**Problem:** Increased number of suboptimal blood samples (hemolyzed, clotted and quantity not sufficient) due to factors out of the laboratory's control had a definite impact on patient care and can thus affect patient outcome; customer satisfaction and increase healthcare cost.

**Aim: To** reduce the number of suboptimal blood samples (hemolyzed, clotted and quantity not sufficient) by 80% by June 2014. Reduction of defective samples can improve timeliness of patient care, improve patient outcome and patient satisfaction.

### Interventions:

- Campaign to enhance NCCCR laboratory staff reporting of suboptimal laboratory samples.
- Data collected, analyzed and prioritized the most common cause of suboptimal lab samples.
- Conducted skills demonstration sessions on blood sample collection and handling technique by Phlebotomist to the nursing staff and In- charges in collaboration with Nurse Educator.
- Reviewed and revised the current Phlebotomy Competency Validation.
- Facilitate the store requisition requirements of the following items for all NCCCR units with the Material Management: Lithium Heparin and Microtainer and conducted training session on the new supply with the unit key staff. Patient in Urgent Care Unit that requires immediate chemistry report to consider using Lithium Heparin container (green top tube) .Used in NCCCR only and Microtainer used only for difficult vein patient.
- Updated the existing laboratory guide in the intranet.
- Standardized specimen transport storage container. Purchase Request sent.
- Reviewed and evaluated the appropriateness of using Vein Scanner for difficult vein patient in NCCCR.

## Team:

Project Lead: Ms. Emelita J. Ison -QMR
Back up Project Lead- Ms. Gilrose Bautista- Lab

**Technologist** 

Process Owner: Mr. Amer Al Zawahreh. HN-Ward 2

المركز الوطنى لعلاج وأيحاث السرطات

Coach: Ms. Lamiaa Mohd Saleh, QMR

Subject Matter Expert- Ms. Abeer Abunada- Phlebotomist

Core members :

Ms. Sheeja Chacko -HN Ward 1

Ms. Mariamma Daniel-HN DCU

Mr. Abdulqader -A/ HN,UCU Ms. Kumari Thank am -HN .PCU

Ad hoc Members:

Ms. Amal Hussein, Lab Technologist

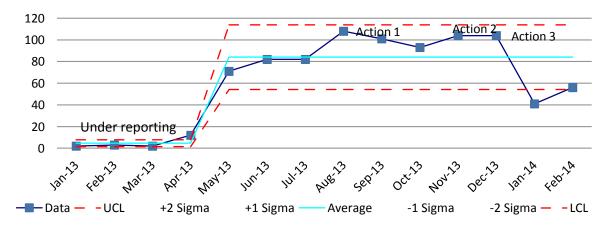
Ms. Fe Martinez , Nurse Educator

Dr. Shehab- Physician's Quality

**Project Sponsor:** 

Ms. Noora Al Mullah- Chief Lab Technologist

# NCCCR Number of Suboptimal Blood Sample per Month Year 2013-2014



## **Conclusions:**

- After implementation of the action plan, a significant reduction in the number of sub optimal blood samples (hemolyzed, clotted and quantity not sufficient) was decreased by 60%.
- The evaluation of pre-analytical processes in the laboratory allowed one to identify problem areas and prioritize where improvement is necessary.
- Reduction of suboptimal laboratory blood samples significantly improved timeliness of patient treatment and care delivery, improved patient satisfaction and decreased healthcare cost.

#### Next steps:

- To conduct Phlebotomy Competency Validation to all nursing staff.
- To share the improvement story to other HMC facility.
- To continue monitoring to sustain the gain.
- To celebrate success.

