

Carter BloodCare Implementation of the Reveos™ Automated Blood Processing System

Slides authored by Lavetta Kennedy





Conflicts of Interest:

I affirm that I have no financial, professional, or personal relationships that have influenced the content of this presentation.

Disclaimer:

This presentation has been developed for educational purposes only.

The views and opinions expressed are those of the external speaker and do not represent the views of Terumo Blood and Cell Technologies.

This presentation reflects data from the Blood Center; Terumo Blood and Cell Technologies does not have access to data for purposes of verifying these findings.





Who We Are

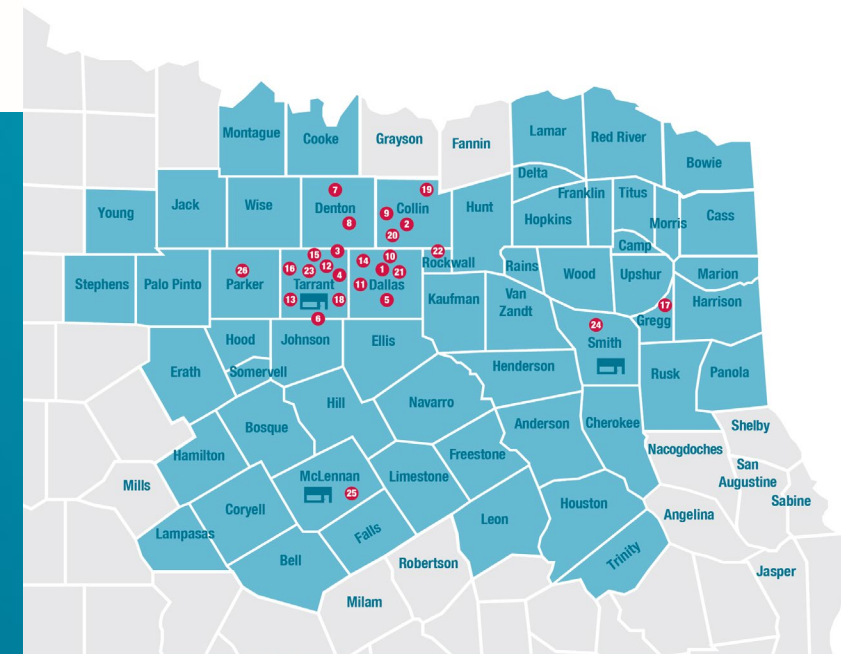
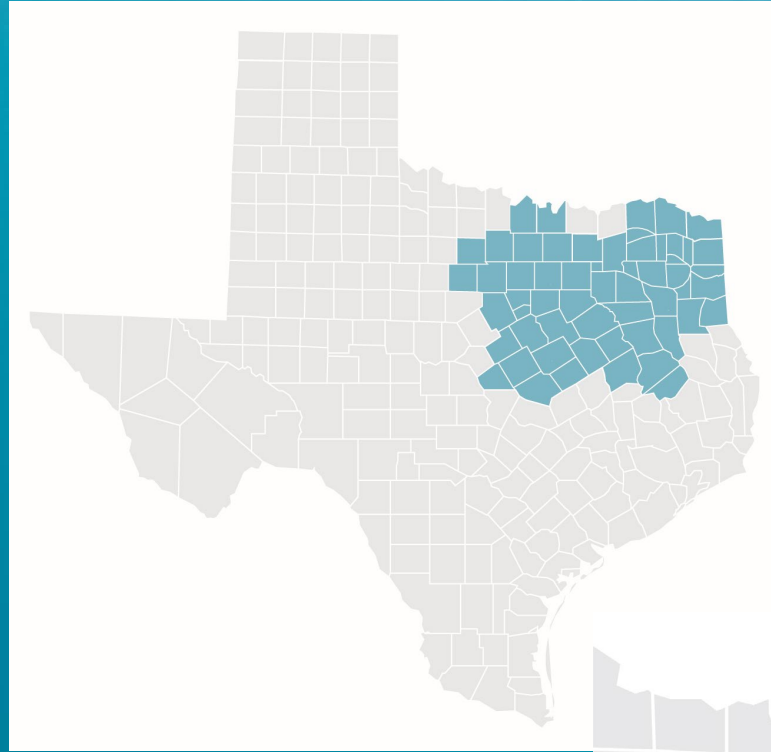
Mission: We save lives by making transfusion possible.

For more than 70 years, Carter BloodCare has been saving lives across North, Central and East Texas. Our services include collection, processing, specialized laboratory testing, storage, distribution of blood and blood components, cellular therapy collections and processing as well as clinical apheresis services.



Service Area

- Over 8.1 million population
- 200+ healthcare facilities served
- 440,000 blood components distributed annually
- Three main offices: North, Central and East Texas 
- Twenty-six donor centers 

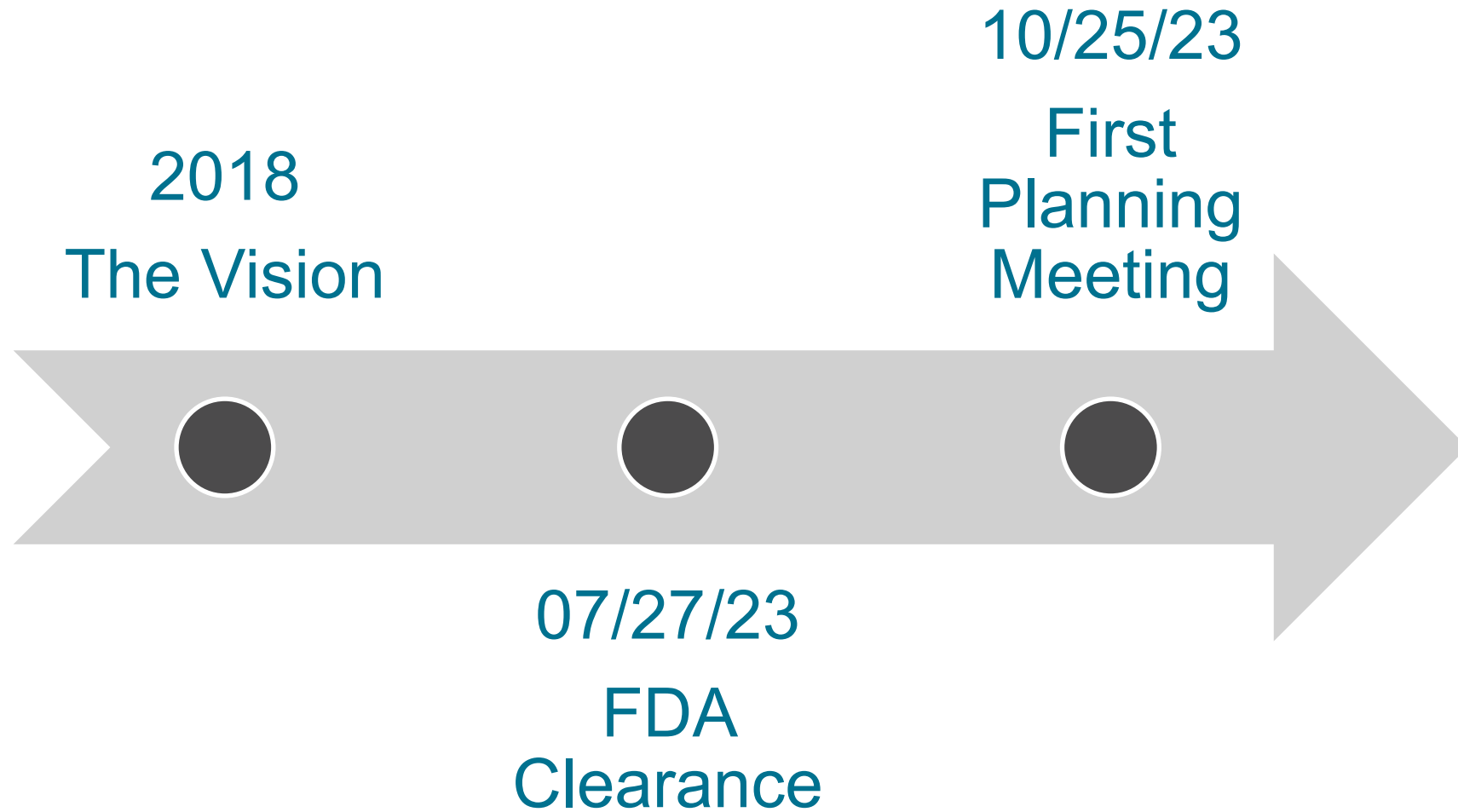


Considerations to Implement an Automated Whole Blood Processing System

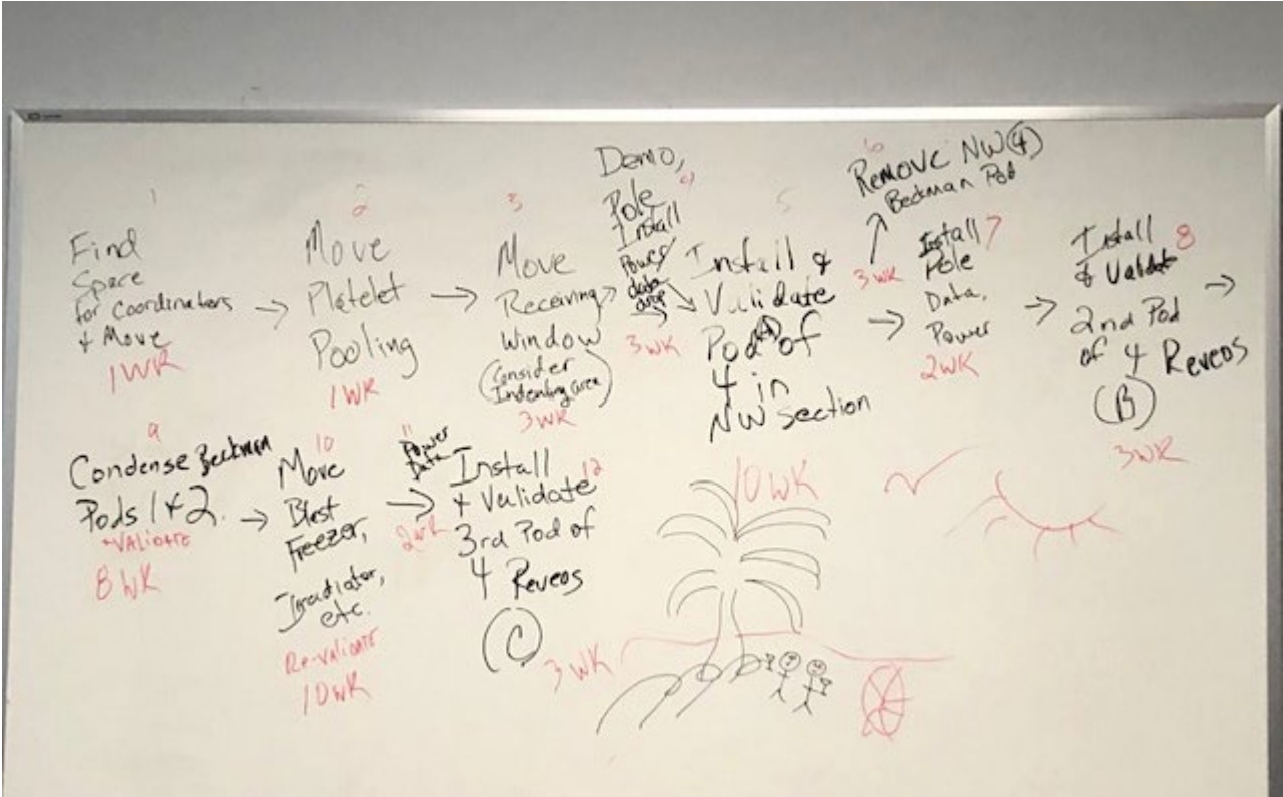
- Consistency in components produced
- Increased plasma volumes
- Additional whole blood derived platelets for pooling
- Faster throughput provides improved efficiency to increase staff availability for other duties and reduce labor costs



Note - The Reveos Automated Blood Processing System is intended to automatically separate units of whole blood into blood components.

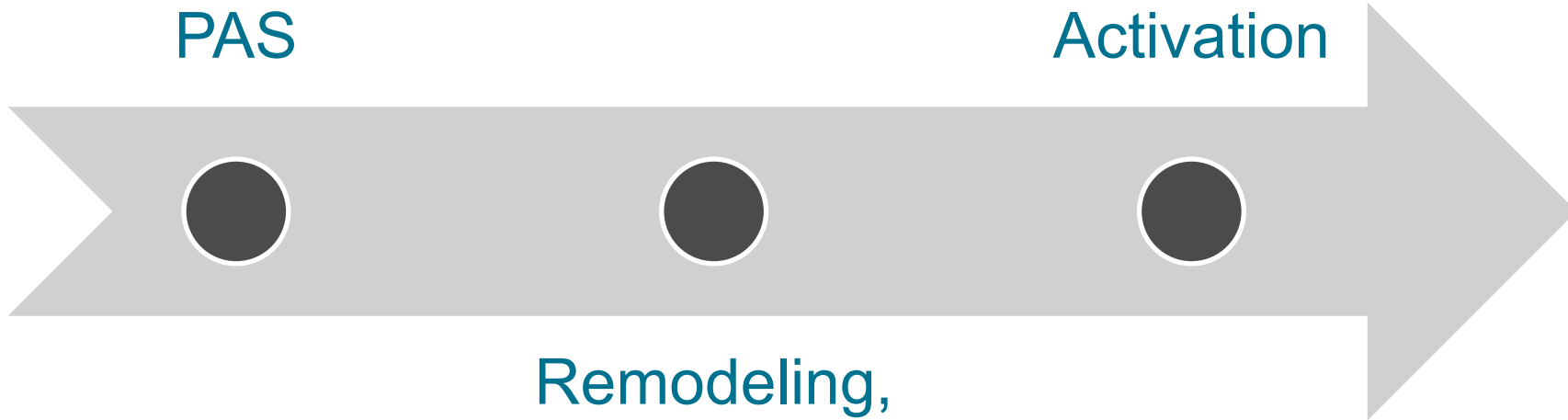


Planning meeting October 25-26, 2023



07/01/24
FDA states
PAS

09/18/24
The
Activation



Remodeling,
Remodeling,
Remodeling

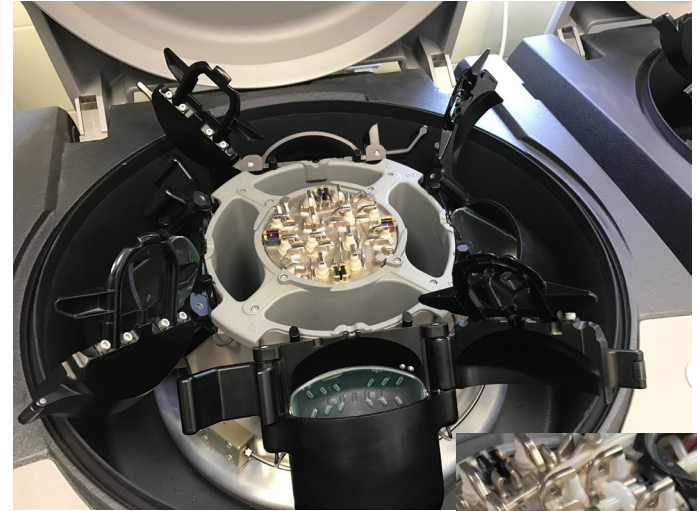




Before



After



Carter Bloodcare Planning – Involved All Departments

- Terumo Blood and Cell Technologies
- Project Manager
- Facilities
- Component Production
- Labeling
- Product Quality Control
- Quality Assurance
- Information Services
- Hospital Relations
- Collections
- Medical Services
- Purchasing
- Marketing
- Distribution



Timeline

- Component Production/Labeling
 - Remodel, implement, validate
 - 9/18/24 | First two Reveos devices are activated
 - 9/24/24 | Validation begins
 - 11/18/24 | Approved validation of third POD of four Reveos devices
 - 11/20/24 | Full transition to Reveos **eight weeks** after first activation
- Product Quality Control
 - 9/10/24 | Installation/validation of new Sysmex XNBB, coordinated simultaneous validation of PODs, revised QC plan
- Marketing
 - Media announcement
- Distribution
 - Prepared staff for AS-5 distributions/questions
- Hospital Relations
 - Client communication: AS-5, CPD shortages



Lessons Learned from Device Implementation

- A bag is not a bag is not a bag
 - Involve phlebotomy staff early in training and becoming familiar with the set
 - Involve Hospital clients early with a sample of the bag
 - Different ports for compatibility w/Infusion Sets
 - Port tabs “tear” differently
 - Fewer segments
- If moving to a high volume of Reveos use, have a plan for specialty products/clients (e.g. pediatrics)
- Computer program to automate which bag is suited for which donor
 - Final solution: computer generated list of qualified donors (CMV-, no testosterone, no ASA if WB)



Post Implementation Addition – T-Pool Select

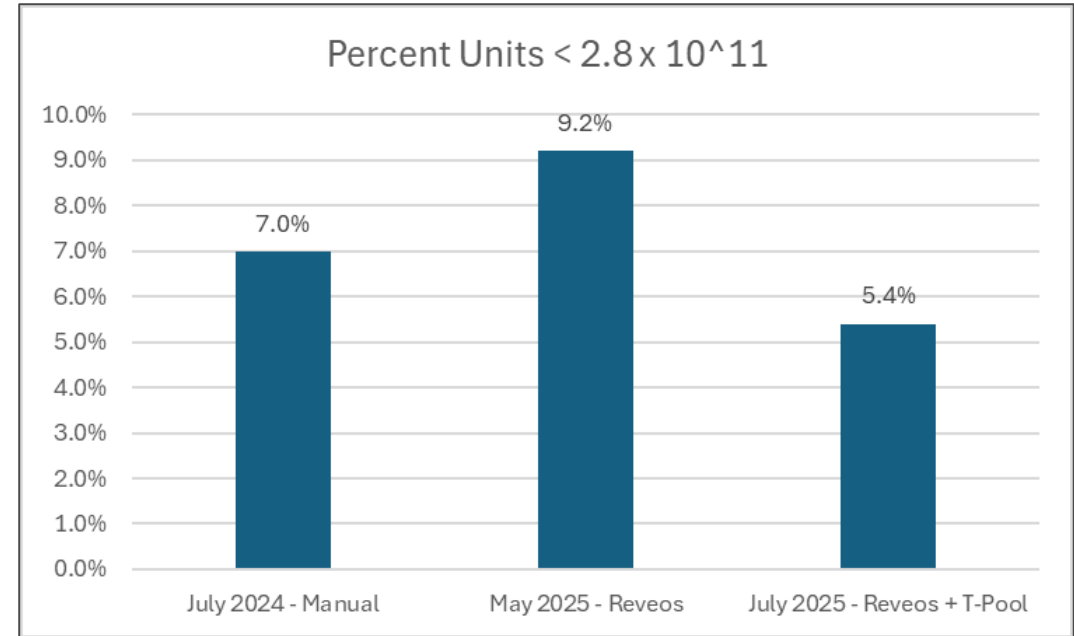
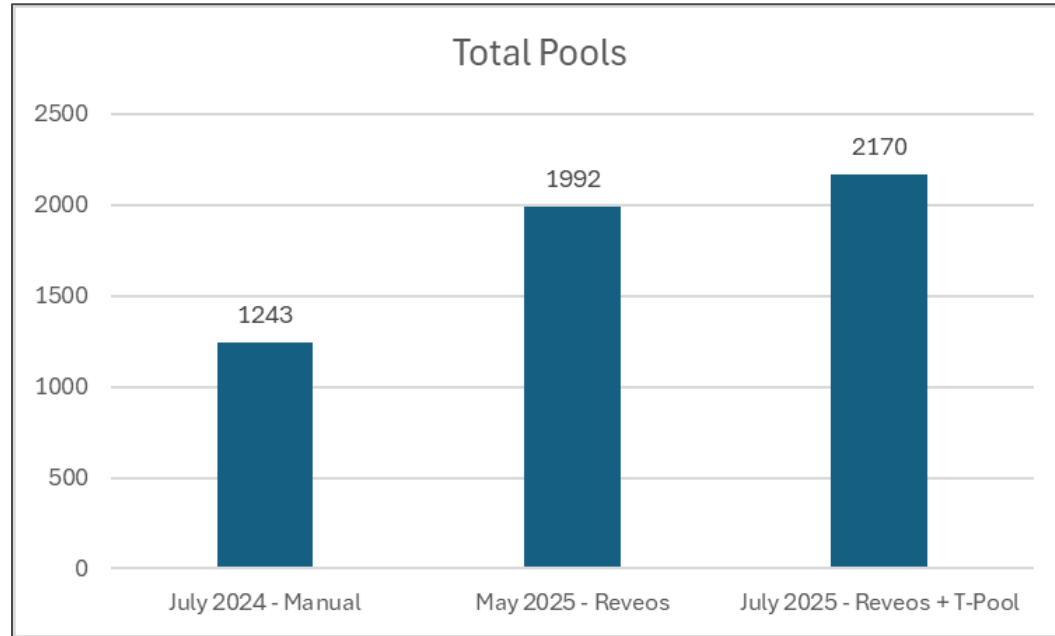
- T-Pool Select™ software from Terumo Blood and Cell Technologies optimizes selection of platelets to pool
- 6/16/2025 | Software module implemented
 - No validation of T-Pool Select software as all pooled platelet products are individually tested
 - 6/19/2025 | Start validation of 4-unit pooled platelet products
 - 6/26/2025 | Validation completed with final review signatures obtained 6/30/2025
 - **Approximately 50% of pools are now 4-unit pools**
 - **Pools with yield less than 2.8×10^{11} decreased from 9.19% to 5.39%**



Platelet Pooling Process with T-Pool Select



Carter Blood Comparison of Manual to Reveos with T-Pool Select



Make it Fun

Friendly Competition - Production team posted daily productivity on white board to motivate operator throughput.

- One (1) Reveos device processes four units per cycle cycle. Each operator can run four (4) devices in one pod.
- The maximum number of whole blood units processed by one operator in one shift was **231** units.

	Fri.	Sat.	Sun.	Mon.	Tues.	Wed.	Thurs.
Jessi	-	-	-	-	30	-	-
Anthony	147	-	-	-	-	-	-
Susan	-	-	-	-	10	-	-
Carie	-	115	-	-	-	151!!	-
EL	-	-	-	-	-	-	-
Chau	4	-	-	-	-	-	-
Nylah	221!!	36	-	-	-	-	-
Liz	-	-	80	134	6	-	-
meissa	-	-	-	-	-	-	-
Sandra	-	-	-	-	-	-	-
AJ	-	4	-	-	15	-	-
Camelace	-	-	-	-	-	-	-
Kiya	178	34	130!!	12	-	-	-
Piarc	-	-	-	-	-	-	-
Jacob	-	-	-	-	-	-	-
Zach W	-	-	4	-	-	142	-

	Fri.	Sat.	Sun.	Mon.	Tues.	Wed.	Thurs.
Dorian	-	-	-	-	-	-	-
Jordan	-	-	-	-	-	-	-
Michael	-	155	121	-	-	-	-
Onbisa	-	-	-	-	133	-	-
Shazia	-	-	-	-	-	-	-
Tapia	-	-	-	-	-	-	-
Ivonne	16	-	-	-	-	-	-
Ciara	-	-	-	-	-	-	-
Robyn	-	-	-	-	-	-	-
Katie	-	-	-	202!	139	4	-
Keatrina	-	-	-	-	-	-	-
Librenta	8	-	18	11	-	47	-
mo	20	20	-	-	211!!	64	-
Rieka	-	74	-	-	-	-	-
Zach	-	-	-	136	-	140	-

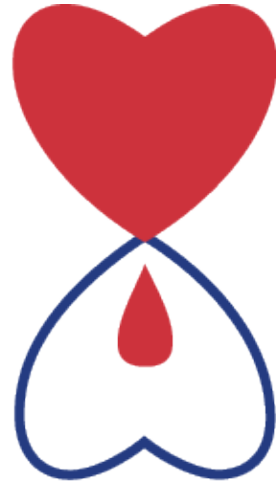
Highest Reveos
 Mosho 231
 Who can beat it?



Photo taken April 11, 2025

Thank You!





THE BLOOD CENTER

Serving you for life!

Introducing Reveos

Disclaimer

This presentation has been developed based on The Blood Center's experience.

This presentation does not represent claims or expanded indications of the Reveos™ Automated Blood Processing System.

This presentation reflects data from The Blood Center; Terumo Blood and Cell Technologies does not have access to data for purposes of verifying these findings.

Mission

- Founded in 1960, The Blood Center is the primary supplier of blood, blood components, and plasma derivatives to local hospitals throughout South Louisiana and parts of the Mississippi Gulf Coast.
- Our mission is to provide a quality supply of blood components to meet the needs of the communities served by The Blood Center, and to provide the technical support needed by the blood banking profession to achieve the highest safety and ethical standards.



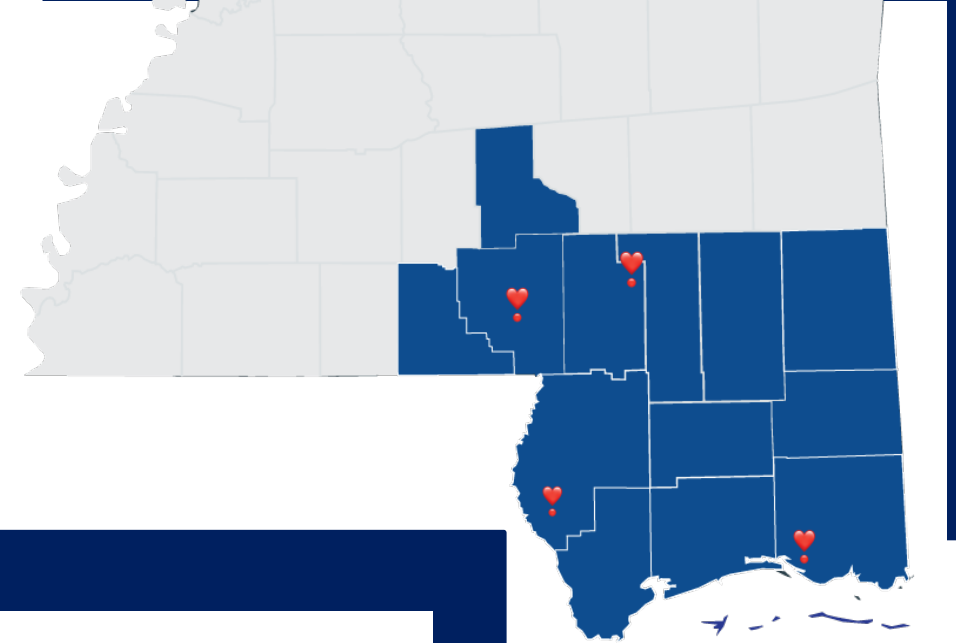
THE BLOOD CENTER

Serving you for life!

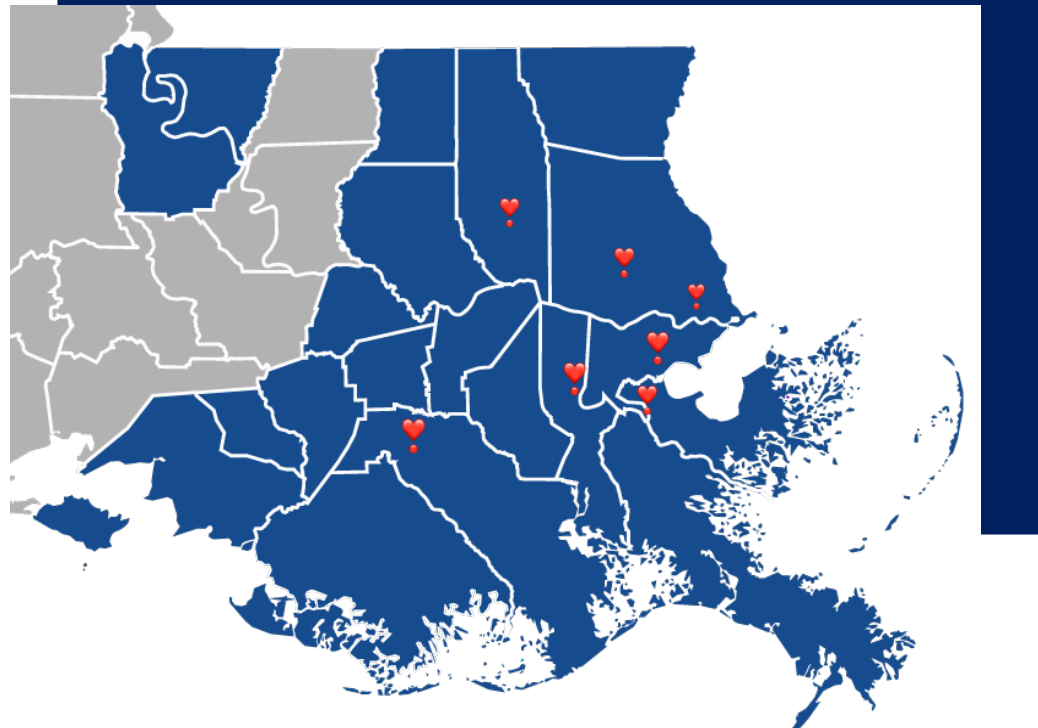
Service Area

- South Louisiana & Southern Mississippi
- 40+ healthcare facilities served
- 65,000 blood components distributed annually
- Eleven donor centers
- Over 200 associates
- Main offices located in New Orleans with labs in Hammond & Orleans

Mississippi



Louisiana



THE BLOOD CENTER

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Reveos™ Automated Blood Processing System

Benefits for The Blood Center

- Improves quality, efficiency and consistency
- Streamlines the process of whole blood processing
- Processes whole blood into components, including platelets
- Helps utilize existing blood donors more effectively
- Helps tackle platelet shortages



Operational Process

- Reveos System
 - Can load up to four units of whole blood
 - Separates whole blood into plasma, platelets, and red blood cells
- Component Separation
 - Plasma, platelets, and red blood cells are expressed into product bags
 - Each bag is sealed after separation
- Data Recording
 - Data recorded on Terumo Blood and Cell Technologies' Lumia™ Software Platform
 - Software connects with Reveos for operational efficiency



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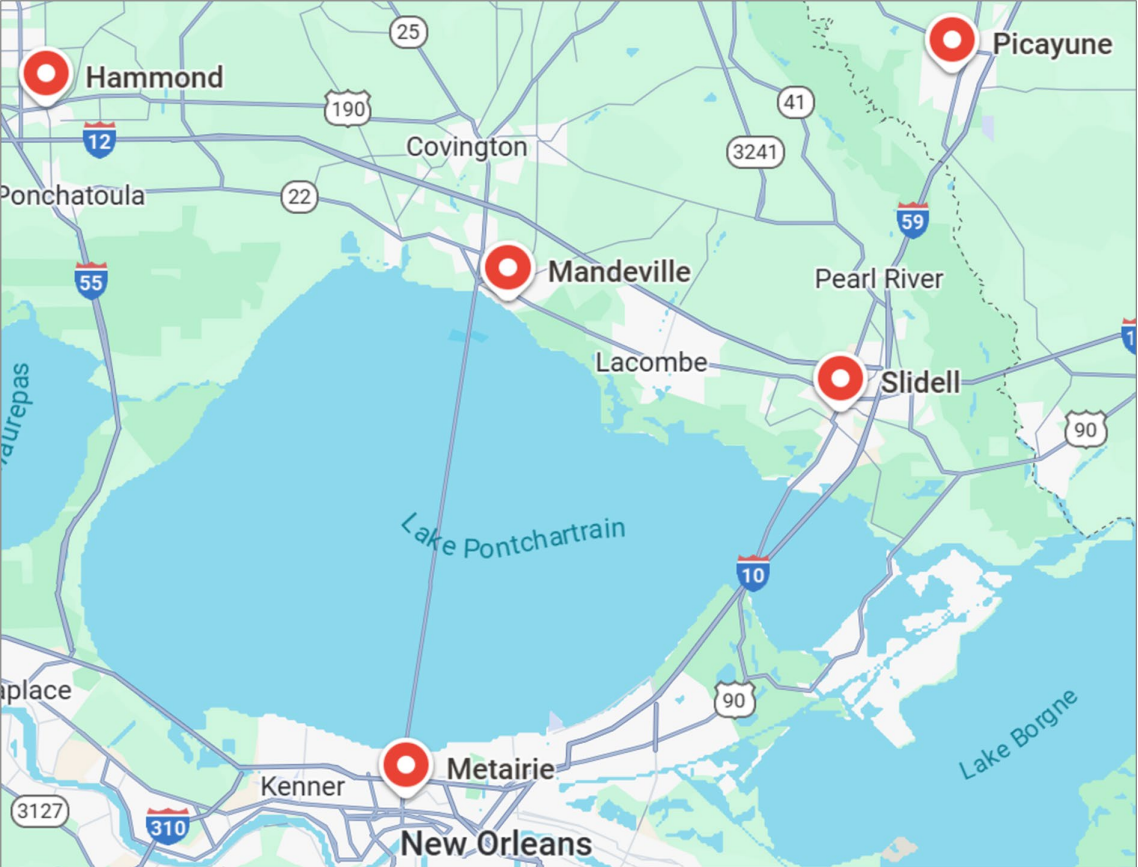
Timeline

- Installation
 - January 17, 2025
 - One pod of 4 Reveos devices
- Validation
 - January 29 – March 1, 2025
- Routine use
 - March 3, 2025



Logistics

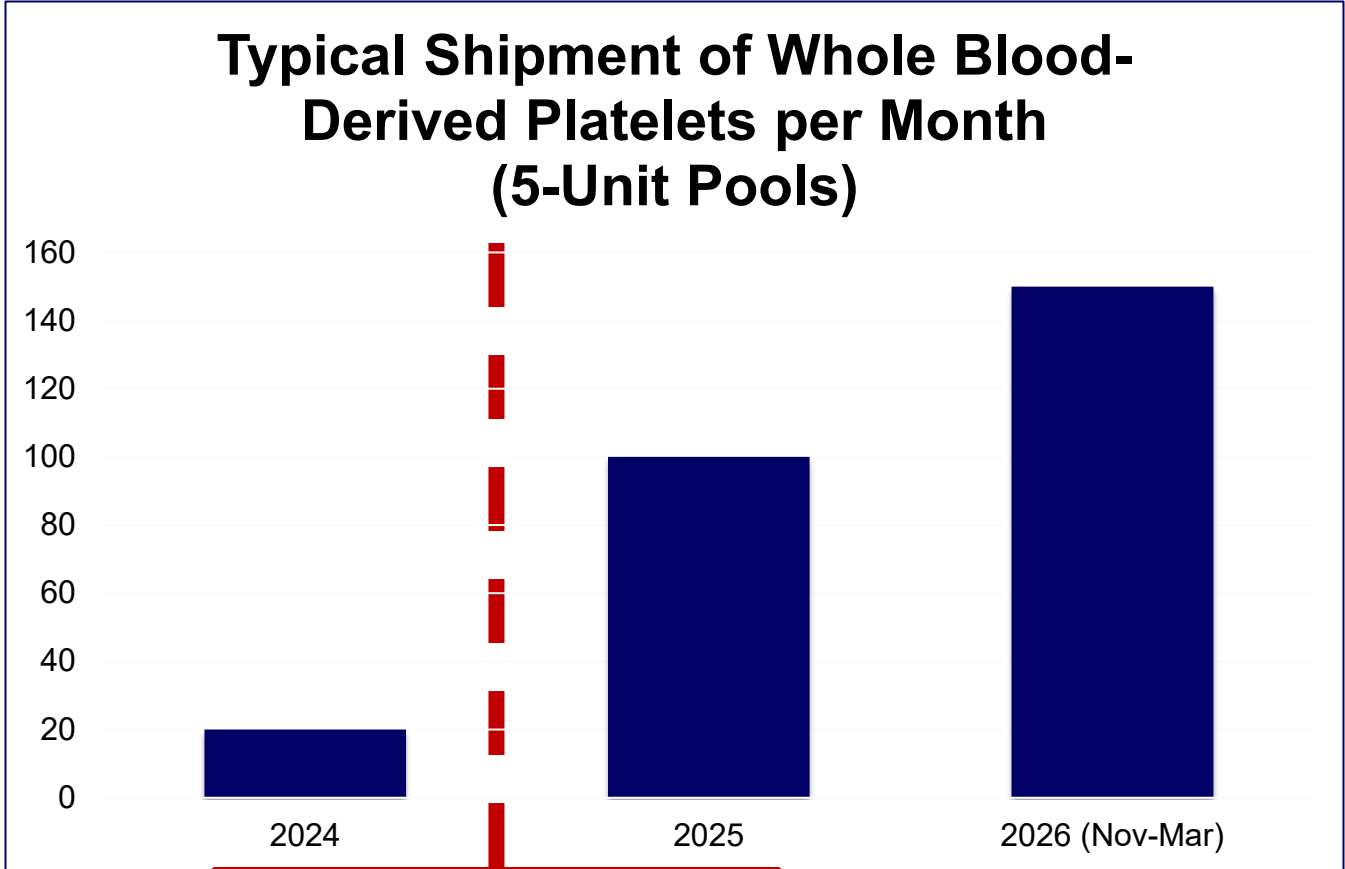
100% of units collected from 4 satellite sites within a 65-mile radius of the central processing facility were processed within eight hours of collection. Required scheduling of additional pick-up times on days with longer hours of operation.



Collection Sites	Distance from Central Processing Facility in Hammond, LA (miles)
Hammond, LA	0
Mandeville, LA	28
Slidell, LA	48
Metairie, LA	50
Picayune, MS	64



Productivity



**January 2025
Reveos Implementation**

**200 Whole Blood
Units Processed per
Week**

- Reduced reliance on Single-Donor Platelets
- Subsidized platelet availability
- Reduced imports

Disaster Preparedness



Conclusions



The Reveos system has strengthened our ability to supply platelets to the hospitals and patient we serve

From installation to routine use



6
WEEKS

Current pooled platelet distribution



Almost 150 pools / month

100%

WB units processed
within 8 hour window
within 65 mile collection radius