

PROCESS MAPPING IN THE MAGNETIC RESONANCE IMAGING (MRI) DEPARTMENT TO IDENTIFY POTENTIAL DELAYS



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DESCRIPTION

At Humber River Health, a process map that outlines the key steps of patient's journey throughout the radiology care process was created by the MRI team in collaboration with the Quality and Patient Safety (QPS) team to maximize the efficiencies. The process map provides the quick visual guide of a patient's journey that allows stakeholders to identify delays and factors impacting patient flow and devise solutions and quality improvement ideas. The process analysis was completed to understand the delays in the process of MRI examination by performing the time study for each step in the process.

OBJECTIVE

To outline the steps in the process and understand the expected timelines.

ACTIONS TAKEN

The QPS team engaged the key stakeholders from the MRI department including frontline staff and leadership team to identify the key steps of the radiology process. A process map was designed for both inpatient and outpatient flow. The process map was divided into the steps that occur from the registration desk to the recovery room. The time study was completed through observations to measure the amount of time taken for each step in the process, the template was used to document findings. The results of the analysis was shared with stakeholders.

SUMMARY OF RESULTS

A process map that highlights key steps of the radiology process for MRI study was created. A total of seventy-two patients were observed at various steps of the MRI process between June 2023 to July 2023 on five different days. The average time required for each step was established. The possible barriers to completing scans in a timely manner were highlighted through an analysis.

PROCESS TIME STUDY TEMPLATE

IP/OP	PATIENT #/AGE	MRI ROOM #	BODY PART	PRIORITY	AMBULANCE?	PREP DONE?	PROCESS STEPS	TIME START	TIME END	NOTES

LESSONS LEARNED

Taking a step back to evaluate the current state and process, can help to implement strategies to enhance the patient experience and improve patient flow.



Figure 1. A time sheet used to capture process steps.

MRI Outpatient

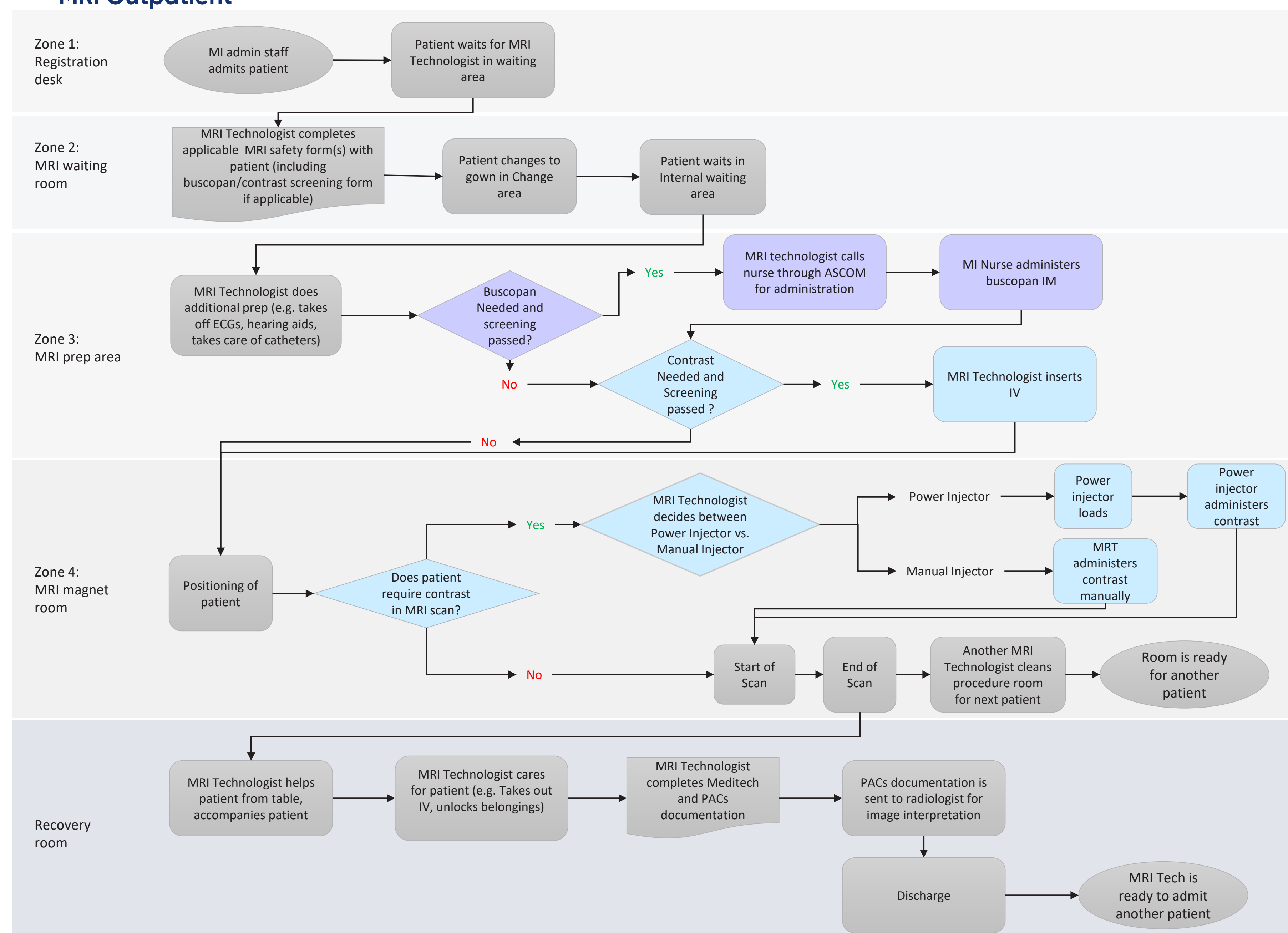


Figure 2. A process map for the outpatient flow throughout the MRI department. Similar another process map was designed for inpatient.