

## 2018 Performance Improvement Report STRATEGIC PRIORITY I

Medical Research and Academic excellence

## **Project Name**

## Improve The Accuracy Of Parathyroid Abnormalities Detection

Site		Department
Jeddah		Radiology/ Nuclear Medicine
Project Status	Project Start Date	Project End Date
Completed	11-01-2017	07-01-2018
	10	Aimer M/het will the project echieve?
Parathyroid scintigraphy is an important tool for minimal surgical excision of parathyroid abnormalities. Improving the accuracy of detection will increase the surgeons' satisfaction, avoid major operational incisions for patients and shorten the patient recovery time		<ol> <li>Improve the accuracy (sensitivity and specificity) of parathyroid abnormalities localization from 50% to 90%</li> </ol>
Benefits/Impact: What is the improve	ment outcome?	<b>Quality Domain:</b> Which of the domains of healthcare quality does this project support?
Contained or reduced costs		
Improved productivity		Efficient
Improved work process		
Improved cycle time		
Increased customer satisfaction		
□ Other (please explain)		
Click or tap here to enter text.		

Interventions: Overview of key steps/work completed

• In the old NM parathyroid protocol, early dynamic images, immediately after radioactive injection, followed by 3-4 hours delayed statics and/or SPECT/CT were used for every patients suspected with parathyroid abnormalities.

- Whereas, the new NM parathyroid protocol requires early statics, 10 minute post injection, followed by early SPECT/CT of the head and neck. 3 hours later, another delayed statics are taken for the same area.
- After applying the new protocol, the sensitivity and specificity of parathyroid abnormalities localization was improved from 80% to 99%.
- In return, this has assisted the surgeons to go for minimal surgical excision instead of local exploration of parathyroid abnormalities.

## **Results:**



Project Lead	Team Members
Name	Names
Hossam El-Zeftawy	Nour Al-attas (QM facilitator) Johnny C. Alejandro Nedal Hamed Alkhawaldeh Turki Halabi Evelyn A.Tolentino Monaliza P. Delacuesta Yasse Fahed Aleatany Wejdan Niazi