Project Name

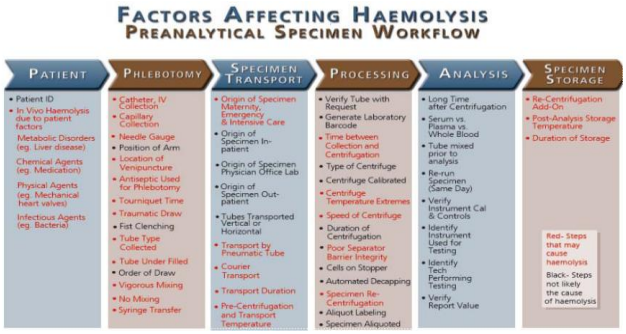
Decrease the number of hemolized sample in DEM

Site	Department
Jeddah	Department of Emergency Medicine

Project Status	Project Start Date	Project End Date
Completed	Click or tap to enter a date.	Click or tap to enter a date.

Problem: Why the project was needed?

Figure: Factors affecting blood hemolysis adapted from European pre analytical scientific committee (ESPSC), Spcimencare.com.



Aims: What will the project achieve?

Target Goal: To reduce the number of hemolized samples with 20% of 4th quarter total samples (from 96% to 76%) by end of Jun 2018

Push Goal: To reduce the number of hemolized samples with 40% of 4th quarter total samples (from 96% to 56%) by end of Jun 2018

Benefits/Impact: What is the improvement outcome?
(check all that apply)

- ☒ Contained or reduced costs
- ☒ Improved productivity
- ☒ Improved work process
- ☒ Improved cycle time
- ☒ Increased customer satisfaction
- ☐ Other (please explain)
  Click or tap here to enter text.

Quality Domain: Which of the domains of healthcare quality does this project support?
Efficient

Interventions: Overview of key steps/work completed

According to the above contributing factors the team in DEM works on controllable factors in collaboration with Laboratory department which include

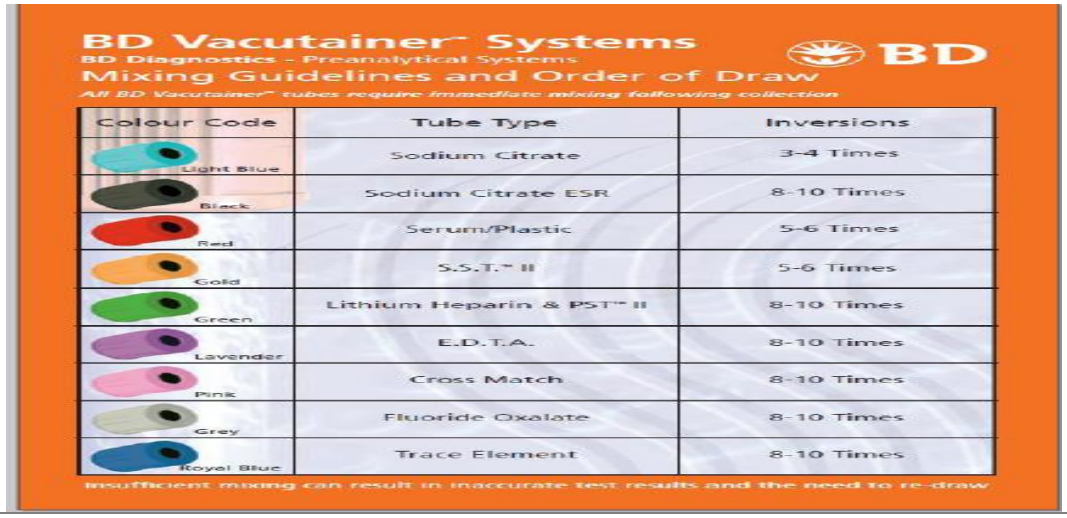
- Corrective action

- Nurses who have high number of hemolized sample was involved in root cause analysis and action plan.
- Practice check-off for each staff nurse in DEM to ensure the correct steps are followed by trained Peer reviewer.
- Staff instructed to do gentle tube shaking and avoid the vigorous mixing.
- Root cause related to processing and analysis was shared with laboratory quality coordinator
- Order of draw and mixing guideline card (from BD Company through laboratory) was placed on each blood collection trolley. See Figure 2

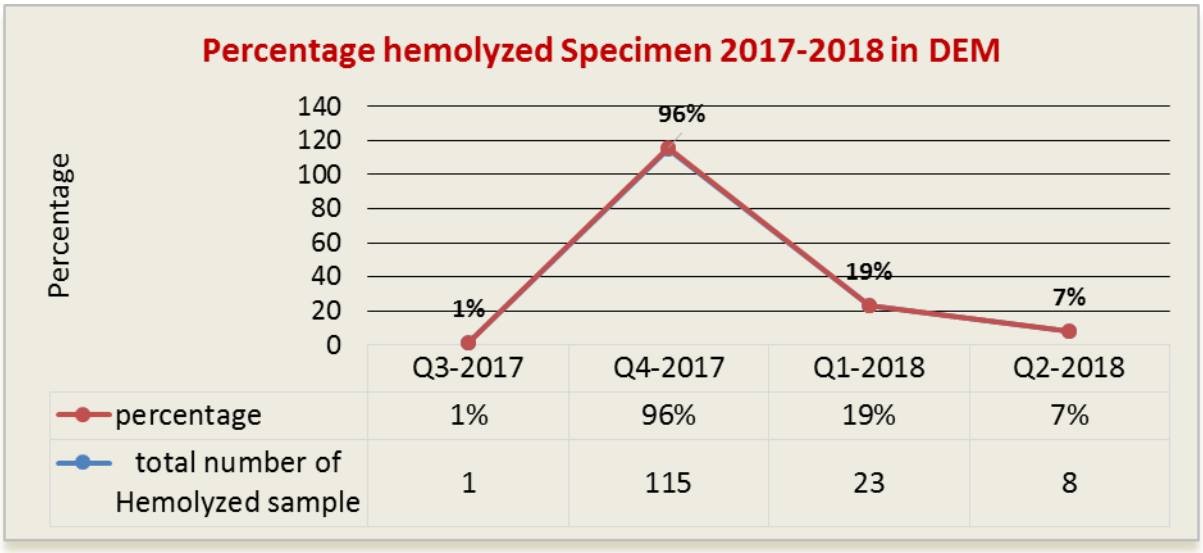
- Preventative action

- Educate the nurses on the evidence based steps on blood collection and site selection
- Quarterly regular schedule In-services for all DEM staff includes both teams, discussing all the factors contribute of hemolysis during sample collection, handling and transportation and how to prevent it, and update the education material if needed by SNI core group.
- Monthly data reviewed, analyzed with change in recommendation to support the project.
- Assessment tool (checklist) was designed by the SNI to check off the nurses on right process of blood drawn sample, and added to Departmental orientation for the new nurse.
- Feedback on the result discussed on quarterly bases with DEM staff to assess the progress of the PI project.

Figure 2: BD vacationer system-Mixing guideline and order of draw



Results:



Project Lead	Team Members
Name *(person accountable for project)* Anaam Khatatbeh	**Names** *(persons involved in project)* Nour Al Attas Wadea Beheri Marwa Abid - Taghreed Jilan Sarfinaz Hanbazaza Khalaf Al-Zyod Amirah Al Amri Hanan Abu ASidah Mahmoud Shanaah Sara Al beladi Linda Van Ryneveld Anisha Augustine Sara Ba Abdullah Imelda Sison Sara Diaz Guia Doronila Walaa Ismail Rajani Ravi