStatus
15	C123663	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released
16	D789457	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released
17	D789458	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released
18	D789459	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released
19	D789460	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released
20	D789461	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released
21	D789463	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released
	E456132	St Mary	Chemistry	Chem Inst 02	eGFR	SER	R	Released
23								
24								

# Components of Lab Intelligence

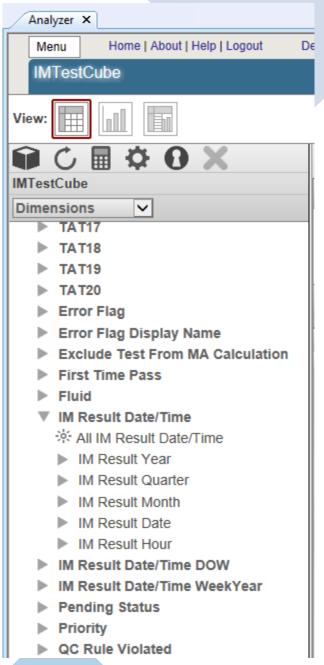
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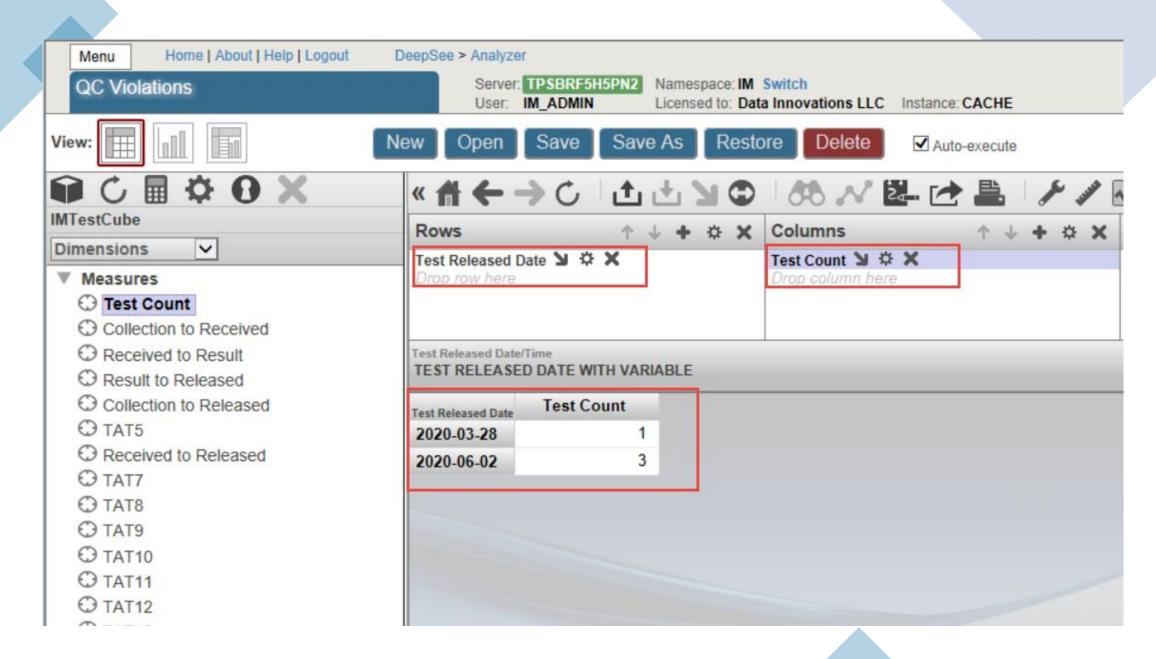






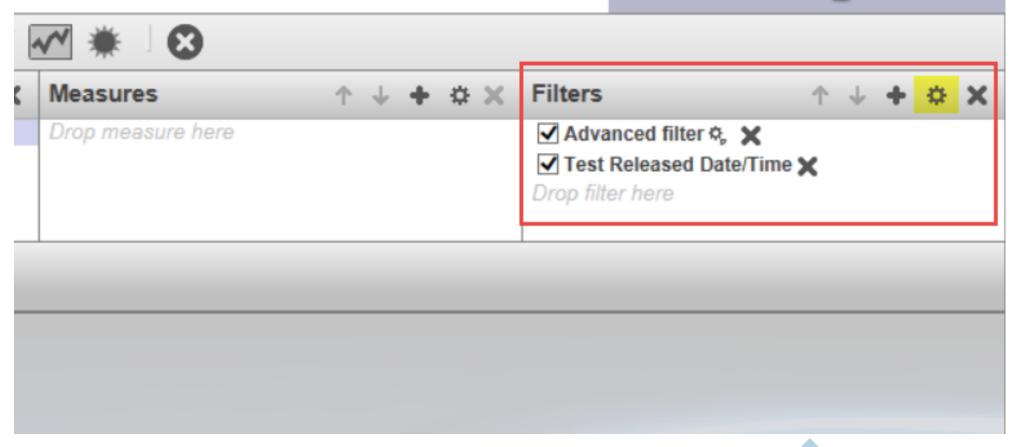


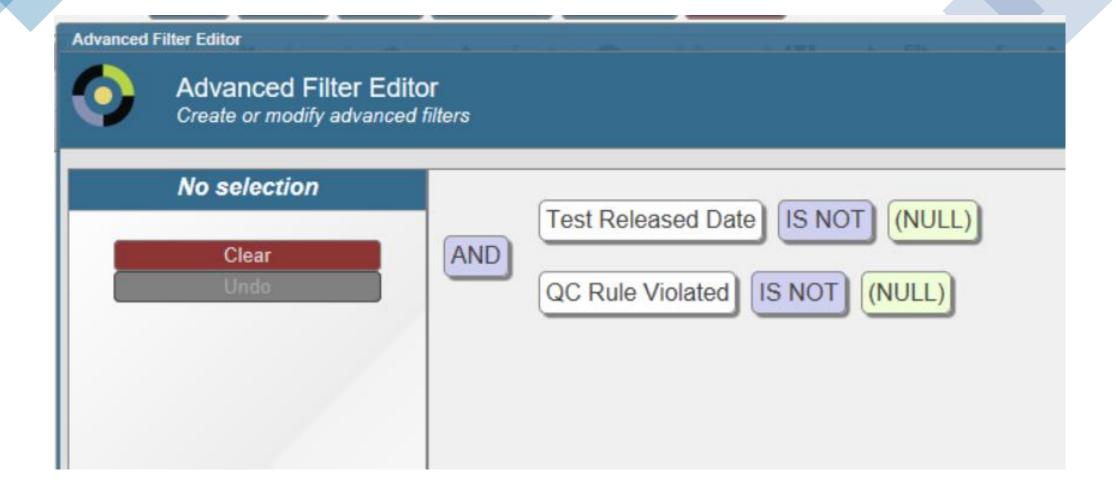






## Analyzer

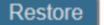






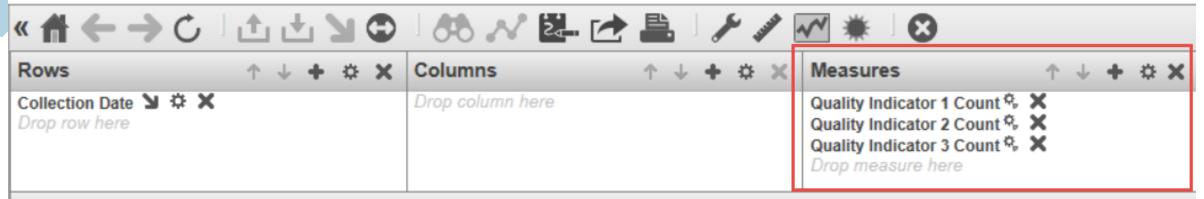


Save As





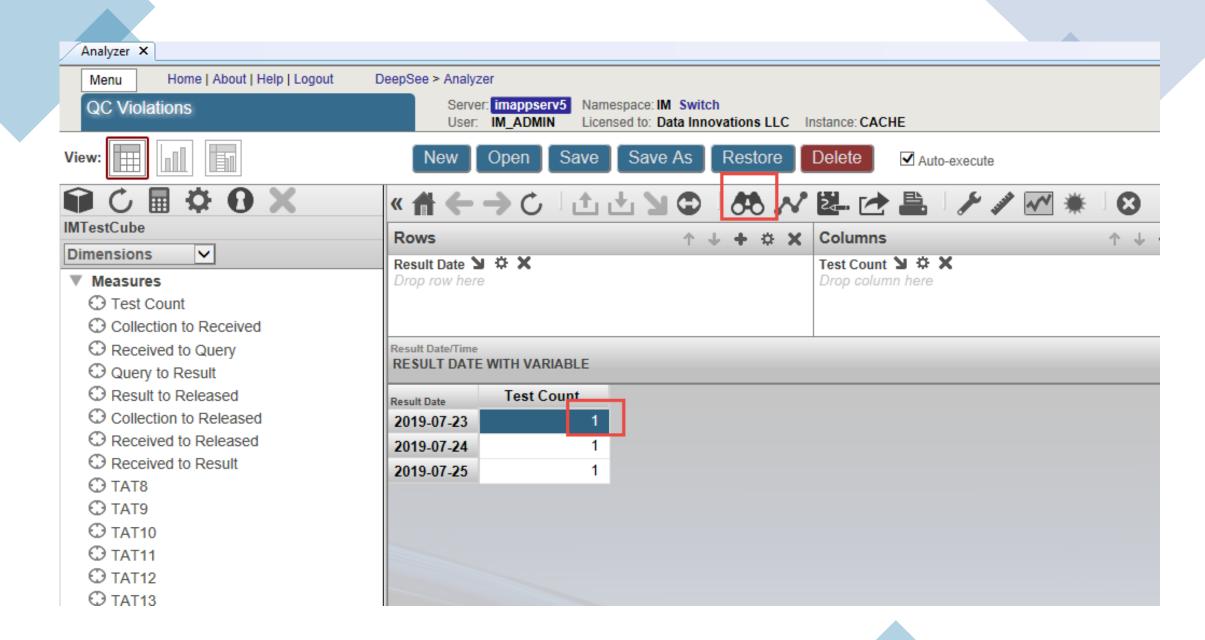


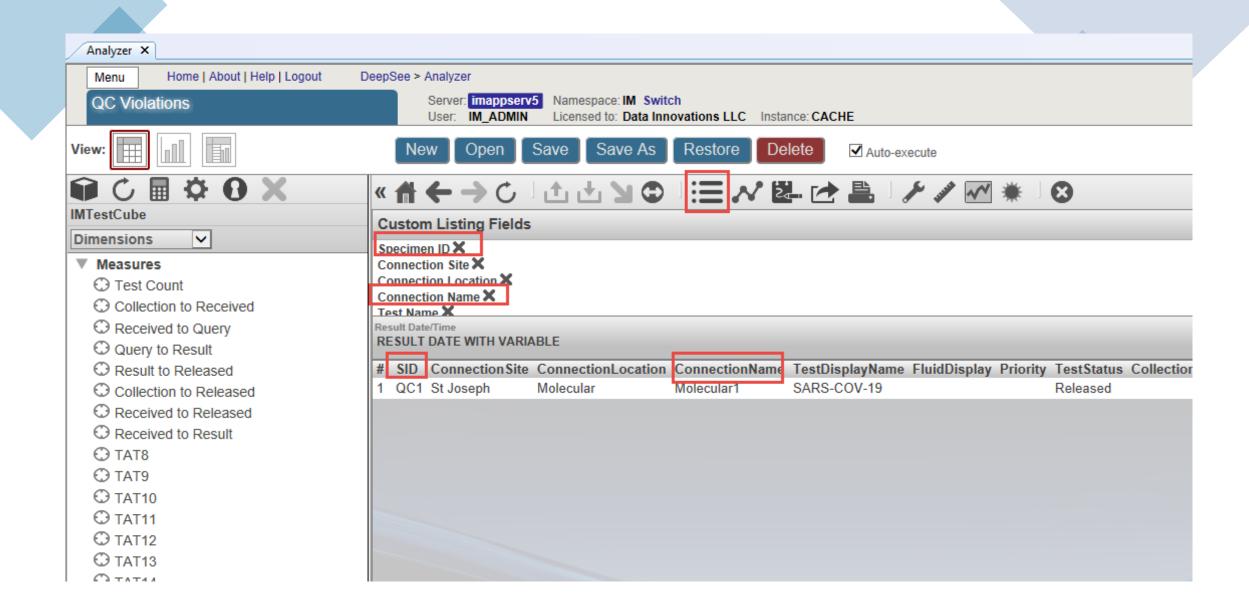


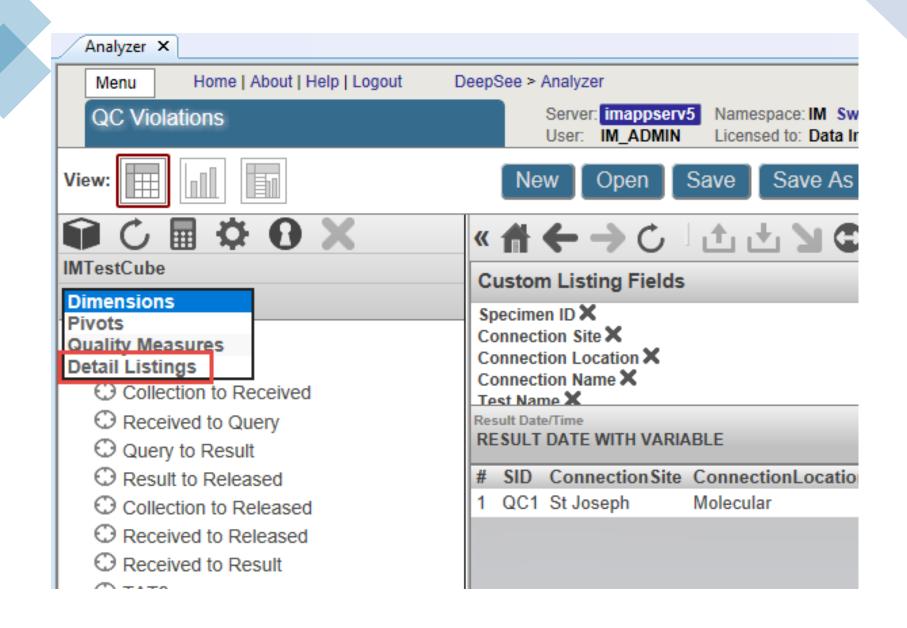
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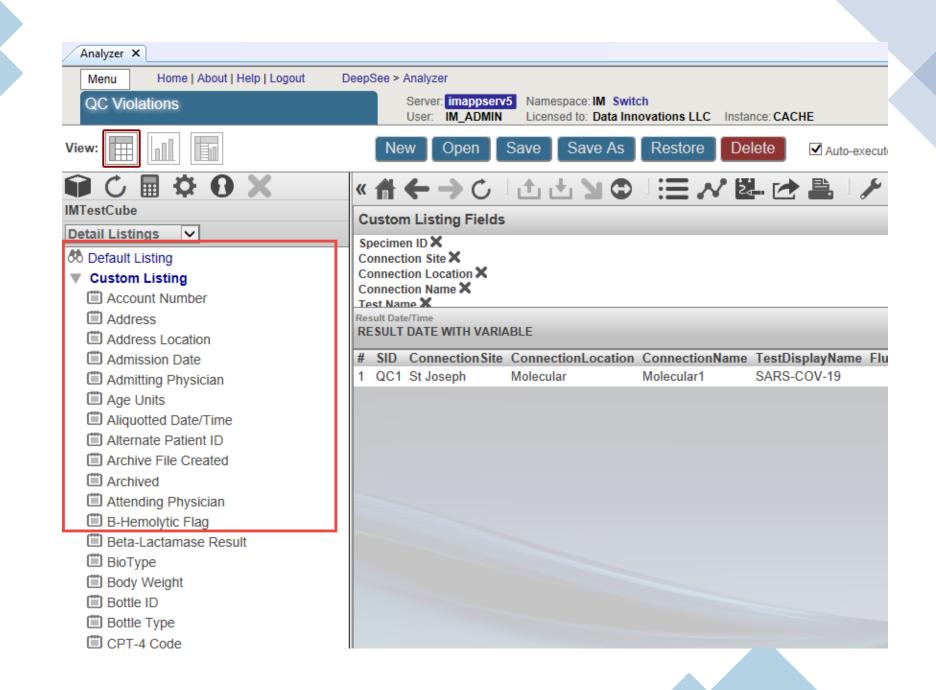
#### **COLLECTION DATE WITH VARIABLE**

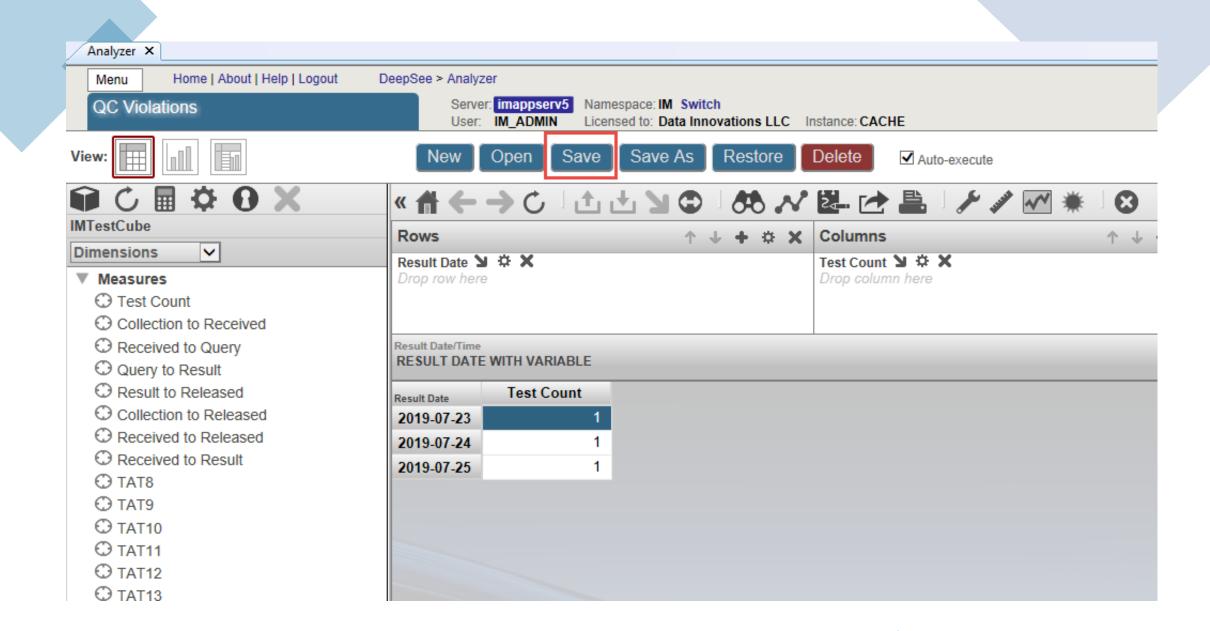
Collection Date	Hemolyzed Count	Clotted Count	Insufficient Volume Count
2020-04-09	5	3	

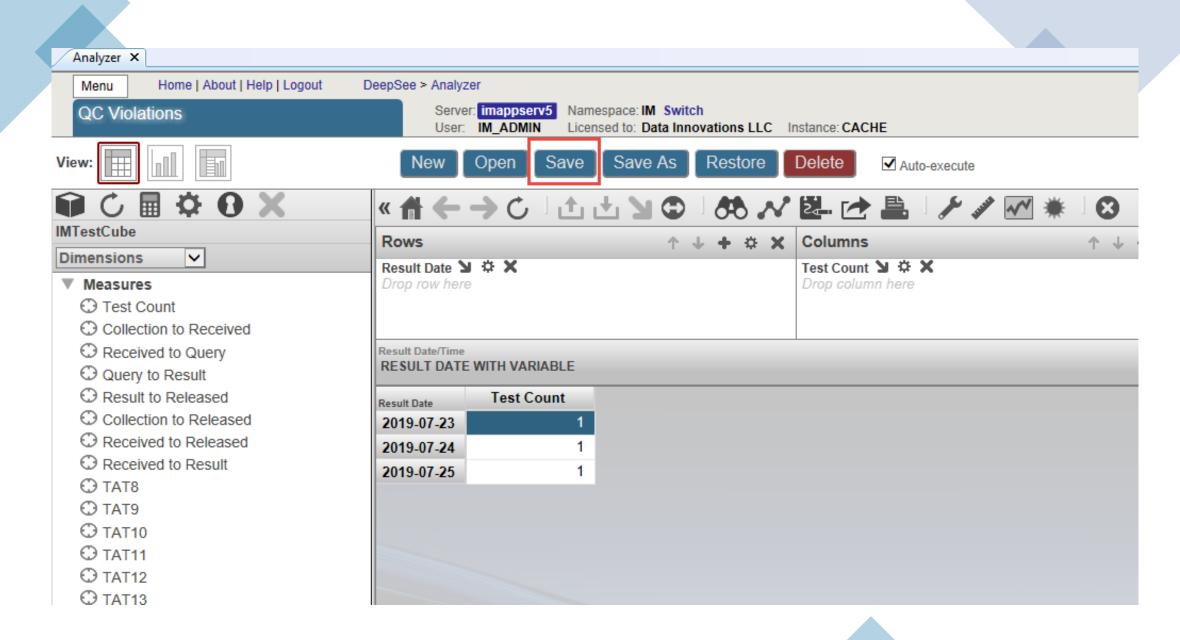


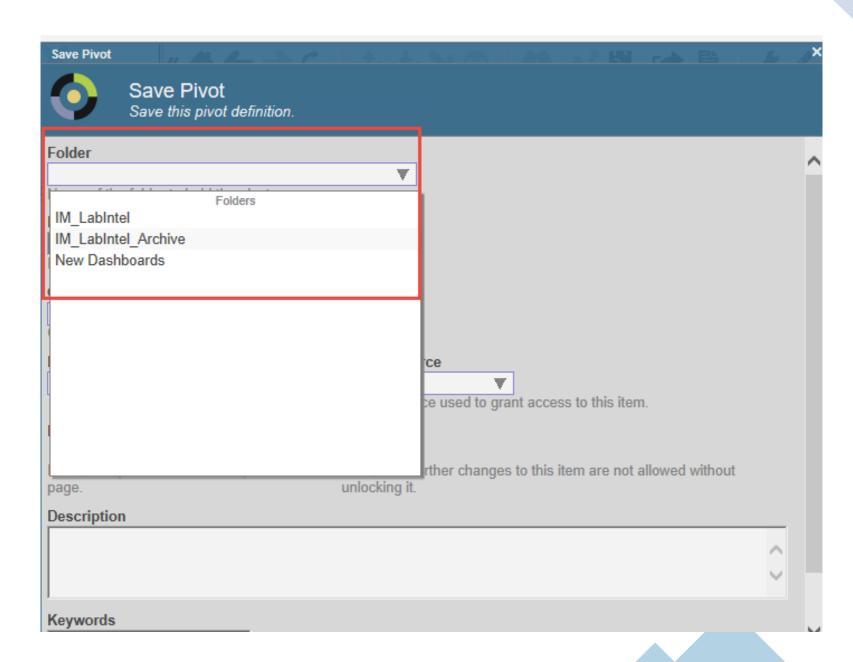


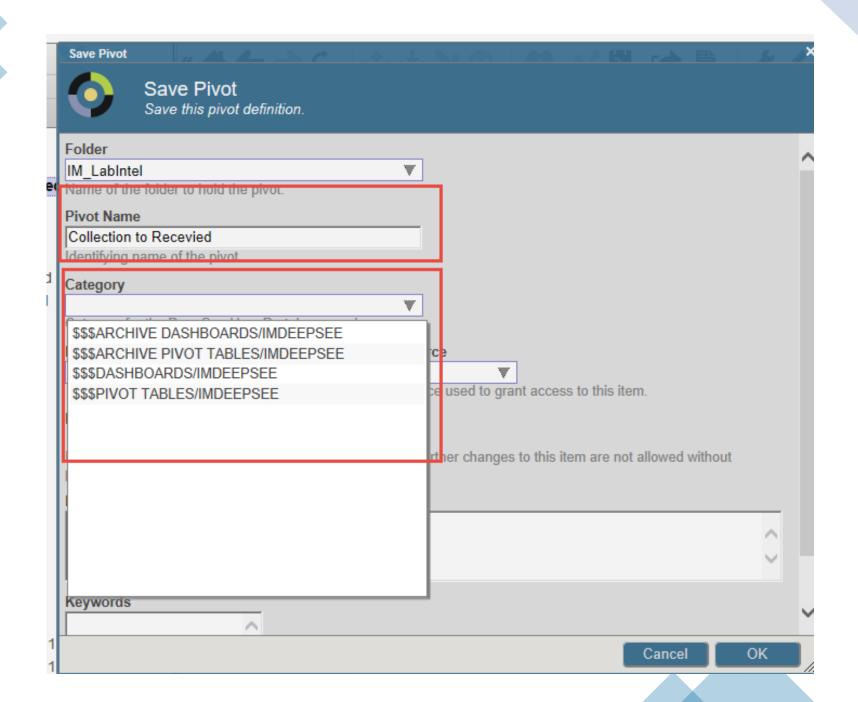


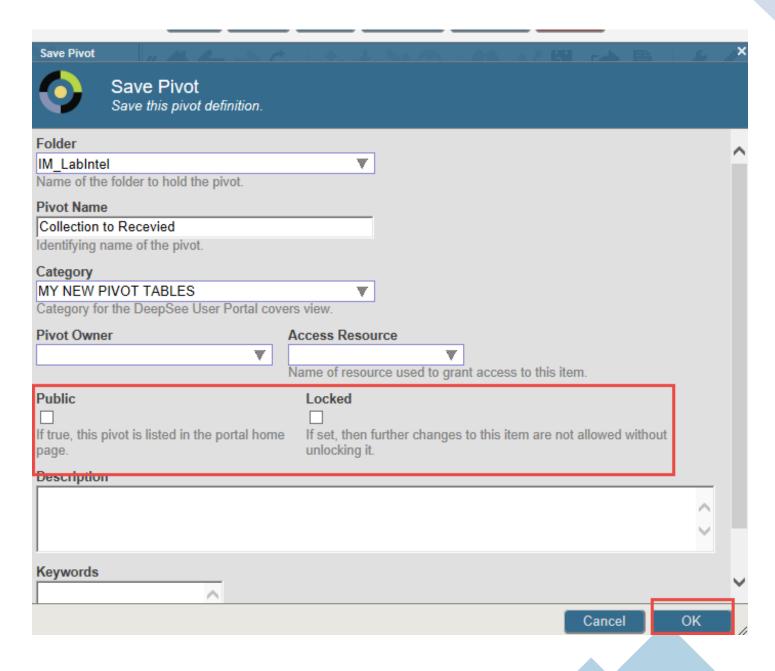












## Key **Performance Indicators** (KPI)



- Collection to Received
- Received to Query
- Query to Result
- Result to Released
- Collection to Released
- Received to Released
- Received to Result
- Number of Hemolyzed Samples
- Percent Autovalidation
- Number of Samples and/or Tests per Day or Month,
  Number of QC Violations per
- Day/Month



Choose KPI

KPI is represented by Specimen or Test Level Data?

Configure Pivot Table

Create New Dashboard

Create Widget to Display KPI Data

Filters

Controls

## **Upcoming Webinars & Virtual Events**

COVID-19 Rapid Results Platform
Oct. 28, 2020
10:00 AM PT /1:00 PM ET

Virtual Thought Leadership Event

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