

Impact 100 2024 Residual Grant
Western Kentucky Regional Blood Center
Executive Summary

Proposed Initiative:

Centrifuge

Statement of Need:

The Western Kentucky Regional Blood Center (WKRBC) is responsible for all blood product(s) required for the medical care of any Owensboro and Daviess County resident. In total, nine western Kentucky hospitals and 3 Air Evac Life Flight Teams rely on WKRBC as their sole source of life-saving blood products. According to the 2023 US Census Bureau, an estimated 340,688 western Kentuckians depend on WKRBC for their blood needs. This facility is 100 % responsible, 24 hours a day, 7 days a week, 365 days per year. To effectively fulfill our mission WKRBC must replace an existing centrifuge.

Goals:

Our goal is to consistently provide blood products and related services: cost-effectively, efficiently, and in compliance with state and federal regulations. Any failure on our part is not a viable option. The ramifications could cost someone their life. WKRBC must replace one of three centrifuges currently in operation at the Owensboro Center. The manufacturer is discontinuing service and parts for the machine purchased in 2002. One-third of all blood donated to WKRBC is processed in this piece of equipment. If it were to fail, the impact would slow production by 33%. This is a risk WKRBC is not willing to take. Each unit of whole blood donated to WKRBC must be separated into blood components, losing a third of our production capacity would have a devastating impact on access to healthcare in our community. WKRBC is applying for the \$34,000 Residual Grant from Impact 100 to help with the expense of replacing the centrifuge.

Impacts:

- WKRBC operates 3 centrifuges
- WKRBC purchased its newest centrifuge in FY 22/23.
- This purchase of a second centrifuge was not anticipated in the FY 24/25 budget as we just learned of the discontinuation of service in early May 2024.
- These centrifuges are used to separate whole blood into components (a demonstration will be given at our site visits).
- The process of separation is both time-sensitive and time-intensive.
- WKRBC employs two full-time lab assistants who must perform this separation process within eight hours of collection per the FDA guidelines.
- The time it takes to process a unit, the number that can be processed at a time, and the number of collected units to be processed determine the full amount of time required to release blood products to the hospital.

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- The lab assistants often log overtime even when operating the three existing centrifuges. WKRBC must operate three at all times to keep pace with the demand.
- This centrifuge will cost \$44,875.52.

Measurable Objectives:

WKRBC will define our success by the number of products produced by the new centrifuge. Our current capacity is 20 units every 92 minutes. The new capacity will increase outputs by 10%. The success of WKRBC ensures cost-effective, compliant, and expedient service for our healthcare systems while maintaining affordable and accessible healthcare in the region. One life saved has an infinite impact on our community. Each life saved is someone's mother, daughter, sister, brother, husband, son, friend, wife.... The impact is life. The objective is life.

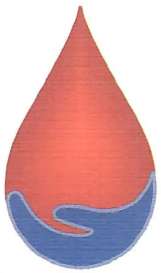
Plan of Action:

If granted, the \$34,000 Impact 100-Residual Grant WKRBC would invest an additional \$10, 875.52 of our capital to fund the project.

- The immediate plan would be to order as soon as possible upon receipt of funding from the Residual Grant.
- Secure the delivery date
- Receive centrifuge
- Validate the Standard Operating Procedure (SOP), and perform IQ (Installation Qualification), OQ (Operational Qualification), and PQ (Performance Qualification).
- Enter the centrifuge into service

Impact on the problem:

The 2024 Impact 100 Residual Grant is **THE SOLUTION** to the problem. Once we have received the new centrifuge and validated it our greatest fears will be eliminated. Not only will we have a supported centrifuge but the model replacing the old one comes with a greater capacity and performs more efficiently than the one it is replacing. WKRBC strives daily to ensure the availability of a sustainable blood supply. This is an issue with the potential for catastrophic outcomes. We must act now.



Western Kentucky Regional Blood Center

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WKRBC

Impact 100 2024 Residual Grant \$34,000
Western Kentucky Regional Blood Center
Project: Centrifuge \$44, 875.52

Support:

Grants:

| | | |
|-------------------|--------------------|----------------|
| Impact 100 | \$34,000.00 | Pending |
|-------------------|--------------------|----------------|

WKRBC:

| | | |
|-----------------------|---------------------|----------------|
| Earned Revenue | \$10, 875.52 | Secured |
|-----------------------|---------------------|----------------|

Total Revenue and Support: **\$44, 875.52**

Expense:

| | |
|--|----------------------|
| Capital expenditure: Centrifuge | \$44, 875.52* |
|--|----------------------|

Total Expense: **\$44,875.52**

***Please note:** The quote for this project increased from \$40,207.22 in May to \$44,875.52 presently. This budget reflects this change.
