



UPMC Presbyterian Shadyside
University of Pittsburgh Medical Center
Pittsburgh, Pennsylvania

Darlene Lovasik, RN
Advanced Practice Nurse
UPMC Presbyterian
Pittsburgh, PA 15213

Ticket to Ride: Providing Safe Intra-hospital Transport

The Institute for Healthcare Improvement declares that the riskiest place in healthcare is between care providersⁱ. Studies have reported that there is an increased risk of medical or procedural errors when a patient moves between one healthcare provider/team to another. Root cause analysis of sentinel events reveal that 70% were due to communication issues and 50% of communication failures occurred during hand-offsⁱⁱ.

One of the 2009 JCAHO National Patient Safety Goals (NPSG.02.05.01) requires hospitals to develop and implement a standardized approach to hand-off communicationsⁱⁱⁱ. The primary objective of a hand-off is to provide accurate information about a patient's medical history, current condition, treatment, and any recent changes. The hospital environment has several types of patient hand-offs, including the acceptance of temporary responsibility for the patient as they transition through the hospital for specific diagnostic tests and/or procedures. The objective for our team was to develop a standardized model of the patient transportation process within UPMC Presbyterian that would spread to the other system hospitals. Promoting patient safety and satisfaction were the primary goals of this project.

The *Ticket to Ride* focuses on internal transportation of the patient within the hospital, particularly when the patients leave their assigned hospital bed to go to another department for a diagnostic test and/or procedure. Role clarification, standardization of the physical and informational hand-off, and strengthening the connection among the various members of the healthcare team were critical components in developing the new process.

UPMC Presbyterian, an 801-bed hospital of the University of Pittsburgh Medical Center (UPMC), introduced the *Ticket to Ride* in May 2007. There are three primary areas of concentration:

1. The nursing unit (sending unit)

- a. Documentation/communication
 - Print the *Ticket to Ride* jacket from any unit computer system.
 - Contact phone number.
- b. Oxygen rate and delivery method
 - Print the *Nurse Hand-off Report* from the electronic medical record. This report contains essential patient information including allergies, medications, medical history, and recent laboratory values (within one hour of transport).
 - The nurse validates the patient's pre-transport condition.

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- c. Equipment
 - Proper patient identification wristband.
 - Appropriate oxygen therapy.
 - Appropriate oxygen reserve in the tank.
 - Reference sheets for the oxygen calculation delivery (in minutes).
 - Confirm IV infusions/pumps.
 - d. Patient preparation /comfort.
 - Notifying patient of the reason for transport.
 - Address patient comfort prior to leaving the unit.
 - 1. Pain level and need for medication.
 - 2. Toileting needs prior to leaving the room.
 - 3. Offered water, blankets, etc.
 - 4. Encouraged to alert care providers along the transport continuum of any needs or concerns.
- 2. Transport department**
- Utilize a checklist identifying the process steps.
 - Introduction to the patient.
 - Verify patient identification via wristband and addressing the patient by name.
 - Secure the equipment.
 - Verify oxygen flow and the oxygen tank PSI.
 - 1. Reference sheets for the oxygen calculation delivery (in minutes).
 - 2. Identified oxygen refueling units for long intra-hospital transport.
 - Transport patient to their destination.
 - Communicate patient arrival and hand off the *Ticket to Ride* to the receiving department staff.
- 3. Receiving department**
- Introduction and acknowledgement of patient arrival.
 - Check oxygen tank and connect to wall oxygen supply.
 - Confirm IV infusions/pumps.
 - Provide communication mechanism for the patient.
 - Verify patient identification via wristband and addressing the patient.
 - Review *Nurse Hand-off Report*.
 - Questions or updates are called to the designated nurse.
 - Maintain the equipment.
 - Educate the patient and perform the appropriate diagnostic test and/or procedure.
 - Prepare the patient for return to the unit.
 - Supervise the patient until the transport staff arrives.
 - Include the *Ticket to Ride* for the return trip.

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The decision to develop and implement the *Ticket to Ride* program was in response to the 2009 JCAHO National Patient Safety Goals (NPSG.02.05.01) and internal risk analysis of patient events during intra-hospital transport. The members of the *Ticket to Ride* committee included representatives from patient transportation, nursing, ancillary departments, patient relations, medical staff, administrative staff, electronic health record, process improvement, and risk management. The goals and process for the *Ticket to Ride* were based on:

- Standardized communication
- Coordinated teamwork
- Problem solving and decision making
- Situational awareness

The aim statement was to establish a standardized process for the safe and respectful transport of patient by:

- Utilizing criteria to reliably identify the appropriate resources and requirements for each patient.
- Verifying patient identifiers during every hand-off by care providers.
- Ensuring transfer of clinical information in a standard format between the sending unit, the transport team, and the receiving department.
- Maintaining continuity of care for the duration of the transport and the time the patient is in the temporary clinical setting.
- Valuing the patient by engaging him or her in the transport process.

The committee began by observing the current practice of intra-hospital patient transportation. The findings revealed inconsistent use of the (previous) transfer summary that accompanied patients, reports that did not consistently reflect the current patient condition because they were printed in advance of transport, inconsistent relationship building with the transport staff and receiving unit, and unpredictable patient identification processes prior to transport. The transport process embraced a drop off behavior rather than direct hand off to the receiving department and on return to the patient unit. It was also noted that potential questions were not easily directed to primary caregivers, geographic areas in some of the diagnostic areas were not clearly designated as waiting areas for pending testing, and the design of some of the ancillary departments had limited or no direct visualization of a patient waiting for a test. If an emergency situation arose during a diagnostic test or procedure, a standardized, comprehensive, and current hand-off report provided valuable information to the healthcare responders.

A review of several intra-hospital transport events also noted occasions when the oxygen tank would be depleted prior to arrival in the testing/procedure area or before the return to the sending unit.

The *Ticket to Ride* implementation incorporated approximately 12,000 intra-hospital transports per month at UPMC Presbyterian.

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The outcomes of the *Ticket to Ride* were evaluated along three dimensions:

- The number of off-unit oxygen-related events during intra-hospital patient transport.
- The number of Condition A's (cardiac arrest requiring cardiopulmonary resuscitation) and Condition C's (crisis, including respiratory arrest) that occurring during patient transport and in patient testing areas.
- Patient satisfaction with intra-hospital transport.

Off-unit oxygen-related events

In the quarter prior to the *Ticket to Ride* implementation, there were 2 oxygen-related events. The reported events increased to seven during the quarter the *Ticket to Ride* was introduced. This temporary increase may have been related to increased awareness and reporting. In the subsequent two quarters, the off-unit oxygen-related events decreased to zero and one, respectively.

Each event is investigated the same day that it is reported by a team including staff from the sending unit, the transport team, the receiving unit, and risk management. Appropriate remediation is undertaken.

Condition A's and Condition C's

There was a 42% decrease in the number of Condition A's and Condition C's that occurred in the patient testing areas. Prior to implementation of the *Ticket to Ride*, 63 were reported from January through July 2007. This decreased to 50 from July through December 2007 and decreased further to 36 from January through June 2008.

Patient satisfaction with transport

Based on Press-GaneyTM survey results, patient satisfaction increased from 84.9 to 86.1 in percentile ranking between August 2007 and April 2008.

Additional outcomes

Documentation that the patient was assessed for transport readiness increased from 0% to 80%, and documentation of receipt of the patient increased from 0% to 75%. The nurse's name and direct telephone number was noted to increase from 16% to 100%. Verification of the patient's name via wristband increased from 30% to 100% following the implementation of the *Ticket to Ride*.

The outcomes of the *Ticket to Ride* include a decrease in off-unit events, particularly those related to oxygen, a decrease in Condition A's and C's, an increase in patient satisfaction with transport, and an increase in relevant documentation. The *Ticket to Ride* is an easily available, inexpensive tool that incorporates standardized safety criteria and relevant patient information without *adding* to the workload of the healthcare team. The next step in the process will be to spread the *Ticket to Ride* to the other UPMC acute care hospitals.

Resources:

ⁱ Institute for Healthcare Improvement website: <http://www.ihl.org/ihl>

ⁱⁱ Leonard M, Frankel A, Simmonds T, Vega K. Achieving Safe and Reliable Healthcare. Health Administration Press; 2004.

ⁱⁱⁱ 2009 JCAHO National Patient Safety Goal (NPSG.02.05.01): http://www.jointcommission.org/NR/rdonlyres/31666E86-E7F4-423E-9BE8-F05BD1CB0AA8/0/09_NPSG_HAP.pdf