

8-21-2017

# Improving Cardiology Patient Flow In Nuclear Medicine

Kelly Haar  
*Maine Medical Center*

Hannah Sullivan  
*Maine Medical Center*


Kathryn Laverdiere  
*Maine Medical Center*

Nuclear Medicine Department

Haley Pelletier  
*Maine Medical Center*

*See next page for additional authors*

Follow this and additional works at: <https://knowledgeconnection.mainehealth.org/mmc>

 Part of the [Business Administration, Management, and Operations Commons](#), [Cardiology Commons](#), [Cardiovascular Diseases Commons](#), [Health and Medical Administration Commons](#), [Interprofessional Education Commons](#), [Nursing Commons](#), [Operations and Supply Chain Management Commons](#), and the [Radiology Commons](#)

---

## Recommended Citation

Haar, Kelly; Sullivan, Hannah; Laverdiere, Kathryn; Nuclear Medicine Department; Pelletier, Haley; Tyzik, Stephen; Nayak, Suneela; and Hanselman, Ruth, "Improving Cardiology Patient Flow In Nuclear Medicine" (2017). *Maine Medical Center*. 5.  
<https://knowledgeconnection.mainehealth.org/mmc/5>

This Article is brought to you for free and open access by the All MaineHealth at MaineHealth Knowledge Connection. It has been accepted for inclusion in Maine Medical Center by an authorized administrator of MaineHealth Knowledge Connection. For more information, please contact [mckeld1@mmc.org](mailto:mckeld1@mmc.org).

---

**Authors**

Kelly Haar, Hannah Sullivan, Kathryn Laverdiere, Nuclear Medicine Department, Haley Pelletier, Stephen Tyzik, Suneela Nayak, and Ruth Hanselman

**Project:** Nuclear Medicine - Cardiology Patient Flow  
**Last Updated:** 8/21/2017

**Executive Sponsor:** Mark Parker  
**Facilitator:** Haley Pelletier



**Team Members:** Kelly Haar, Hannah Sullivan, Kathryn Laverdiere, Nuclear Medicine Department, Suneela Nayak, Stephen Tyzik, Ruth Hanselman

**Problem/Impact Statement:**

Upon Operational Excellence performance improvement measures being undertaken by the Nuclear Medicine department, Cardiologists associated with the unit wanted a goal to reflect success rate of having one stress test per day ready to be read by the cardiologist at noon. The remainder of the Nuclear Medicine staff has since undertaken a variety of KPIs, to combat the many areas of delay associated with these procedures, in an attempt to provide feedback to the cardiologists, while simultaneously providing better patient care.

**Scope:**

**In Scope:** Nuclear Medicine department at Maine Medical Center (MMC)

**Out of Scope:** Departments within MMC that are procedural in nature, and require the timeliness of a variety of other units. Additionally, Nuclear Medicine departments at other, similar, tertiary hospitals may benefit from the success of this work.

**Goal/Objective:**

**KPI 1:** 100% of cardiac stress tests will be completed within the scheduled time frame

**KPI 2:** 100% of the time, patients to undergo nuclear cardiac stress tests will be ready for injection by 7:30 AM

**Overall goal:** **One stress test will be ready for cardiologist to read by noon-time everyday, in an attempt to increase the efficiency of the process, as well as decrease time of procedure and length of stay.**

**Baseline Metrics/Current State:**

At baseline, it is very difficult for the Nuclear Medicine department to complete stress tests within the scheduled time frame, and as a result the cardiologist often does not have a test to read by noon for that day, leading to further delays for subsequent patients. Currently, patients spend a great deal of time waiting for the nuclear medicine and stress test procedure to be completed, with added wait time contributing to poor patient experience, as patients are NPO until the end of testing.

**Root Cause Analysis:**

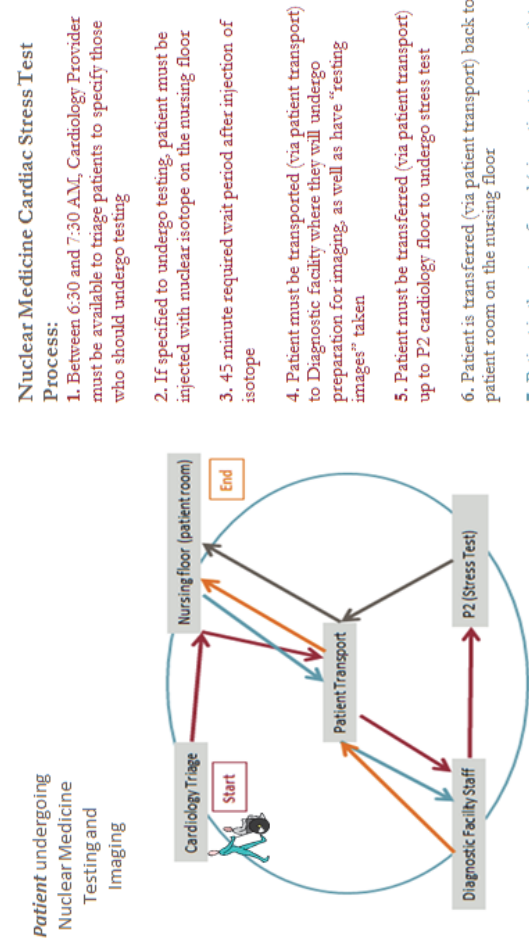


Figure 1: Image depicting the transfer of care and process involved when a patient is under going Nuclear Medicine Cardiac Stress testing

**Countermeasures**

Action	Owner	Due Date	Status
KPI 1: 100% of cardiac stress tests will be completed within the scheduled time frame	Nuclear Medicine	9/22/2016	Ongoing
KPI 2: 100% of the time, nuclear cardiac stress tests will be ready for injection by 7:30	Nuclear Medicine	6/6/2017	Ongoing

**Outcomes**

When it was shown to management on a daily Gemba walk that time waiting for cardiology availability was a major barrier in getting the nuclear medicine procedures completed in a timely manner, a discussion was started about the potential benefit of hiring an additional provider, which has been successfully accomplished. Additionally, it has become standard practice, and recognized by the nursing staff interacting with nuclear medicine, that a working IV is required for a patient to be considered "ready for injection."

**Next Steps**

- Hiring of a physician's assistant who can take some of the Cardiology workload, in an attempt to improve the workflow for Nuclear Medicine
- Once the new provider is implemented into the daily rhythm, there will be auditing of further delays, in order to discern what other barriers are present in getting cardiac stress tests completed in the appropriately scheduled time frame.