



## Service Priorities and Programmes Electronic Presentations

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### **Analysis of In-patient Transfers to the Radiological Department for Imaging Investigations and Services: Results, Implications and Impact**

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#### **Introduction**

Demand for medical imaging has been progressively increasing in recent years. In-patients need to be transferred from their wards to the radiological department for such services. Timely transfer of in-patients is essential for efficient workflow and daily throughput of the radiological department. The transfer process involves collaboration between clinical staff in wards, porters, and staff of the radiological department.

#### **Objectives**

To evaluate the punctuality of transfer of in-patients, who have been allocated a scheduled time for an imaging study, to the radiological department in a major regional hospital.

#### **Methodology**

A prospective observational study over a 6 week period. The punctuality of in-patient transfers to the radiological department for ultrasound, computed tomography (CT), magnetic resonance imaging (MRI), and interventional services were evaluated. Arrival times of in-patients with regard to their scheduled appointments were recorded. The cases with delayed arrival of in-patients were further analyzed. The Auto Dispatching System for Portering and Messengerial Services (ADS) booking time, porter distribution time, arrival time of porter to the ward, and the arrival time of the patient to the radiological department were recorded. The reason for delayed arrival of the patient was documented by means of a questionnaire.

#### **Result**

There were a total of 826 of in-patient transfers to the radiological department during the period. 14 were excluded due to missing data. From the included 812 transfers, 520 (64%) were punctual, and 292 (36%) were late for their scheduled appointments. 147 (50.3%) of the late transfers were late by less than 15 minutes, 84 (28.8%) by 16-30 minutes, and the remaining 61 (20.9%) by more than 30

minutes. 40.6% of the late cases were due to late ADS booking by wards. 40.2% of the cases were late due to late porter distribution time. The remainder of the late cases were related to the in-patients such as unstable condition or incomplete patient preparation. Conclusion: Our analysis shows that up to 1/3 of in-patient transfers were late for their scheduled appointments. Approximately 80% of these delays were related to booking of porters or to the portering system. These impact the workflow, efficiency and throughput of a radiological department. Measures to reduce these include familiarization of ward staff with local ADS guidelines, use of advanced booking of porters by wards, and increasing the number of portering staff to cope with the increasing demand of imaging services.