

# Disclaimer

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# DSCSA Pilot Project Program

## Participant Results (3)

Program Participant/Speaker <i>(All partnering entities are not listed)</i>	Pilot Project
Rymedi Jason Cross	DSCSA Implementation in Intra and Inter Healthcare System Medicine Transfers
KitCheck Tim Kress-Spatz	Analyzing gaps and addressing key concerns and testing key concepts relating to the 2023 DSCSA requirements by utilizing and adapting existing commercial methods and technologies
IBM/KPMG/Merck/Walmart Mark Treshock	DSCSA Blockchain interoperability Pilot
IDLogiq Kelly Nguyen	IDLogiq Next Generation Advanced REAL FIPS-Compliant Cryptographic ID Authentication with Transaction Ledger Powered by Blockchain/Distributed Ledger Technology for Decentralized Heterogeneous Global Network Computing Environment
LSPediA Riya Cao	Router Service Solution for Verification/Notification and Interoperability 2023

**We will have a Participant Panel Q&A after the above presentations.**



# FDA DSCSA Pilot Presentation

December 2020

# FDA DSCSA Pilot: Rymedi Consortium



## Tracking Healthcare System Specialty Medicine Transfers: Integrating Quality Management Systems & Real-World Evidence



Indiana University Health



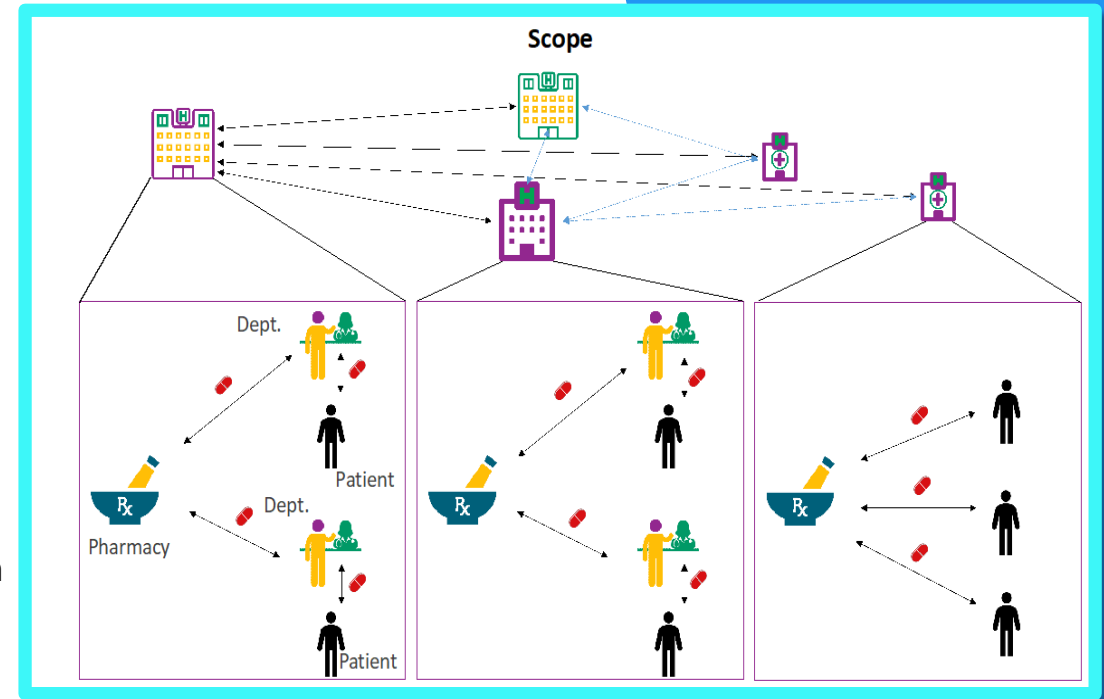
# Key Objectives

## Assess High-Visibility Process Tracking Technology Deployment

- Blockchain, IoT, AI-integrated process and data compliant architecture
- Advanced temperature monitoring sensor integration
- Simple, mobile-based UX and labeling systems
- Legacy IT system integration
- Supply and clinical workflow coordination

## Evaluate Adoption Feasibility and Supplemental Value Propositions

- Clinical care workflow enhancement
- Operations and administration efficiency improvement and risk reduction
- Standard-of-care and R&D Real-World Evidence insights
- Trading partner Real-World Evidence and operations insights



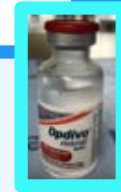
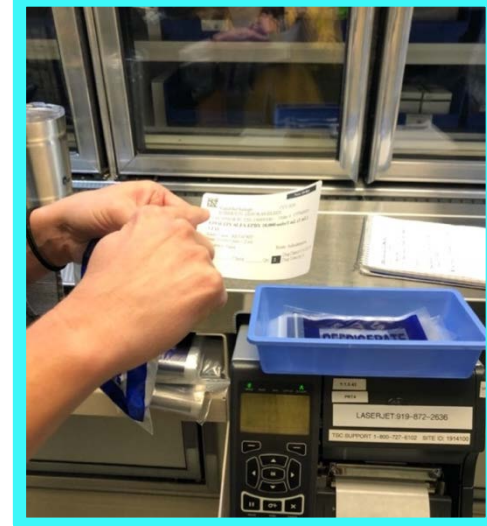
# Key Outcomes

## Promise of QMS-RWE Integration for Learning Health Systems




- Improved quality control for more sensitive medications
- Operational efficiency improvements and risk reduction
- Agile standards compliance and data-driven evolution
- Standard-of-care and R&D analytics
- Clinical trial streamlining and regulatory approval acceleration

## Challenges in Adoption of Quality Tracking to Patient Use

- Workflow integration
- Interoperability
- Business case definition
- Administrative and organizational structure and responsibilities



**Opidio**  
**Keytruda**  
**Zarxio**  
**Curosurf**  
**Retacrit**

Initial Appearance- Before Heating	End Point Appearance – After Heating
 (01)00012345600010 (10)123456 (17)211231 (21)1003 	 (01)00012345600010 (10)123456 (17)211231 (21)1003 

# Key Conclusions & Recommendations

## Value-Driven Stepwise Change Management for Medication Manufacturers and Trading Partners

- Business case for secondary approval acceleration for in-market medicines
- Treatment divisions leveraging companion digital therapeutics
- Existing research site partners at leading edge of digital integration

## Ease of Permissions Management & Data Rights Standards

- HIPAA, GDPR and Research Subjects Protections standard compliance architecture ecosystem
- Patient data rights management standards coordination
- Simplified e-consents and multi-factor authentications



# It takes an ecosystem.... Feel free to reach out!

## Contact

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## HQ Address

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Greenville, SC 29601  
USA

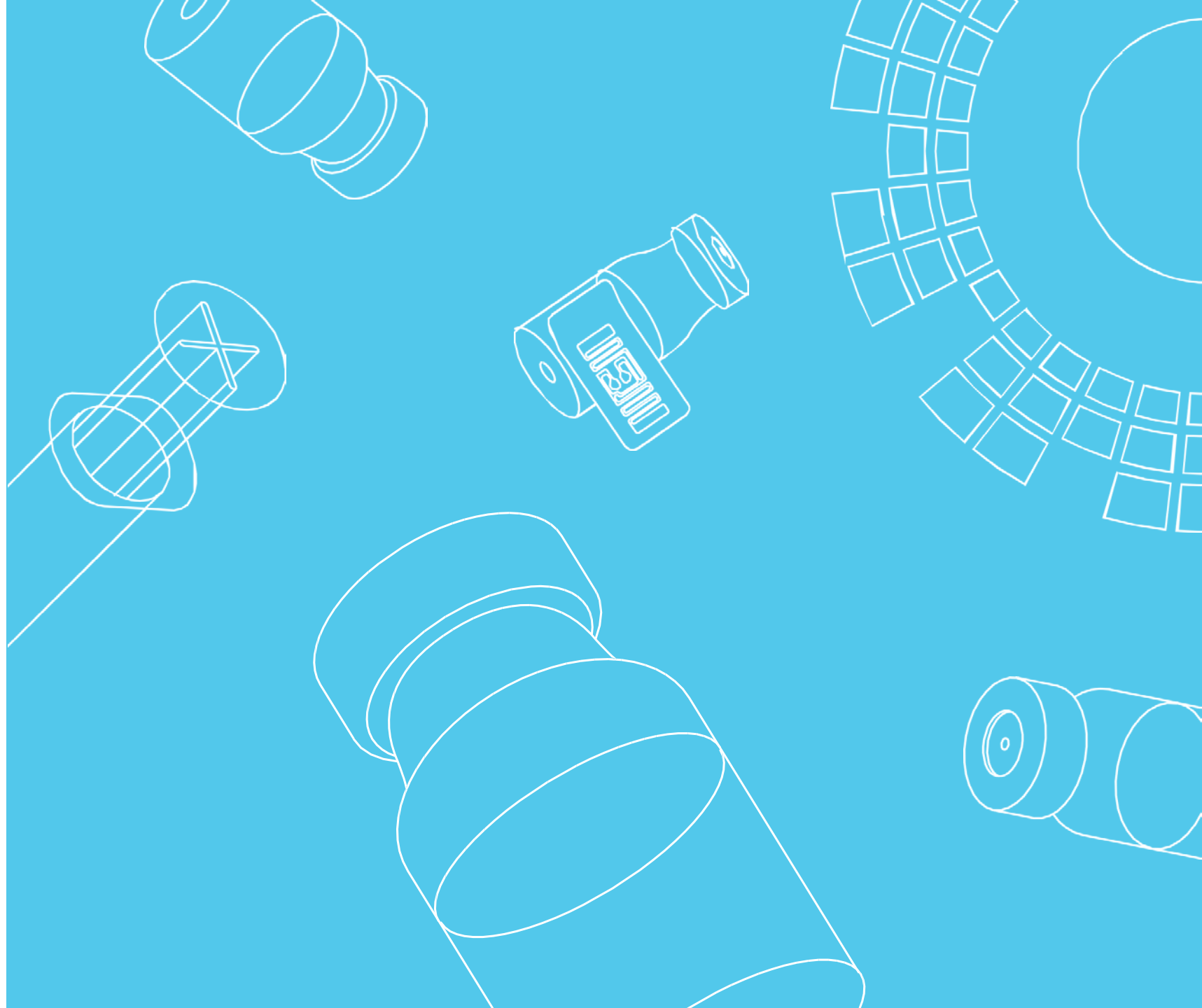




POWERED BY BLUESIGHT

## FDA DSCSA Pilot

### Kit Check + Sandoz Findings





# Key Objectives



**Improve accuracy of tracking items throughout the supply chain**



**Improve DSCSA compliance**

- **Increase data accuracy (reduce rework due to errors)**
- **Reduce cost**



**Ensure interoperability between supply chain stakeholders**

# Key Outcomes



## Centralized Item Repository

- **Unlimited item attributes and events**
- **Not constrained by barcodes printed at the time of manufacturing**
- **Compliments other tech and standards**
  - Examples: Blockchain, SN in ASN/EDI, GTIN



## Serialized item lookups

- **Expiration & “Beyond Use” Dates**
  - Example: Refrigerated drugs
- **Recalls**
  - Closed loop with manufacturer tracking
  - Partial batches
  - Manufacturer & crowdsourced notifications
- **Suspect & Illegitimate Product**
  - Manufacturer notifications
  - Automatic detection (TID & implausible occurrences)

# Key Outcomes



## Manufacturer Aggregation & Packaging

- **RFID benefits over barcode**
  - scan many at once, no line of sight, anti-counterfeit
- **RFID tags increased unit-dose cost by an average of 5-7 cents**
- **Using RFID improved SC efficiency because the data carrier didn't necessitate line of site**



## Cost-neutral, overall

 **Tags are more expensive than barcodes**

 **SC Efficiency**

 **Reduced aggregation errors**

# Conclusion



**FDA should allow RFID as a data carrier for DSCSA data  
(with backup barcode)**



**FDA shouldn't dictate technologies & implementations**

- **Example: dictating “how” data gets exchanged**
- **Allow for simplicity and flexibility**



# Conclusion



**Manufacturers should consider RFID-based aggregation workflows**

- **Address data integrity gaps for aggregation**
- **Reduce efforts to gather SN data for an investigation**
- **Enable downstream workflows & technologies**

02

# Conclusion



## Unit-dose Serialization + MDR

- Already proven that customers are willing to pay for this on over 100 million drugs



## Helps with

- Inventory Management
- Recalls
- Suspect/Illegitimate Product
- Automation
- Data for manufacturers and FDA

03



# Conclusion

**DSCSA ≠ full supply chain security**



That serial number  
[in the salable-unit barcode]  
is only good



until it encounters a pair of scissors.

**The real goal is full supply chain security,  
which means the combination of:**

- **unit-dose serialization**
- **a centralized master data repository**



# Next Steps

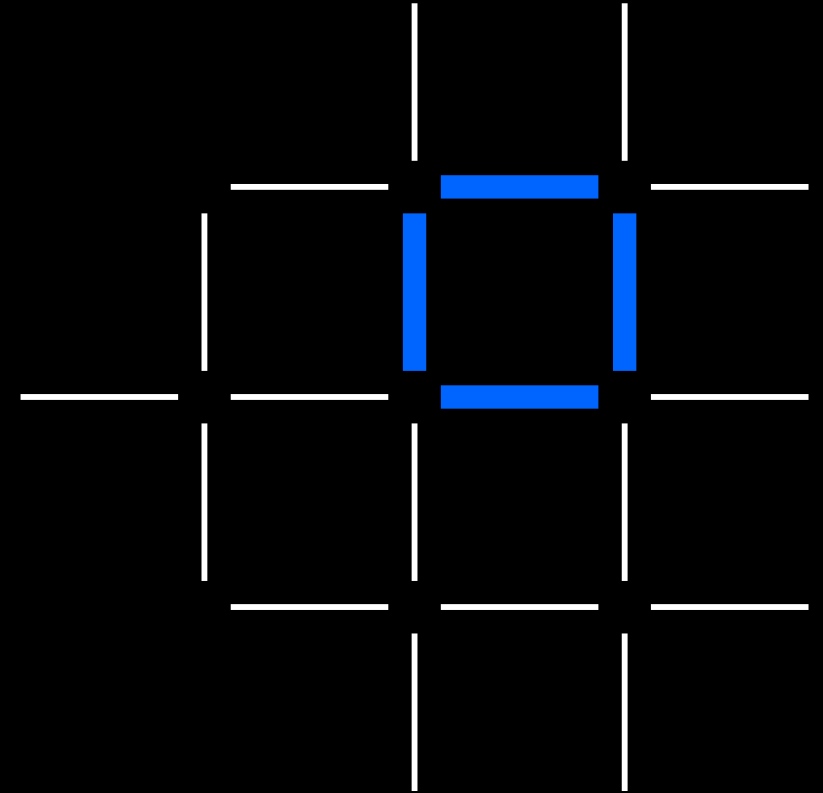
1. Sandoz launching 6 RFID-tagged products in Q4-Q1
2. Kit Check bringing other pharma manufacturers live
3. Pilots with other service providers to show inoperability
  - Digital recalls
  - Efficiency of gathering data for investigations
  - Verifications using RFID technology as a data carrier  
(small increase in cost addresses many of the data errors and gaps)
4. Thinking Beyond 2023
  - Interoperable platform
  - Tools for high-speed manufacturing lines



# FDA DSCSA Blockchain Interoperability Pilot

FDA DSCSA Pilot Project Program  
Participant Meeting

December 8, 2020




# 00 Agenda



**01 Objectives**



**02 Key Features**

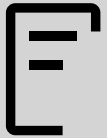


**03 Value Beyond  
Compliance**



**04 Recommendation**

# 01 Objectives



## Supply Chain Provenance

Demonstrate that blockchain can provide a common record of product movement by connecting disparate systems and organizations to meet DSCSA 2023 interoperability requirements in a secure way.



## Patient Safety

Improve patient safety by triggering product alerts and increasing visibility to relevant supply chain partners in the event of a product investigation or recall.

## Pilot

The Pilot was successful in demonstrating both stated objectives.

## 02 Key Features



Integrated manufacturer enterprise system to private permissioned blockchain and enabled **post of product commissioning** transaction.



Recorded subsequent **receive, ship and dispense actions** from manufacturer, distributor and dispenser on the blockchain ledger including established order and one up / one down privacy of information sharing.

Created **product query function** to verify product data.

Enabled **alerts** to be sent to product holders in the event of an investigation



Enabled **product recall communications** to be sent in a targeted manner

## 03 Value Beyond Compliance

With a digital record following product movement, new opportunities to solve key challenges can be explored:



### Cold Chain Logistics

Add data collected from IoT sensors to create an environmental history for each serialized product.

### Drug Shortages

Analyze aggregated data across the platform to identify and address product shortages before they occur.



### Inventory Management

Streamline processes to introduce a lean supply chain with optimized inventory management.

## 04 Opportunities

To foster industry adoption, an egalitarian, inclusive, open-sourced commercial solution should be considered to help launch a blockchain network intended for information exchange of the pharmaceutical product transactions in the United States.

### DSCSA

1. Accelerate the formation of supporting **policies**
2. Assisting the pharmaceutical supply chain stakeholders with **guidelines** to help extend existing industry standards to support this solution
3. Establish a **communication channel** with industry players who are developing similar solutions to share findings, received guidance, and actively collaborate

### Beyond DSCSA

1. The number of **cold chain products** is rapidly increasing with new biologics, biosimilars and vaccines, urging the need for temperature-control monitoring.
2. Expanded capabilities may require **cross-agency, global collaboration** to assist in **drug recalls**, mitigating **drug shortages** and other public health events.
3. A **platform centric approach** that meets the needs of many agencies and enables DSCSA will accelerate deployment and adherence.



**Thank you**



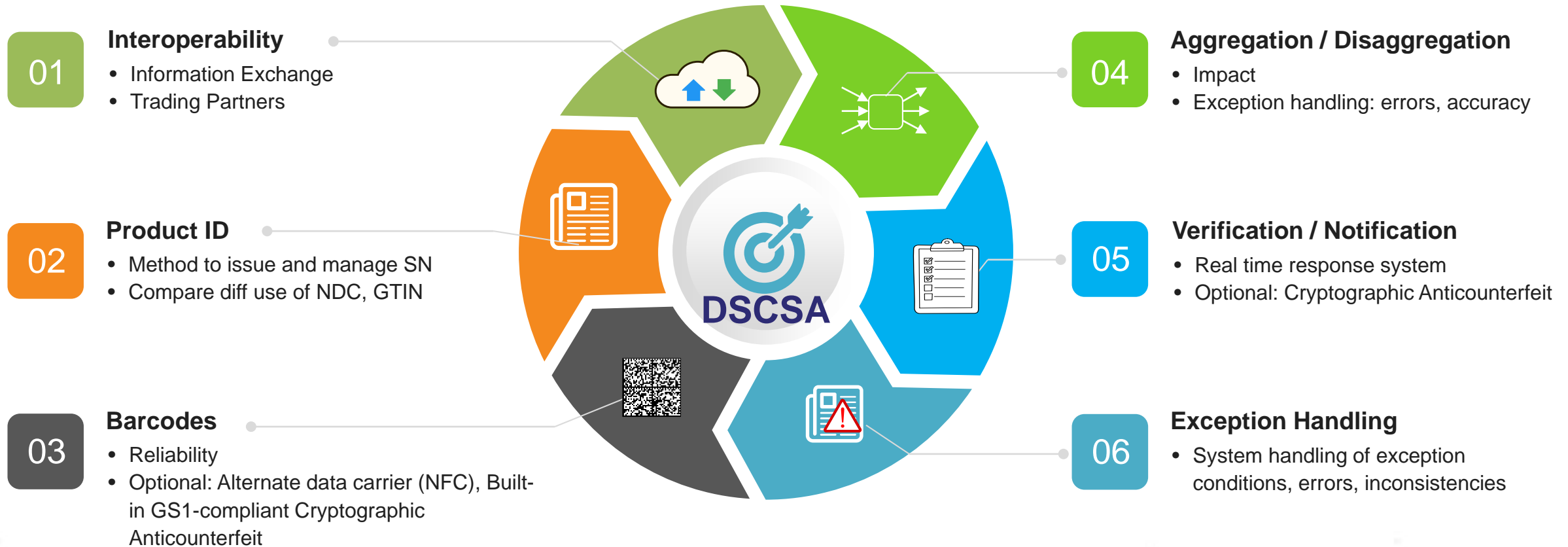
Cryptographic Identity Authentication (CIA)



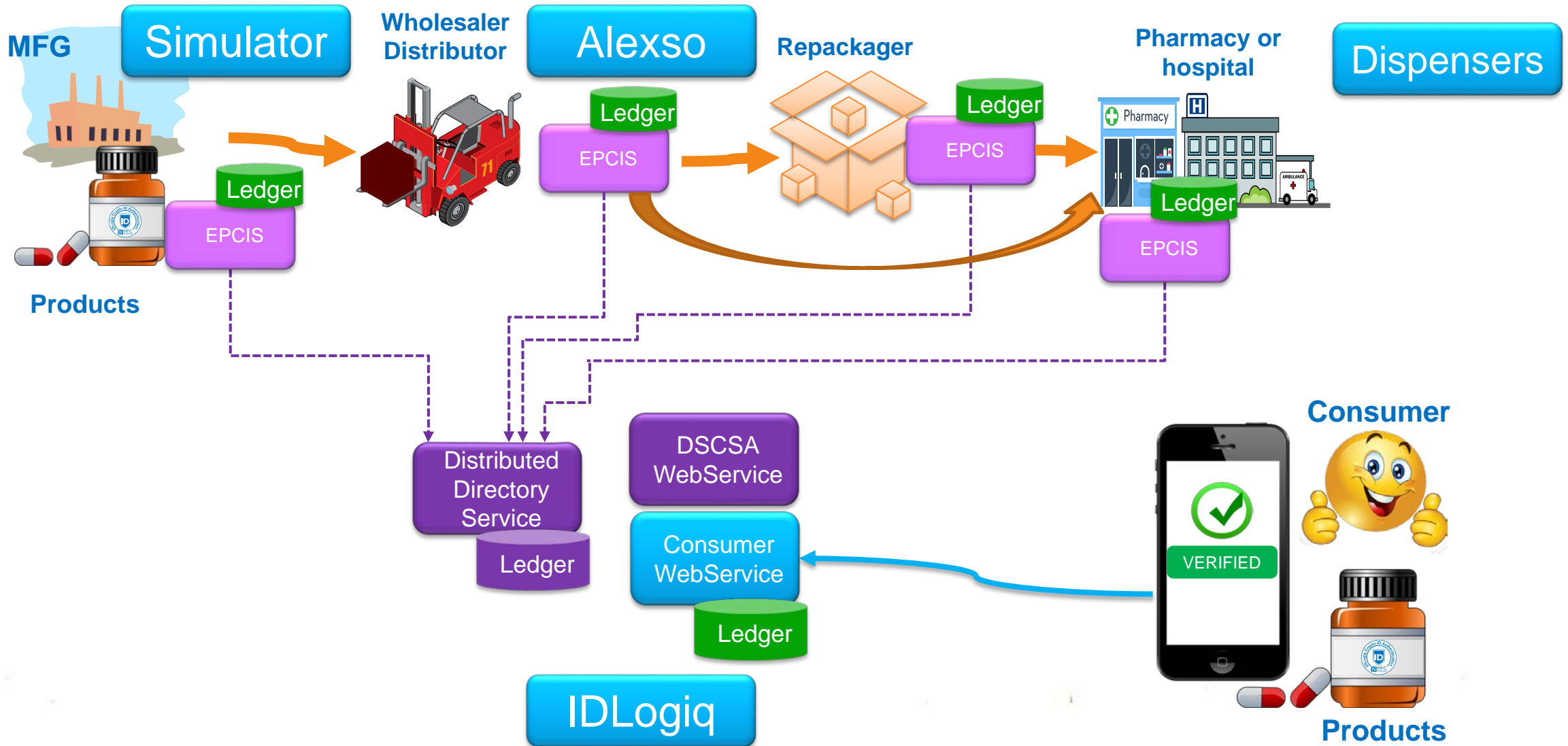
**IDLogiq Inc.**  
**FDA DSCSA Pilot**



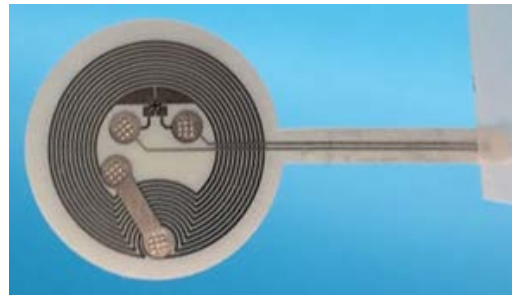
# Pilot Project Key Objectives



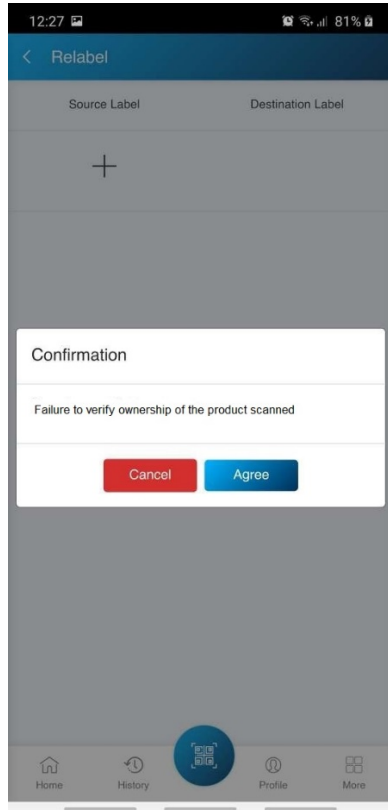
# Introduction – Workflows of Entities Participated in the Pilot



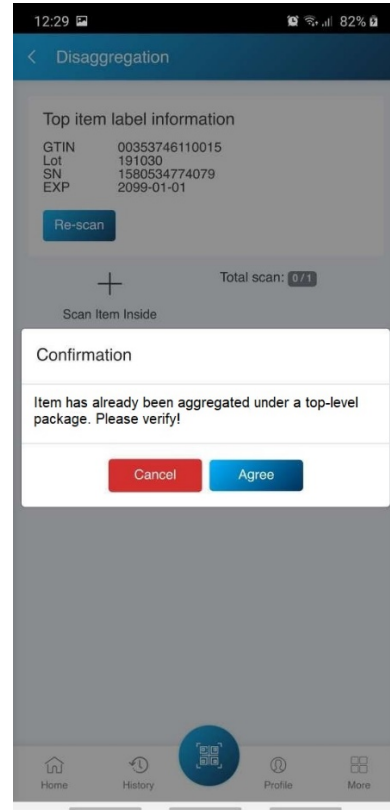
# Examples / Demo



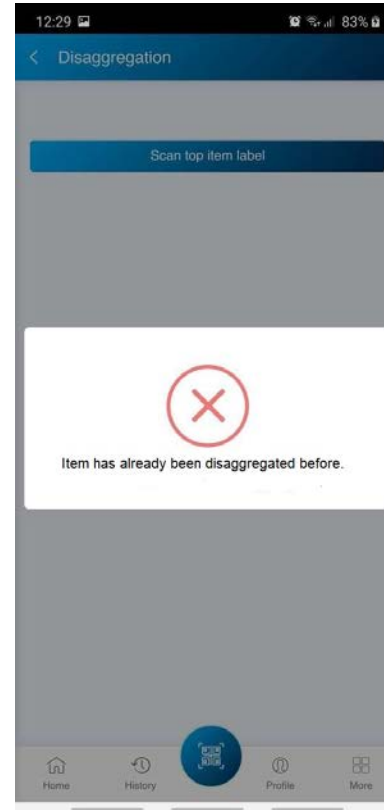
# Example Screenshots of Errors, Exception Condition



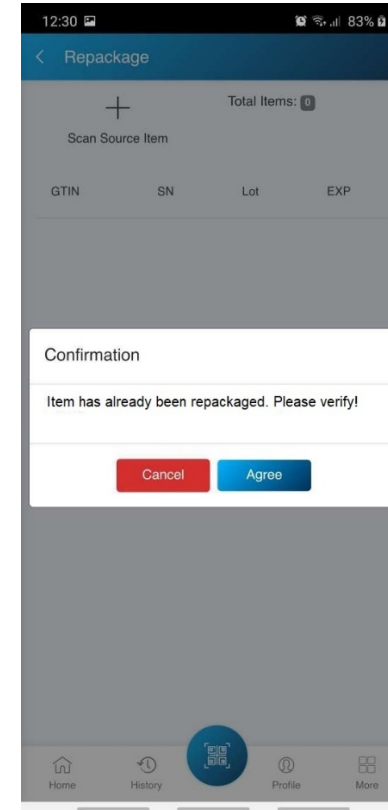
Repackaging:  
Invalid ownership of  
product



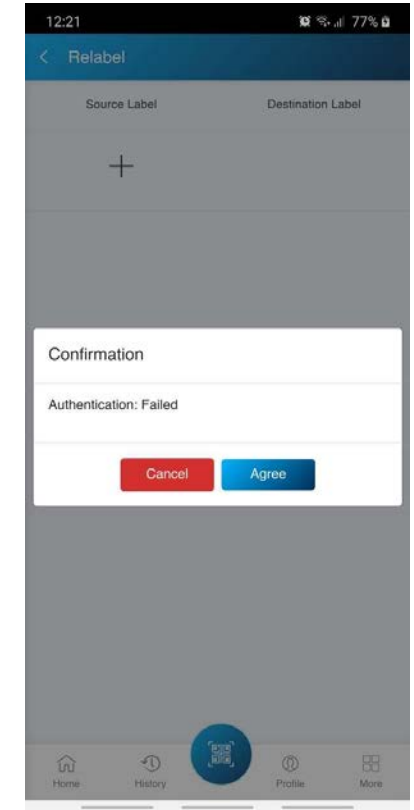
Aggregation: Items  
has already been  
aggregated



Dis-aggregation:  
Item has already  
been disaggregated

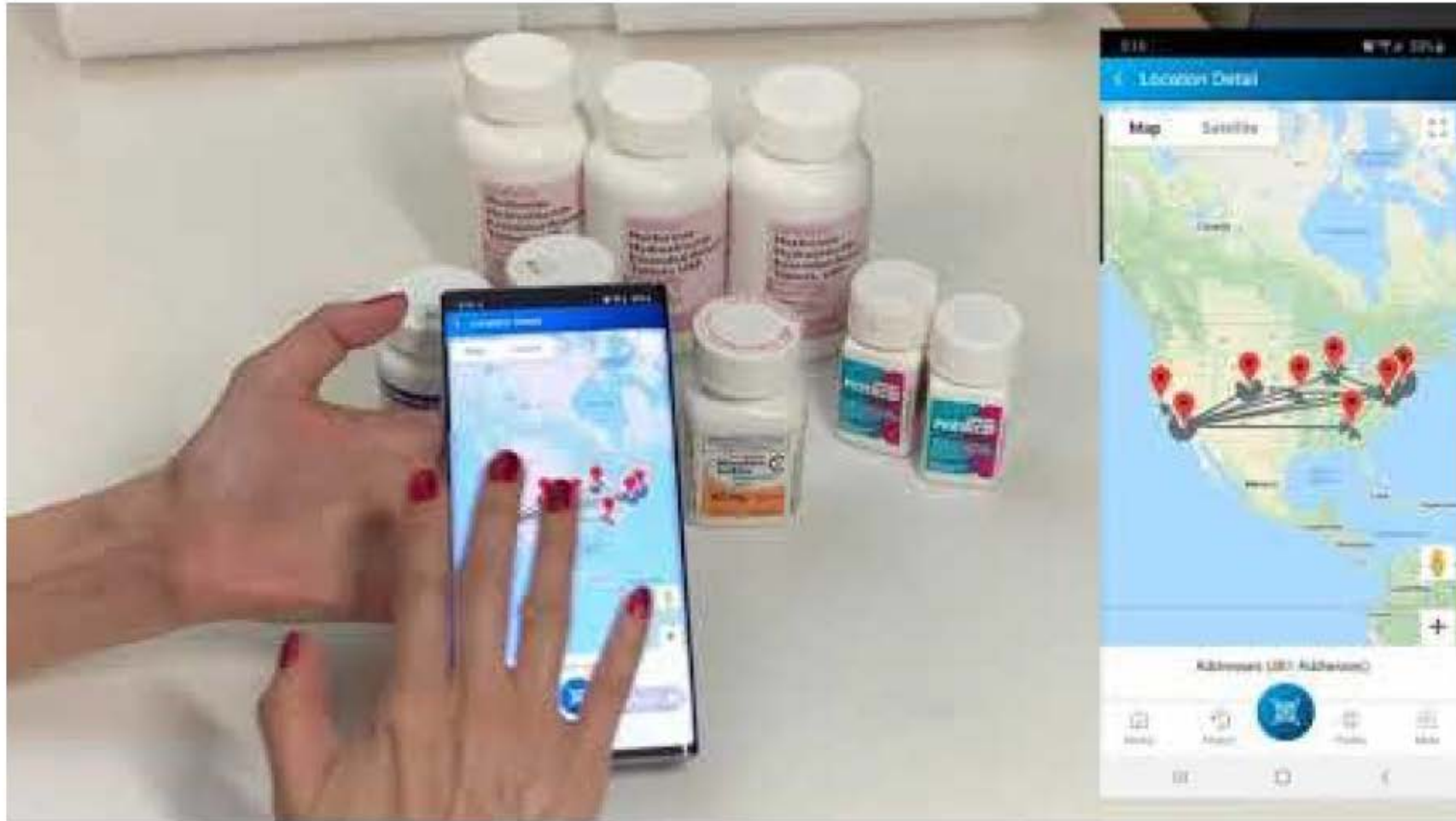


Repackaging:  
Item has already  
been repackaged



Counterfeit  
detected via  
Cryptographic ID  
Authentication

# Video Track and Trace of a Product Life Cycle



# Example: TI Reports



Shipping Information											
Shipped Date	2019-11-19T22:19:41.000Z										
Shipped From	SA3, LLC										
Shipped To	Alpha Medical Pharmacy Inc Gabriel Blvd										
(TI) Item Shipped											
ID	Shipped Date	Product	NDC	UPC	Dosage Form	Strength	Container Size	MFG	Qty	Lot	Serial Number
488c53b4 65a4 43c2 b2c6 a4f853e41646	2019-11-19T22:19:41.000Z	Naproxen Sodium	69420-1375-1	"00369420137513"	TABLET, FILM COATED, EXTENDED RELEASE	"375 mg/1"	100 TABLET, FILM COATED, EXTENDED RELEASE in 1 BOTTLE (69420-1375-1)	SA3, LLC	1	191113	3606440918495544
488c53b4 65a4 43c2 b2c6 a4f853e41646	2019-11-19T22:19:41.000Z	Naproxen Sodium	69420-1375-1	"00369420137513"	TABLET, FILM COATED, EXTENDED RELEASE	"375 mg/1"	100 TABLET, FILM COATED, EXTENDED RELEASE in 1 BOTTLE (69420-1375-1)	SA3, LLC	1	191113	3616870985969605
488c53b4 65a4 43c2 b2c6 a4f853e41646	2019-11-19T22:19:41.000Z	Naproxen Sodium	69420-1375-1	"00369420137513"	TABLET, FILM COATED, EXTENDED RELEASE	"375 mg/1"	100 TABLET, FILM COATED, EXTENDED RELEASE in 1 BOTTLE (69420-1375-1)	SA3, LLC	1	191113	3661003717595213
488c53b4 65a4 43c2 b2c6 a4f853e41646	2019-11-19T22:19:41.000Z	Naproxen Sodium	69420-1375-1	"00369420137513"	TABLET, FILM COATED, EXTENDED RELEASE	"375 mg/1"	100 TABLET, FILM COATED, EXTENDED RELEASE in 1 BOTTLE (69420-1375-1)	SA3, LLC	1	191113	3682584920443046
488c53b4 65a4 43c2 b2c6 a4f853e41646	2019-11-19T22:19:41.000Z	Naproxen Sodium	69420-1375-1	"00369420137513"	TABLET, FILM COATED, EXTENDED RELEASE	"375 mg/1"	100 TABLET, FILM COATED, EXTENDED RELEASE in 1 BOTTLE (69420-1375-1)	SA3, LLC	1	191113	3753489221457785
488c53b4 65a4 43c2 b2c6 a4f853e41646	2019-11-19T22:19:41.000Z	Naproxen Sodium	69420-1375-1	"00369420137513"	TABLET, FILM COATED, EXTENDED RELEASE	"375 mg/1"	100 TABLET, FILM COATED, EXTENDED RELEASE in 1 BOTTLE (69420-1375-1)	SA3, LLC	1	191113	3781595217834361
488c53b4 65a4 43c2 b2c6 a4f853e41646	2019-11-19T22:19:41.000Z	Naproxen Sodium	69420-1375-1	"00369420137513"	TABLET, FILM COATED, EXTENDED RELEASE	"375 mg/1"	100 TABLET, FILM COATED, EXTENDED RELEASE in 1 BOTTLE (69420-1375-1)	SA3, LLC	1	191113	3781763940180028



# Example: TH Reports



GTIN	Serial Number	Timestamp	Transaction Type	Lot Number		Description
00369420137513"	3606440918495544	2019-11-19T22:19:41.000Z	SHIPPING	191113	8/30/2021	Shipping from SA3 to Alpha Medical Pharmacy Inc Gabriel Blvd
00347781153014"	4689415182531103	2019-11-19T21:19:15.000Z	Repackage	191113	8/30/2021	SA3 repackaged from 00347781153014.4689415182531103 to 00369420137513.3606440918495544
00347781153014"	4689415182531103	2019-11-15T10:18:02.934Z	SHIPPING	191113	8/30/2021	SHIPPING from Alvogen Manufacturer to SA3
00369420137513"	3616870985969605	2019-11-19T22:19:41.000Z	SHIPPING	191113	8/30/2021	Shipping from SA3 to Alpha Medical Pharmacy Inc Gabriel Blvd
00347781153014"	3623183817940961	2019-11-19T21:19:15.000Z	Repackage	191113	8/30/2021	SA3 repackaged from 00347781153014.3623183817940961 to 00369420137513.3616870985969605
00347781153014"	3623183817940961	2019-11-15T10:18:02.934Z	SHIPPING	191113	8/30/2021	SHIPPING from Alvogen Manufacturer to SA3
00369420137513"	3661003717595213	2019-11-19T22:19:41.000Z	SHIPPING	191113	8/30/2021	Shipping from SA3 to Alpha Medical Pharmacy Inc Gabriel Blvd
00347781153014"	5661445665230668	2019-11-19T21:25:11.000Z	Repackage	191113	8/30/2021	SA3 repackaged from 00347781153014.5661445665230668 to 00369420137513.3661003717595213
00347781153014"	5661445665230668	2019-11-15T10:18:02.934Z	SHIPPING	191113	8/30/2021	SHIPPING from Alvogen Manufacturer to SA3
00369420137513"	3682584920443046	2019-11-19T22:19:41.000Z	SHIPPING	191113	8/30/2021	Shipping from SA3 to Alpha Medical Pharmacy Inc Gabriel Blvd
00347781153014"	7170071169111973	2019-11-19T21:30:36.000Z	Repackage	191113	8/30/2021	SA3 repackaged from 00347781153014.7170071169111973 to 00369420137513.3682584920443046
00347781153014"	7170071169111973	2019-11-15T10:18:02.934Z	SHIPPING	191113	8/30/2021	SHIPPING from Alvogen Manufacturer to SA3

# Pilot Project Key Outcomes

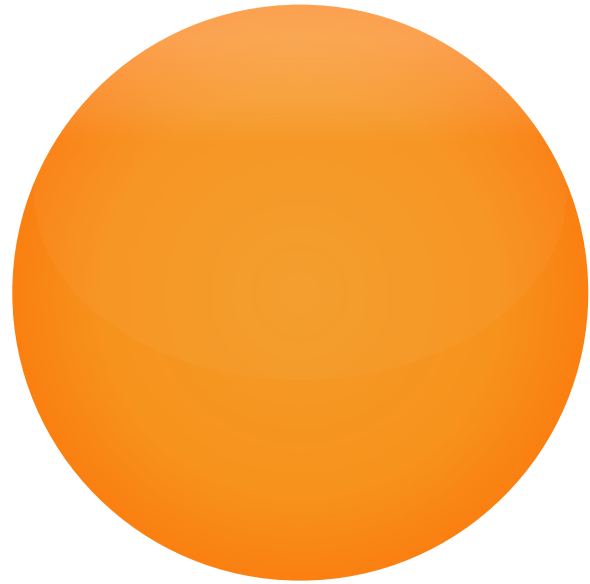


- Interoperability
  - ASN EDI 856 legacy or vendor-specific proprietary XML still widely used
  - Issues with getting cooperation from a different technology provider. We think this will continue to be a major hurdle for the industry because it is more political than technological problems.
- Serialization
  - Common trend: use GTIN
- Barcode
  - Successful on both curved and flat surface
  - Also, NFC was successfully used together with barcode
- Aggregation/Disaggregation
  - Without good process automation software, production could be heavily impacted
- Verification/Notification
  - Human errors due to mismanagement should be seriously considered
  - Without robust automation software, this would be a very challenging task

# Key Conclusions and Recommendations



- Interop will require cooperation from ALL parties.
  - Not so much a technology issue, but a complex topic politically
  - Recommendation: FDA to promote corporation between all technology developers and trading partners.
  - Interop test lab, test suites
- Automation software is necessary for package level tracing at all phases of production and DSCSA events to mitigate errors / exception condition due to technical and human errors.
  - Aggregation, Disaggregation, Repackaging, Shipping, Receiving, simple ownership transfer
- Would be helpful if FDA defines a standard and examples for the details of the report and terminology inside TI and TH.
  - Potential interop issues



**THE END**

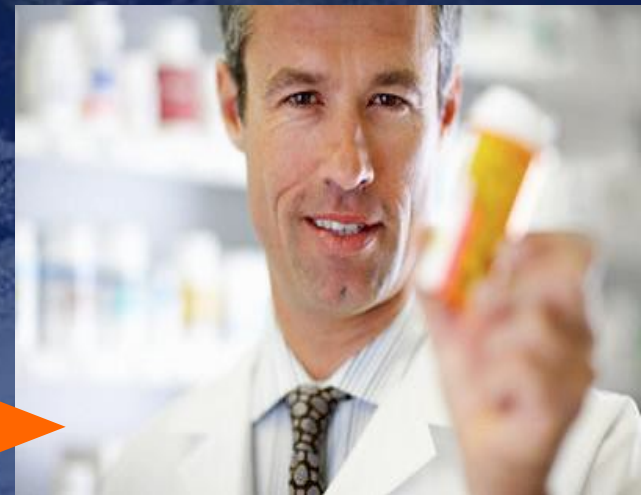
Contacts:  
Email: [info@dlogiq.com](mailto:info@dlogiq.com),

# FDA DSCSA Pilot Project Program



**Router Service Solution for Verification/Notification and Interoperability 2023**

December 2020



## Safe Harbor Statement

All information in this presentation is current as of today. LSPediA undertakes no duty to update any statement in light of new information or future events.

This presentation is intended for information purposes only and may not be incorporated into any contract.

## Agenda

- Goals & Objectives
- Partnering Entities
- Evaluation Method
- Products
- Results
- Lessons Learned
- Recommendations
- Summary
- Q&A

## Presenters



Riya Cao  
CEO

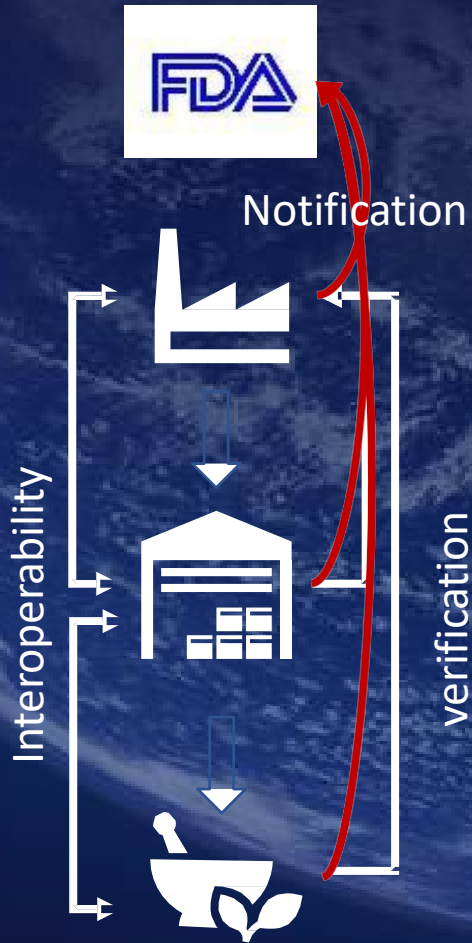
## Objectives

- Use existing technology
  - Router Service Network
  - LSPediA OneScan solution
- Effectively meet DSCSA requirements
  - Verification
  - Notification
  - Interoperability
- Utilizing Product Identifier





## Partnering Entities



**Trading Partner**

**Name**

Manufacturer

Kowa Pharma



Ingenus Pharma



Wholesale Distributor

AmerisourceBergen



Smith Drug



Auburn Pharma



Dispenser

SpartanNash



## Live Inventory

## Seeded Bottles



## End to End Supply Chain Test

### Round 1 – Test Scenarios

Requestor	Pilot Scan Round
Round 1 (red #1)	V
Round 1 (red #2)	V
Round 1 (red #3)	V

### Round 2 – Test Scenarios


Requestor	Return Code
Round 2 (green #1)	200 Not Verified
Round 2 (green #2)	200 Not Verified
Round 2 (green #3)	200 Not Verified

### Round 3 – Test Scenarios

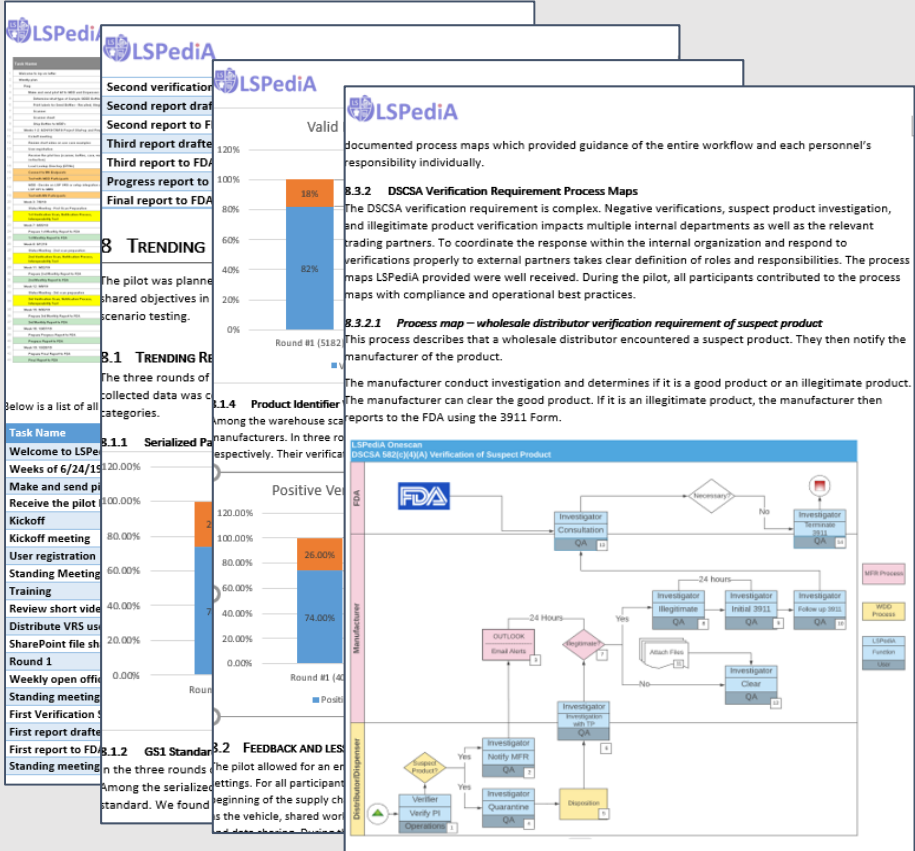
Requestor	VRS			Responder		Requestor
	Pilot Scan Round	Return Code	Reason Code	VRS Automatic Activity		
Round 3 (blue #1)	200 Not Verified	No Match GTIN SERIAL LOT EXPIRY	Investigation Record created. Email Notification sent to Responder	Responder receives Email and Investigates Item. Item is not verified - Responder determines item is suspicious	Responder changes status of Notification to SUSPECT for further investigation. Responder Initiates 3911	Requestor will rescan item. Item will scan Not Verified -Suspect
Round 3 (blue #2)	404			After further investigation, Responder determined item is illegitimate	Responder changes status of Notification to ILLEGITIMATE. Responder does F/U 3911	Requestor will rescan item. Item will scan Not Verified, Illegitimate. Item needs to be quarantined.
Round 3 (blue #3)	200 Verified	Manufacturer – Suspect				Requestor - Put to quarantine.
Round 3 (blue #4)	Test for Interoperability			The Transaction Information/ Transaction Statement report for the item will show.		
Round 3 (blue #5)	Test for VRS Security			A notification email will go out informing the responder of a sGTIN being scanned by more than 1 GLN within 24 hours.		

## Outcomes

- LSPediA FDA DSCSA Pilot Project Final Report



**The FDA DSCSA Pilot Program**  
 Router Service Solution for  
 Verification/Notification and  
 Interoperability 2023  
*FINAL REPORT*  
 V1.4



**Valid**

Valid	82%
Invalid	18%

Round #1 (5182)

**Positive Verification**

Positive Verification	74.00%
Other	26.00%

Round #1 (40)

**Task Name**

Welcome to LSPediA	100.00%
Weeks of 6/24/19	100.00%
Make and send pilot	100.00%
Receive the pilot	100.00%
Kickoff	100.00%
Kickoff meeting	100.00%
User registration	100.00%
Standing Meeting	100.00%
Training	100.00%
Review short video	100.00%
Distribute VRS user	100.00%
SharePoint file share	100.00%
Round 1	100.00%
Weekly open office	100.00%
Standing meeting	100.00%
First Verification	100.00%
First report drafted	100.00%
First report to FDA	100.00%
Standing meeting	100.00%

**8.3.2 DSCSA Verification Requirement Process Maps**

The DSCSA verification requirement is complex. Negative verifications, suspect product investigation, and illegitimate product verification impacts multiple internal departments as well as the relevant trading partners. To coordinate the response within the internal organization and respond to verifications properly to external partners takes clear definition of roles and responsibilities. The process maps LSPediA provided were well received. During the pilot, all participants contributed to the process maps with compliance and operational best practices.

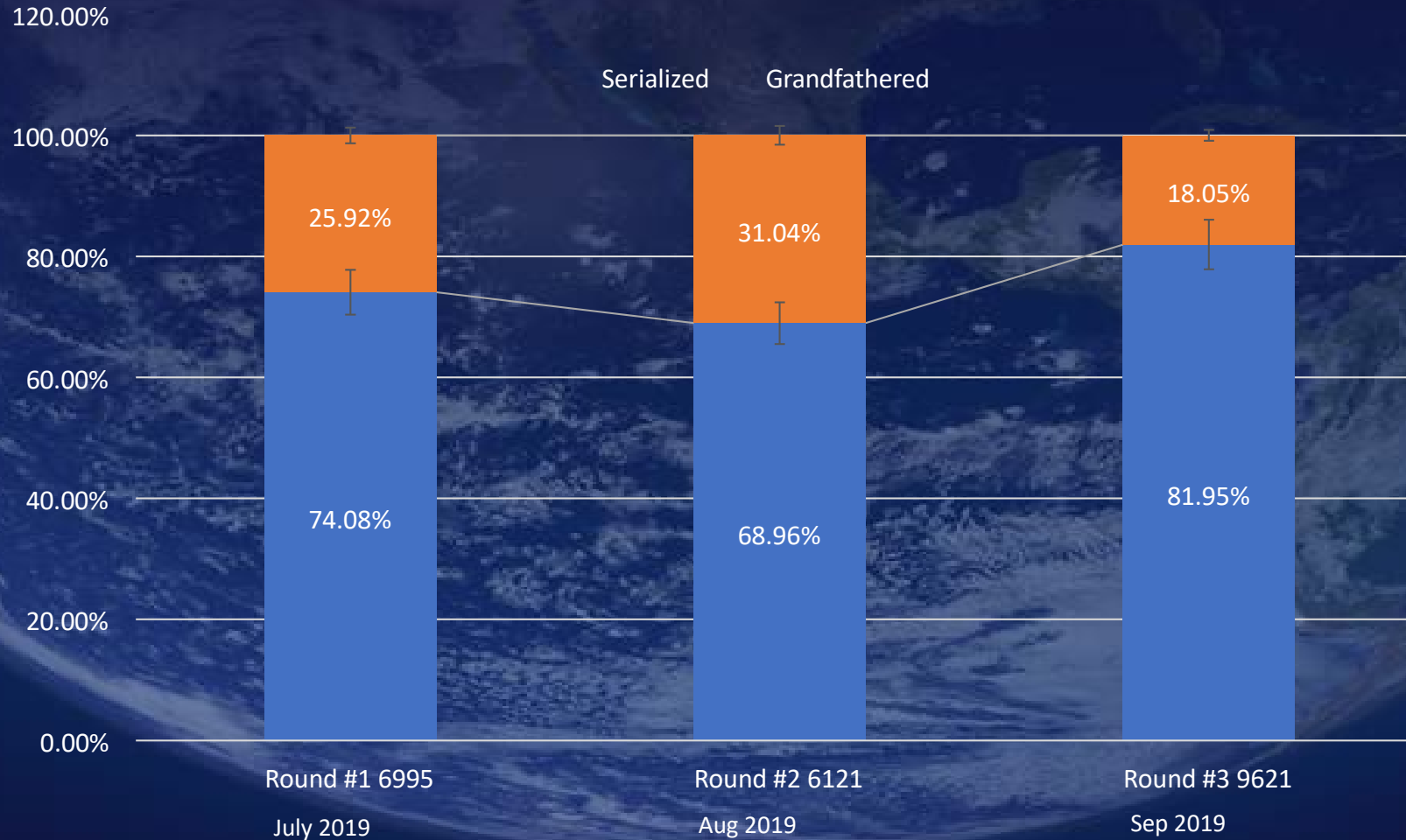
**8.3.2.1 Process map – wholesale distributor verification requirement of suspect product**

This process describes that a wholesale distributor encountered a suspect product. They then notify the manufacturer of the product. The manufacturer conduct investigation and determines if it is a good product or an illegitimate product. The manufacturer can clear the good product. If it is an illegitimate product, the manufacturer then reports to the FDA using the 3911 Form.

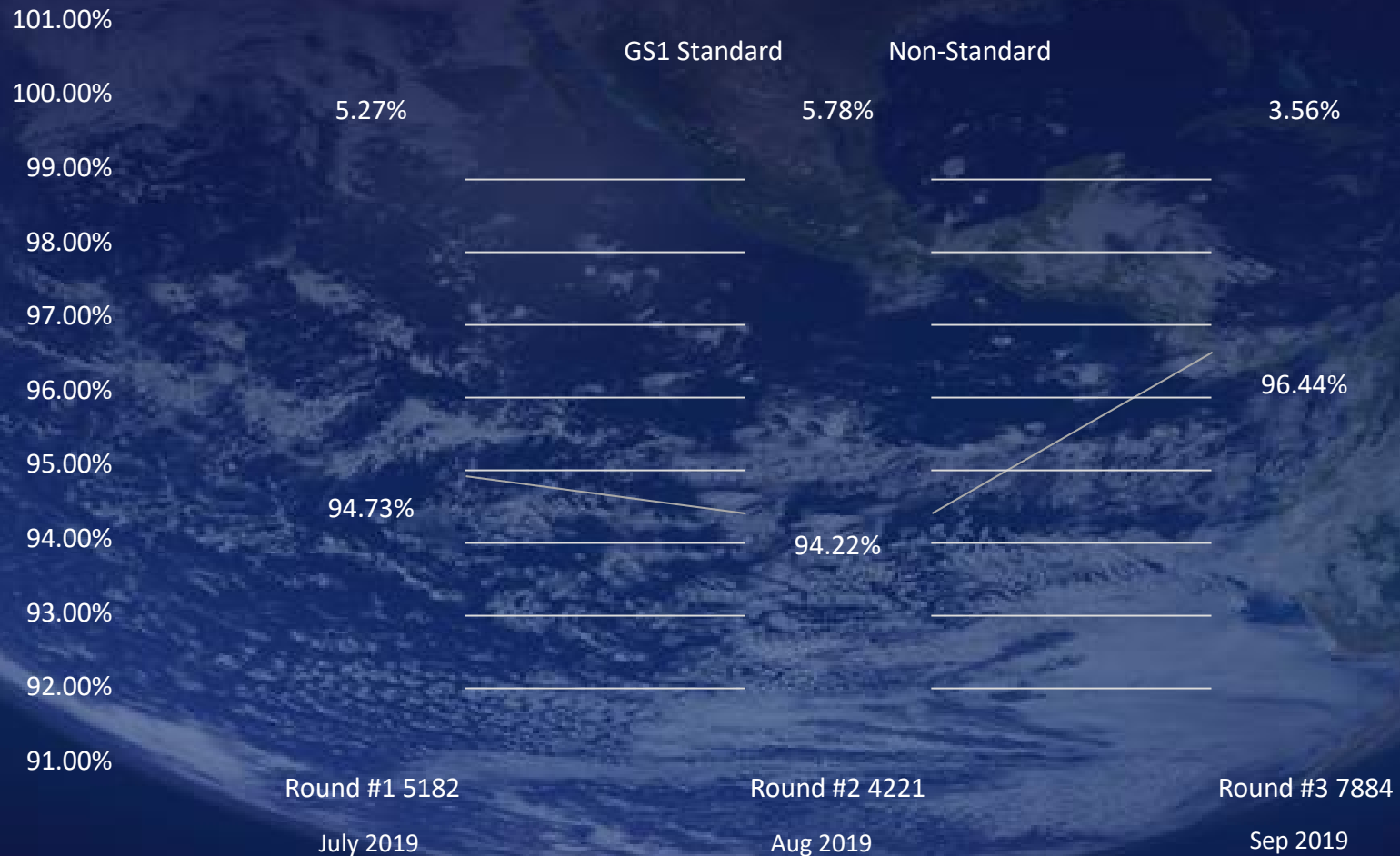
**8.3.2 FEEDBACK AND LESSONS LEARNED**

The pilot allowed for an enhanced understanding of the requirements. For all participants, the beginning of the supply chain is the vehicle, shared work...

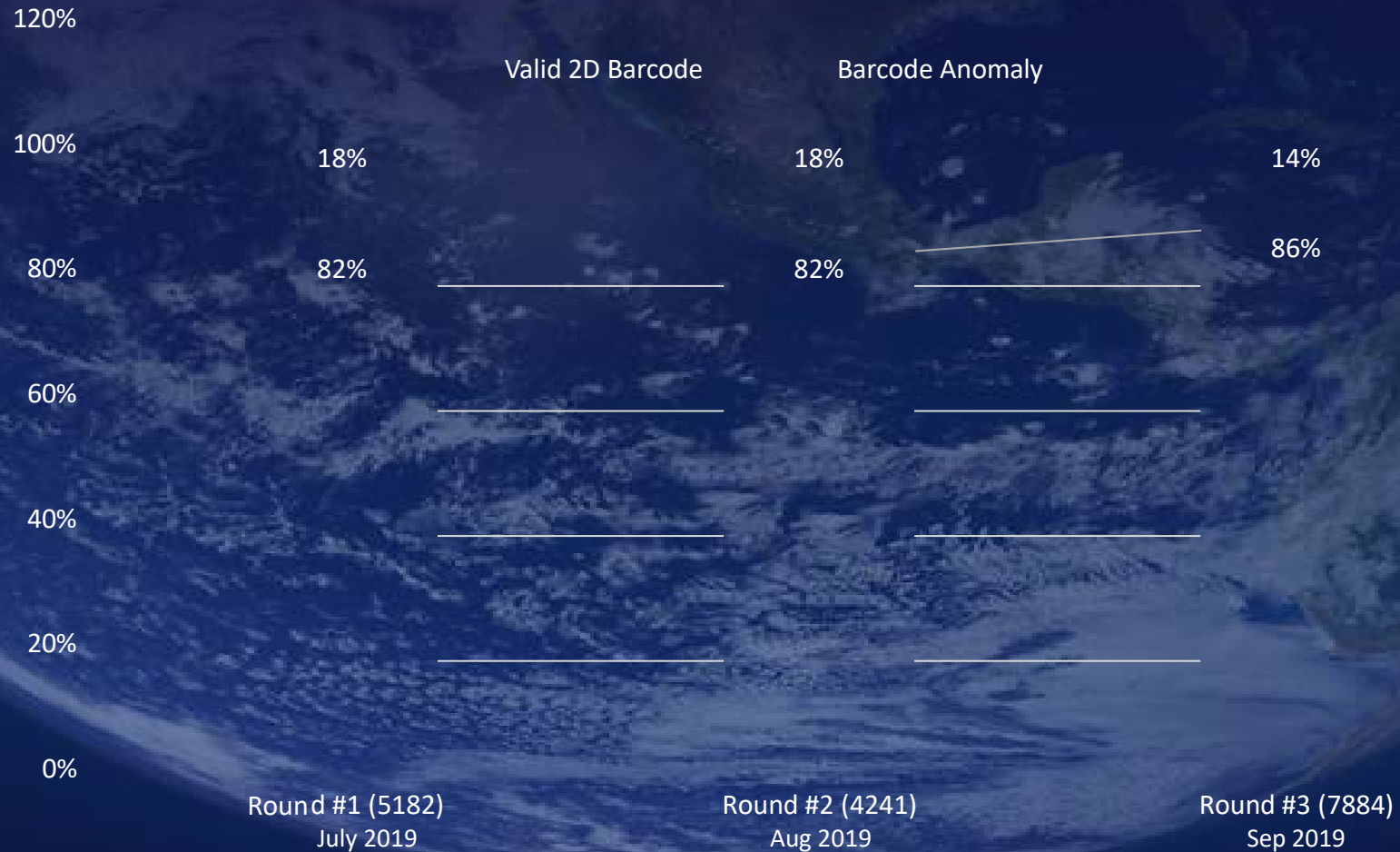
## Outcomes - Serialized v. Grandfathered



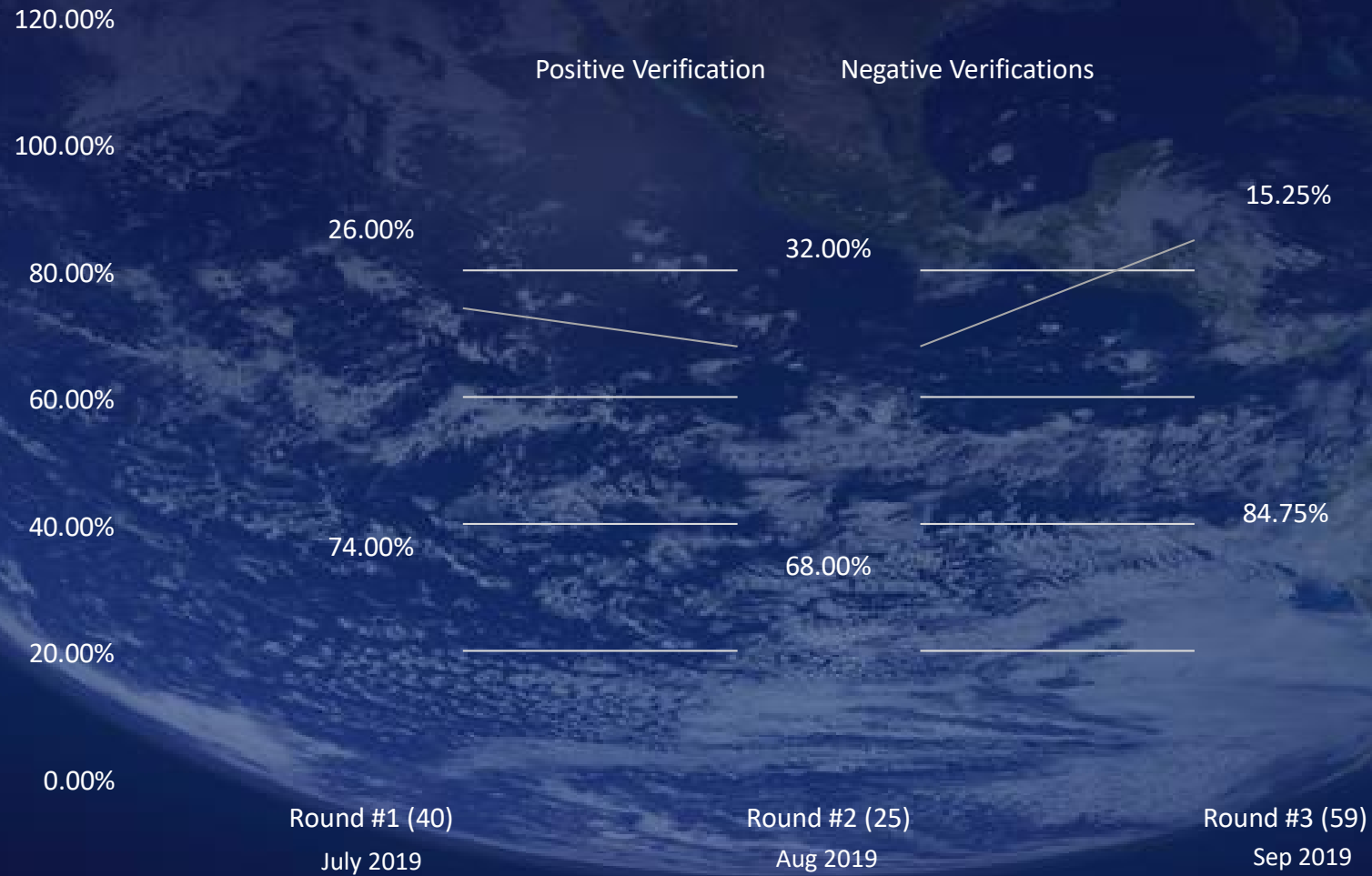
## Outcomes - GS1 Standard v. Non-Standard



## Outcomes - Valid Barcode v. Barcode Anomaly



## Outcomes - Positive Verification v. Negative





## Notification

The screenshot displays the LSPediA Notification interface. At the top, there is a navigation bar with tabs for Dashboard, Verify, LD, History, Interoperability, Notification (selected), Reports, ADR, Portal, and VRS. The user is logged in as IngenusProvider. An 'Export' button is located in the top right corner. Below the navigation bar is a table with the following columns: Select, NDC, GTIN, Lot Number, Serial, Status, Start Exp., End Exp., and Source. The table contains several rows of data, including entries for 'Suspect' and 'Recall' statuses. A red circle highlights the 'Action' dropdown menu for one of the rows, which lists options: Investigate, Initial 3911, Follow Up 3911, and Termination.

Select	NDC	GTIN	Lot Number	Serial	Status	Start Exp.	End Exp.	Source
<input type="checkbox"/>						mm/dd/yyyy		
<input type="checkbox"/>	5074219001	00350742190010	1803018	J62N2A43J9CA	Suspect	2020-03-30		
<input type="checkbox"/>	5074299999	00350742999996	INGENUSHEB	100000000000079	Recall	2021-07-02		
<input type="checkbox"/>	6686999999	00366869999993	KOWAHEB	100000000000069	Recall	2022-07-02		
<input type="checkbox"/>	5074299999	00350742999996	INGENUSSPART	100000000000069	Recall	2021-07-02		
<input type="checkbox"/>	6686999999	00366869999993	KOWASPART	100000000000059	Recall	2022-07-02		
<input type="checkbox"/>	5074299999	00350742999996	INGENUSHYGEN	100000000000059	Recall	2021-07-02		
<input type="checkbox"/>	6686999999	00366869999993	KOWAHYGEN	100000000000049	Recall	2022-07-02	7/3/19 12:28 PM	FDA
<input type="checkbox"/>	5074299999	00350742999996	INGENUSSMITH	100000000000049	Recall	2021-07-02	7/3/19 10:38 AM	FDA

## 3911 Initiated with PI

**Contains Nonbinding Recommendations\***  
*Draft — Not for Implementation*

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**ATTACHMENT A: FORM FDA 3911**

DEPARTMENT OF HEALTH AND HUMAN SERVICES Food and Drug Administration		Form Approved: OMB No. xxx-xxxx Expiration Date: XXXXXX XX, 201X See PRA Statement on page 2.	
<b>Drug Notification</b>			
1. Type of Report (Select one): <input checked="" type="checkbox"/> Initial Notification <input type="checkbox"/> Follow-Up Notification <input type="checkbox"/> Request for Termination			
2. Date of Initial Notification (mm/dd/yyyy)		3. Date Illegitimate Product Was Determined by Company (mm/dd/yyyy)	4. Classification of Notification (Select from list)
Description of Illegitimate Product			
5. Generic Name			
6. Trade Name (if applicable)			
7. Drug Use (Select from list)	8. Drug Description (Select from list)	9. Strength of Drug	10. Dosage Form (Select from list)
11. Quantity Of Drug (Number and Unit)		12. NDC Number (if applicable) 5074219001	13. Serial Number (if applicable) J62N2A43J9CA
14. Lot Number(s) 1803018			
15. Expiration Dates 3/30/2020			
16. For Notification: Description of event/issue			
<b>DRAFT</b>			
<a href="#">Add Page for Item 16</a>			
17. For Request for Termination of Notification: Description of why notification is no longer necessary			

## Interoperability Utilizing Product Identifier

The screenshot shows the LSPediA web application interface. At the top, there is a navigation bar with the LSPediA logo and several menu items: Dashboard, Verify, LD, History, Interoperability (highlighted in orange), Notification, Reports, ADR, Portal, and VRS. Below the navigation bar is a form for entering product identifiers. It includes a Barcode input field with a Scan button to its right. A 'Request' section is collapsed. The form contains several input fields: Request Type (a dropdown menu), Correlation Guid (with the value '5c79a713-ad1f-410d-8acc-a5d88e71aa38' and a 'New' button), GTIN, Serial Number, and GLN (with the value '0399999000000'). At the bottom of the form are 'Verify' and 'Reset' buttons, and a 'GS1' dropdown menu. The footer of the page contains the copyright notice: '© Copyright 2019 LSPediA Inc.'

## Returns TI and TS

LSPediA Dashboard Verify LD History **Interoperability** Notification Reports ADR Portal VRS

Barcode  Scan

Request +

Result -

### Transaction Information

Product Name	Livalo 1mg 90 Tablet, Film Coated in 1 Bottle, Dispensing		Number	1.00	
Lot	3175328	Exp Date	Nov 30, 2021	Strength	1.040000 MG/1
Dosage Form	TABLET	NDC	66869010490	Size	90.00
Sender	KOWA PHARMACEUTICALS AMERICA, INC.				
Address	530 Industrial Park Boulevard Montgomery, AL 36117				
Receiver	AMERISOURCE				
Address	1300 Morris Drive Chesterbrook,, PA 19087				
Shipment Date	6/4/2019	Transaction Date	6/4/2019		

**Seller has complied with each applicable subsection of FDCA Sec. 581(27)(A)-(G)**

## Conclusion

- Existing technology viable for 2023
  - Router Service Network
  - LSPediA OneScan solution
- Effectively meet DSCSA requirements
  - Verification
  - Notification
  - Interoperability
- Utilizing Product Identifier

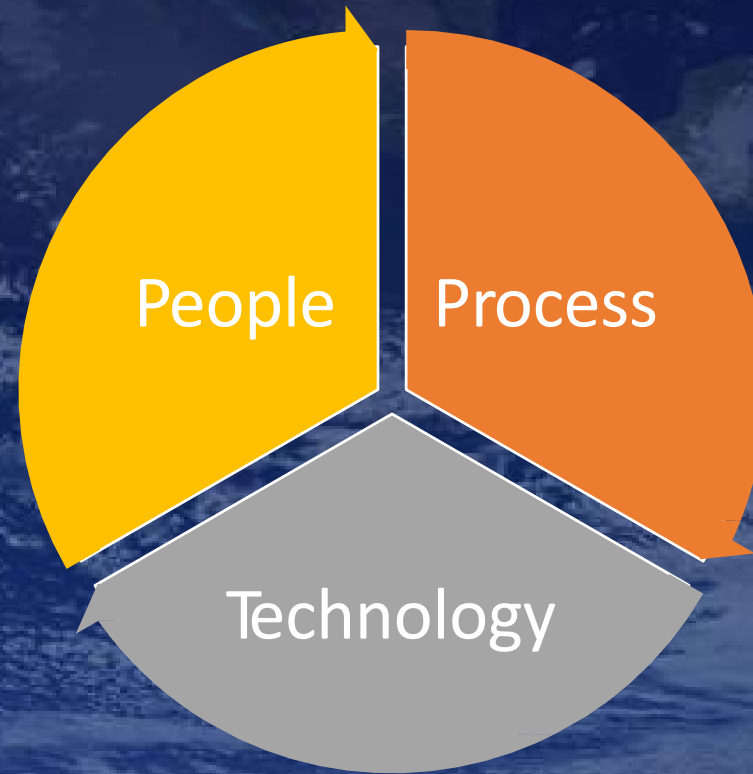


# LSPediA FDA DSCSA Pilot Project

## Lessons Learned

- Training
- Cross functional team
- Human factor

- Enable process
- Enable people
- Viable today



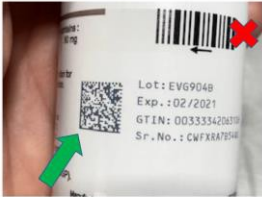
- Process maps
- SOPs
- Change management

## Training Developed

Sample 2: GS1 Barcode Fields Presented in Different Order

The GS1 2D barcode on the bottle has the 4 data elements but with the Lot number as the first field instead of GTIN. The human readable shows the order of the fields in the barcode. The barcode should parse correctly if the lot number includes the [GS] (Group Separator) separating it from the next data element. In this example, there was no [GS] after the lot number so when the barcode was scanned it failed to parse correctly.

Fig 3.



Lot: EV69048  
Exp.: 02/2021  
GTIN: 003333420670  
Sr. No.: CWFXR87046

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Label Samples for training warehouse scanners

Sample 1: Bottle with multiple 2D Barcodes and Product Insert on bottle

Label has Two 2D barcodes on the label. One for the actual GS1 2D barcode (Fig 1) and one that is part of the package insert (Fig 2). The package insert portion of the label is meant to be removable. The rest of the label has a more aggressive adhesive that is not meant to be peeled off. The GS1 2D barcode label will also usually have the human readable showing next to the barcode for GTIN, Serial, Lot, Expiry.

Always scan the label on the left.

Fig 1. shows the GS1 2D barcode. Fig 2. shows the barcode for the package insert.



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Sample 3: Bottles with Package Insert on Top of Bottle

These bottles have a package insert with a 2D barcode on top. Bottles also have a GS1 2D barcode and a LUPC barcode on the bottle label (Figs 5 and 6). The correct barcode to scan is the GS1 2D barcode on the bottle. The GS1 2D barcode will also have the human readable next to the barcode as a guide. Never scan the package insert barcode. Only scan the GS1 2D barcode on the bottle. See green arrows.

Fig 4. Fig 5.






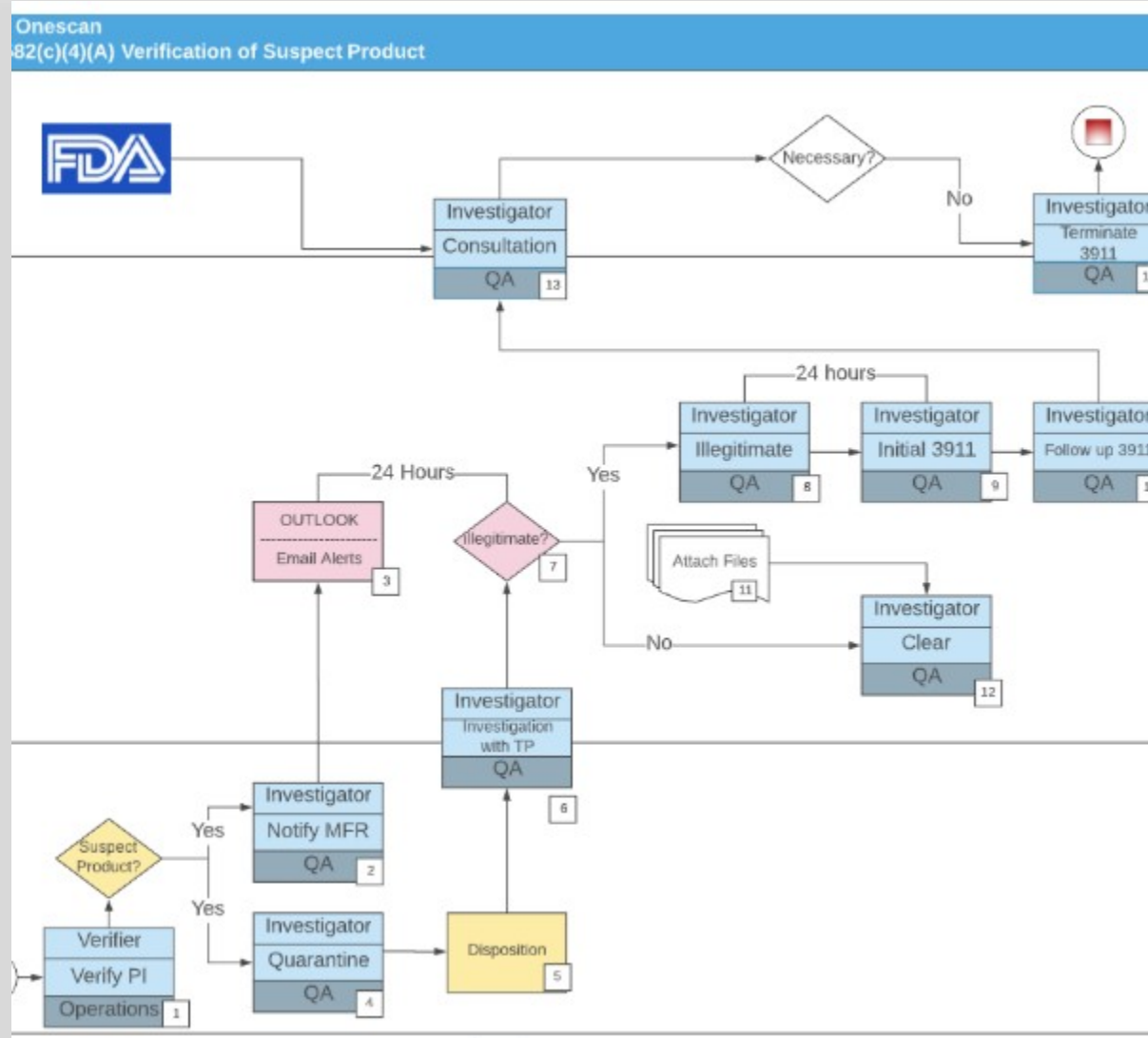
Fig 6.



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# LSPediA FDA DSCSA Pilot Project



Best Practice Recommendation

Suspect Product Process Map



# LSPediA FDA DSCSA Pilot Project

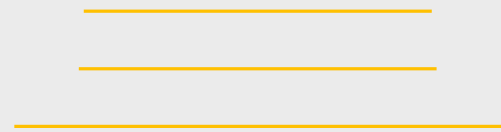
## Next Steps

- Pilot program
- Feedback
- Communication



- New perspective
- Don't wait
- Collaborate

- Turn systems on
- Load production data
- Continuing the pilot work



# DSCSA Pilot Project Program

## Participant Results (3)

Program Participant/Speaker <i>(All partnering entities are not listed)</i>	Pilot Project
Rymedi Jason Cross	DSCSA Implementation in Intra and Inter Healthcare System Medicine Transfers
KitCheck Tim Kress-Spatz	Analyzing gaps and addressing key concerns and testing key concepts relating to the 2023 DSCSA requirements by utilizing and adapting existing commercial methods and technologies
IBM/KPMG/Merck/Walmart Mark Treshock	DSCSA Blockchain interoperability Pilot
IDLogiq Kelly Nguyen	IDLogiq Next Generation Advanced REAL FIPS-Compliant Cryptographic ID Authentication with Transaction Ledger Powered by Blockchain/Distributed Ledger Technology for Decentralized Heterogeneous Global Network Computing Environment
LSPediA Riya Cao	Router Service Solution for Verification/Notification and Interoperability 2023

### Participant Panel Q&A

- Please type in your question for the panel into the chat box.
- FDA will select and direct questions to the panel.