Improving on Transitions of Care:
How to Implement and Evaluate a Plan

The National
Transitions of Care Coalition

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Acknowledgement

Funding Acknowledgement

For more information

Please visit the NTOCC website, www.ntocc.org, for additional contact information.

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Remarks here from Cheri Lattimer, Exec director of CMSA

NTOCC and its multidisciplinary team of health care leaders are committed to improving the quality of transitions of care. Doing so requires attention to complex issues of health literacy, patient safety, medication non-adherence, treatment interventions, standards, guidelines, and performance measures. NTOCC's mission is to raise awareness about transitions of care among health care professionals, government leaders, and consumers to increase the quality of care, reduce medication errors, and enhance clinical outcomes. To this end, NTOCC develops consensus regarding recommended actions that can be taken by all participants in the health care system to improve transitions of care. NTOCC strives to provide a channel of communication to consumers for information when choosing health care options and also serves as a clearinghouse for tools and intervention resources to support providers and consumers to achieve safer and better transitions.

NTOCC is committed to working in collaboration with all stakeholders and eliminating silos of care that diminish the ability of patients, particularly older adults, to receive the care coordination to which they are entitled. Further information about NTOCC is available on the organization's website at http://www.ntocc.org.

Introduction

Patients face significant challenges when moving from one care setting to another within the fragmented health care system. As currently structured, the U.S. health care system does not meet the needs of many patients during transitions between health care settings. The system's problems have culminated in medical errors and gross mismatches of health care resources to needs. (MR Chassin et al. The urgent need to improve health care quality: Institute of Medicine National Roundtable on Health Care Quality, JAMA 1998;280:1000-05.) Oftentimes, episodes of care for serious illness or conditions involve numerous settings, both acute and long-term, and many highly specialized professionals. These episodes generally occur with suboptimal communication between the various components and provide the context where resource utilization and quality care have met the greatest challenges.

Transitional care connotes the scenario of a patient leaving one health care setting or provider and moving to another. Transitions often involve multiple caregivers and professionals. According to several studies over the last decade, patient safety and quality of care are being compromised, making care transitions a national priority. Standardizing communication across settings will improve care transitions by improving follow-up and reducing errors.

 A constant in all episodes of care is the patient, who, with sufficient education and empowerment, can proactively facilitate necessary communication and interaction between providers. In order to improve health care in this country, patients and providers must ensure better information exchange at all stages of the health care process, and patients and their caregivers should actively participate in a standardized communication plan.

In addition to the potential for poor care quality, transitions of care issues pose a financial burden for the health insurers, the government, and patients. Studies show an increase in the cost of health care due to medication errors and readmissions after a patient experiences an adverse event, often considered related to poor communication in the transition process.

Health care professionals and government leaders increasingly understand that improving the coordination of care among the various care settings can improve patient safety, quality of care, and health outcomes while avoiding significant costs. Making such improvements will be challenging and require significant and meaningful collaboration among health care providers, community members, and government regulators. In addition, patients and their families and caregivers need to take an active role in their health care and facilitate communication during transitions.

Background

The term "transitions of care" connotes the scenario of a patient leaving one care setting (i.e. hospital, nursing home, assisted living facility, SNF, primary care physician, home health, or specialist) and moving to another. The care transition frequently involves multiple persons, including the patient, family or other caregiver, nurses, social workers, case manager, pharmacists, physicians, and other providers. An optimal transition should be well planned and adequately timed. More often, however, communication between settings fails to provide all of the information needed for optimum quality of care.

Care coordination is a related but distinct concept that refers to the actual transition between two particular care settings. It involves the interaction of providers and health plan administrators across a variety of care settings to ensure optimal patient care. Good care outcomes demand good, coordinated communication

The lack of connectivity between providers in the health system has risen to the national consciousness. The Institute of Medicine (IOM) emphasizes that health care quality suffers "due not to a lack of effective treatments, but to inadequate health care delivery systems that fail to implement these treatments." (IOM, *Priority Areas for National Action: Transforming Health Care Quality* (2003)). Fragmented care leads to an increase in both hard and soft costs–financially, clinically, and at the patient level. The inefficiencies in the current system unnecessarily increase costs to patients, providers, payers, and employers.

There exists significant evidence that poor transitions:
- compromise patient safety and quality of care,
- place a significant burden on patients and their families and caregivers through inefficiencies,
- increase costs to patients, providers, payers.

Several efforts have studied how to improve transitions of care. The Institute of Medicine and the Commonwealth Fund are just two organizations that have published reports outlining recommendations for improved care coordination. NTOCC has built upon these suggestions and developed their own recommendations outlined below.

1. Improve communications during transitions between providers, patients, and caregivers.
2. Implement electronic medical records that include standardized medication reconciliation elements.
3. Establish points of accountability for sending and receiving care, particularly for hospitalists and nursing home providers.

4. Increase the use of case management and professional care coordination.

5. Expand the role of the pharmacist in transitions of care.

6. Implement payment systems that align incentives and include performance measures to encourage better transitions of care.

Purpose and goal of this report

The purpose of this report is to develop an implementation and evaluation outline for transitions of care tools and resources developed by NTOCC. The plan is intended for institutions ready to make changes in the processes their facilities use to send and receive patients. The plan will include an educational component about transitions of care, implementation manual, and evaluation methodology. These items will be incorporated into an example transition of care scenario. This implementation and evaluation plan will empower institutions to take the first step at measuring their own performance in transitions of care and identify areas for improvement. It may be helpful to review the primer on evaluation (Appendix F) prior to getting started.

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>
> Concept Paper
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Evaluating and Improving Transitions of Care in Your Institution

Step 1. Select what you plan to study

To improve care transitions, system, workflow, and personal behavior changes list among those worthy of intervention. Change finds individual and institutionalized resistance and will require a systematic approach to endure. The process can appear daunting and overwhelming for all involved.

To make the thought process easier, begin by thinking about the individual components of care transitions, including gathering accurate information from patients or other health providers and documenting information accurately. Timely and precise communication between those individuals involved in transitions of care or "handovers" is critical. When determining who will participate in the communication stream, consider all those who will need information to provide care, not just the single person who will receive the patient.

Keep it simple

So how does an organization start making changes? Start by keeping it simple, and add complexity as proficiency is gained in determining the current state, implementation planning, and evaluation. For instance, consider implementing the strategy for just one high-risk group of patients. Patients experiencing the bi-directional transfer from nursing facility to hospital could be a good place to start, for example. After all the details—including how to measure success of implemented changes— have been worked out in this group, add another high-risk group to the implementation plan, until all patients are incorporated.

When thinking about the system, it may help to start thinking about each transition point as **Exchanges**. Each exchange is where communication occurs and where evaluation may occur as well. Keep in mind that communication must happen between the accountable providers at all of the exchanges. For example, the accountable providers at the NF (e.g., floor nurse, physician) must communicate with the accountable providers at the hospital (e.g., nurse, case manager, physician).

> **Individuals who will need information during or after a care transition**
> o Patient
> o Family members/caregivers
> o Primary care physician
> o Specialist physician
> o Hospitalist
> o Nurses
> o Case manager
> o Pharmacist
> o Therapists
> o Discharge planner
> o Nursing home staff
> o Home health providers
> o Others

Case study: In a nursing home to hospital bi-directional transfer, you may consider that there are six exchanges
    Exchange 1:   Preparation in nursing home to transfer patient to hospital (nursing home handover)
    Exchange 2:   EMS/Ambulance transport
    Exchange 3:   Hospital receipt of patient
    Exchange 4:   Preparation in hospital to transfer patient back to nursing home (hospital handover)
    Exchange 5:   EMS/Ambulance transport
    Exchange 6:   Nursing home receipt of patient

Step 2. Assess the current process

An evaluation methodology can be used to walk through the key exchanges where we can make an impact on transitions of care. Consider the framework in which the transition occurs. As outlined by the NTOCC Measures workgroup, the framework will have the same basic components regardless of what transition exchange you want to affect.

Structure

Each healthcare facility/institution/department/unit has a structure by which they provide patient care. There must be accountability to providers for all patients at all steps within the transition exchange. Setting expectations for all providers can help enhance accountability. When people don't know what is expected of them, they may become defensive which can lead to an "its not my job" attitude.

NTOCC Tool
Metrics & Outcomes Workgroup

Transition of Care Performance Measures

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All patients should have a documented plan of care that takes into account the patient's preferences and is culturally appropriate. The use of health information technology (HIT) will also be part of the structure within the transition framework. To what degree HIT is used depends on the institution. Institutions should strive to have information incorporated that will facilitate efficient transitions of care into their HIT strategy.

Process

In each of these exchanges, we will discuss the processes involved, the information to be transferred, and the NTOCC guidance documents to aid in education, policy development, etc.

An effort should be made to embed processes into the daily workflow, whenever possible. We will divide the document into sections discussing these exchanges in detail and include graphic representations of the process from an evaluable model; the key elements to be measured from a evaluation matrix; patient, caregiver, and staff educational opportunities; the patient "My medicine list" and other patient education tools, etc.
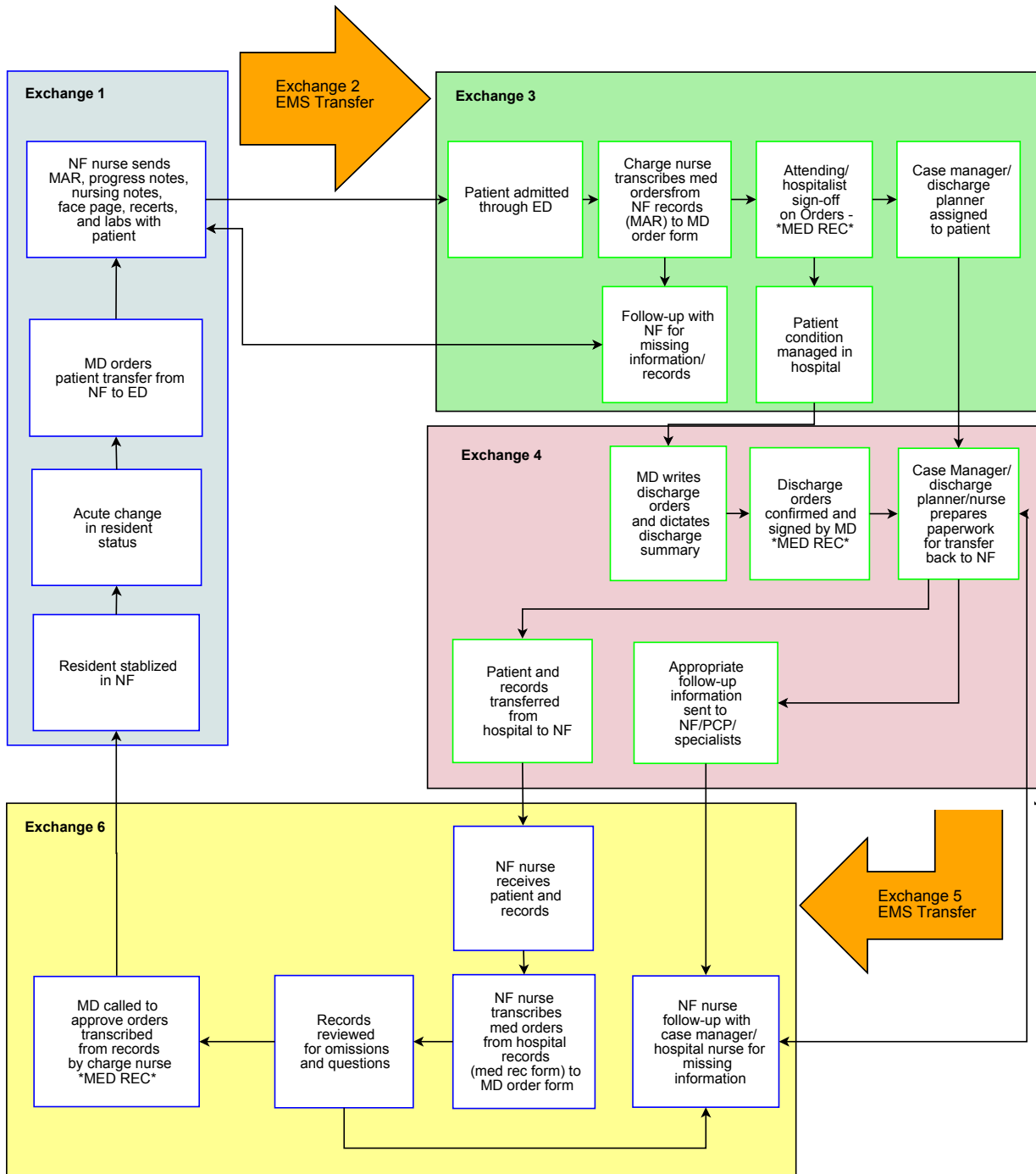
Outcomes

When implementing and modifying processes to improve transitions of care, knowing the outcomes to be measured is critical in determining where there is a breakdown in communication and whether improvements are affecting overall patient care. These measures can be used for public reporting and accountability as well as for internal quality improvement activities.

When preparing to conduct an evaluation, a literature review about the particular area of study is critical. For instance, for the case of nursing home to hospital transition, a quick literature review reveals several related studies and articles. See appendix G. The literature can help determine what to measure, what gains can be expected or learned from the mistakes or successes of others. We created a review document summarizing the key points, as that may be critical in gaining buy-in from all the necessary stakeholders, in terms of the need for focusing on transitions of care.

The next step is to develop a model that describes the process we want to evaluate. It is important to put this into a graphical presentation, such as a flow diagram on the following page. Each exchange and their components can easily be seen. It may take several iterations to arrive at a diagram that everyone agrees is representative of the process. This is an opportunity to engage institutional leadership in the discussion about the evaluation effort and its goals.

Workgroups should create a process map to make sure every step is considered in the exchange. A process map is a visual presentation displaying how to process a transaction and the important details. A good process map allows all stakeholders to understand the interaction of the work-flow and contains additional information about input and output variables, e,g., the structure, process, and outcome items discussed above. For additional information on process mapping, see http://www.isixsigma.com/library/content/c061030a.asp. The team should document a detailed description of each step to ensure no steps or tasks are left out. Include logistic details if they are critical to completing a particular step during a transfer (e.g., access to a copy machine during overnight shift, paging the physician and waiting for a callback, etc).

Nursing Home to Hospital Bi-directional Transfer

Exchange 1

NF nurse sends MAR, progress notes, nursing notes, face page, recerts, and labs with patient

MD orders patient transfer from NF to ED

Acute change in resident status

Resident stablized in NF

Exchange 2 EMS Transfer

Exchange 3

Patient admitted through ED

Charge nurse transcribes med ordersfrom NF records (MAR) to MD order form

Attending/ hospitalist sign-off on Orders - *MED REC*

Case manager/ discharge planner assigned to patient

Follow-up with NF for missing information/ records

Patient condition managed in hospital

Exchange 4

MD writes discharge orders and dictates discharge summary

Discharge orders confirmed and signed by MD *MED REC*

Case Manager/ discharge planner/nurse prepares paperwork for transfer back to NF

Patient and records transferred from hospital to NF

Appropriate follow-up information sent to NF/PCP/ specialists

Exchange 6

MD called to approve orders transcribed from records by charge nurse *MED REC*

Records reviewed for omissions and questions

NF nurse transcribes med orders from hospital records (med rec form) to MD order form

NF nurse receives patient and records

NF nurse follow-up with case manager/ hospital nurse for missing information

Exchange 5 EMS Transfer

*Medication Reconciliation occurs at this point

Nursing Home to ED/hospital Transfer

Let's start by looking at Exchange 1. The transfer from the nursing facility to the ED/hospital is a process that takes place outside the ED/hospital system. The study and measurement of the Exchange 1 components will be conducted in the nursing facility environment.

Exchange 1: The transfer from the nursing home to the ED/hospital

1. Patient becomes ill, gradually or acutely, and the primary care physician is contacted
2. Decision is made between nurse caring for patient and family/caregiver to transfer to ED for evaluation
3. EMS/Ambulance service (possibly 911) called for transport of patient to ED
4. Unit nurse calls hospital to notify them of patient transport/delivery
5. Paperwork is gathered to send with patient to ED
6. EMS/Ambulance arrives to transport patient

Think about the Exchange 1 framework as discussed previously, in terms of the structure, process, and outcomes. See the example below.

Exchange 1 Framework

Structure
A. Accountable provider at point of transition (NF side)
- Attending MD
- Nurse(s) caring for patient
- legally authorized representative (LAR)/other caregiver
B. Plan of care
- Medication list (MAR)
- Medical history (medical record document)
- Contact information, LAR, patient, primary provider
- Advance directives
- Chief complaint and recent related information; lab data, x-rays, vital signs, symptoms (medical record document)
C. Use of HIT
- Electronic medical record (EMR) - system specific implementation

Process

A. Care team processes

- Medication reconciliation – gather MAR and copy

- Laboratory – gather recent (within 1-3 mos) labs from medical record and copy

- Admission and discharge planning – contact EMS/Ambulance and hospital

B. Information transfer/communication between providers

- Timeliness, completeness, and accuracy of information transferred

- Protocol of shared accountability in effective transfer of information

C. Patient education and engagement

- Patient preparation for transfer – nursing staff

- Patient education, where possible

- Family/LAR education

- Appropriate communication with patients with limited English proficiency

Outcomes

- Appropriate information sent to the receiving facility

- Resident transferred with appropriate information (e.g., name, birthdate, nursing home name and phone, reason for transfer, accurate medication list, allergies, DNR status, etc)

- Communication between sending physician and receiving institution

- Documented communication with resident's family

- Timeliness (i.e., information transferred within 60 minutes of resident departure)

By looking at the framework, we can determine which elements we want to affect and where changes need to take place.

Evaluation Questions for Exchange 1:

- Question 1: Is the appropriate information being communicated to the ED/hospital by nursing home staff?

- Question 2: Is there documentation in the nursing home medical record of communication with the primary care physician about the ED/hospital transfer?

- Question 3: Is there documentation in the nursing home medical record of communication with family/caregiver about transfer of resident?

- Question 4: Was information transmitted to the ED/hospital within 60 minutes of departure?

- Question 5: Is there written documentation in the nursing home medical record of verbal follow-up with the hospital regarding receipt of the patient and information on the day of transfer?

For each of the Exchange 1 goals, we chose what data we are going to collect and where the information is documented.

Step 3. Determine your current level of performance

A key component of an effective transition is communication of the appropriate information to the receiving institution. Based on the literature review and direct communication with several receiving hospitals, we made a list of the key pieces of information that we are going to measure. A description of each evaluation question will help clarify what is being asked, where the information will be found, and how it will be collected and reported.

Evaluation Question 1: Is the appropriate information being communicated to the ED/hospital by nursing home staff?

Using our literature review, we developed a list of items we considered the appropriate information to communicate at transfer. Some states have mandated a minimum level of information (e.g., Rhode Island, New Jersey), so many institutions have a starting point. As listed in Table 1, there are 11 items, three of which address metrics identified as health care quality indicators by ACOVE (see appendix for summary document). After we created our list, we involved the facilities receiving our transfers and asked them what information they wanted to receive. If there is something on the checklist that the receiving institution never uses, it may not need to be a required transfer element. Having as many stakeholders as possible participating in this process is critical, since they do not all have the same needs. There may be information needed by the hospital that was not discovered during the literature review (e.g., vaccination status).

> **⌨ NTOCC Tool**
>
> <u>Metrics & Outcomes Workgroup</u>
>
> Assigning Existing Measures to the NTOCC Framework for Measuring Transitional Care
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Currently, for our case institution, there is no consistent method of documenting which information is sent during a transition from the nursing facility. Having the nurse (or other accountable provider/staff member) write down a list of sent documents as the items are

prepared was determined to be a reasonable method to gather this information. The nurse will be asked to do this without guidance on ideal components, to obtain information on the current status of transfers. The nurse will include this list within the nursing notes for the transferred resident. Following data collection, the information will be aggregated based on the evaluation questions (e.g., number of residents transferred for whom the face sheet containing patient name, birth date, and facility name and phone number was sent to the receiving institution). Number and percent will be reported for each measure.

Evaluation Question 2: Is there documentation in the nursing home medical record of communication with the primary care physician about the ED/hospital transfer?
And
Evaluation Question 3: Is there documentation in the nursing home medical record of communication with family/caregiver about transfer of the resident?

The medical record is the source document to assess current level of performance for evaluation questions 2 and 3. Specifically, when staff communicates with the physician or family about a resident's transfer, it should be documented in the medical record (e.g., nursing notes, progress notes).

We will aggregate information gathered based on the evaluation questions (e.g., number of residents transferred for whom name of transfer facility and phone number was sent to the physician and family member, current status on transfer communication to physician and family member, etc). Data will be reported as a number and percent for each measure.

Evaluation Question 4: Was information transmitted to the ED/hospital within 60 minutes of departure?

Ideally, staff sends all essential information and documents with the resident to the ED/hospital. Oftentimes, however, a resident's acuity may preclude that from happening. When all necessary documentation must be collected after the resident leaves, it should be transmitted to the receiving facility within a reasonable amount of time. Based on work by the University of Minnesota Rural Health Resource Center, the American Board of Internal Medicine, the American Academy of Physicians, among others, 60 minutes appear as an acceptable compromise. Staff document in the medical record time and date of information transmittal and to whom they gave the information.

We will aggregate the information based on the evaluation questions (e.g., number of residents transferred for whom information transmit occurred within 60 minutes). Data will be reported as a number and percent for each measure.

Evaluation Question 5: Is there written documentation in the nursing home medical record of verbal follow-up with the hospital regarding receipt of the patient and information on the day of transfer?

When a resident is transferred out of the nursing home to the ED/hospital, there should be verbal communication confirming the receipt of the patient and transfer documentation by the intended recipient ED/hospital. Documentation of the time, date, and contact name for this verbal communication should be in the medical record (e.g., progress notes, nursing notes).

Information gathered will be aggregated based on the evaluation questions (e.g., number of residents transferred for whom there is documented verbal followup communication with receiving facility). Data will be reported as a number and percent for each measure.

For more information on choosing evaluation measures see appendix H. See the Evaluation Matrix summarizing each evaluation question, data source, and reporting guidance.

Evaluation Matrix for Exchange 1

Measure	Data source	Reporting Guidance
Evaluation Question 1: Is the appropriate information being communicated to the ED/hospital by nursing home staff?		
1. # residents transferred with face sheet (or similar document) containing patient name, birth date, nursing home name and phone number	List prepared by nurse/staff at transfer	Number and percent **(ACOVE-3 QI, Continuity and coordination of care, No.1)**
2. # residents transferred with reason for transfer (EMS transfer form, verbal communication)	List prepared by nurse/staff at transfer	Number and percent
3. # residents transferred with past medical history (e.g., annual review, history and physical form, MDS)	List prepared by nurse/staff at transfer	Number and percent
4. # residents transferred with medication list (medication administration record, EMR printout)	List prepared by nurse/staff at transfer	Number and percent
5. # residents transferred with allergy list (medication administration record, face sheet)	List prepared by nurse/staff at transfer	Number and percent
6. # residents transferred with baseline mental and physical functioning (seven day look-back, MDS)	List prepared by nurse/staff at transfer	Number and percent

Measure	Data source	Reporting Guidance
7. # residents transferred with advance directive (DNR status, living will)	List prepared by nurse/staff at transfer	Number and percent *(ACOVE-3 QI, End-of-life care, No. 4 and 9)*
8. # residents transferred vital signs (vital sign book, nursing notes, verbal communication)	List prepared by nurse/staff at transfer	Number and percent
9. # residents transferred with recent lab work (lab reports)	List prepared by nurse/staff at transfer	Number and percent
10. # residents transferred with nursing home nurse contact name and phone number (verbal communication, EMS transfer form)	List prepared by nurse/staff at transfer	Number and percent *(ACOVE-3 QI, Continuity and coordination of care, No.1)*
11. # residents transferred with physician contact name and phone number (verbal communication, face sheet)	List prepared by nurse/staff at transfer	Number and percent
Evaluation Question 2: Is there documentation in the nursing home medical record of communication with the primary care physician about the ED/hospital transfer?		
12. # residents transferred with name of ED/hospital transfer communicated to primary care physician	Medical record review (nursing notes, progress notes)	Number and percent *(ACOVE-3 QI, Continuity and coordination of care, No.7)*
13. # residents with clinical status on transfer communicated to primary care physician	Medical record review (nursing notes, progress notes)	Number and percent
Evaluation Question 3: Is there documentation in the nursing home medical record of communication with family/caregiver about transfer of resident?		
14. # residents with evidence of family/caregiver notification	Medical record review (nursing notes, progress notes)	Number and percent
Evaluation Question 4: Was information transmitted to the ED/hospital within 60 minutes of departure?		
15. # residents with Information transferred within 60 minutes of departure	Medical record review (nursing notes, progress notes)	Number and percent *(Univ Minn Rural Health Res Ctr QI, ABIM, ACP)*
Evaluation Question 5: Is there written documentation in the nursing home medical record of verbal follow-up with the hospital regarding receipt of the patient and information on the day of transfer?		
16. # residents with documentation of verbal follow-up with hospital by nursing home staff	Medical record review (nursing notes, progress notes)	Number and percent

In order to gather the data outlined in the evaluation matrix, a data collection instrument is essential. The number of transfers reviewed depends on facility size. A review of ten transfers may be acceptable for a small facility with only one or two units, whereas a large facility with multiple units may need to review more. The number could be based on a time frame; for instance "we reviewed all transfers that occurred over 30 day period." Based on the information in the evaluation matrix, we created the following data collection form to complete the baseline analysis.
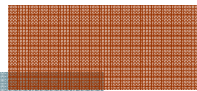
Sample Data Collection Instrument

Nursing Home to ED/Hospital Transfer

Resident name: _____   Date of transfer: _____
Person collecting information: _____

Question	Response	
1. Resident face sheet (or similar document) containing patient name, birth date, nursing home name and phone number	☐ Yes	☐ No
2. Reason for transfer (check method) ☐ EMS transfer form ☐ verbal communication	☐ Yes	☐ No
3. Past medical history (e.g., annual review, history and physical form, MDS)	☐ Yes	☐ No
4. Medication list (medication administration record, EMR printout)	☐ Yes	☐ No
5. Allergy list (medication administration record, face sheet)	☐ Yes	☐ No
6. Baseline mental and physical functioning (seven day look-back, MDS)	☐ Yes	☐ No
7. Advance directive (DNR status, living will)	☐ Yes	☐ No
8. Recent vital signs (vital sign book, nursing notes, verbal communication)	☐ Yes	☐ No
9. Recent lab work (lab reports)	☐ Yes	☐ No
10. Nursing home nurse contact name and phone number (verbal communication, EMS transfer form)	☐ Yes	☐ No
11. Physician contact name and phone number (verbal communication, face sheet)	☐ Yes	☐ No
Is there evidence of the following actions?		
12. Name of ED/hospital transfer communicated to primary care physician Medical record review (nursing notes, progress notes)	☐ Yes	☐ No
13. Resident clinical status on transfer communicated to primary care physician Medical record review (nursing notes, progress notes)	☐ Yes	☐ No
14. Evidence of family/caregiver notification Medical record review (nursing notes, progress notes)	☐ Yes	☐ No
15. Information transferred within 60 minutes of departure Medical record review (nursing notes, progress notes)	☐ Yes	☐ No
16. Verbal follow-up with hospital by nursing home staff Medical record review (nursing notes, progress notes)	☐ Yes	☐ No

Comments:

_____
_____
_____

Summarizing your results

After we collected the information for the transitions, we needed to aggregate the numbers. Once that is complete, we will prepare the information for dissemination. Many organizations and individuals realize that the current state is not ideal, but they cannot see how their actions or their system are part of the problem. One way to illustrate the problems and get individuals to realize that their behavior is related is to show them what is happening in their institution and to give concrete examples. In the nursing home, for instance, it may help to include an example, when presenting the findings. The example should be one of high impact as this helps to raise awareness of the implications of poor transitions.

> *"Mr. Jones was transferred out at 11:00 pm on January 31 for difficulty breathing due to pneumonia. His physician was notified, he was transferred to County Hospital, all records were sent, etc. His daughter called two days later to check up on her father, and nobody had called her to let her know he was transferred, and she was very upset. She is now threatening to remove her father from our facility once he is able to leave the hospital."*

The figure below is a sample graphical display of the findings. It is visually clear which areas need the most work.

Sample of Baseline Evaluation Graph
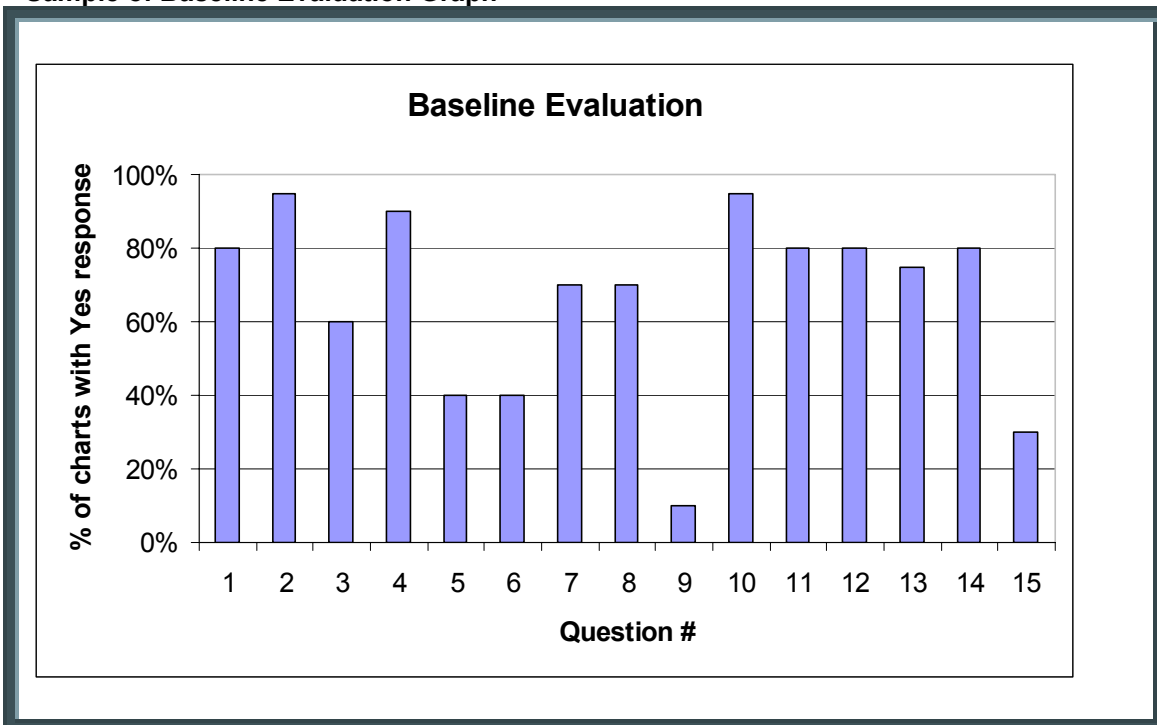
Sample Results of Baseline Assessment

Nursing Home to ED/Hospital Transfer

Background/time table: Due to the increasing concern about communication during transitions of care, XXXXXXXX facility conducted a baseline assessment of performance in communication involved with residents transferred to the ED/hospital. Review of the medical record was conducted to determine the level of documentation for the evaluation questions.

Objective: To assess baseline performance in communicating with the ED/hospital for residents transferred for evaluation or admission.

Method: the facility nurses were asked to write down a list of all items sent with a resident during a transfer to the ED/hospital in the nursing notes. Additional review of the medical record was conducted to determine the level of documentation with other questions. A data collection form was filled out for each of 20 transfers.

Results (20 transfers)

Measure (from chart review)	Response		% Compliance
	Yes	No	
1. Resident face sheet (or similar document) containing patient name, birth date, nursing home name and phone number	16	4	80%
2. Reason for transfer	19	1	97%
3. Past medical history (e.g., annual review, history and physical form, MDS)	12	8	60%
4. Medication list (medication administration record, EMR printout)	18	2	93%
5. Allergy list (medication administration record, face sheet)	8	12	40%
6. Baseline mental and physical functioning (seven day look-back, MDS)	8	12	40%
7. Advance directive (DNR status, living will)	14	6	70%
8. Recent vital signs (vital signs book, nursing notes, verbal communication)	14	6	70%
9. Recent lab work (lab reports)	2	18	10%
10. Nursing home nurse contact name and phone number (verbal communication, EMS transfer form)	19		95%
11. Physician contact name and phone number (verbal communication, face sheet)	16	4	80%
12. Name of ED/hospital transfer communicated to primary care physician	16	4	80%
13. Resident clinical status on transfer communicated to primary care physician	15	5	75%
14. Evidence of family/caregiver notification	16	4	80%
15. Information transferred within 60 minutes of departure	6	14	30%

Based on the information presented above and discussion with staff involved in resident transfers, we determined that the staff oftentimes does not know what information should be sent with a resident going to the hospital; hence, it is not being done in a systematic way. Conversations with staff also revealed the following:

- o Labs are almost never sent because staff believes the hospital always runs their own and that previous lab work would not be considered.
- o Vital signs were usually communicated to the EMS staff verbally, so documentation may be why Question 8 only had 70% agreement that it was communicated.
- o Staff was unsure of what medical history to send with the patient, because the information was often recorded in several places, and they didn't always agree (e.g., on the face sheet and the annual review).

Step 4. Determining your intervention strategy

Now that we have an idea about what is happening around a transition in our facility, we need to determine what we want to change and how we are going to accomplish it. We can start again by considering the structure, process, and outcome framework discussed in Step 2.

Based on the current structure for Exchange 1, the nurse/accountable staff, the physician/licensed provider, and the legally authorized representative/caregiver are accountable in the transition process.

Our first step is to create a policy and procedure document and educate the staff on exactly what should be transferred with the patient (based on our list for evaluation question 1), who should be communicated with, and in what time frame it should all occur. Staff need to take ownership of this process so that there is accountability. We will include our findings from the baseline evaluation and specific examples of problems caused by poor communication or documentation during the transition as discussed in the previous section. We are going to implement a nursing home-to-ED/hospital

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checklist as part of a policy. A sample of a checklist is included in the following pages. Not only will a checklist serve a reminder cue of what to send, potentially saving time, it will also document the process.

Literature suggests that ED/hospital staff and providers feel the information sent from the nursing home is often unorganized and hard to review. Consider revisions to standardized forms already included in residents' charts. Revisions to some of the standard documents used at the facility may be possible. For example, add the facility name and phone number, allergy, vaccination, or family/LAR information to the face sheet if not already included there. Consolidating information when possible may be helpful for staff at both sending and receiving institutions; having fewer separate pieces of paper to send or receive can increase efficiency.

If your facility has good health information technology resources in place, consider creating a transfer sheet that contains critical information needed for the transfer and that is updated periodically (e.g., a new sheet could be printed quarterly when an MDS is prepared or updated, which makes this step part of the routine activities). Preprint information such as resident name, birth date, nursing home name and phone, family/LAR and contact information, current medical conditions and history, allergies, vaccination status, mental and physical functioning, primary physician name and phone number, and leave blank lines or boxes for filling in other acute information like vital signs, reason for transfer, and accountable provider in the nursing home at time of transfer.

Some states have instituted universal transfer forms or "Continuity of Care" documents that are required by law to be filled out at the time a patient transfers out from any institutional setting (e.g., Rhode Island, New Jersey). See http://www.ahcancal.org/events/ahca_convention/convention_handouts/T-3%20Mandatory%20State-wide%20Universal%20Transfer%20Forms.ppt# 287,21,C.M.S. – P.A.C. – P.R.D for more information on New Jersey's process.

An institution may decide to roll out interventions one at a time, or to initiate several interventions at once. Just make sure that the available resources meet the staff needs; staff will have to initiate and follow through on the intervention. The team must develop tools once they have determined which interventions to roll out. For example, assign responsibility for writing of a policy and procedure, a checklist, and modified versions of documents already in use. Below is a sample of how we might organize a simple policy and procedure for transferring a resident to the hospital (not a complete policy) followed by a sample transfer checklist.

When determining interventions, always consider how they might fit into the current workflow. This aids in reducing duplication of effort, creating streamlined processes, and minimizing extra effort by staff. The fewest staff behavior changes needed for the intervention to be fully employed is likely to improve acceptance and compliance.

Sample Policy and Procedure (Not complete)

Policy and Procedure for Nursing Home-to-ED/Hospital Resident Transfer	
Title: Appropriate and patient centered transfer of a resident to the emergency department or hospital	Approved by:
	Approved by:
Effective date: June 1, 2008	Revised:
Purpose: ○ To make clear the appropriate information that should be included with a resident when they are transferred to an emergency department, hospital or other facility for care ○ To set responsibility among the professional staff and support services with respect to transfers ○ To maintain patient centered care by involving the resident and their family member or legally authorized representative whenever possible	
Procedure: One key individual involved in the care of the patient (e.g., the unit nurse) will carry the responsibility for coordinating the transfer process. This individual will ensure that all necessary action has been taken to: a) facilitate transport to the receiving facility b) gather all necessary documents and information for communication with receiving facility (include the list here) c) communicate directly with the receiving facility about resident being transferred d) communicate with the resident's primary care physician e) communicate with the resident's family or legally authorized representative f) document all communication and activities in the resident's medical chart Use the approved checklist to document that all of the procedures have occurred.	

Sample Checklist for Nursing Home to ED/Hospital Transfer

Resident Information Checklist for ED/Hospital Transfer

Resident Name   **Date and time of transfer**

☐ Resident face sheet (or similar document) containing patient name, birth date, nursing home name and phone number

☐ Reason for transfer (check method): ☐ EMS transfer form ☐ verbal communication

☐ Past medical history (e.g., annual review, history and physical form, MDS)

☐ Medication list (e.g., medication administration record, EMR printout)

☐ Allergy list (e.g., medication administration record, face sheet)

☐ Baseline mental and physical functioning (e.g., seven day look-back, MDS)

☐ Advance directive (e.g., DNR status, living will)

☐ Recent vital signs (e.g., vital sign book, nursing notes, verbal communication)

☐ Recent lab work (lab reports)

☐ Nursing home nurse contact name and phone number (e.g., verbal communication, EMS transfer form)

The following information is documented in the medical record:

☐ Name of ED/hospital transfer communicated to primary care physician

☐ Resident clinical status on transfer communicated to primary care physician

☐ Evidence of family/caregiver notification

☐ The information above was transferred with the resident or within 60 minutes of departure from the facility. Contact name _____   time: _____

Name   Date

Step 5. Implementing your intervention strategy

Planning the implementation is likely the most important aspect of this step. A poorly thought-out plan will likely lead to poor outcomes. Consider all the factors ahead of time, anticipate problems, and develop a strategy for what to do when problems arise.

For implementation, it will be important to fully describe all facets of what is to be implemented. Creating a comprehensive document describing everything that has been done to date will help get the leadership support needed for the implementation to be successful. It is likely that an administrator, director of nursing, or medical director have already been included up to this point (as many as would cooperate), but there will be others who have not yet been involved but important for success. The message may have to be tailored to the specific group for whom you are trying to engage. Aside from improving patient care as the reason for improving transitions of care, the "what's in it for me" factor will likely vary. For example, the administration may care about meeting regulatory guidelines and reducing cost, while the staff nurse handling a transition may care most about saving time, being efficient, and knowing what is expected. Asking around and talking to different stakeholders is a simple way to determine the key issues of importance. Convening a work group from the institution is one way to get all stakeholders to openly discuss all the issues. Not only will this be important for gaining buy-in from all parties, but it will also be critical in all facets of education, training, planning, timetables, and assigning responsibility.

Learn from Others

There are numerous groups conducting quality improvement initiatives related to transitions of care. Take advantage from their success and failures to reduce the learning curve when starting out. Reviewing what other hospitals, nursing facilities, health systems, and individual practitioners have accomplished may also spark some creative thinking within the facility.

For Exchange 1, the workgroup recommended the following.

Education and Training:
- inservices for the staff on
    - importance/benefits of good transitions of care
    - ED/hospital transfer process
    - baseline assessment findings (with specific examples)
    - the newly created policy and procedure, and
    - use of the Resident Information Checklist for ED/Hospital Transfer

- mock patient transfer exercise
- letter from the medical director to all physicians/licensed providers about the initiative and their responsibilities
- an article about transitions of care in the nursing home newsletter that goes to families/residents and is posted on facility bulletin boards

Assigning responsibility:
- Medical director - draft the provider letter for workgroup review
- Director of nursing and staff development coordinator - prepare inservice program and mock transfer exercise
- Admissions coordinator - communicate with sending hospital about new policy and transfer checklist
- Administrator - write newsletter article; oversight and administrative support for the initiative
- Staff nurses/others - attend inservice, adhere to the new policy and procedure, use transfer checklist during all transitions

It may be helpful to review and address the barriers to change with the workgroup.

Step 6. Determine your degree of success

Reassess your performance at an agreed upon time. This will involve repeating the actions performed in the baseline assessment.

Keep in mind the process has changed. For example, we have implemented a checklist, which serves as the source document within the resident's chart instead of a separate list written in the nursing notes.

See the post-intervention summary on the following page.

Post-intervention Results

Nursing home to ED/hospital transfer

Background/time table: Due to the increasing concern about communication during transitions of care, XXXXXXXX facility conducted baseline and post-intervention assessments of performance in communication involved with residents transferred to the ED/hospital. Review of the medical record was conducted to determine the level of documentation for the evaluation questions.

Objective: To assess baseline and post-intervention performance in communicating with the ED/hospital for residents transferred for evaluation or admission.

Method: Post intervention, the facility nurses were asked to use the new checklist to cue them what to send and to document that it was sent. Additional review of the medical record was conducted to determine the level of documentation with other questions. One data collection form was filled out for each transfer.

Results (20 transfers)

Measure	Baseline % compliant	Post-intervention % compliant	Difference
1. Resident face sheet containing patient name, birth date, nursing home name and phone number	80%	100%	+20%
2. Reason for transfer	97%	100%	+3%
3. Past medical history (e.g., annual review, history and physical form, MDS)	60%	93%	+33%
4. Medication list (medication administration record, EMR printout)	93%	100%	+7%
5. Allergy list (medication administration record, face sheet)	40%	80%	+40%
6. Baseline mental and physical functioning (seven day look-back, MDS)	40%	80%	+40%
7. Advance directive (DNR status, living will)	70%	97%	+27%
8. Recent vital signs (vital sign book, nursing notes, verbal communication)	70%	75%	+5%
9. Recent lab work (lab reports)	10%	40%	+30%
10. Nursing home nurse contact name and phone number (verbal communication, EMS transfer form)	95%	100%	+5%
11. Physician contact name and phone number (verbal communication, face sheet)	80%	100%	+20%
12. Name of ED/hospital transfer communicated to primary care physician	80%	100%	+20%
13. Resident clinical status on transfer communicated to primary care physician	75%	97%	+22%
14. Evidence of family/caregiver notification	80%	100%	+20%
15. Information transferred within 60 minutes of departure	30%	60%	+30%

Of the 20 transfers reviewed, 17 had a completed ED/Hospital Transfer Checklist. As you can see in the graphic and chart below, there were improvements for all transfer elements. We've highlighted the areas that fell below 80% before and after the intervention.

Step 7. Make any modifications necessary to the intervention

This is the step in the process where we need to look at what we have accomplished, what lessons have been learned, and decide where we may need to modify our intervention.

In reviewing Exchange 1 results, a few areas stood out as still needing improvement (compliance <80%)—communicating vital signs and recent lab work, and timeliness of communication. We should make an effort to discover barriers to performance on these measures. Discussion with the nurses and asking for feedback about improving these areas may be a simple but direct way of determining what modifications are needed.

For example, a process barrier could be that transfers are occurring during the evening shift when there is a personnel shortage and nurses feel they have competing priorities (e.g., medpass, aggressive behaviors), which is resulting in some of the missing communication elements.

Monitor processes over time to ensure the intervention is sustained. A control chart is one method to monitor progress. The workgroup decided to monitor the process monthly to determine the ongoing performance and sustainability. A simple trend chart with only four of the questions represented is shown below.

At this point, an opportunity exists to incorporate the initiative into the quality assurance meetings of the institution. By having input into the process and its progress, institutional leadership buy-in will be further reinforced.

Sample Trend Chart
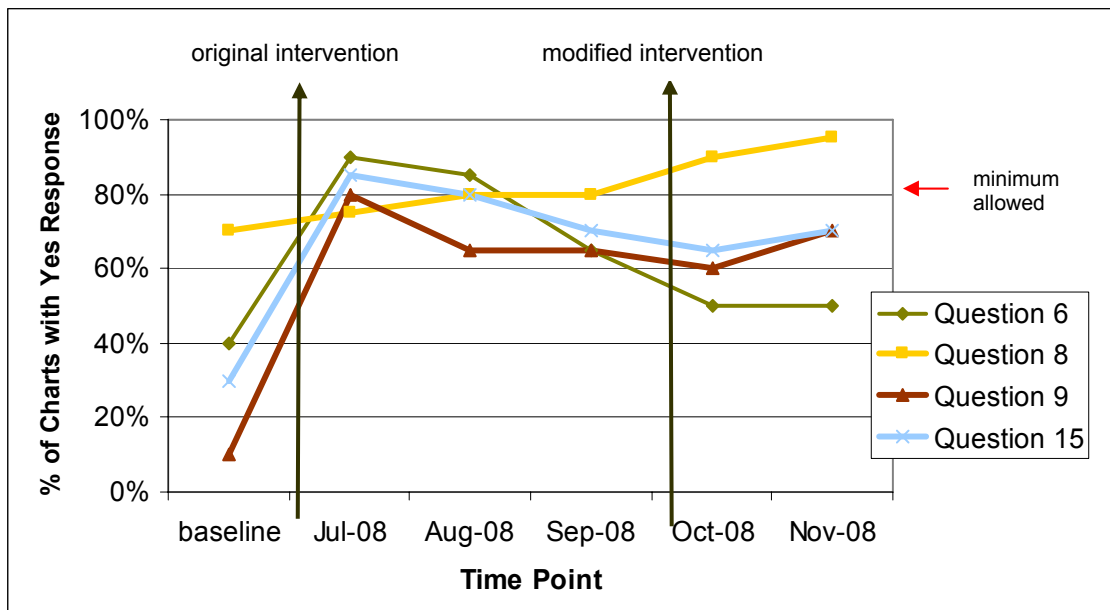
You can see that while the intervention has sustained a change for question 8 (recent vital signs sent), diligence with items in questions 6, 9, and 15 (the seven day look back, recent lab work, and timeliness) has waned. This could necessitate more education or a reminder system due to changing staff or staff needs, for example. If there are modifications to the intervention, redeploy the intervention with the changes and measure again every 30 days and report findings to the quality assurance committee.

Sustain the Interventions

Following steps 1 through 7, it is important that the positive changes are maintained and that staff members do not slip back into old habits. The process of collaborating with other institutions and developing the interventions and tools should be shared with other sites. A few steps may be helpful for sustaining the efforts.

- Share results within the organization. Keep staff informed of progress, successes, and failures.
- Share results outside of the organization. Present your process and findings at local, state, and national levels.
- Expand the scope to include all patients transferring into, out of, or within the facility, regardless of starting or destination points. Focusing on a key area of concern, such as medication reconciliation, is also a way to broaden the project's scope.

- Look for participation from other departments and/or disciplines. Educate other disciplines on their role in improving quality and safety of health care delivery as it relates to transitions of care.

Keep in mind if you plan on presenting in a public forum or publishing your findings, the project will need ethical review and/or oversight by an Institutional Review Board.

Appendices

Appendix A: EMS/Ambulance Transfer of Patient from a Nursing Home to Hospital

Step 1. Select what you plan to study

As discussed on page 8 for Exchange 1, decide what you want to study. Here are the basic steps for Exchange 2, transport of the patient from the nursing home to the ED/hospital.

Exchange 2: Transport of patient (NF handover)

1. EMS/Ambulance receives call of patient transport
2. EMS/Ambulance arrives to pick up NF patient
3. EMS/Ambulance staff record patient information
4. Transport begins
5. Activities during transport recorded by EMS/Ambulance staff

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Exchange 2 is unlike the other transitions in this scenario; however, it is still one of great importance. EMS/Ambulance personnel may be required to provide care during transport of the patient from the NF to the hospital, so communication of critical information must occur. The framework as discussed previously, in terms of the structure, process, and outcomes of this transition are outlined below. Different localities or states may have different requirements of the emergency medical system. Be sure to check the individual locale regulations.

Step 2. Assess the current process

Exchange 2 Framework

Structure
A. Accountable provider at point of transition (NF side)
- EMS/Ambulance staff
- Nurse(s)/accountable staff caring for patient in NF and arranging transport
B. Plan of care
- EMS transfer sheet
- Chief complaint and recent related information; vital signs
- Advance directive
C. Use of HIT
-Electronic medical record (EMR) – institution/system specific implementation

Process

A. Care team processes
- Monitoring patient status
- Treatment/monitoring during transfer documented

B. Information transfer/communication between providers
- Timeliness, completeness and accuracy of information transferred
- Protocol of shared accountability in effective transfer of information
- Treatment/monitoring during transfer communicated to receiving institution

C. Patient education and engagement
- Communication with patient regarding current status

Outcomes
- Appropriate information received by EMS/Ambulance personnel to provide immediate care
- Resident transferred with appropriate information to be given to the hospital (e.g., name, birth date, nursing home name and phone, reason for transfer, accurate medication list, allergies, DNR status, etc.)
- Complete and accurate information communicated to receiving institution

Appendix B: Hospital Receipt of Patient from Nursing Home

Step 1. Select what you plan to study

For Exchange 3, hospital receipt of the patient from the nursing home, we may want to include all patients transferred from all nursing homes, or we'll narrow it to those received from one particular nursing home. If possible, work with the nursing home directly and involve their admissions personnel in the plan. The study and measurement of Exchange 3 processes takes place in the hospital environment.

Exchange 3:   Hospital receipt of patient from nursing home (EMS/Ambulance handover)

1.   Hospital receives call of patient transport
2.   EMS/ambulance arrives with NF patient
3.   Case manager/admissions personnel/social worker assigned to patient
4.   Patient information transferred to physician order form and/or medication reconciliation form for physician confirmation and signature
5.   Medication reconciliation with NF medication list/MAR performed
6.   Physician/provider signs orders
7.   Patient condition managed in hospital

Step 2. Assess the current process

Create a detailed process map to help determine the structure, process, and outcome for this exchange.

Exchange 3 Structure, Process, Outcome

Structure
A. Accountable provider at point of transition
        - ED physician/hospitalist
        - Receiving nurse/accountable staff
        - Case manager/admissions personnel/social worker
        - LAR/caregiver
B. Plan of care
        - Medication list or MAR (required medication reconciliation document)
        - Medical history (medical record document)

      - Physical and mental functional assessment

      - Contact information, LAR, primary provider, nursing home contact (face sheet)

      - Reason for transfer and related information; lab data, x-rays, vital signs, symptoms (medical record document)

      - Advance directive

C. Use of HIT

      - Electronic medical record (EMR) – system specific implementation

Process

A. Care team processes

      - Medication reconciliation – compare admission medication order to NF MAR/med list

      - Test tracking – recent labs and diagnostics tests from NF documented

      - Admission and discharge planning – care plan document by case manager/admissions personnel/social worker

B. Information transfer/communication between providers

      - Timeliness, completeness and accuracy of information transferred

      - Protocol of shared accountability in effective transfer of information

C. Patient education and engagement

      - Patient education for self-management

      - Appropriate communication with patients with limited English proficiency

Outcomes

      - Patient/LAR experience

      - Provider experience

      - Health care utilization and costs (readmissions, etc.)

      - Health outcome (e.g., functional status, adverse drug events, etc.)

Medication Reconciliation

Medication reconciliation is the process of creating the most complete and accurate list of medications possible, comparing that list against medication orders at each stage of the patient's hospitalization, and resolving any discrepancies. Perform medication reconciliation at admission, transfer to another service/level of care, and at discharge. Medication reconciliation is a Joint Commission National Patient Safety goal for both hospitals and nursing homes. In order to be in compliance with this standard, there must be documentation that the reconciliation has taken place. Many hospitals have developed forms to facilitate this documentation, some having the document also serve as a standardized physician order form for medications.

In our scenario, the hospital will most likely receive a copy of the nursing home medication administration record (MAR) as the source document for performing medication reconciliation.

There are numerous published examples of implementing a successful medication reconciliation process, so the process will not be described here. The following are a few resources for implementing or improving medication reconciliation programs:

Rogers G, Alper E, Brunelle D et al. Reconciling medications at admission: safe practice recommendations and implementation strategies. Jt Comm J Qual Patient Saf 2006;32:37-50.

Medication Reconciliation Toolkit. A Department of Defense patient safety program. Available at http://dodpatientsafety.usuhs.mil/modules.php?name=News&file=article&sid=451

Varkey P, Cunningham J, O'Meara J et al. Multidisciplinary approach to inpatient medication reconciliation in an academic setting; Am J Health-Syst Pharm 2007;64:850-4.

Once again, by looking at the framework, determine which elements should be included on the evaluation.

Evaluation Questions for Exchange 3:

Question 1: Did the hospital receive the appropriate information from the nursing home?
Question 2: Were admitting medications reconciled with the medication information (MAR) provided by the nursing home?
Question 3: Did the receiving provider communicate with the nursing home following receipt of the patient?
Question 4: Was information received from the nursing home within 60 minutes of arrival?
Question 5: Was a case manager/admissions personnel/social worker assigned to the patient?

Step 3. Determine your current level of performance

Evaluation Question 1: Did the hospital receive the appropriate information from the nursing home?

A key component of an effective transition is receipt of the appropriate information from the sending institution. Based on the literature review, the key pieces of information that we are going to measure are outlined in the measurement chart. When determining this list, work with the nursing facility from which you receive transfers to collaborate on a list that meets everyone's needs. Be willing to negotiate and compromise over exactly what that list entails. As listed in the evaluation matrix for Exchange 3, we have given an example of 11 items, three of which address metrics identified as healthcare quality indicators by ACOVE and two address Joint Commission indicators; these five measures are included in the NTOCC Metrics and Outcomes performance measures document.

Incorporate the patient's transfer information into the hospital medical record; the transfer information will be the data source for each item. Information gathered will be aggregated based on the evaluation questions (e.g., number of residents transferred for whom the hospital received the face sheet containing patient name, birth date, and facility name and phone number from the sending nursing home). Data will be reported as a number and percent for each measure.

> NTOCC Tool
> Metrics & Outcomes Workgroup
>
> Transition of Care Performance Measures
>
> www.ntocc.org

Evaluation Question 2: Were admitting medications reconciled with the medication information provided by the nursing home?

Medication reconciliation can be assessed as a static event (i.e., performance documentation by signature and completion of a medication reconciliation form) and by detecting errors that occurred during the process (i.e., medication discrepancies resolved). Incorporate these two procedures into the evaluation questions. This addresses the Joint Commission patient safety goal on medication reconciliation.

Medication reconciliation requires a multidisciplinary team approach, usually consisting of a nurse, a pharmacist, and a physician. There are resources that describe medication reconciliation in detail and offer guidance on performance measurement. One such resource is available from the Institute for Healthcare Improvement available at

http://www.ihi.org/IHI/Topics/PatientSafety/MedicationSystems/Tools/Medication+Reconciliation+Review.htm

If an institution requires electronic ordering of medications, specific instructions for the multidisciplinary team members should be developed to assure an accurate and complete medication reconciliation process. An example of one health system's process is available at the Legacy Health System website. http://www.legacyhealth.org/body.cfm?id=1878.

The form and system used to record admission medications, whether paper or electronic, should include a minimum set of data elements. NTOCC developed a document containing suggested common/essential data elements for medication reconciliation.

Evaluating resolution of medication discrepancies is critical to evaluating the effectiveness of medication reconciliation. For Exchange 3, the person responsible for this component of the evaluation will need to use the MAR (source document from the nursing home) to compare the medication reconciliation form or physician order form completed on admission. This process can be enhanced by using a list of categories to organize the discrepancies into logical groups (e.g., patient level, system level). The Medication Discrepancy Tool (MDT) is a published, validated data collection instrument that accomplishes this task.

> NTOCC Tool
> Tools & Resources Workgroup
>
> Suggested Common/Essential Data Elements for Medication Reconciliation
>
> www.ntocc.org

There are several published examples of documenting and measuring medication discrepancies including the following:

Coleman EA, Smith JD, Raha D, Min S. Posthospital medication discrepancies; prevalence and contributing factors. Arch Intern Med 2005;165:1842-47.

Cornish PL, Knowles SR, Marchesano R et al. Unintended medication discrepancies at the time of hospital admission. Arch Intern Med 2005;165:424-29.

Varkey P, Cunningham J, O'Meara J et al. Multidisciplinary approach to inpatient medication reconciliation in an academic setting; Am J Health-Syst Pharm 2007;64:850-4.

As there is a direct relationship between adverse drug events and medication discrepancies during admission or discharge, it may be beneficial to measure and plot the rate of adverse drug events as you plot performance on achieving your objectives for medication reconciliation.

Evaluation Question 3: Did the receiving provider communicate with the nursing home following receipt of the patient?

The medical record is the source document to assess current level of performance for evaluation question 3. When the receiving provider communicates with the nursing home about the patient, it should be documented in the medical record (e.g., progress notes).

We will aggregate information gathered based on the evaluation questions (e.g., number of residents received for whom there is documentation in the medical record of direct communication with the nursing home provider). Data will be reported as a number and percent for each measure.

Evaluation Question 4: Was information received from the nursing home within 60 minutes of arrival?

Staff document in the medical record time and date of information was received and from whom they received the information.

We will aggregate the information based on the evaluation questions (e.g., number of residents received for whom information was received within 60 minutes). Data will be reported as a number and percent for each measure.

Evaluation Question 5: Was a case manager/admissions personnel/social worker assigned to the patient?

The case manager should be assigned at the time the patient is admitted. We will aggregate the information based on the evaluation questions (e.g., number of residents received for whom case manager was assigned at admission). Data will be reported as a number and percent for each measure.

Evaluation Matrix for Exchange 3

Measure	Data source	Reporting Guidance
Evaluation Question 1: Did the hospital receive the appropriate information from the nursing home?		
1. # residents transferred with face sheet (or similar document) containing patient name, birth date, nursing home name and phone number	Medical record	Number and percent *(ACOVE-3 QI, Continuity and coordination of care, No.1)*
2. # residents received with reason for transfer (EMS transfer form, verbal communication)	Medical record	Number and percent
3. # residents received with past medical history (e.g., annual review, history and physical form, MDS)	Medical record	Number and percent
4. # residents received with medication list (medication administration record, EMR printout)	Medical record	Number and percent **(Joint Commission – National Patient Safety Goal 8, Medication Reconciliation)**
5. # residents received with allergy list (medication administration record, face sheet)	Medical record	Number and percent
6. # residents received with baseline mental and physical functioning (seven day look-back, MDS)	Medical record	Number and percent
7. # residents received with advance directive (DNR status, living will)	Medical record	Number and percent *(ACOVE-3 QI, End-of-life care, No. 4 and 9)*
8. # residents received with vital signs (vital sign book, nursing notes, verbal communication)	Medical record	Number and percent
9. # residents received with recent lab work (lab reports)	Medical record	Number and percent
10. # residents received with nursing home nurse contact name and phone number (verbal communication, EMS transfer form)	Medical record	Number and percent *(ACOVE-3 QI, Continuity and coordination of care, No.1)*
11. # residents received with physician contact name and phone number (verbal communication, face sheet)	Medical record	Number and percent **(Joint Commission – National Patient Safety Goal 2, Effectiveness of communication among caregivers)**
Evaluation Question 2: Were admitting medications reconciled with the medication information provided by the nursing home?		
12. Was the form filled out and signed?	Medical record	Number and percent **(Joint Commission – National Patient Safety Goal 8, Medication Reconciliation)**

Measure	Data source	Reporting Guidance
13. Was the form accurate with all medication discrepancies resolved?	Medical record	Number and percent **(Joint Commission – National Patient Safety Goal 8, Medication Reconciliation**
Evaluation Question 3: Did the receiving provider communicate with the nursing home following receipt of the patient?		
14. # residents received that had documentation of verbal communication (or attempted) by the attending physician with the nursing facility within first 2 days of admission	Medical record	Number and percent ***(ACOVE-3 QI, Continuity and coordination of care, No.7)***
Evaluation Question 4: Was information received from the nursing home within 60 minutes of arrival?		
15. # residents with information received within 60 minutes of arrival	Medical record	Number and percent ***(Univ Minn Rural Health Res Ctr QI, ABIM, ACP)***
Evaluation Question 5: Was a case manager/admissions personnel/social worker assigned to the patient?		
16. # residents received that had a case manager/discharge planner assigned to the patient upon admission	Medical record	Number and percent
17. # residents received that had a case manager/discharge planner communicate with the patient/caregiver/nursing facility with 24 hours after admission	Medical record	Number and percent

Step 4. Determining your intervention strategy

Implementation of a strategy

It is difficult to develop a universally applicable policy and procedure for medication reconciliation as health systems vary greatly in HIT implementation. However, there are several documents available to the public that are useful in developing a policy for the first time.

They are:

Medication reconciliation review, Luter Midelfort – Mayo Health System, and Institute for Healthcare Improvement. Available at http://www.ihi.org/ihi/topics/patientsafety/medicationsystems/tools/medication+reconciliation+review.htm

Medication Reconciliation, Bridging Communication Across the Continuum of Care, Legacy Health System. Available at http://www.legacyhealth.org/body.cfm?id=1878

Kramer JS, Opkins PJ, Rosendale JC et al. Implementation of an electronic system for medication reconciliation. Am J Health-Syst Pharm 2007;64:404-22.

Summary of Safe Practice Recommendations for Reconciling Medications at Admission

Collect complete and accurate pre-admission medication lists

1. Collect a complete list of current medications (including dose and frequency) for each patient on admission.

2. Validate the pre-admission medication list with the patient (whenever possible).

3. Assign primary responsibility for collecting the preadmission list to someone with sufficient expertise, within a context of shared accountability (the ordering prescriber, nurse, and pharmacist must work together to achieve accuracy).

Write accurate admission orders

4. Use the pre-admission medication list when writing orders.

5. Place the reconciling form (see Recommendation 8) in a consistent, highly visible location within the patient chart (easily accessible by clinicians writing orders).

Reconcile all variances

Assign responsibility for identifying and reconciling variances between the pre-admission medication list and new orders to someone with sufficient expertise.

6. Reconcile patient medications within specified time frames.

Provide continuing support and maintenance

7. Adopt a standardized form to use for collecting the pre-admission medication list and reconciling the variances (includes both electronic and paper-based forms).

8. Develop clear policies and procedures for each step in the reconciling process.

9. Provide access to drug information and pharmacist advice at each step in the reconciling process.

10. Improve access to complete medication lists at admission.

11. Provide orientation and ongoing education on procedures for reconciling medications to all healthcare providers.

12. Provide feedback and ongoing monitoring (within context of non-punitive learning from mistakes/near misses).

* Although the Safe Practice Recommendations provided here were developed focusing particularly on reconciling medications at admission, the same vigilance must occur at all critical transitions. The reconciling practices also offer significant safety benefits at patient handoffs on transfer between services and at discharge.

Source: Rogers G, Alper E, Brunelle D et al. Reconciling medications at admission: safe practice recommendations and implementation strategies. Jt Comm J Qual Patient Saf. 2006;32:37-50.

Appendix C: ED/Hospital to Nursing Home Transfer

Step 1. Select what you plan to study

For Exchange 4, the hospital prepares for transfer of the patient to the nursing home, include all patients transferred to a nursing home, or narrow it to those sent to one particular nursing home. If possible, work with the nursing home directly and involve their admissions personnel in the plan. The study and measurement of Exchange 4 processes takes place in the hospital environment.

Exchange 4:   Preparation in hospital to transfer patient back to nursing home (hospital handover)

1.   Physician writes discharge orders and dictates discharge summary (stat order)
2.   Medication reconciliation performed
3.   Case manager/discharge planner contacts NF to coordinate patient's return.
4.   Patient/family counseled on physician orders, medication changes (My Medicine List), pending tests/results, appointments scheduled, and medical condition "red flags"
5.   Paperwork is gathered to send with patient back to NF; appropriate information sent to specialists/PCP office
6.   Ambulance arrives to transport patient

Create the detailed process map to help determine the structure, process, and outcome for this exchange.

Step 2. Assess the current process

Exchange 4 Structure, Process, Outcome

Structure
A. Accountable provider at point of transition
- Hospitalist/attending MD
- Nurse caring for patient
- Discharge planner/case manager/social worker
- Patient/LAR/other caregiver
B. Plan of care
- Discharge summary

      - Medication list (completed medication reconciliation form, hospital MAR, My Medicine List)

      - Scheduled appointments

      - Pending tests

      - NTOCC Patient Care Tool

C. Use of HIT

      - Electronic medical record (EMR) - system specific implementation

Process

A. Care team processes

      - Medication reconciliation – comparison of admission and discharge medications

      - Test tracking – forward labs obtained in hospital, acknowledge any pending labs

      - Test scheduled – labs or other procedures, date of testing

      - Referral tracking – indicate any referrals, consultants

      - Discharge planning – ensure bed availability in receiving nursing home

      - Follow-up appointment – include contact name/phone, date of appointment

B. Information transfer/communication between providers

      - Timeliness, completeness and accuracy of information transferred

      - Protocol of shared accountability in effective transfer of information

C. Patient education and engagement

      - Patient preparation for transfer – discharge instructions provided to patient/caregiver

      - Patient education for self-management – medical condition/procedure "red flags"

      - Patient personal "My Medicine List" – provided to patient/caregiver

      - Appropriate communication with patients with limited English proficiency

      - NTOCC Patient Care Tool

Outcomes

      - Patient experience (CTM) – on discharge CTM-3

      - Provider experience – survey

      - Health care utilization and costs (readmissions, etc.)

      - Health outcome (e.g., functional status, adverse drug reactions, etc.)

Step 3. Evaluate your current level of practice

Evaluation Questions for Exchange 4

Question 1: Is the hospital communicating the appropriate information to the nursing home by the hospital staff?

Question 2: Was medication reconciliation conducted by the provider prior to transfer?

Question 3: Was the patient/family educated about their discharge and any self-management instructions?

Question 4: Did the hospital provider communicate with the nursing home provider following transfer of the patient?

Question 5: Did the case manager/social worker communicate with the nursing home following transfer of the patient?

Evaluation Matrix for Exchange 4

Measure	Data source	Reporting Guidance
Evaluation Question 1: Is the hospital communicating the appropriate information to the nursing home?		
1. # residents transferred with hospital discharge summary	Case manager checklist	Number and percent *(ACOVE-3 QI, Continuity and coordination of care, No.13)*
2. # residents transferred with pending test results documented as pending in the discharge summary	Discharge summary	Number and percent *(ACOVE-3 QI, Continuity and coordination of care, No.11)*
3. # residents transferred with pending appointment documented as pending in the discharge summary	Discharge summary	Number and percent *(ACOVE-3 QI, Continuity and coordination of care, No.12)*
4. # residents transferred with medication list (hospital medication administration record, medication reconciliation form, EMR printout)	Case manager checklist	Number and percent **(Joint Commission – National Patient Safety Goal 8, Medication Reconciliation)**
Evaluation Question 2: Was medication reconciliation conducted by the provider prior to transfer?		
5. Was the form filled out and signed?	Medical record	Number and percent **(Joint Commission – National Patient Safety Goal 8, Medication Reconciliation)**
6. Was the form accurate with all medication discrepancies resolved?	Medical record	Number and percent **(Joint Commission – National Patient Safety Goal 8, Medication Reconciliation)**
Evaluation Question 3: Was the patient/family educated about their discharge and any self-management instructions?		
7. # residents transferred with My Medicine List	Case manager checklist	Number and percent *(ACOVE-3 QI, Continuity and coordination of care, No.7)*
8. # residents transferred with the "Taking Care of My Health" document	Case manager checklist	Number and percent
9. # residents transferred with "red flags" or information about warning signs associated with their hospitalization	Case manager checklist	Number and percent

Measure	Data source	Reporting Guidance
Evaluation Question 4: Did the hospital provider communicate with the nursing home provider following transfer of the patient?		
10. # residents transferred that had documentation of verbal communication (or attempted) by the attending physician with the nursing facility within first 2 days after discharge	Medical record	Number and percent ***(ACOVE-3 QI, Continuity and coordination of care, No.7)***
Evaluation Question 5: Did the case manager/social worker communicate with the nursing home following transfer of the patient?		
11. # residents with documentation of verbal follow-up by case manager with nursing home	Case manager checklist	Number and percent

As outlined for Exchange 1, continue the process by completing steps 4 through 7. These steps will be discussed briefly below, but not fully described as for Exchange 1.

Step 4. Determining your intervention strategy

As with Exchange 1, the first step is to create a policy and procedure document and educate the staff on exactly what should be transferred with the patient (based on our list for evaluation question 1), who should be communicated with, and in what time frame it should occur. Include findings from the baseline evaluation and specific examples of problems caused by poor communication or documentation during the transition. We are going to implement an ED/hospital-to-nursing home checklist as part of a policy. As with Exchange 1, literature suggests that nursing home staff and providers feel they receive sparse information following hospitalization. Consider revisions to standardized forms already included in patients' charts.

> NTOCC Tool
> Education & Awareness Workgroup
>
> - My Medicine List
> - Patient Care Tool
>
> www.ntocc.org

Work with the health information technology departments to find how the transfer documents could be set to be automatically generate on discharge.

For more information about transitions of care related to hospitalization, see the following resources.

Phillips CO, Wright SM, Kern DE et al. Comprehensive discharge planning with postdischarge support for older patients with congestive heart failure: a meta-analysis. JAMA 2004;291:1358-67.

Moore C, McGinn T, Halm E. Tying up loose ends: discharging patients with unresolved medical issues. Arch Intern Med 2007;167:1305-11.

Kind AJ, Smith MA, Frytak JR, Finch MD. Bouncing back: patterns and predictors of complicated transitions 30 days after hospitalization for acute ischemic stroke. J Am Geriatr Soc. 2007;55:365-73.

Forster AJ, Murff HJ, Peterson JF et al. The incidence and severity of adverse events affecting patients after discharge from the hospital. Ann Intern Med 2003;138:161-7.

Australian Council for Safety and Quality in Health Care. Clinical hand-over and Patient Safety literature Review Report. March 2005. Available at http://www.health.gov.au/internet/safety/publishing.nsf/Content/AA1369AD4AC5FC2ACA2571BF0081CD95/$File/clinhovrlitrev.pdf

Step 5. Implementing an Intervention Strategy

As discussed previously, planning is critical. These tasks should be completed during the planning phase.

- Fully describe all facets of what is to be implemented in one clear and concise document.
- Get the leadership support needed for the implementation to be successful.
- Determine the "what's in it for me" for each of the accountable stakeholders.
- Convene a work group from the institution.

Learn from Others

As with everything else, do your homework. There are numerous groups conducting quality improvement initiatives related to hospital discharge and transitions of care.

Resources from other institutions:

- Project Red (the Re-engineered Discharge) - http://www.bu.edu/fammed/projectred/
- The Care Transitions Program[SM] - http://www.caretransitions.org/intervention_design.asp
- Care Transitions for Older Adults. Society of Hospital Medicine (SHM)
- http://www.hospitalmedicine.org/AM/Template.cfm?Section=Home&Template=/CM/HTMLDisplay.cfm&ContentID=10814

As outlined in Exchange 1, steps 6 and 7 involve reassessing performance at an agreed upon time and making modifications to the intervention as necessary.

Appendix D: EMS Transport of Patient to Nursing Facility

Step 1. Select what you plan to study

Here are the basic steps for Exchange 5, transport of the patient from the ED/hospital to the nursing home.

Exchange 5: Transport of patient (hospital handover)

1. EMS/Ambulance receives call to transport patient back to NF
2. EMS/Ambulance arrives to pick up NF patient
3. EMS/Ambulance staff record patient information
4. Transport begins
5. Activities during transport recorded by EMS/Ambulance staff

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Exchange 5 is similar to Exchange 2, in that it involves the transport of the patient, however, this time back to the nursing facility. In most cases, these individuals will be in a better state of health than when they entered the hospital.

The same structure, process, and outcome discussed in Exchange 2 apply here.

Appendix E: Nursing Home Receipt of Patient from the Hospital

Step 1. Select what you plan to study

For Exchange 6, it is critical that the nursing home admissions personnel work directly with the hospital discharge planner to determine the plan for receiving patients. The study and measurement of Exchange 6 processes takes place in the nursing home.

Exchange 6: Nursing home receipt of patient from the hospital

1. NF nurse receives patient and records
2. NF nurse transcribes hospital physician orders/discharge summary information to physician order form
3. Record reviewed for omissions and questions
4. MD called to approve orders

Process mapping will help clarify all of the activities that occur around Exchange 6.

Step 2. Assess the current process

Exchange 6 Structure, Process, Outcome

Structure
A. Accountable provider at point of transition
- Admissions coordinator
- Unit nurse
- Attending MD
- LAR/other caregiver
B. Plan of care
- Medication reconciliation form, hospital MAR
- Medical history (medical record document)
- Hospital discharge summary (treatment provided in ED/hospital)
- Advance directives
- Lab data, x-rays, vital signs
- Referrals, follow-up appointments
C. Use of HIT
- Electronic medical record (EMR) - system specific implementation

Process

A. Care team processes

- Medication reconciliation – Compare hospital medication reconciliation form with the pre-hospitalization MAR

- Test tracking – monitor for appropriate follow-up from hospital procedures

- Referral tracking – monitor follow-up physician visits, referrals

B. Information transfer/communication between providers

- Timeliness, completeness and accuracy of information transferred

- Protocol of shared accountability in effective transfer of information

C. Patient education and engagement

- Patient/caregiver education for self-monitoring

- Patient personal "My Medicine List"

- Patient care tool

- Appropriate communication with patients with limited English proficiency

Outcomes

- Patient experience (CTM)

- Provider experience

- Health care utilization and costs (readmissions)

- Health outcome (e.g., functional status, medical errors, etc.)

> 🖥️ NTOCC Tool
> Education & Awareness Workgroup
>
> - My Medicine List
> - Patient Care Tool
>
> www.ntocc.org

Step 3. Evaluate your current level of practice

Evaluation Questions for Exchange 6

Question 1: Did the nursing home receive the appropriate information from the ED/hospital?

Question 2: Did the nursing home communicate with the hospital following receipt of the patient?

Question 3: Was the nursing home provider informed of the resident's return to the facility?

Question 4: Was the hospital medication reconciliation form compared with the prehospitalization MAR?

Question 5: Was the family/LAR informed of the resident's return to the facility?

Evaluation Matrix for Exchange 6

Measure	Data source	Reporting Guidance
Evaluation Question 1: Did the nursing home receive the appropriate information from the ED/hospital?		
1. # residents received with hospital discharge summary	Medical record	Number and percent ***(ACOVE-3 QI, Continuity and coordination of care, No.13)***
2. # residents received with pending test results documented as pending in the discharge summary	Medical record	Number and percent ***(ACOVE-3 QI, Continuity and coordination of care, No.11)***
3. # residents received with pending appointment documented as pending in the discharge summary	Medical record	Number and percent ***(ACOVE-3 QI, Continuity and coordination of care, No.12)***
4. # residents received with medication list (hospital medication administration record, medication reconciliation form, EMR printout)	Medical record	Number and percent **(Joint Commission – National Patient Safety Goal 8, Medication Reconciliation,** *ACOVE-3 QI, Continuity and coordination of care, No.9*)
5. # residents received with treatments received in the hospital	Medical record	Number and percent
6. # residents received with consultants' notes	Medical record	Number and percent
7. # residents received with vital signs during stay	Medical record	Number and percent
8. # residents received contact information for follow-up	Medical record	Number and percent ***(ACOVE-3 QI, Continuity and coordination of care, No. 8)***
Evaluation Question 2: Did the nursing home communicate with the hospital following receipt of the patient?		
9. # residents received that had documentation of verbal communication with the hospital within 24 hours of receipt	Medical record	Number and percent ***(ACOVE-3 QI, Continuity and coordination of care, No. 7)***
Evaluation Question 3: Was the nursing home provider informed of the resident's return to the facility?		
10. # residents received that had documentation of verbal communication with the NF provider within 24 hours of receipt	Medical record	Number and percent
Evaluation Question 4: Was the hospital medication reconciliation form compared with the prehospitalization MAR?		
11. # residents received that had documentation of medication reconciliation on admission?	Medical record	Number and percent **ACOVE-3 *QI, Continuity and coordination of care, No. 9)***
Evaluation Question 5: Was the family/LAR informed of the resident's return to the facility?		
12. # residents with documentation of verbal communication with family/LAR within 24 hours of return to the facility	Medical record review (nursing notes, progress notes)	Number and percent

See Exchange 1 for examples of steps 4 through 6.

Sample Checklist for Receipt of Resident from ED/hospital Transfer

Resident Information Checklist from ED/Hospital

_____   _____

Resident Name   **Date and time of transfer**

☐ Resident discharge summary

☐ List of pending test results

☐ List of pending appointments

☐ Medication list, including time of last dose, stop dates for new medications

☐ List of all treatments received by resident during hospital stay

☐ Consultant notes

☐ Vital signs during hospital stay

☐ Hospital contact name and phone or pager number

The following information is documented in the medical record:

☐ Verbal communication between NF and hospital within 24 hours
Contact name: _____   time: _____

☐ Verbal communication regarding the resident's return to the NF provider

☐ Evidence of medication reconciliation with prehospitalization MAR

☐ Verbal communication with family/LAR within 24 hours of return to the facility.
Contact name: _____   time: _____

_____   _____

Name completing form   Date

Appendix F: Evaluation: A Basic Primer

Quality Improvement And Evaluation

Introduction to Evaluation

Evaluation is the conscious reflection on what we do, with the aim of discovering:

- Opportunities to improve practice (e.g., flaws in systems or processes)
- Whether or not we have achieved the outcomes that we set out to achieve for patients; and/or whether key areas within our services are performing as expected over time
- Whether or not an improvement has been made as a result of a quality improvement activity (e.g., a project or new process)

Opportunities to improve practice might be discovered through ongoing evaluation of risks, incidents, clinical indicators, or other data. Peer review, caregiver/patient surveys, and observations of practice are also forms of evaluation. In fact, any data could be used, as long as it informs us about flaws (or potential flaws) in practice, and creates questions about how these flaws could be addressed.

Continuous, ongoing reflection and evaluation of clinical practice is an important part of creating safer, higher quality health care environments.

Evaluation of goal achievement is also important to improving health care. Evaluating goal achievement makes us focus on our effectiveness in practice: are we achieving what we hoped to achieve? Goal achievement for individual patients might include evaluation of:

- Clinical improvement
- Functional improvement
- Improvement in well-being/quality of life

Goal achievement is often evaluated using outcome measurement tools. While reflecting on patient improvements over time is a standard part of clinical care, outcome measurement tools allow this improvement to be quantified. Examples of tools are:

- Goal-based measures, such as the Goal Achievement Scale (GAS). These measures are often 'open' and can be tailored towards any goal for a patient.
- Functional outcome measures, such as the Functional Independence Measure for children (WeeFIM). Some of these measures are designed to be used across patient groups, while others are specific to disorders, diseases, or parts of the body that you might want to measure.
- Quality of life or well-being focused outcome measures. These measures often ask patients to rate their response to questions about their feelings, coping, ability to participate, and other areas.

Individual patient outcome measurement allows clinicians to quantify patient progress towards goals over time. If measures are used that can be 'summed' across patients, outcome measurement allows us to track the outcome of a group of patients over time (e.g., all patients who have had orthopaedic surgery). They can also be used in order to compare the outcomes

of two different approaches to patient care- for example, the well-being *of* patients with cancer who have received social work input, versus those who have not.

Evaluation is also part of the quality improvement cycle. A key component to any QI project is evaluating the effectiveness or otherwise of the strategies used. For example, if you hold study days, give reminders, and use nurse facilitators as strategies to try and improve documentation in patient file notes, have these efforts actually led to any improvement? Evaluation in QI is specific to the aim of the QI effort. Often, data about the process in question (e.g., documentation) is needed before and after the strategies are put into place, so that the actual improvement can be documented.

Clinical and Key Performance Indicators

Clinical indicators and key performance indicators are another way of evaluating services. Indicators allow a broad overview of performance over time. They don't give a lot of detail about what is happening, but they do allow us to monitor and track (on an ongoing basis) key areas of practice, in order to 'flag' areas that need improvement. Clinical and key performance indicators can be used to compare our performance against other health care services, to ensure that we are providing the best possible service for children.

Clinical indicators can reflect patient outcomes (e.g., central line infection rate), safety issues (e.g., falls), or the appropriateness of care given (e.g., appendectomy with normal histology). Clinical indicators flag potential clinical problems that are happening, and allow us to follow this up with appropriate action (e.g., improved process for placing central lines to decrease infection rate). For example, an increased rate of patient falls in the hospital may indicate a need to review policy and re-educate staff and families about children's safety and supervision.

Other examples of clinical indicators might be:

- Number of patients who develop pressure ulcers whilst in the hospital
- Percentage of patients who undergo transfers from acute care to home
- Rate of medication incidents in the nursing home

Key performance indicators (KPIs) are similar to clinical indicators, but reflect overall hospital, department, or group 'performance' rather than just clinical problems or outcomes. KPIs often reflect administrative, service, or business areas, such as staffing levels, under or over utilization of services by certain groups of patients, and efficiency. KPIs, like clinical indicators, can reflect the quality of a service – particularly relating to quality areas of efficiency (e.g., waiting times for services; cost of a service) and access (e.g., types of patients who are utilizing the service).

Introduction to Quality Improvement

Quality improvement is about ensuring that our focus is on improving, not just maintaining, our services. Quality improvement involves a focus on the safety, effectiveness, efficiency, acceptability, accessibility and appropriateness of services for consumers (who might be patients, caregivers, other health care professionals, or the health care facility).

Quality improvement is a continuous cycle of planning, implementing strategies, evaluating the effectiveness of these strategies and reflection to see what further improvements can be made (plan-do-study-act – PDSA approach – see figure below).
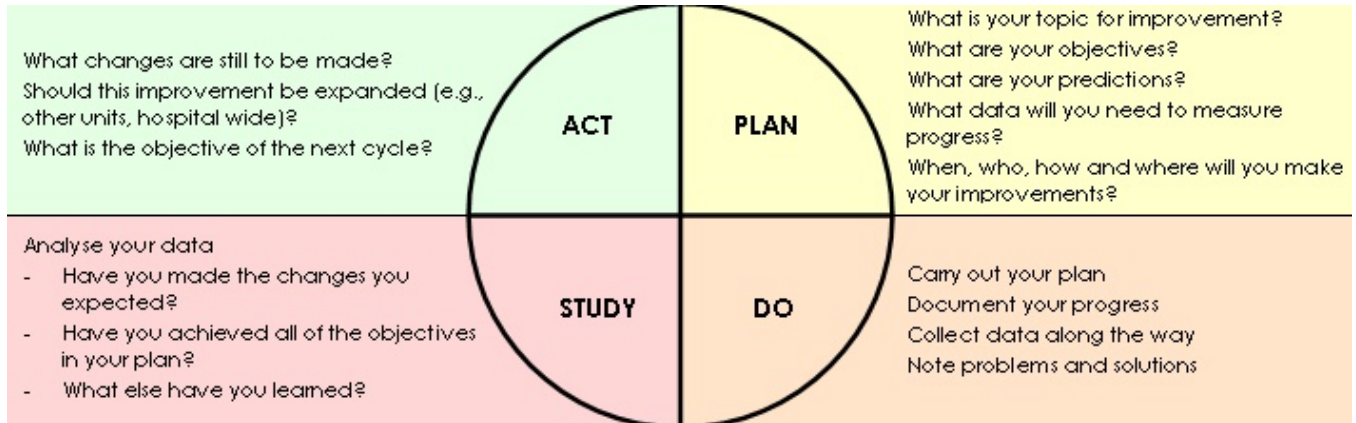
PDSA approaches promote action by getting clinicians to reflect and brainstorm strategies that they hope will lead to improvement. It also promotes evaluation of these changes once the strategies have been implemented.

This is the beginning of a continuous cycle which allows for the initiation of changes for improvement through a process that requires evaluation to prove that the desired outcome is achieved.

Strategies for Quality Evaluation and Improvement

Examine the Current Situation (Plan)

Find areas for improvement

'Walk through' (observational survey or process mapping method): A walk-through is a data collection method that allows you to consider the patient and caregiver perspective in care, and to evaluate how and where the process of care could be improved for consumers. For example, members of the health care team go through the experience just as the patient and caregivers would, and provide feedback on this experience to the rest of the team. A walk-through allows you to clarify the current process of care–what happens to patients when they come into your department–and suggest areas for improvement.

'Why' Technique: Asking 'why' for any given problem allows you to get closer to the true root of the problem. The five why's technique supports identification of the best focus for quality improvement, by identifying the root cause of a problem (rather than just the cause that is the most obvious).

<u>Define and quantify the problem and study aims</u>

Ask the 5 W-questions and the 1-H question: Who, What, Where, Why, When and How often- about your problem. This helps you clearly define your problem and aims. For example, if your broad aim is to improve documentation, consider:

- What is the exact problem? (e.g., poor documentation of clinical progress)
- Whose documentation do you want to improve? (e.g., nurses? multidisciplinary staff?)
- When/where does this problem occur? (e.g., poorer documentation in night shift)
- Why does this problem occur? (as identified above using the 'why' technique).
- How often does this problem occur? (quantify the percentage of patient files in which documentation is inadequate)

<u>Look for possible solutions</u>

Identify the barriers to change: There is often more than one thing that stops change from happening. Identifying barriers helps you to identify the best strategies to support change. Areas to consider include:

- Personal barriers – For example, a person's attitude toward change, or their knowledge/skill in relation to the new behavior
- Social barriers – For example, poor leadership or support from peers for new behaviors
- Process barriers – For example, lack of clarity about the actual process, or competing processes that are higher priority
- Environmental barriers – For example, a lack of some physical resource needed to carry out the new behavior

Implement a Plan for Change (Do)

Presuming that you have identified the most appropriate area to change, and you are now ready to take action, what is your strategy for making change and improving practice?

The most important factor in choosing a strategy is ensuring that it matches your goal/aims and provides an adequate solution to the problem identified above. For example, if a lack of knowledge is identified as a key problem, then environmental modification is not an appropriate solution.

Strategies that target personal/group knowledge, attitudes and behaviors have been evaluated in the evidence, and their known effectiveness is summarized in the following table.

Strategies that Target Knowledge, Behavior, Attitudes	Effectiveness
Disseminating information/recommendations to staff: Sending staff information about new policies, recommendations, or guidelines in an accessible form	**LOW** – This is a fairly passive strategy for change. It requires staff to take the initiative to read, assimilate and apply the new information in their practice. Current evidence suggests that it is not an effective strategy for encouraging change in practice.[1]
Posters/ visual reminders: A visual reminder, such as a poster or handout may be effective in the short term for getting an issue at the forefront of people's minds. It is going to have more impact if it is placed immediately in the area in which it is relevant (e.g., if the issue is procedural pain management, then a poster should be in the procedure room, not the tea room), but remember to be sensitive to families who will also be able to read the posters in clinical areas, and make sure that the poster is in line with hospital policy. Visual reminders are also more effective if they are not surrounded by a hundred other posters, all trying to bring issues to the forefront of staff's minds!	**UNTESTED** – Although similar strategies (e.g., sending staff information, above) have not been found to be effective, it is unclear whether or not posters and other visual reminders are more or less effective in changing behavior.
Use of local opinion leaders: Using respected staff to model appropriate behaviors and encourage new practices is a strategy that is widely used.	**LOW** – The use of local opinion leaders can successfully promote evidence-based practice. However the feasibility of its widespread use remains uncertain.[2]
Tailored approaches: Tailoring a strategy means addressing the specific barriers to change that have been identified. There is usually more than one barrier, and a tailored approach may include several strategies so that all of the barriers are addressed. For example, if knowledge, leadership and process issues have been identified, strategies may include teaching and training (to address knowledge barriers), 'selling' the idea to leadership (by demonstrating benefits that are important to them), and restructuring processes.	**UNCLEAR** – At this stage, more evidence is needed to show whether 'tailoring' an approach to the barriers identified is more effective than a 'one size fits all' strategy.[3]
Monitoring (audit) and feedback: Monitoring and feedback approaches require someone to consistently assess staff adherence to expected behaviors and provide this feedback to staff, in the expectation that they will change their practice. This approach targets consistency of practice by showing staff how their behavior differs from the 'ideal' behavior or from that of their peers.	**MODERATE** – There is some evidence that monitoring and feedback combined are effective, and this is more likely where the strategy is used intensively. However, the two must go hand in hand; monitoring of practice alone does not improve practice.[4]

Strategies that Target Knowledge, Behavior, Attitudes	Effectiveness
Interactive workshops: Both interactive workshops and traditional teaching approaches target knowledge and skills of staff, which is important if these areas have been identified as barriers to change. For example, a new protocol within the hospital may need to be taught to staff before they can start to apply it.	**MODERATE–HIGH** – There is evidence that teaching/training in the form of interactive workshops can result in moderate- large changes in practice.[5,6]
Traditional teaching sessions: Didactic learning is the traditional approach, where a teacher talks and 'students' (or staff) listen and learn.	**LOW** – Didactic sessions alone (traditional teaching methods) are not effective in changing behavior.[5,6]

1. Freemantle N et al. Printed educational materials: effects on professional practice and health care outcomes. Cochrane Database Syst Rev 2000;(2):CD000172.
2. Doumit G et al. Local opinion leaders: effects on professional practice and health care outcomes. Cochrane Database Syst Rev 2007;(1):CD000125.
3. Shaw B et al. Tailored interventions to overcome identified barriers to change: effects on professional practice and health care outcomes. Cochrane Database Syst Rev 2005;(3):CD005470.
4. Jamtvedt G et al. Audit and feedback: effects on professional practice and health care outcomes. Cochrane Database Syst Rev 2006;(2):CD000259.
5. Thomson O'Brien MA et al. Continuing education meetings and workshops: effects on professional practice and health care outcomes. Cochrane Database Syst Rev. 2001;(2):CD003030
6. Davis D et al. Impact of formal continuing medical education: do conferences, workshops, rounds, and other traditional continuing education activities change physician behavior or health care outcomes? JAMA 1999;282:867-74.

Other strategies:

Environmental 'modification': Sometimes specific physical changes are needed to the environment to support the change/improvement. For example, the lighting in a recovery room might be modified to support better documentation by staff, while still allowing patients to wake gently following surgery.

System or process redesign: Addressing deficiencies in the system or process can play an important part in quality improvement. Process redesign is about ensuring that a new 'path' is introduced (and reinforced) that supports the ideal behavior/outcome.

'Mistake proofing': Mistake proofing is a specific type of environmental modification and/or process redesign. It involves modifying a process or equipment in such a way that it is impossible (or at least very difficult) for a mistake to be made. For example, a problem where letters are being place in the wrong envelopes and therefore sent to the wrong patients can be 'mistake proofed' by switching to envelopes with windows. If done correctly, this method can take human error out of the picture.

Evaluate Your Success (Study)

Evaluating the success or otherwise of your QI project is an essential step.

Some tips for effective measurement are:

1. *Examine data at more than one time point.* Improvement requires change, and in order to see change you need to examine data over time.
2. *Aim for useful data, not perfect data.* Measurement is not the goal; improvement is the goal. In order to move forward to the next step, a team needs just enough data to know whether changes are leading to improvement.
3. *Sample, don't measure everyone.* A well-chosen sample can represent the rest of the data. Sampling can save time and resources while accurately tracking performance.
4. *Make measurement simple.* Useful data are often easy to obtain from existing information systems. However, if there is too long a gap between the data going in and you getting meaningful reports, use another method. A simple data collection form can get you the data that you need to measure improvement.
5. *Target your measurement.* Ensure that you measure what you set out to achieve–this means looking back at your aims and targeting the data toward those aims. For example, if you wanted to improve patient ID bands (e.g., make them more durable), then counting the number of patients wearing an ID band at any given time is NOT your best measure. If your aim is a more durable ID band, use a measure of durability (e.g., get nurses to note the number of broken ID bands).
6. *Consider qualitative and quantitative aspects.* Quantifying change is important. For example, the change in the average number of days on the waiting list following the introduction of a new clinic designed to reduce waiting times. However, it is important to also consider qualitative information, such as how staff feel about the new clinic, what the impressions of patients are about the new process, and how both groups feel further changes could be made.

Note: Some of the above tips are modified from: Institute for Healthcare Improvement Tips for Effective Measurement.

Take Action Based on the Results (Act)

The last phase in the PDSA cycle is act on the information that you have gathered. This means looking in depth at what has been learned and how the knowledge should be applied.

If the change worked, look at expanding the project (e.g., across your department, into other departments, into other problem areas).

If the change did not work, look at what you have learned and start the cycle again, with a different plan.

In either case, use what you learned to plan new improvements, beginning the cycle again.

Used with permission. Jemma Skeat, Murdoch Childrens Research Institute, Royal Children's Hospital, Melbourne, Australia. Available at http://www.rch.org.au/css/qie/index.cfm?doc_id=10112 and http://www.rch.org.au/css/qie/index.cfm?doc_id=10131.

Appendix G: Literature Review - Transitions from the nursing home to the hospital

Boockvar K, Fishman E, Kyriacou CK et al. Adverse events due to discontinuations in drug use and dose changes in patients transferred between acute and long-term care facilities. Arch Intern Med 2004;164:545-50.

This study investigated the occurrence of iatrogenic harm from medication changes during patient transfer. The investigators studied residents of four nursing homes in the New York City metropolitan area admitted to two academic hospitals. Investigators reviewed nursing home and hospital medical records, identifying changes in medication regimens between sites. Medications were matched and compared regarding dosage, route, and frequency of administration. Two physician investigators used structured implicit review to identify ADEs attributable to transfer-related medication changes.

During 122 admissions, the mean numbers of medications altered during transfer from nursing home to hospital and hospital to nursing home were 3.1 and 1.4, respectively (P<0.001 for comparison). Most changes in drug use were discontinuations, followed by dose changes, and class substitutions. Of 71 bidirectional transfers reviewed, ADEs attributable to medication changes occurred during 14 (20%) and overall risk of ADE per drug alteration (n = 320) was 4.4% (95% confidence interval, 2.5%-7.4%). Almost half of the medication changes implicated in causing ADEs (8/14) occurred in the hospital and most of the ADEs (12/14) occurred in the nursing home after readmission. The authors concluded that medication changes are common during transfer between hospital and nursing home and are a cause of ADEs.

Field TS, Gurwitz JH et al. Risk Factors for Adverse Drug Events in NF Residents. Arch Intern Med 2001;161:1629-34.

In this prospective study of nursing home residents, the investigators found ADEs to be common, serious, and often preventable. The investigators conducted a case-control study nested within a prospective study of ADEs among residents in 18 nursing homes. For each ADE, they randomly selected a control from the same home. Data were abstracted from medical records on functional status, medical conditions, and medication use.

Adverse drug events were identified in 410 nursing home residents. Independent risk factors included being a new resident (odds ratio [OR], 2.8; 95% confidence interval [CI], 1.5-5.2) and taking anti-infective medications (OR, 4.0; CI, 2.5-6.2), antipsychotics (OR, 3.2; CI, 2.1-4.9), or antidepressants (OR, 1.5; CI, 1.1-2.3). The authors concluded that it is possible to identify nursing home residents at high risk of having an ADE. Particular attention should be directed at new residents, those with multiple medical conditions, those taking multiple medications, and those taking psychoactive medications, opioids, or anti-infective drugs. The risk factor of being a new resident suggests that a transition of care issue exists.

Boockvar KS, Burack OR. Organizational Relationships Between Nursing Homes and Hospitals and Quality of Care During Hospital-Nursing Home Patient Transfers J Am Geriatr Soc 2007;55:1078-84.

The study objective was to identify organizational factors and hospital and nursing home organizational relationships associated with more-effective processes of care during hospital–NH

patient transfer. Surveys were mailed to Medicare- or Medicaid-certified NHs in New York State. Participants included nursing home administrators with input from other NH staff.

Investigators sent the survey directly to the administrator due to ease and convenience of obtaining and verifying that person and administrators were encouraged to seek information from others included nurses, physicians, medical directors, other staff members, or medical records.

Key predictor variables were travel time between the hospital and the nursing home, affiliation with the same health system, same corporate owner, trainees from the same institution, pharmacy or laboratory agreements, continuous physician care, number of beds in the hospital, teaching status, and frequency of geriatrics specialty care in the hospital. Key dependent variables were hospital–to–nursing home communication, continuous adherence to healthcare goals, and patient and family satisfaction with hospital care. Of 647 questionnaires sent, 229 were returned (35.4%). There was no relationship between hospital–nursing home interorganizational relationships and communication, healthcare goal adherence, and satisfaction measures. Geriatrics specialty care in the hospital (r=0.157; P=.04) and fewer hospital beds (r=−0.194; P=.01) were each associated with nursing homes more often receiving all information needed to care for patients transferred from the hospital. Teaching status (r=0.230; P=.001) and geriatrics specialty care (r=0.185; P=.01) were associated with hospital care more often consistent with healthcare goals established in the nursing home. No management-level organizational relationship between nursing home and hospital was associated with better hospital-to–nursing home transfer process of care.

Geriatrics specialty care and characteristics of the hospital were associated with better hospital–to–nursing home transfer processes.

Terrell KM, Miller DK. Challenges in Transitional Care Between Nursing Homes and Emergency Departments J Am Med Dir Assoc 2006;7:499-505.

The objectives of this study were to obtain opinions of knowledgeable professionals involved in the emergency care of nursing home (NH) residents. The investigators conducted structured focus group interviews. Five provider categories, including NH staff, NH physicians and nurse practitioners, emergency medical services (EMS) providers, emergency department (ED) nurses, and ED physicians served as the participants. Two NHs, 2 EDs, and a county-wide EMS system were included. Audiotaped discussions were transcribed and analyzed independently by two authors. Themes included barriers to providing high-quality care, data needed when residents are transported in both directions between EDs and NHs, and possible solutions to improve care.

Communication problems were the most frequently cited barrier to providing care. Residents are often transported in both directions without any written documentation; however, even when communication does occur, it is often not in a mode that is useable by the receiving provider. ED personnel need a small amount of organized, written information. When residents are released from the ED, NH personnel need a verbal report from ED nurses as well as written documentation. All groups were optimistic that communication can be improved. Ideas included use of (1) fax machines or audiotape cassette recorders to exchange information, (2) an emergency form in residents' charts that contains predocumented information with an area to write in the reason for transfer, and (3) brief NH-to-ED and ED-to-NH transfer forms that are accepted and used by local NHs and EDs. The authors concluded that the transitional care of NH residents is laden with problems but has solutions that deserve additional development and investigation.

OIG Report – June '07
- Consecutive Medicare stays involving inpatient and skilled nursing facilities in CY 2004
- Key findings
  - 35% of consecutive stays were associated with quality-of-care problems and/or fragmentation of services
  - 11% of individual stays within consecutive stay sequences involved problems with quality-of-care, admission, treatments or discharges

The Joint Commission has goals that address transitions of care in its National Patient Safety Goals for hospitals and nursing homes. They are:

Goal 2	Improve the effectiveness of communication among caregivers.
2A	For verbal or telephone orders or for telephonic reporting of critical test results, verify the complete order or test result by having the person receiving the information record and "read-back" the complete order or test result.
2B	Standardize a list of abbreviations, acronyms, symbols, and dose designations that are not to be used throughout the organization.
2C	Measure and assess, and if appropriate, take action to improve the timeliness of reporting, and the timeliness of receipt by the responsible licensed caregiver, of critical test results and values.
2E	Implement a standardized approach to "hand off" communications, including an opportunity to ask and respond to questions.
Goal 8	Accurately and completely reconcile medications across the continuum of care.
8A	There is a process for comparing the resident's current medications with those ordered for the resident while under the care of the organization.
8B	A complete list of the resident's medications is communicated to the next provider of service when a resident is referred or transferred to another setting, service, practitioner, or level of care within or outside the organization. The complete list of medications is also provided to the resident on discharge from the facility

Appendix H: Institute for Healthcare Improvement Tips for Effective Measures

The Institute for Healthcare Improvement prepared an AHRQ report in 2007 that examines the link between health information technology (HIT) and quality improvement in a range of primary care settings. Here is a table from that report that has some tips for effective measures.

Tips for Effective Measures

1. **Track data over time.** Improvement requires change, and change is, by definition, a temporal phenomenon. System information and targets for improvement is often obtained by plotting data over time. (e.g., length of stay, volume, patient satisfaction data) and then observing trends and other patterns. Tracking a few key measures over time is the single most powerful tool a team can use.

2. **Seek useful information, not perfect information.** Improvement is the goal, not measurement. For a team to move forward to the next step, they need enough data to know whether changes are leading to improvement.

3. **Use sampling.** Sampling is a simple, efficient way to help a team understand how a system is performing. Sampling can save time and resources while accurately tracking performance.

4. **Integrate measurement into the daily routine.** Useful data are often easy to obtain without relying on information systems. Don't wait two months to receive data when a simple data collection form can be developed, and data collection made part of someone's job. Often, a few simple measures will yield all the information you need.

5. **Use qualitative and quantitative data.** In addition to collecting quantitative data, be sure to collect qualitative data, which often are easier to access and highly informative. For example, ask the nursing staff how the new medication reconciliation is going or how to improve the protocol. Or, in order to focus your efforts on improving patient and family satisfaction, ask patients and their families about their experience with their hospital discharge.

Adapted from:
http://www.ihi.org/IHI/Topics/Improvement/ImprovementMethods/Measures/tipsforestablishingmeasures.htm

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Appendix I: NTOCC Tools

Suggested Common/Essential Data Elements for Medication Reconciliation

NT🔷CC
National Transitions of Care Coalition

Suggested Common/Essential Data Elements for Medication Reconciliation

ASSESSMENT ON ACCESS TO CARE SETTING (E.G. HOSPITAL ADMISSION, NURSING HOME ADMISSION)				
Category	Element	Source(s)	Barrier(s)	Comments
Demographic	Name	Patient/caregiver	Cognitive status	Universally available unique identifier information
	Date of birth			
	ID Number			
	Gender			
	Contact information			
	Caregiver name and contact information	Caregiver	Caregiver knowledge of patient	
	Allergies/intolerances	Patient/caregiver		
	Date of assessment	Interviewer		May also include time of transport of info
Medications (active, taken chronically)	Name – generic/trade	Patient/caregiver	Patient/caregiver knowledge of complete medication list, cognitive status	NDC will be used in automated systems – name + dose
	Dose			
	Form			
	Frequency			
	Reason for use			
Other medications/OTC/herbal remedies/nutritional supplements/time-limited medications	Name – generic/trade			Stop dates for short term medications
	Dose			
	Form			
	Frequency			
Other elements for consideration				
Demographic	Primary language	Patient/caregiver	Patient/caregiver knowledge of complete medication list, cognitive status	
	Religious, cultural factors			
Medications	Prescriber			Variety of methods to provide info on

My Medicine List

How to use My Medicine List:

"My Medicine List" can help you and your family keep track of everything you take to keep you healthy—your pills, vitamins, and herbs. Having all of your medicines in one place also helps your doctor, pharmacist, hospital, or other healthcare workers take better care of you.
   Start using "My Medicine List" today!

1. With help from your healthcare professional, fill out the form.
2. In order to fill out the form, you need a list of all of your medicines or everything you take in front of you. Be sure you include medicine you take from all pharmacies that you use as well as any over-the-counter medicines, vitamins, herbs or minerals you may take.
3. Next, think about what you take in the morning, afternoon, around dinner time, and before you go to bed.
4. For every medicine (including ones you get without a prescription), vitamin or herb you take, you need to write down these things:
   • The name of what you take (like Tylenol, Acetaminophen 500 mg)
   • How much you take of this (1 pill, 3 drops, 2 puffs)
   • What it looks like (round, white and red, clear liquid)
   • How you take it (by mouth, with food, with a needle)
   • You started taking this on: (Sept. 15, 2007)
   • You will stop taking this on: (Sept. 30, 2007)
   • Why you take it (for my arthritis, for my heart, to lower cholesterol)
   • Who told me to use it (my internist, my rheumatologist)
   Here's an example:

Drug name (brand name, generic name, dose)	This looks like	How many?	How I take it	I started taking this on:
Zocor, Simvastatin, 40 mg	yellow pill	1 pill	with water	June 2001

5. Always keep this card with you. Fold it and keep it in your wallet or purse, so you will have it in case of an emergency.
6. Whenever you stop taking something or start taking something new...

💊 My Medicine List

This medicine list is for:

Name: _____ Birth date: _____

If you need to get in touch with me, use:

this phone number: _____

this e-mail: _____

Emergency contact:_____

The best way to get in touch with my emergency contact is:

Phone: _____ E-mail: _____

I am allergic to: _____

I also have some other problems with medicines: _____

_____

Keeping My Medicine List up-to-date:

It is very important to keep this information current. Use the chart below to review and update your "My Medicine List". You can do this with your doctor, pharmacist, nurse, or other health care professional.

Reviewed by:	Reviewed on:	Updated on:	Updated by:

Elements of Excellence in Transitions of Care (TOC) Checklist

Elements of Excellence in Transitions of Care (TOC)

TOC Checklist

*The purpose of this checklist is to enhance communication—among health care providers, between care settings, and between clinicians and clients/caregivers—of patient assessments, care plans, and other essential clinical information. The checklist can serve as an adjunct to each provider's assessment tool, reinforcing the need to communicate patient care information during transitions of care. This list may also identify areas that providers do not currently assess but may wish to incorporate in the patient's record. Every element on this checklist may not be relevant to each provider or setting.

*For purposes of brevity, the term *patient/client* is used throughout this checklist to describe the client and client system (or patient and family). The *patient/client system* (or family), as defined by each patient/client, may include biological relatives, spouses or partners, friends, neighbors, colleagues, and other members of the patient/client's

Appendix J: NTOCC Proposed Framework for Measuring Transitions of Care

I. **Structure**
    A. **Accountable provider at all points of transition.** Patients should have an accountable provider or a team of providers during all points of transition. This provider(s) should be clearly identified and will provide patient-centered care and serve as central coordinator of his/her care across all settings, across other providers.
    B. **Plan of Care.** The patient should have an up-to-date, proactive care plan that includes clearly defined goals, takes into consideration the patient's preferences, and is culturally appropriate.
    C. **Use of health information technology (HIT).** Management and coordination of transitional care activities is facilitated through the use of integrated electronic information systems that are interoperable and available to patients and providers.

II. **Processes**
    A. **Care team processes**
        - Medication reconciliation
        - Test tracking (lab and diagnostic procedures)
        - Referral tracking
        - Admission and discharge planning
        - Follow up appointment
    B. **Information transfer/communication between providers**
   - Timeliness, completeness, and accuracy of information transferred
        - Protocol of shared accountability in effective transfer of information
    C. **Patient education and engagement**
        - Patient prepares for transfer
        - Patient education for self-management
        - Appropriate communication with patients with limited English proficiency and health literacy

III. **Outcomes**
    - Patient experience (including family or caregiver)
    - Provider experience (individual practitioner or health care facility)
    - Patient safety (medication errors, etc.)
    - Health care utilization and costs (reduced avoidable hospitalization)
    - Health outcomes (clinical and functional status, intermediate outcomes, therapeutic endpoints)
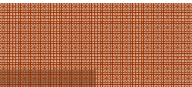
Appendix K: Annotated Bibliography and References

Transitions of Care intervention programs and literature

The Care Transitions Program[SM]: This program received funding from The John A. Hartford Foundation and The Robert Wood Johnson Foundation. The Care Transitions Intervention[SM] was designed to be a patient-centered, interdisciplinary intervention that addresses continuity of care across multiple settings and practitioners. The goal of the intervention is to improve care transitions by providing patients with tools and support that promote knowledge and self-management of their condition as they move from hospital to home. Available at http://www.caretransitions.org/intervention_design.asp.

Project Red (the Re-engineered Discharge): Project RED is a Randomized Controlled Trial at Boston Medical Center. This project re-engineers the workflow process and improves patient safety for patients from a network of Community Health Centers discharged from a general medical service at an urban hospital.
The research was supported by Agency for Healthcare Research and Quality (AHRQ) grant number 1 U18 HS015905-01. Available at http://www.bu.edu/fammed/projectred/.

Project BOOST and the Care Transitions Implementation Guide. The Society of Hospital Medicine (SHM) launched Project BOOST (Better Outcomes for Older Adults Through Safe Transitions) to improve transitions out of the hospital to risk assess patients on admission, and plan and execute risk specific discharge planning activities. Available at http://www.hospitalmedicine.org/AM/Template.cfm?Section=Quality_Improvement&TEMPLATE=/CM/HTMLDisplay.cfm&CONTENTID=14413.

How to Create an Accurate Medication List. CAPS (Consumers Advancing Patient Safety) With the support of a grant from the US Agency for Healthcare Research and Quality (AHRQ), Aurora Health Care established a Patient Safety Council. The document was intended to provide information and guidance for implementing a patient-centered approach in the outpatient setting, focused on medication safety. Available at http://www.patientsafety.org/page/94874/index.v3page;jsessionid=2htsmmu4bt2mr.

Best Practice Intervention Package – Transitional Care Coordination. The Home Health Quality Improvement Organization Support Center (HHQIOSC) created this package for to assist home health agencies in understand the concept of transitional care coordination, recognize the necessity for home health to assert its role in and to implement transitional care coordination strategies to promote collaboration with other providers to improve care coordination. Available at http://www.homehealthquality.org/hh/hha/interventionpackages/default.aspx.

5 Million Lives Campaign. The Institute for Healthcare Improvement leads the 5 Million Lives Campaign, which aims to improve the quality of American health care by protecting patients from five million incidents of medical harm between December 2006 and December 2008. The How-to Guides associated with this Campaign are designed to share best practice knowledge on areas of focus for participating organizations. Available at www.ihi.org/IHI/Programs/Campaign.

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