Service Priorities and Programmes

Electronic Presentations

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Quality Assurance of Mammographic Images with PGMI Rating System
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Introduction
The PGMI (Perfect, Good, Moderate, Inadequate) rating system uses visual grading analysis to judge image quality in mammography. It is recommended by the Hong Kong College of Radiologists Mammography Statement that the film rating of each mammographer should be assessed by the PGMI rating system as part of the quality assurance programme.

Objectives
#NAME?

Methodology
All mammographers who performed mammography throughout 2014/15 were included. Fifty random sets of mammograms performed by each mammographer in January to October 2014 were evaluated individually by the PGMI rating system by a pair of radiologists. Discrepancy was resolved in consensus meetings. Areas for improvement in techniques for the images graded as "Moderate" or "Inadequate", if any, were identified. Following implementation of improvement, another fifty random sets of mammograms performed by each mammographer in January to October 2015 were rated by the same pair of reviewers.

Result
In both baseline and post-implementation periods, all the image sets were classified to be in the "Perfect", "Good" or "Moderate" (PGM) categories, better than the recommended >97%. There was no image set being graded as "Inadequate".   All mammographers achieved an improvement in the proportion of image sets categorized "Perfect" or "Good" (PG). The PG rates among individual mammographers ranged between 64-68% in 2014 and 66-82% in 2015. The overall PG rate improved from 65% to 73% (recommended >75%).   COMMON REASONS FOR LIMITED IMAGE QUALITY: The most common reason for moderate grading was inadequate visualization of the inframammary fold and pectoral muscle not up to nipple level on mediolateral oblique view. Other reasons included nipple not in profile or off midline, skin folds, and asymmetry.   CONCLUSION AND RECOMMENDATIONS: All of the image sets were graded to be within the PGM categories, surpassing the standard target of 97%. With the aid of the PGMI system in

2014/15, promising improvement of the proportions of "Perfect" and "Good" images has also been achieved. The use of PGMI rating system has offered valuable insight into areas of common challenges and possible improvement strategies in mammography services. Continuous use of this system, individual feedback, and focused discussions on positioning techniques and image criteria can be performed to maintain and further improve our mammographic image quality.