



PROJECT REPORT ON DEPARTMENT OF BLOOD BANK IN APOLLO MULTISPECIALITY HOSPITAL, KOLKATA



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- SUBMITTED BY ABIR MONDAL
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- COLLAGE KINGSTON SCHOOL OF MANAGEMENT AND SC
- STREAM BACHELOR OF BUSINESS ADMINISTRATION (HIOSE
- YEAR (20212024)

DECLARATION

I am Abir Mondal, hereby declare that the work presented in this internship project report on Apollo Multi Speciality Kolkata report on "Blood Bank," is my own and has been carried out under the supervision of respected principal Sir Dr. Prakash Narayan Mahanty and Training and Placement Officer Mr. Raja Dutta and Mr. Sougata Chakraborty. Any references to work done by others have been duly acknowledged in the project report. I understand and acknowledge that plagiarism is a serious academic offense, and I am aware of the consequences associated with it. The data and findings presented in this report are authentic, and I take full responsibility for the content produced during the course of this internship. I further declare that this internship project has not been submitted, in part or in full, for any other degree or diploma at any other institution.

Date:	
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KINGSTON EDUCATIONAL INSTITUE BERUNANPUKIRA, BARASAT, KOLKATA 700126

SIGNATURE:	
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<u>Approval letter</u>

I do herby declare that this project report of blood bank submitted by me for the partial fulfillment of the requirement for the award of Bachelors in Hospital management in Kingston school of management and science and the internship is completed under the supervision of Head of the department Dr. Sudipta Sekhar Das & Blood Bank Coordinator Mrs. Debasrita Banerjee (Senior Executive)

This is a documentation of my own research work. It is not submitted to any other Institution or published for the award of any degree or diploma to any institute or university.

DATE:	
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58, Canal Circular Road, Kadapara, Kolkata, West Bengal 700054

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ACKNOWLEDGMENTS

I extend my heartfelt gratitude to the Head of the Department, Dr. Sudipto Sekhar Das, for his unwavering support and guidance throughout my internship at Apollo Multispeciality Hospital. His mentorship has been instrumental in shaping my understanding of hospital administration and management. A special thanks to our Blood Bank Coordinator, Mrs. Debasrita Banerjee (senior executive), for her continuous encouragement and for facilitating my involvement in various aspects of blood bank management. Her dedication to patient care and excellence in blood bank operations has been truly inspiring. I would also like to thank Ms. Mili Saha, our Head of Department, for her guidance and encouragement during my internship. Her commitment to education and training has been a source of inspiration. A special mention to Mr. Raja Dutta, Training and Placement Officer, and Mr. Sougata Chakrabarty, for their valuable contributions to my professional development. Their support has been instrumental in enhancing my skills and knowledge. Lastly, my thanks to all the staff at Apollo Multispeciality Hospital for their cooperation and willingness to share their expertise, significantly enhancing my learning experience.

HOSPITAL PROFILE

Apollo Multispeciality Hospital Kolkata

Apollo Multispeciality Hospital Kolkata is a premier healthcare institution renowned for its stateoftheart facilities and exceptional patient care. The hospital offers a wide range of medical services, including advanced diagnostics, specialized treatments, and comprehensive surgical procedures. With a team of highly skilled and experienced medical professionals, Apollo Multispeciality Hospital is dedicated to providing worldclass healthcare and ensuring the wellbeing of its patients.

Venue:

Apollo Multispeciality Hospital Kolkata

<u>Address:</u>

58, Canal Circular Road, Kadapara, Kolkata, West Bengal 700054

Landmark:

Near EM Bypass, close to Salt Lake Stadium

Founded:

Established in 2003

Summary of My Internship at Apollo Multispeciality Hospital:

Focus on the Blood Bank During my internship at Apollo Multispeciality Hospital Kolkata, I had the invaluable opportunity to work closely with the Blood Bank. Under the expert guidance of Mrs. Debasrita Banerjee, the Blood Bank Coordinator, I gained profound insights into the management and administrative aspects of running a blood bank. I learned about the critical processes involved in donor recruitment, blood collection logistics, and the meticulous documentation required for regulatory compliance. I participated in organizing blood donation drives and observed the coordination needed to ensure the smooth operation of these events. I also had the chance to collaborate with various hospital departments, understanding the vital role of the blood bank in supporting overall hospital operations. This interdisciplinary interaction underscored the importance of effective communication, teamwork, and coordination in delivering seamless patient care. Mrs. Banerjee's dedication to maintaining high operational standards and her commitment to efficient blood bank management were truly inspiring. This internship significantly enriched my understanding of healthcare administration and prepared me for future endeavors in healthcare management.

Apollo Multispeciality Hospital Kolkata Overview

Apollo Multispeciality Hospital Kolkata is one of the leading healthcare institutions in Eastern India, renowned for its comprehensive medical services, stateoftheart facilities, and exceptional patient care. Part of the esteemed Apollo Hospitals Group, it has set benchmarks in various medical disciplines and continues to be a trusted name in healthcare.

History and Mission

Founded in 2003, Apollo Multispeciality Hospital Kolkata was established with a mission to bring worldclass healthcare to the people of West Bengal and neighboring regions. The hospital is dedicated to providing highquality medical services, ensuring patient safety, and maintaining clinical excellence.

<u>Infrastructure and Facilities</u>

Apollo Multispeciality Hospital boasts modern infrastructure designed to meet the needs of patients and medical professionals alike. The hospital is equipped with cuttingedge medical technology and offers a range of facilities:

Advanced Diagnostic Laboratories: The hospital houses fully equipped diagnostic labs offering a wide range of tests and procedures, ensuring accurate and timely diagnosis.

- Stateoftheart Operating Theaters: Equipped with the latest surgical technology, these theaters enable surgeons to perform complex procedures with precision.
- Intensive Care Units (ICUs): The hospital has specialized ICUs for different needs, including neonatal, pediatric, and cardiac care, ensuring comprehensive critical care.
- 24/7 Emergency Services: The emergency department is staffed by experienced professionals and equipped with advanced lifesaving equipment, ready to handle any medical crisis. Imaging and Radiology: Facilities include MRI, CT scan, digital Xray, and ultrasound, offering highresolution imaging for accurate diagnosis.

Specialties and Departments

Apollo Multispeciality Hospital offers a broad spectrum of medical specialties, each supported by a dedicated team of experts and advanced medical technology:

Cardiology and Cardiothoracic Surgery

The Cardiology Department provides comprehensive care for heart conditions, including interventional cardiology, electrophysiology, and heart failure management. The Cardiothoracic Surgery unit performs complex heart surgeries, including bypass surgery and valve replacements.

Neurology and Neurosurgery

This department specializes in the diagnosis and treatment of neurological disorders. The Neurosurgery unit performs advanced procedures such as brain tumor removal, spinal surgeries, and minimally invasive neurosurgery.

Orthopedics

The Orthopedics Department offers treatment for musculoskeletal conditions, including joint replacements, arthroscopic surgeries, and treatment for fractures and sports injuries.

Oncology

The Oncology Department provides a multidisciplinary approach to cancer treatment, including medical oncology, surgical oncology, and radiation therapy. The hospital is equipped with advanced radiation machines and chemotherapy facilities.

<u>Gastroenterology</u>

This department focuses on the diagnosis and treatment of digestive system disorders. Services include endoscopy, colonoscopy, and treatment for liver diseases and pancreatic disorders.

Nephrology and Urology

The Nephrology Department provides care for kidney diseases, including dialysis and kidney transplantation. The Urology unit offers treatments for urinary tract disorders, prostate conditions, and minimally invasive surgeries.

Pulmonology

The Pulmonology Department treats respiratory system conditions, including asthma, chronic obstructive pulmonary disease (COPD), and sleep disorders. The department is equipped with advanced pulmonary function testing facilities.

Gynecology and Obstetrics

This department offers comprehensive care for women, including prenatal and postnatal care, highrisk pregnancy management, and gynecological surgeries.

Pediatrics and Neonatology

The Pediatrics Department provides healthcare for children from infancy through adolescence. The Neonatology unit offers specialized care for premature and critically ill newborns.

Dermatology

The Dermatology Department offers treatments for skin conditions, including acne, eczema, psoriasis, and skin cancers.

ENT (Ear, Nose, and Throat)

This department treats conditions related to the ear, nose, and throat, including sinusitis, hearing loss, and throat disorders. The hospital offers advanced ENT surgical procedures.

Ophthalmology

The Ophthalmology Department provides comprehensive eye care, including cataract surgery, glaucoma treatment, and retinal surgeries.

Patient Care and Services

Apollo Multispeciality Hospital is committed to delivering patient centric care. The hospital offers a range of services designed to enhance patient experience and outcomes:

Patient Counseling and Support: The hospital provides counseling services for patients and their families to help them cope with illness and treatment.

Pharmacy Services: The inhouse pharmacy is open 24/7, providing easy access to medications.

Nutrition and Dietetics: The hospital offers dietary counseling and personalized nutrition plans to support patient health and recovery.

Physiotherapy and Rehabilitation: Comprehensive rehabilitation services are available to help patients recover post surgery or after prolonged illness.

Education and Research

Apollo Multispeciality Hospital is also dedicated to advancing medical knowledge and practices through education and research. The hospital conducts various training programs, workshops, and continuing medical education (CME) sessions for healthcare professionals. Additionally, it engages in clinical research to explore new treatments and improve patient care.

Community Outreach

As part of its commitment to social responsibility,
Apollo Multispeciality Hospital undertakes various community
outreach programs. These include health camps, awareness drives,
and free medical checkups in underserved areas, aiming to improve
the overall health and wellbeing of the community.

Roles and Responsibilities

- •Position Overview: As a Blood Bank Coordinator.
- •Detailed Responsibilities:
 - Blood Issuance: How you checked and issued blood to patients.
 - **Patient Followup**: Methods and importance of following up with patients.
 - Communication with Donors: Calling and counseling of the patient relatives who are consuming blood from the blood center.
 - **Inventory Management**: Monitoring the availability of blood and blood components in the inventory.
 - **Donor Registration**: Donor registration questionnaires are filled up for registration of the donors.
 - **Record Keeping**: The requisition, crossmatch sheet and issue slips are maintained in monthly basis.
 - Communication: Interactions with patient relatives, donors, and collueges

Registration and Donor Screening Process

Registration:

- Upon arrival at the blood bank, donors are registered in the system to maintain a record of their donation history and personal information.
- Essential details such as name, contact information, and previous donation history are recorded.

Vitals Assessment:

- Donors undergo a brief health assessment to ensure they meet the basic eligibility criteria for blood donation.
- Vitals such as height, weight, and blood pressure are measured.

Hemoglobin Testing:

- A hemoglobin test is conducted to assess the donor's blood hemoglobin levels and overall eligebility for donation.
- This test helps the donors who are suffering from anemia and ensures the safety of the donated blood.

Donor Screening by the Doctor:

- Donors undergo a screening process conducted by a medical professional, usually a doctor, to assess their overall health condition and suitability for donation.
- Based on factors like height, weight, blood pressure and hemoglobin levels, the doctor determines the volume of blood to be donated, typically between 350 and 450 milliliters.

Donor Bag Allotment:

- After passing the screening process, donors are assigned a specific blood bag for donation based on their prescribed volume.
- Donors are directed to the donation area where trained staff collect the blood using sterile techniques.

Blood Donation Process

- Donation Procedure:
- Donors are comfortably seated in a donation area where trained phlebotomists collect blood using sterile techniques.
- The donation process typically takes around 10 to 15 minutes, during which donors are monitored for any adverse reactions.

Refreshment and Recovery:

- Following donation, donors are provided with refreshments to help replenish fluids and nutrients lost during the donation process.
- Donors are advised to rest for a short period before resuming normal activities to ensure full recovery.

Blood Component Separation

- Component Room:
- Donated blood is processed in a specialized component room where it undergoes separation into its various components, such as red blood cells, plasma, and platelets.
- This process allows for the efficient use of blood donations and enables the customization of blood products based on patient needs.

Laboratory Testing and Final Checks

- Crossmatching and Group Checking:
- Blood components are subjected to crossmatching and group checking in the laboratory to ensure compatibility with the intended recipient.
- This crucial step helps prevent adverse reactions and transfusion related complications.

TTI Screening:

- Blood samples are screened for Transfusion Transmitted Infections (TTIs) in a dedicated screening room.
- Screening for diseases such as HIV, hepatitis B and C, and syphilis is performed to safeguard the health of both donors and recipients.

Blood Bank Defined Procedures

- Standard Operating Procedures (SOPs):
- The blood bank follows strict SOPs to ensure the safety, quality, and efficiency of blood donation and processing procedures.
- SOPs cover every aspect of blood banking, from donor registration to blood component separation and distribution.

Overview of Apollo's Blood Bank

Voluntary Donations: We encourage healthy individuals to donate blood voluntarily, ensuring a steady supply.

Apheresis: Specialized equipment separates blood components during donation, allowing donors to give specific components like platelets or plasma.

Blood Storage:

Cryopreservation: Advanced techniques are used to freeze and store rare blood types for long-term availability. Temperature Controlled Storage: Ensuring blood components are kept at optimal conditions to maintain their efficacy and safety.

Blood Testing:

Comprehensive Screening: Every donation undergoes rigorous testing for infectious diseases and compatibility. Quality Assurance: Continuous monitoring and quality control processes ensure the highest standards.

Distribution:

24/7 Availability: Rapid response systems in place to provide blood to hospitals and clinics anytime.

Specialized Blood Products: Supply of specific components like platelets, red cells, and plasma for tailored patient needs.

Innovations

Digital Donor Management: Advanced software for tracking donor history, eligibility, and scheduling.

Mobile Blood Drives: State-of-the-art mobile units facilitate on-site blood collection at community events and corporate locations.

Community Engagement

Awareness Campaigns: Educational programs and partnerships to raise awareness about the importance of blood donation.

Incentive Programs: Recognition and rewards for regular donors to encourage continuous contributions.

Achievements

Accreditations: Certified by leading health organizations for adherence to international standards.

Network Expansion: Extensive network of collection centers and partnerships with hospitals and emergency services.

Future Goals

Technological Advancements: Implementation of AI and machine learning for improved blood matching and donor recruitment.

Sustainability Initiatives: Environmentally friendly practices in operations and logistics.

Mission of Apollo's Blood Bank

- 1. **Deliver High-Quality Patient Care**: Ensure every patient receives comprehensive and compassionate care using the latest medical advancements and evidence-based practices, prioritizing patient safety, comfort, and well-being.
- 2. **Leverage Cutting-Edge Technologies**: Incorporate state-of-the-art medical technologies and innovative treatment methods to offer precise, effective, and efficient healthcare solutions, staying at the forefront of medical innovation.
- 3. **Promote Preventive Healthcare**: Advocate for preventive measures and wellness programs that help individuals maintain their health and prevent illness through education about healthy lifestyle choices and regular health screenings.
- 4. Foster Continuous Improvement: Commit to ongoing learning, professional development, and quality improvement across all levels of our organization to enhance services, processes, and patient experiences through feedback and innovation.
- 5. **Ensure Accessibility and Affordability**: Strive to make world-class healthcare accessible and affordable to all segments of society by reducing barriers to care and providing equitable healthcare services.

_Vision of Apollo Hospitals

- 1. Excellence in Patient Care: To set the benchmark for high-quality, patient-centered care that consistently meets and exceeds international standards, ensuring optimal health outcomes and patient satisfaction.
- **2. Innovation and Technology Leadership:** To lead the healthcare industry through the integration and advancement of cutting-edge medical technologies and innovative treatment methods, continuously improving the precision, effectiveness, and efficiency of healthcare delivery.
- 3. Global Healthcare Accessibility: To expand our reach and make world-class healthcare services accessible and affordable to diverse populations across the globe, reducing disparities and ensuring equitable access to quality care for all.
- **4. Pioneering Preventive Health:** To champion preventive healthcare and wellness by promoting healthy lifestyles, early detection, and timely intervention, thereby reducing the burden of disease and enhancing the quality of life for individuals and communities.
- 5. Sustainable Healthcare Practices: To implement environmentally sustainable practices throughout our operations, contributing to a healthier planet while maintaining the highest standards of healthcare service delivery.

Conclusion

Apollo's Blood Bank stands out as a leading institution in the field of blood collection, storage, and distribution, thanks to its comprehensive services, commitment to quality assurance, and innovative use of technology. The bank's proactive community engagement and recognized accreditations further cement its reputation for reliability and excellence.

However, the bank must address challenges such as dependency on voluntary donations, operational costs, and potential geographical limitations. By expanding its network, leveraging advanced technologies, and enhancing sustainability initiatives, Apollo's Blood Bank can overcome these hurdles and continue to improve its service delivery.

In an environment marked by regulatory changes and potential health crises, maintaining public trust and donor engagement remains crucial. Apollo's Blood Bank's strategic focus on continuous improvement and community education will be vital in sustaining its mission to provide safe and high-quality blood products for those in need. Through these efforts, Apollo's Blood Bank is well-positioned to make a lasting, lifesaving impact.