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Male Plastic Surgical Unit

## Small Change of Practice; Can Testing all Patients for Diabetes Improve Patient Safety?

### PROBLEM:

There is no protocol to check random blood sugar (RBS) for all patients before surgery. This practice carries the potential risk of undiagnosed patients going through surgeries with high blood glucose which increases the risk of Peri-Operative complication.

### AIM:

Within 2 months 100 percent of adult patients will be checked for random blood sugar level (RBS) on admission prior to surgery.

### INTERVENTIONS:

#### Using the Model for Improvement

1. Collect base line data
2. Plan change in practice:
  - Provide glucometers with strips at easily accessible place
  - Plan with the Nurses how to proceed with this activity
  - Provide log book to log all patient's RBS results
3. Small change test for one day of admissions. Analysis of test (Jan 22.).
4. Small change test for 8 days of admissions (Jan 23. – Jan 31.). Analysis of test.
5. Some (22% of) patients were missed so new changes were put in place:
  - Put a reminder for RBS check in admission book
  - Designate person responsible for daily checking of RBS log book
6. Small change test for 15 days of admissions (Feb 01.-Feb 15.).Analysis of test
7. Some (6% of) patients were missed. Reinforcement of changes in practice was done.
8. Continuation of test for 15 days.

### TEAM:

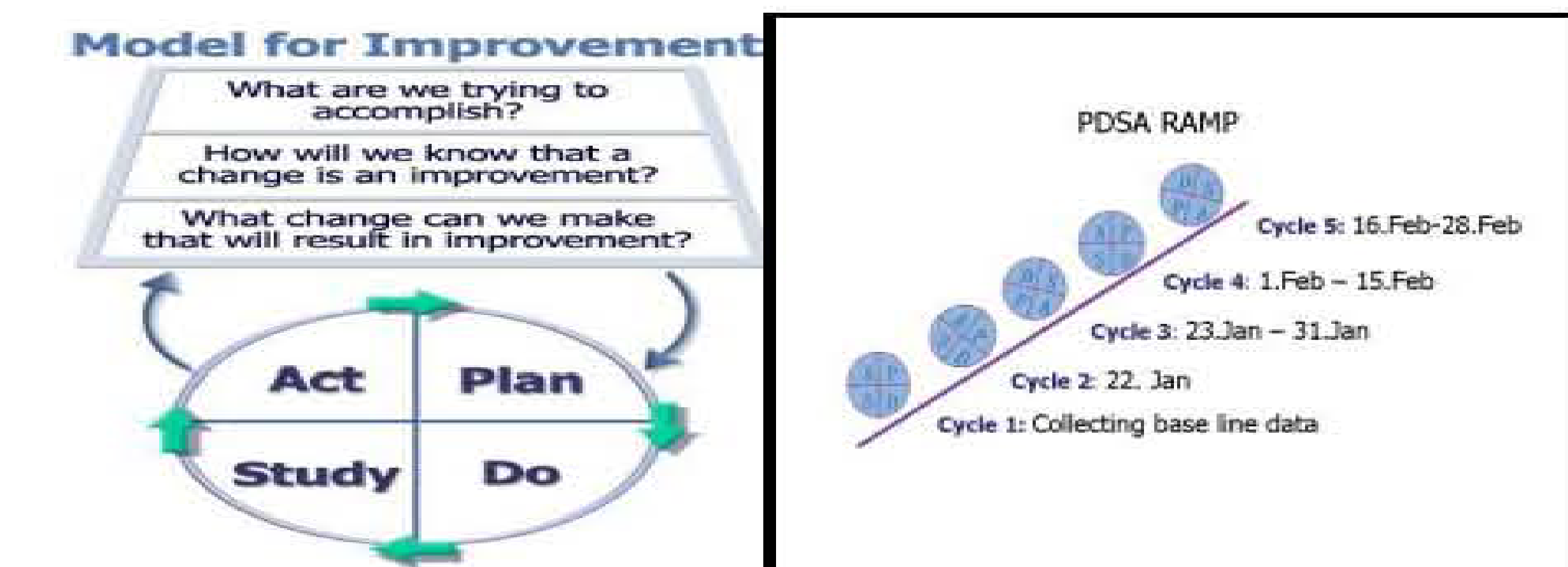
Charge Nurses

Staff Nurses

Team for BCA

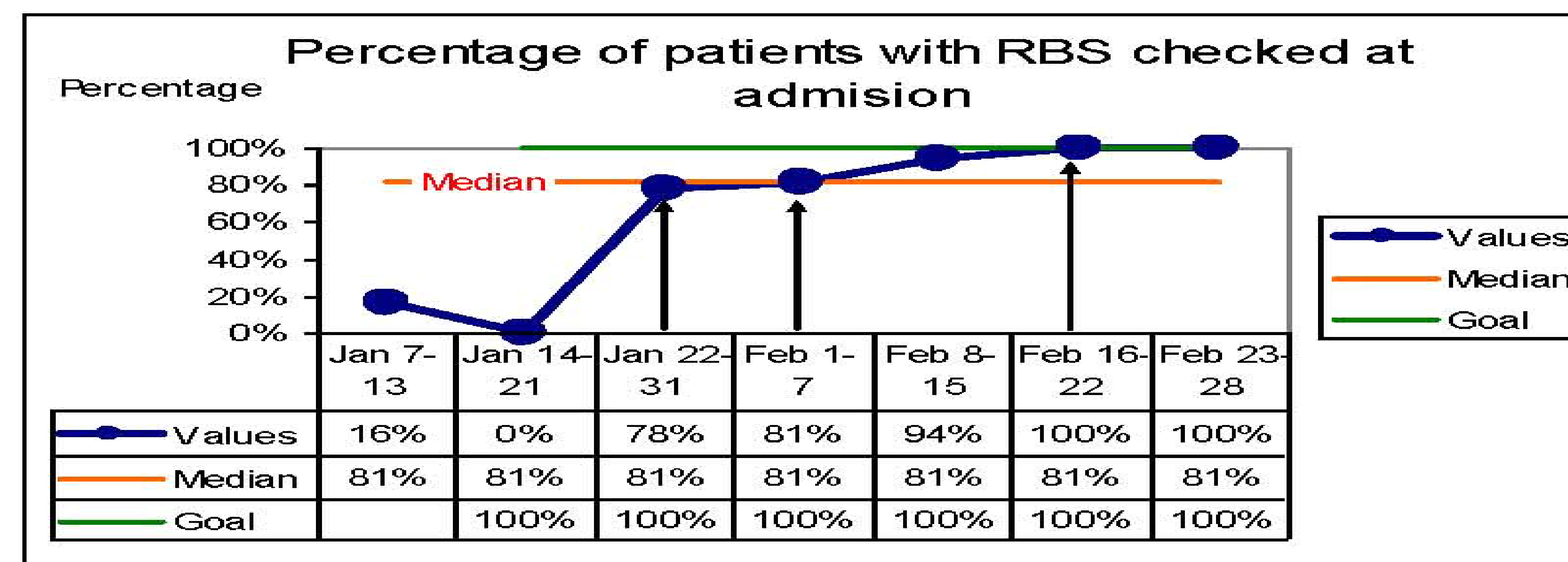
### Project Manager:

Dr. Amal Abousaad



### RESULTS:

After 5 weeks of starting changes, RBS was checked for 100 % of patients. On the **fifth day of test one patient (46 years old) was diagnosed with high blood sugar (12.2 mmol/L) for the first time of his life.** This small test of change meant a life change for this patient.



### CONCLUSIONS:

This change is low cost, simple, low time consuming. This change has a potential for major impact on patient's health and safety.

### NEXT STEPS:

1. Incorporate RBS check in admission routine to ensure sustainability.
2. Spread this change to other patient's entry points for surgery - FMPSU and DCSU once the process is stable
3. Analyze age related data for possibility to focus on patients older than 40 years.
4. After getting supporting data from analysis, plan to incorporate this change in official policy.