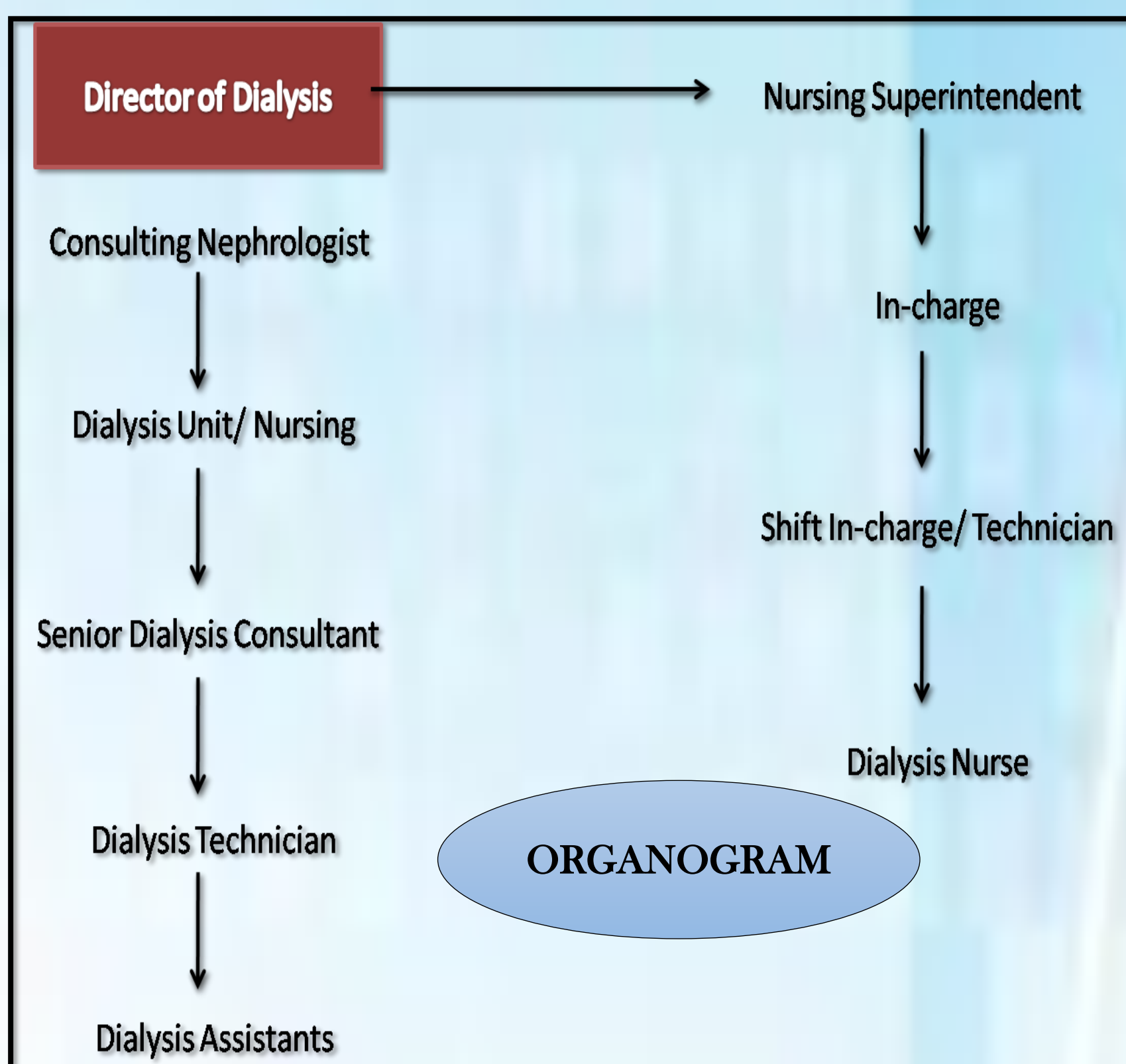


### ABOUT THE ORGANIZATION

**Narayana Health** is a chain of Multispeciality hospitals headquartered in Bengaluru, India, and operates a network of hospitals across the country. NH was founded in May 2001 by one of the famous cardiac Surgeon team led by **Dr. Devi Shetty** under the umbrella of the **Asia Heart Foundation**. **Shri Mata Vaishno Devi Narayana Super speciality Hospital** is a 250-bedded **NABH accredited Hospital** of Jammu & Kashmir.

**Vision:** To provide high quality healthcare, with care and compassion, at an affordable cost on a large scale.

**Mission:** Dream of making quality healthcare available to the masses worldwide.



### ABOUT HEMODIALYSIS

Hemodialysis is a procedure in which a machine filters harmful waste and excess salt and fluid from your blood. A needle is inserted into the patient's arm through a special access point. Patient's blood is then sent via the needle to a dialyzer (a device that filters your blood in a set time). The filtered blood returns to the body through another needle.

### SWOT ANALYSIS

#### STRENGTH

- State of art infrastructure
- High end Equipment's (PET SCAN, R O PLANT)
- Location: Hospital is situated in Katra, a town that serves as the starting point for pilgrimages to the vaishno Devi shrine.

#### WEAKNESS

- Ambulatory services are not accessible to the main city.
- Long ques at the billing counter.
- Distance to the hospital is no accessible to the main city.

#### OPPORTUNITY

- Pilgrimage Tourism.
- Collaborations: Establishing alliances with other medical organizations on a national and worldwide scale.

#### THREAT

- Opening of the new hospital AIIMS near the main city.
- Political and Security Situation.

### SUGGESTIONS

- ❖ Hiring and training of more GDA staff.
- ❖ Increase in quantity of isolation rooms in dialysis unit.
- ❖ Converting the available space into a storage room in dialysis unit.
- ❖ Providing on-job training about the Emergency Planning of the hospital.

### ABOUT THE PROJECT

**AIM:** To study the dialysis procedure & Analysis of Quality Indicators of Dialysis Department.

#### OBJECTIVES:

1. To study the process of dialysis unit.
2. To measure the **quality indicators** in the hemodialysis department with respect to
  - ✓ Functioning of AV Fistula failure rate after a year.
  - ✓ Mean value of Hb for patients on maintenance dialysis in a month.

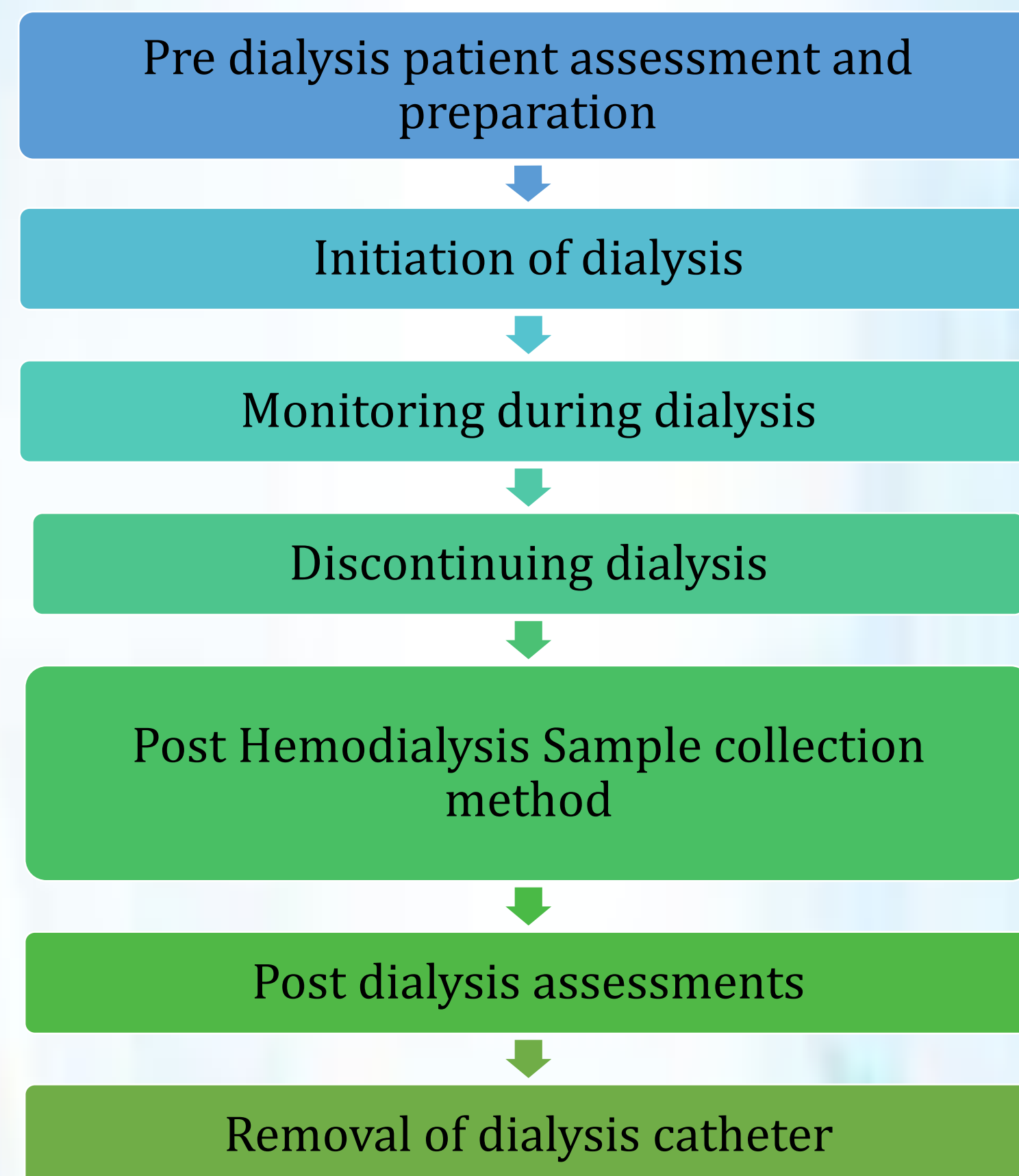
### RESEARCH METHODOLOGY

Study Design:- **Observational Descriptive Design.**

Sampling:- **Purposive Sampling**

- For Functioning of AV fistula failure rate: 42 patients.
- For mean Hb value:
  - Month of may: 159 patients.
  - Month of June: 171 patients

### Hemodialysis Procedure and Documentation:



#### Pre dialysis patient assessment and preparation:

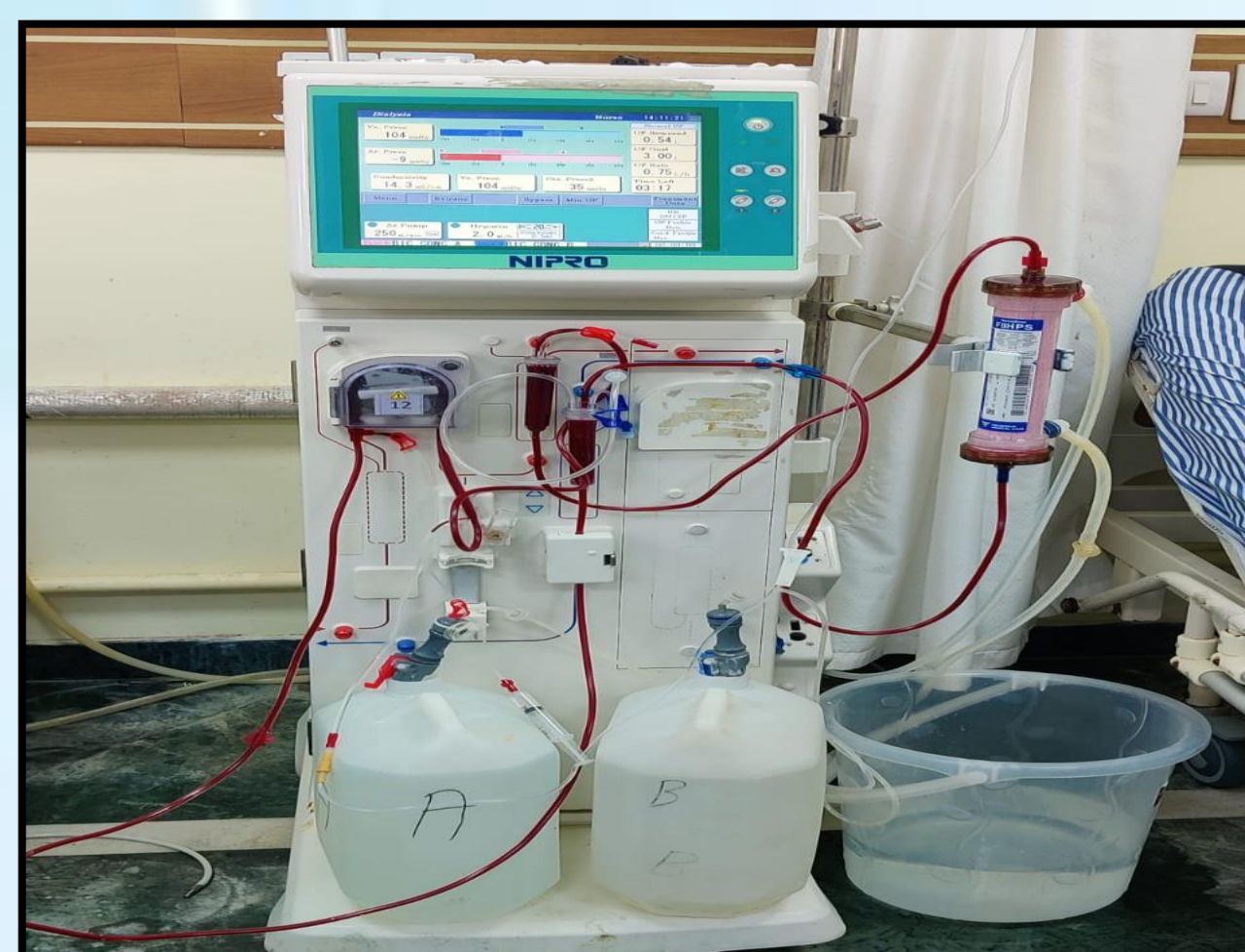
The dialysis nurse/technician assigned, documents the pre dialysis assessment which includes:

- Blood Pressure
- Pulse
- Pre dialysis weight (weight of patient is recorded to determine the weight gain and the condition at the time of dialysis)

#### Monitoring during Dialysis:

Patient and equipment monitoring are performed and documented upon the initiation and after every 30 minutes interval during the entire dialysis process which includes:

- Blood pressure
- Monitoring blood flow rate
- Venous Pressure
- Conductivity of the dialysis solution
- Documentation of any complication during hemodialysis. (hypotension, dialyzer clotted, needle out, etc.)



Submitted by: **Dr. Shalini Kotwal**  
Under the Guidance of:  
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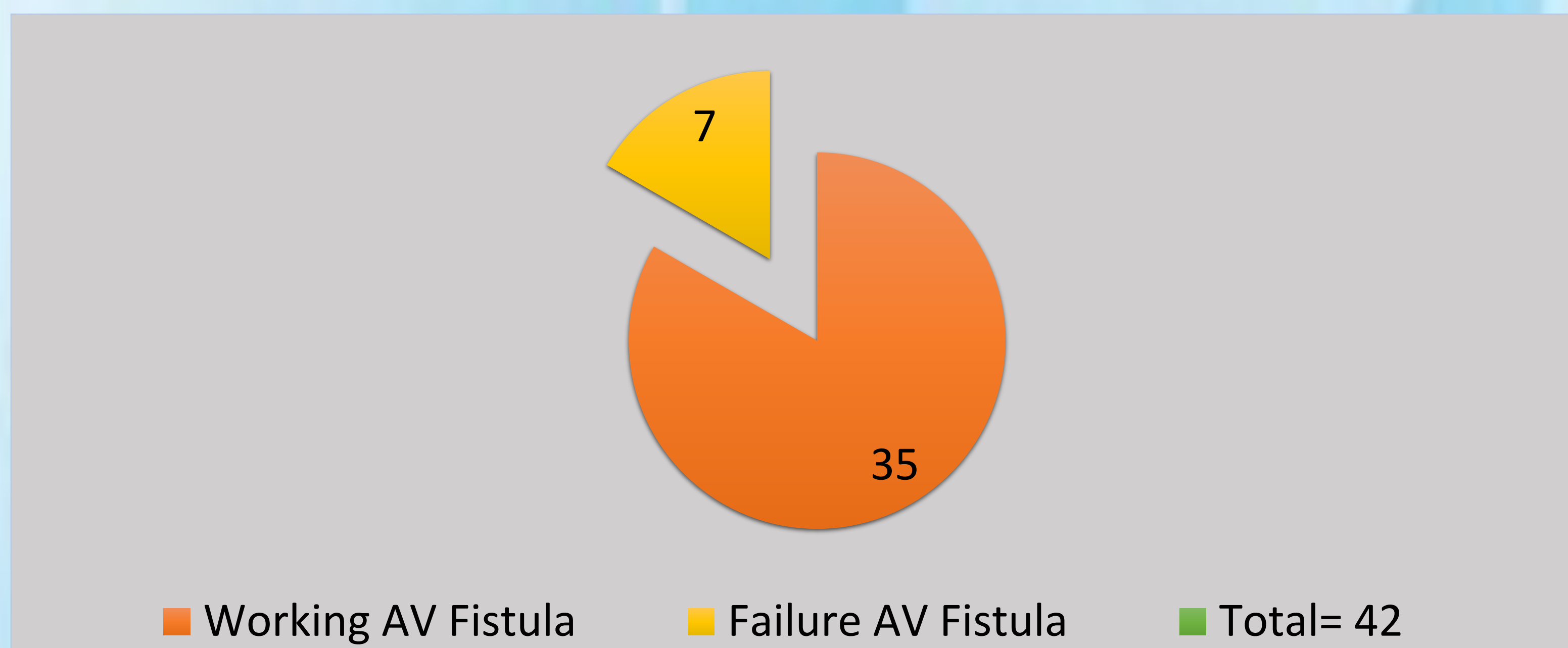
### QUALITY INDICATOR OF DIALYSIS UNIT

#### 1. Functioning of AV Fistula failure rate after 1 year

Creating an arteriovenous (AV) fistula for hemodialysis aims to provide a working access (i.e., one that can be repeatedly cannulated and provides enough flow for the dialysis therapy).

This quality indicator provides information on how many AV fistulas fail and how many are still functional after a year.

$$= \frac{\text{No. of patients with functioning AV Fistula after 1 year}}{\text{Total AV done in 1 year}} = \frac{35}{42} = 0.83$$



#### 2. Mean Value of Hemoglobin for patient on maintenance dialysis in a month:

Anaemia is common in patients on hemodialysis. Hemoglobin (Hb) levels less than 10 g/dl are associated with impairment in quality of life, reduced energy, decreased exercise capacity, increased costs, morbidity, and mortality. Anaemia guidelines on Hb target have recommended a general range of 10–12 g per 100 ml and never over 13 g per 100 ml in dialysis and non-dialysis patients with CKD.

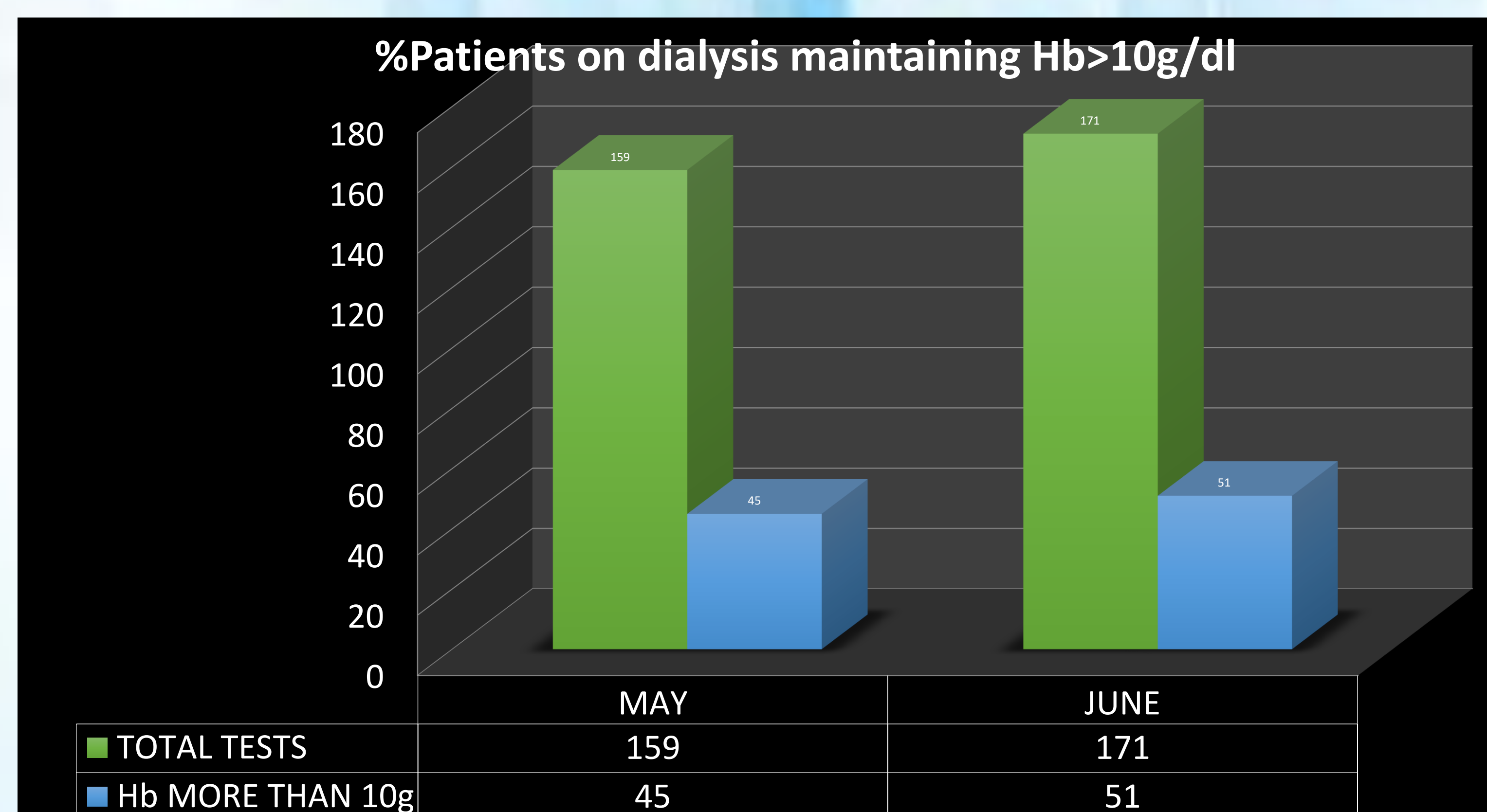
This indicator provides information on the Hb levels in maintenance dialysis patients, including the percentage of those who still have Hb ≤ 10 g/dl after a month of dialysis.

%Patients undergoing dialysis maintaining Hb > 10g/dl =

$$\frac{\text{No. of patient who maintained Hb level} > 10\text{g/dl}}{\text{total no. of patients who underwent blood testing in a month}} * 100$$

$$\text{For the month of May : } \frac{45}{149} * 100 = 28.3\%$$

$$\text{For the month of June : } \frac{51}{171} * 100 = 29.8\%$$



### CHALLENGES

- The hospital had complex procedures like admissions, scheduling, inventory control, and coordination, which were difficult to comprehend and navigate.
- The hospital used various software systems and technologies for functions like electronic health records, scheduling, and inventory management.

### LEARNINGS

- Comprehensive insights into hospital operations, including departmental duties, patient care flow, and the interconnections of operational procedures.
- Enhanced multitasking, deadline adherence, and resource coordination skills.

### USEFULLNESS

- Acquired knowledge on how to apply theoretical knowledge to practical situations and handle daily challenges.
- An opportunity for personal and professional growth, exposing me to diverse individuals and situations fostering adaptability, empathy, cultural competency.
- Deepened my understanding of the healthcare system's impact on people and communities.