

Capital and revenue requirements for establishing and running a phlebotomy service

Necessary Equipment

- **Sterile Disposable Kits:** Needles, tubing, collection bags, and anticoagulant solutions. Single-use kits prevent cross-contamination and ensure sterility.
- **Medical Examination Equipment:** Blood pressure monitors, haemoglobin testing devices, scales, and temperature gauges. These are used to assess participant eligibility and monitor vital signs pre- and post-donation.
- **Emergency Equipment:** Automated External Defibrillators (AEDs), oxygen tanks, and first aid kits. To address any adverse reactions or medical emergencies promptly.

Required Personnel

- **Lead clinician:** Probably a medical consultant with expertise in transfusion medicine or haematology. Role includes oversight of medical procedures, participant eligibility criteria, and compliance with medical standards (JPAC 2024).
- **Specialist nurses:** To perform vein punctures and monitor participants during the procedure. They need to be certified in phlebotomy.
- **Maintenance and Cleaning Personnel:** To ensure cleanliness of the facility and proper functioning of equipment. This is critical for infection control and meeting health standards.

Maintenance and Regulatory Compliance

- **Regular Servicing of Equipment:** Defibrillators, monitors and other resuscitation equipment require routine checks and servicing by qualified technicians.
- **Calibration of Equipment:** Medical devices must be calibrated regularly to ensure accuracy ^(ISO 2022).
- **Facility Cleaning Protocols:** Adherence to strict cleaning schedules for participant areas, equipment, and common spaces.
- **Infection Control:** Implementation of standard precautions to prevent cross-contamination
- **Licensing and Accreditation:** Obtain necessary licenses from health regulatory organisations.
- **Standard Operating Procedures (SOPs):** Develop and maintain SOPs for all processes, aligning with MHRA, FDA and European Medicines Agency (EMA) guidelines.
- **Staff Training and Certification:** Ongoing education to keep staff updated on best practices and regulatory changes.
- **Audits and Inspections:** Regular internal audits and readiness for external inspections.

Capital cost

The capital costs of a phlebotomy service are limited and can likely be met without additional investment.

Additional Costs to Consider

- **Maintenance and Service Contracts:** Essential for the safe and effective operation of the machine, there will be regular maintenance and calibration, carried out by facility staff. In addition to that there would be a requirement for a service contract with the manufacturer. These can be of the order of £5,000 per annum.
- **Consumables:** Each blood collection procedure requires a single-use kit, costing between £30 and £50 each.
- **Training and Staffing:** In addition, the salary costs of the staff described above, staff must be trained.

In summary

Bringing all of this together, it is a reasonable assumption that the capital outlay for a service would be nil and the revenue costs, assuming 300 phlebotomy activities (6 interventions each for 50 people) in year 1 and half time consultant cover and full time cover from other staff would be between £100,000 and £150,000 per annum.