



Strategic Priority: **SPI- Medical, Research, Academic Research**

Project Name

Going Green in outpatient Electrocardiography (ECGs)

Site

Riyadh

Department

Non-Invasive Cardiology Lab, Heart Centre

Project Status

Completed

Project Start Date

01-05-2018

Project End Date

10-31-2018

Problem: Why the project was needed?

The Electrophysiology Section, Non-Invasive Cardiology Lab is seeking to reduce expenditure, by reducing the use of ECG paper. All ECGs are transmitted from the ECG machine and stored electronically in the ECG Management System, MUSE. The ECGs can be reviewed using the MUSE or the HeartNet. Printing the ECGs is a habit and a safety measure in the event that the MUSE is not accessible. In 2017 over 35,000 ECGs were performed and printed unnecessarily in the Lab at a cost of approximately 8,750SAR. This project will educate staff **not** to print ECGs and to automatically transmit to MUSE all ECGs performed in the Outpatient Non-Invasive Cardiology Lab.

Aims: What will the project achieve?

To decrease the number of ECGs being unnecessarily printed in the outpatient Non-Invasive Cardiology Lab from approximately 730 a week in 2017 to less than 50 a week by the end of October 2018. In addition to maintain compliance post project implementation.

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?

(Select only one)
Efficient

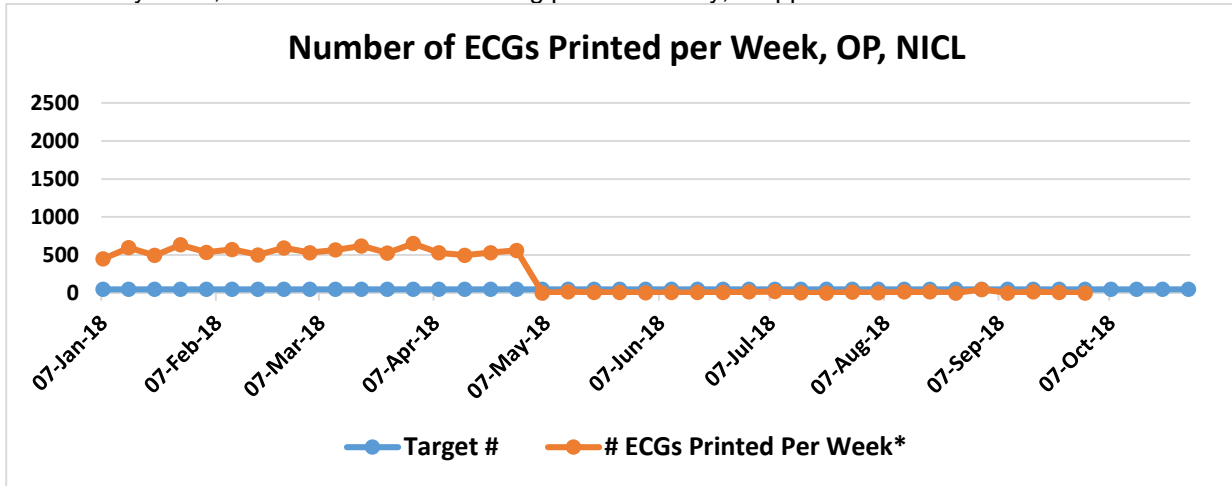
| Measures: Performance metrics to be evaluated | Targets: Expected outcomes |
|--|-----------------------------------|
| Number of ECGs printed per week | < 50 printed ECG per week |

Interventions: Overview of key steps/work completed

- Educate staff not to print outpatient ECGs in Non-Invasive Cardiology Lab.
- Educate staff to transmit all ECGs to the MUSE, ECG Management System.
- Review and monitor compliance.
- Mandate all new staff to be educated regarding non-printing of ECGs.

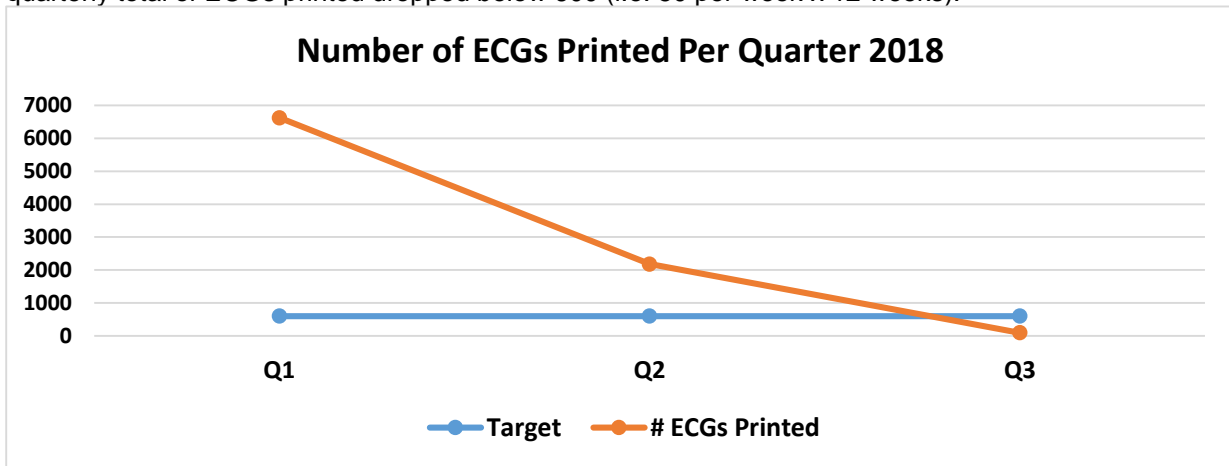
Results: Insert relevant graphs and charts to illustrate improvement pre and post project
(insert relevant graphs, data, charts, etc.)

- As of 7 May 2018, the number of ECGs being printed weekly, dropped to below the benchmark of <50.

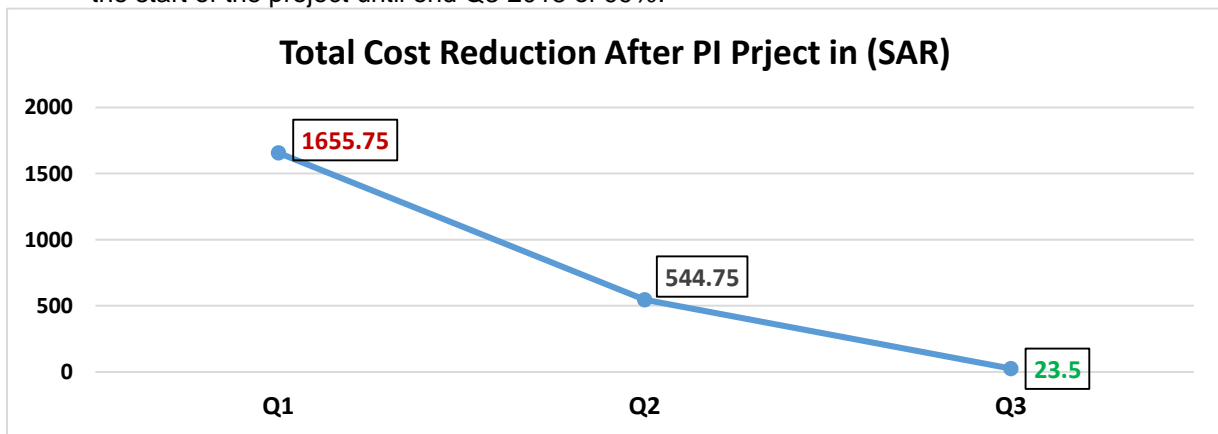


• In Q3 2018 the

quarterly total of ECGs printed dropped below 600 (i.e. 50 per week x 12 weeks).



- The cost of ECG paper is 76SAR per packet and each packet contains 300 sheets i.e. for one (1) sheet of ECG paper the cost is 0.25SAR. If we consider only one (1) sheet of paper is used to print an ECG the cost of ECG paper for outpatient ECGs per quarter 2018 is shown below. There was a 67% cost saving from Q1 to Q2 2018 and a 96% cost saving from Q2 to Q3 2018 with an overall cost saving from the start of the project until end Q3 2018 of 99%.



Project Lead

Name

(person accountable for project)

Deborah Ruediger

Team Members

Names

(persons involved in project)

Deborah Ruediger, Marjorie Arellano, Manal AlHarthy, All EP Section Staff