Documentation of the Breast Disease Clinic’s Workflow and Optimization Based on Informatics Solutions

**Abbasi E**: Cancer Informatics Research Group, Breast Cancer Research Center, ACECR, Tehran, Iran. Student Research Committee, Faculty of Medical Sciences, Mashhad University of Medical Sciences, Mashhad, Iran  
**Nazeri N**: Cancer Informatics Research Group, Breast Cancer Research Center, ACECR, Tehran, Iran  
**Atashi AR**: Cancer Informatics Research Group, Breast Cancer Research Center, ACECR, Tehran, Iran. Student Research Committee, Faculty of Medical Sciences, Mashhad University of Medical Sciences, Mashhad, Iran

**Corresponding Author**: Najme Nazeri, Najme.Nazeri@gmail.com

**Abstract**

**Introduction**: Using the information technology in medical centers, today as one of the efficient ways to improve the work processes. Effective design of health information technology (HIT) for patient-oriented service requires consideration of workflow from patient’s perspective, termed ‘patient-oriented workflow’.

The purpose of this paper, is documentation of workflow diagram for a Breast Disease Clinic affiliated to Breast Cancer research Center in 2013, and analyzing it in term delays, rush points and human errors in work processes. Then using the facilities and services will be offered ways to improve processes.

**Methods**: This research is a descriptive and observational research. Data collected by using previous researches, systematic interview and continuous observation. Using the results of interviews and observations we plotted flowchart of the center was plotted and then the current workflow problems using the scientific with experts in the field of medical informatics identified and solutions were presented. In the last phase the center’s optimal flowchart was drawn.

**Results**: Problems in breast disease clinic workflow consist of: People rush at presence or by phone scheduling, clinic and radiology services waiting room, Delay in retrieving patient’s records, Delay in presenting lab and radiology services reports and Data entry redundancy and waste of time and energy raised from.

To solve above-mentioned problems, we have suggested some health information technology systems, such as Online scheduling services, Electronic Medical Records (EMR) system, Picture Archiving and Communication System (PACS), Online Lab Reporting system, etc.

**Conclusion**: Comparing current flowchart of the center and suggested optimal Chart shows that work processes, by implementation information systems, are facilitated and accelerated. By omitting or shortening processes such as formation and retrieval of records, getting time and report in addition to the accuracy of the services provided, save a lot of time and money for the center as well as the patient.

**Keywords**: Workflow, Informatics, Breast Disease, Patient-Oriented Care.