AHRQ's Safety Program for Nursing Homes

On-Time Preventable Hospital and Emergency Department Visits: Electronic Reports

Five reports are described here. Each section presents a sample report followed by purpose, description, and users and potential uses. The reports are:

- Transfer Risk Reports (a high-risk and a medium-risk report can be produced)
- ED Treat and Release Report
- Monthly Transfers by Facility or Nursing Unit
- Monthly Transfers by Provider
- Key Metrics Trend Report

Agency for Healthcare Research and Quality

Transfer Risk Report

Table 1. Sample High-Risk Transfer Report

Facility Name:
Unit:
Report Date:

Resident Name and Advance Directive Status			# ED Visits Within:			ED Discharge Diagnosis	# Hospital Admits Within:			Hospital Discharge Diagnosis		High-Risk Diagnoses Associated With Transfer Risk												Current Clinical Conditions Contributing to Transfer Risk								Polypharmacy	High-Risk Change in Condition (Based on Assessment Data Within 7 days of Report Date)					
	Age	DNR,DNH, MOLST, or POLST Order in Place	0-7 Days	8-30 Days	31-90 Days	For Most Recent ED Visit	0-7 Days	8-30 Days	31-90 Days	For Most Recent Hospital Stay	LOS for Most Recent Hospitalization	Congestive Heart Failure	Myocardial Infarction	Angina	Pneumonia or Bronchitis	Asthma or COPD	Urinary Tract Infection	Sepsis or Fever or Infection	Dehydration	Circulatory Problems*	Renal Failure	Diabetes or Hypoglycemia	Anemia	Gastroenteritis	Oxygen Therapy	Catheter or Ostomy Present	Stage II or > Pressure Ulcer	Fall Risk	Late-Loss ADL Score ≥12	Cognitive Impairment	Medical Conditions**	High-Risk Medications***	Medication Total ≥15	CHF or Chest Pain or MI	Pneumonia or Bronchitis	Mental Status Change or Neurological Symptoms	Urinary Tract Infection	Sepsis or Fever or Infection	Dehydration
Resident A	79				2	Fever - unknown origin			1	Myocardial infarction	5		X								X	X								1	X		1	1				1
Resident B	81	1			1	Urinary tract infection		1		Cellulitis	10	X		X			X		X	X							X		X	X		2	X	X	1			1	1	
Resident C	82			1		Anemia		1	1	COPD	4				X	X			X				X		X					X	1	X	X		2	2		1	
Resident D	80			1		Gastroenteritis			1	GI bleed	3							X	X				X	X				X	X		2	X					1	1
Resident E	76						1		1	Altered mental status	2											X							X		1		X			2			
Resident F	84	1																	X		X					X	X	X				X						1
Total Residents		2	0	2	2		1	2	4			1	1	1	1	1	1	1	4	1	2	2	2	1	1	2	1	4	3	1	5	4	4	2	2	2	1	3	3

Key: ED=emergency department; DNR=Do Not Resuscitate; DNH=Do Not Hospitalize; MOLST=Medical Order for Life-Sustaining Treatment; POLST=Physician Order for Life-Sustaining Treatment; LOS=length of stay; COPD=chronic obstructive pulmonary disease; GI=gastrointestinal; ADL=activities of daily living.

* Circulatory problems include vascular disease, and venous and arterial ulcer.

** Certain medical conditions include cellulitis, hypertension, deep vein thrombosis, moderate dementia, peripheral neuropathies, quadriplegia, paraplegia, and hemiparesis.

*** High-risk medications include insulin, anticoagulants, antibiotics, alpha blockers, antipsychotics, antianxiety, sedative /hypnotics, anticonvulsants, antihypertensives, opioids, and diuretics.

Purpose

Transfer Risk Reports (high- and medium-risk residents) provide a weekly snapshot of residents at risk for transfer to a hospital or ED that may be avoidable. The report is designed to help nursing staff see the changes in resident clinical status earlier and identify residents at risk for transfer. To accomplish this goal, staff can use the *Transfer Risk Report* to display transfer risk factors by resident each week.

The report summarizes risk elements recorded on Minimum Data Set (MDS) assessments, medication profiles, and daily or weekly nurse documentation and applies risk rules to provide a list of residents meeting criteria for high or medium risk for transfer to the hospital or ED. Using the report will enhance existing communication patterns among the multidisciplinary clinical team and facilitate proactive management of residents at risk.

Members of the multidisciplinary team can use the Transfer Risk Report each week to monitor changes in the resident risk profile and confirm that appropriate interventions are in place and are understood by the entire care team. Specific questions that the report may answer include:

- How many residents on the nursing unit are at high risk for transfer?
- What are the most common risk factors among high-risk residents?
- Which high-risk changes in residents' conditions are flagging more often than others?
- Which clinical conditions contributing to risk are flagging more often than others?
- How often is polypharmacy seen in residents at risk for transfer?

Description

This weekly report displays resident identifier, resident age, and advance directive status (Do Not Resuscitate [DNR], Do Not Hospitalize [DNH], etc.), and notes the following:

- **ED visits:** number within 7, 30, and 90 days, discharge diagnosis.
- **Hospital admissions:** number within 7, 30, and 90 days of report date, discharge diagnosis, and length of stay for most recent hospitalization.
- **High-risk diagnosis associated with transfer risk:** congestive heart failure (CHF), myocardial infarction (MI), angina, pneumonia or bronchitis, asthma or chronic obstructive pulmonary disease (COPD), urinary tract infection (UTI), sepsis or fever or infection, dehydration, circulatory problems (includes vascular disease, venous and arterial ulcer), renal failure, diabetes or hypoglycemia, anemia, and gastroenteritis.
- **Current clinical conditions contributing to transfer risk:** use of oxygen, catheter or ostomy, any pressure ulcer other than stage I, fall risk, late-loss activities of daily living (ADL) score greater than or equal to 12, [i] cognitive impairment, certain medical conditions (cellulitis, hypertension, deep vein thrombosis, moderate dementia, peripheral neuropathies, quadriplegia, paraplegia, hemiparesis), high-risk medications (insulin, anticoagulants, antibiotics, alpha blockers, antipsychotics, antianxiety medications, sedative/hypnotics, anticonvulsants, antihypertensives, opioids, and diuretics).

[i] Late-loss ADL score is the numeric total of the self-performance codes for the MDS items for bed mobility, transfer, toileting, and eating. The score is based on Resource Utilization Group (RUG-III).

- **Polypharmacy**.
- **High-risk change in condition** within 7 days (CHF or chest pain or MI, pneumonia or bronchitis, mental status change or neurological, UTI, sepsis or fever or infection, dehydration). For each of the six high-risk change categories, the number of symptoms that were found in the last 7 days is shown.

The total number of residents at risk for each type of transfer risk is provided, enabling users to identify the most prevalent risk factors. This report can be filtered to display a single nursing unit or to display all residents in the facility with transfer risk.

Risk Factors Associated With Hospital and Emergency Department Visits

Risk factors known to be associated with preventable hospital and ED visits are grouped in six categories:

1. ED visits within last 90 days
2. Hospital admissions within last 90 days
3. Active high-risk diagnoses
4. Clinical conditions that contribute to high risk
5. Polypharmacy
6. High-risk change in condition within last 7 days

ED Visits Within Last 90 Days. This section displays the number of ED visits that occurred in the following timeframes:

- 0-7 days
- 8-30 days
- 31-90 days

It also displays the ED discharge diagnosis for the most recent ED visit. Observation stays are included in the count of ED visits.

Hospitalizations Within Last 90 Days. This section displays the number of hospitalizations that occurred in the following timeframes:

- 0-7 days
- 8-30 days
- 31-90 days

It also displays the hospital discharge diagnosis and length of stay for the most recent hospitalization.

Active High-Risk Diagnoses. Certain medical diagnoses are associated with preventable hospital and ED visits. Specifically, the following 12 diagnoses are considered high risk:

- CHF
- Chest Pain or MI
- Pneumonia or Bronchitis
- Asthma or COPD
- UTI
- Sepsis or Fever or Infection
- Dehydration
- Circulatory Problems

- Renal Failure
- Diabetes
- Anemia
- Gastroenteritis

Clinical Conditions That Contribute to High Risk. Certain medical conditions and treatments are associated with preventable hospital and ED visits and contribute to transfer risk, such as:

- Oxygen therapy.
- Presence of catheter or ostomy.
- Presence of stage II or greater pressure ulcer.
- Fall risk or previous fall in last 90 days.
- Late-loss ADL score ≥12.
- Cognitive impairment
- Certain medical conditions (with examples of ICD-9-CM[ii] diagnosis codes):
    - Cellulitis (682.0-9)
    - Hypertension (401.0-9)
    - Deep vein thrombosis (453.40)
    - Moderate dementia (290.0)
    - Peripheral neuropathies (356.0-9)
    - Quadriplegia (344.0)
    - Paraplegia (334.1)
    - Hemiparesis (342.9; 438.2)
- High-risk medications:
    - Insulin
    - Anticoagulants
    - Antibiotics
    - Alpha blockers
    - Antipsychotics
    - Antianxiety medications
    - Sedative/hypnotics
    - Anticonvulsants
    - Antihypertensives
    - Opioids
    - Diuretics

Polypharmacy. A higher number of medications increases the risk of complications and contributes to transfer risk. We have chosen 15 or more medications as a threshold to be considered a high risk for hospital and ED visits. This threshold represents about 20 percent of nursing home residents. The count of medications includes over-the-counter medications but excludes medications ordered to be given as needed (PRN).

[ii] ICD-9-CM is the International Classification of Diseases, Ninth Revision, Clinical Modification. Facilities are transitioning to ICD-10, but ICD-9 was used to develop the On-Time tools.

High-Risk Changes in Condition. Certain clinical conditions or symptoms are associated with high risk for transfer. These symptoms and clinical condition elements are captured from multiple data sources within the facility's electronic medical record and represent changes that occurred in a resident's clinical condition within 7 days of report date. Sources of these data include nurse documentation, 24-hour reports, electronic medication administration records, and physician orders. Such data provide information more timely than MDS assessments and enable clinicians to recognize resident changes sooner.

The high-risk change in condition elements are grouped into six categories, as shown on the risk report:

- CHF or chest pain or MI
- Pneumonia or Bronchitis
- Mental Status Change or Neurological Symptoms
- UTI
- Sepsis or Fever or Infection
- Dehydration

Rules for Determining High and Medium Transfer Risk

High Risk. A resident is considered high risk for hospital or ED visit based on one of three rules:

1. **Rule 1: High risk based on prior hospital or ED visit AND an existing high-risk factor**

   Criteria: Resident has prior hospital or ED visit in last 90 days and at least one additional high-risk factor from the following (Table 2, Rows 1-4):

   - Active High-Risk Diagnosis
   - Current Clinical Conditions Contributing to Risk
   - Polypharmacy: 15 or More Medications
   - High-Risk Change in Condition Within 7 Days

   To illustrate Rule 1:

   - A resident with ED visit within 90 days of report date and active high-risk diagnosis of COPD present within 7 days of report date would trigger Rule 1.
   - A resident with hospital admission within 90 days of report date and clinical condition (or associated procedure) contributing to risk, such as use of oxygen or presence of Foley catheter, within 7 days of report date would trigger Rule 1.

2. **Rule 2: High risk based on polypharmacy AND at least four risk factors from existing high-risk diagnoses or clinical conditions contributing to risk combined**

   Criteria: Resident has polypharmacy (15 or more medications) and a minimum of four risk factors from high-risk diagnosis list or clinical conditions contributing to risk combined (Table 2, Row 5).

To illustrate Rule 2:

- A resident with a medication profile indicating 16 active medications during the report week, active high-risk diagnoses of pneumonia and renal failure, presence of oxygen therapy, and Foley catheter use during the report week would trigger Rule 2.
- A resident with medication profile indicating 15 active medications during the report week, active high-risk diagnosis of UTI, presence of Stage III pressure ulcer, and two medical conditions, cellulitis and hypertension, would trigger Rule 2.

3. **Rule 3: High risk based on high-risk change in condition within last 7 days**

   Criteria: Resident has at least one high risk change in condition within last seven days AND at least one active high risk diagnosis or polypharmacy (Table 2, Rows 6-7).

   To illustrate Rule 3:

   - A resident with new cough within 7 days of report date and active high-risk diagnosis of CHF would trigger Rule 3.
   - A resident with new or worsened urinary incontinence documented within 7 days of report date and two active high-risk diagnoses of renal failure and diabetes would trigger Rule 3.

Medium Risk. The resident is at medium risk for hospital or ED visit if *one* of the following four conditions is true:

- Prior hospital or ED visit within 90 days of report date (Table 2, Row 8)
- At least one Current Clinical Condition Contributing to Risk (Table 2, Row 9)
- Polypharmacy (Table 2, Row 10)
- At least one High-Risk Change in Condition within 7 Days (Table 2, Row 11)

Note: Having a high-risk diagnosis alone is not sufficient to categorize a resident as at risk for transfer (Table 2, Row 12).

Table 2. Rules for High and Medium Transfer Risk

	Risk Factors					Risk Level	
Row No.	ED Visit or Hospital Admission	Active High-Risk Diagnoses	Clinical Conditions Contributing to Risk	Poly-pharmacy	High-Risk Change in Condition Within 7 Days	High	Medium
1	X	X				X	
2	X		X			X	
3	X			X		X	
4	X				X	X	
5		At least four in these two categories		X		X	
6		X			X	X	
7				X	X	X	
8	X						X
9			X				X
10				X			X
11					X		X
12		X					

Users and Potential Uses

The primary users of this report are the facility leadership, direct care nurses, and members of the multidisciplinary team. The table below displays potential users of the Transfer Risk Reports and potential uses.

Table 3. Transfer Risk Reports Users and Potential Uses

Users	Potential Uses
Multidisciplinary team	Care plan meetings
Dietary Department staff	Dietary Department internal review
Charge nurse or nurse manager, nursing supervisor	Nurse shift change report
Director of Nursing (DON), nursing supervisors, nurse managers or charge nurses, MDS* nurse, quality improvement (QI) nurse, infection control nurse	Nursing leadership meeting
DON, nurse managers, pharmacist, nursing supervisor	Pharmacist medication review meeting
Rehab Department staff	Rehab Department internal review
DON or Assistant DON, nurse manager, wound nurse, dietitian, Rehab director or therapist	Weekly transfer risk meeting
DON or ADON, nurse manager, wound nurse, dietitian, Rehab director, medical director or wound physician, nurse practitioner, QI nurse	Weekly wound review meeting

* MDS=Minimum Data Set.

ED Treat and Release Report

Table 4. Sample ED Treat and Release Report Facility

Name:

Month:

	Average Daily Census	30	**Total Transfers (Obs, ED)**	11
	Resident Days (including bed holds)	300	**Total Residents (Obs, ED)**	10

	ED Visit		Reason for Transfer													Reason for Transfer: Treatment Unavailable at Facility				Authorized by:					Nursing Home Treatments 24 Hours Prior to Transfer								Seen by (Within 24 Hours Prior to Transfer):						Prior ED Visit		Prior Hospital Discharge	
Resident	ED Visit Date	ED Discharge Diagnosis	Cardiac/Circulatory Symptoms	Respiratory Symptoms	Mental/Psychiatric/Neurological Symptoms	Gastrointestinal/Genitourinary Symptoms	Endocrine/Metabolic/Nutrition Issues	Wound or Skin Issues	Injury: Fall Related	Injury: Not Fall Related	Musculoskeletal Symptoms	Abnormal Labs or Anemia	Fever/Possible Infection	Malaise/Fatigue	Possible Surgical Complication	Diagnostics: Radiology, Imaging	IV Access: PICC, Central, Periph; Meds or Fluids	Transfusion	Catheter Insertion/ Reinsertion	Primary Care Physician	Covering Provider	Medical Director	Medicare Managed Care Organization	Outside Clinic or Service	Labwork Obtained	X Rays Obtained	IV Fluids/Subcutaneous Fluids	Oxygen	Respiratory Treatment	Respiratory Suctioning	Medications: IV, Intramuscular, or SQ	Medications: Oral	Primary Care Physician	Covering Provider	Consulting Physician	Nurse Practitioner or Physician's Assistant	Respiratory Therapist	Other	0-3 Days	4-30 Days	0-7 Days	8-30 Days
Resident A	11/11/2013	Angina	X																	X								X				X	X									
Resident B	11/20/2013	UTI			X															X												X				X					1	
Resident C	11/15/2013	Anemia										X		X				X			X				X											X						1
Resident D	11/13/2013	COPD		X									X									X						X	X											1		
Resident G	11/2/2013	Gastro-enteritis				X	X					X									X				X			X					X									
Resident G	11/11/2013	Fracture							X												X																			1		
Resident J	11/20/2013	G tube replacement				X													X		X																			1		
Resident P	11/10/2013	Dehydration				X	X					X		X						X					X	X										X				3		1
Resident R	11/1/2013	Pneumonia		X								X	X				X			X					X	X		X	X			X				X						
Resident T	11/30/2013	Asthma		X									X										X					X	X				X						1			1
Resident Y	11/30/2013	Laceration								X										X																						
Total reasons		21	1	3	1	3	2	0	1	1	0	4	3	2	0																											
% Total reasons			5	14	5	14	10	0	5	5	0	19	14	10	0																											

Purpose

The purpose of this monthly report is to support the facility's current process of understanding trends of resident transfers to the ED with subsequent return to the nursing home, without hospital admission. Treat and release transfers are a prime source of preventable transfers.

The report allows clinicians to identify common reasons for transfer to the ED and potential root causes (e.g., treatment unavailable at facility, treatments prior to transfer) that occurred during the last month. This information may provide insights into ways they may be able to reduce ED visits. The report reduces the need to manually compile these data and enhances quality improvement monitoring and root cause analysis activities.

The report can be used to answer the following questions:

- How many residents had an ED visit and returned to the nursing home during the report month?
- For the residents who appear on the report, which reasons for transfer are cited most often?
- Are any patterns seen with reason for transfer this month compared with previous months?
- How many residents were transferred for diagnostic treatment not available at the nursing home?
- How many residents were transferred to receive IV fluids or to gain IV access?
- Did every resident transferred for a respiratory reason receive oxygen within 24 hours of transfer time? How many received a respiratory treatment? How many were suctioned? How many were seen by a respiratory therapist?
- How many residents were seen by the primary care provider (physician, nurse practitioner, or physician's assistant) within 24 hours of transfer?
- How many residents had prior ED visits within the same report month? How many had ED visits within 3 days? 30 days?
- How many residents with an ED visit also flagged as at high risk for transfer during the same month?

Description

The report displays a list of residents transferred to the ED for treatment and returned to the nursing home. Any resident with an ED visit date within 30 days of the report date displays on the report. The report may be run for the entire facility or for a single unit. It displays the following:

- ED Visit (date and discharge diagnosis)
- Reason for Transfer (cardiac/circulatory, respiratory, mental/psychiatric/neurological, gastrointestinal/genitourinary, endocrine/metabolic/nutrition, wound and skin, injury (fall related or not fall related), musculoskeletal, abnormal labs or anemia, fever/possible infection, malaise/fatigue, possible surgical complication)
- Reason for Transfer: Treatment Unavailable at Facility (diagnostics, IV access, transfusion, catheter insertion/reinsertion)

- Authorized by (primary care physician, covering provider, medical director, Medicare managed care organization, outside clinic or service)
- Nursing Home Treatments 24 Hours Prior to Transfer (labwork, x rays, IV fluid/subcutaneous (SQ) fluids, oxygen, respiratory treatment or suctioning, medications [IV, intramuscular, SQ, or oral])
- Seen by (Within 24 Hours Prior to Transfer (primary care physician, covering provider, consulting physician, nurse practitioner or physician's assistant, respiratory therapist, other)
- Prior ED Visit (within 3 days or between 4 and 30 days)
- Prior Hospital Discharge (within 7 days or between 8 and 30 days)

Users and Potential Uses

The primary users of this report are the facility leadership, direct care nurses, and members of the multidisciplinary team. The table below displays potential users of the ED Treat and Release Report and potential uses.

Table 5. ED Treat and Release Report Users and Potential Uses

Users	Potential Uses
Multidisciplinary team	Care plan meetings
Dietary Department staff	Dietary Department internal review
Charge nurse or nurse manager, nursing supervisor	Nurse shift change report
Director of Nursing (DON), nursing supervisors, nurse managers or charge nurses, MDS* nurse, quality improvement (QI) nurse, infection control nurse	Nursing leadership meeting
DON, nurse managers, pharmacist, nursing supervisor	Pharmacist medication review meeting
Rehab Department staff	Rehab Department internal review
DON or Assistant ADON, nurse manager, wound nurse, dietitian, Rehab director or therapist	Weekly transfer risk meeting
DON or ADON, nurse manager, wound nurse, dietitian, Rehab director, medical director or wound physician, nurse practitioner, QI nurse	Weekly wound review meeting

* MDS=Minimum Data Set.

Purpose

The Monthly Transfers Report provides counts of hospital and ED visits for the month by unit or by the facility at large. The report helps clinicians understand the most common reasons for transfer and discharge diagnoses for all transfers.

A facilitywide or unit-based team can use the report to answer questions such as:

- What is the most frequent reason for transfer to ED for the facility, for each nursing unit?
- What is the most frequent reason for hospitalization for the facility, for each nursing unit?
- What is the most frequent discharge diagnosis from the ED? From the hospital?
- How many discharge diagnoses were "potentially preventable"?

Description

The report displays the number of total transfers and total residents with observation stays, hospital stays, and ED visits. It also displays the number of residents associated with each reason for transfer and preventable diagnosis. In addition, for each reason for transfer and potentially preventable diagnosis, the percentage of the total hospital and ED visits is calculated, with the top five of each category noted.

The scoring of the top five takes into account any ties by allowing categories with the same percentage to be ranked the same. For example, if discharge diagnoses pneumonia and urinary tract infection are both noted as ED discharge diagnosis in 10 percent of ED visits, their rank order would be the same.

Experts do not agree on which discharge diagnoses should be considered potentially preventable. Nursing homes may opt to modify the diagnoses presented in the sample Monthly Transfers Report by working with their electronic medical record vendor to select the diagnoses they are most interested in tracking.

Reasons for transfer follows

- Mental/psychiatric/neurological symptoms
- Cardiac/circulatory symptoms
- Pneumonia/respiratory symptoms
- Gastrointestinal/genitourinary symptoms
- Endocrine/nutritional/metabolic issues
- Musculoskeletal/joint symptoms
- Wound or skin issues
- Fall-related injury
- Non-fall-related injury
- Abnormal labs
- Fever/possible infection
- Malaise/fatigue
- Potential surgical complications
- Treatment unavailable at facility

Potentially preventable discharge diagnoses are as follows:

- Congestive heart failure
- Pneumonia
- Urinary tract infection
- Sepsis or fever or infection
- Skin ulcers or cellulitis
- Dehydration or metabolic problems
- Chronic obstructive pulmonary disease
- Asthma
- Circulatory problems
- Hypertension
- Gastroenteritis
- Angina pectoris
- Falls/trauma
- Anemia
- Diabetes

Users and Potential Uses

The director of nursing, nurse managers, nursing supervisors, medical director, and other clinicians participating in quality improvement activities or root cause analysis will use this report. The table below displays potential users of the Monthly Transfers Report and potential uses.

Table 7. Monthly Transfers Report Users and Potential Uses

Users	Potential Uses
Director of Nursing (DON), nurse managers, nursing supervisors	Nursing leadership meeting
Department heads	Quality improvement review
DON or Assistant DON, nurse manager, dietitian, Rehab director, quality improvement director, medical director, consultant pharmacist	Root cause analysis for hospital admissions/ED visits

Monthly Transfers by Provider

Table 8. Sample Transfers by Provider

Primary Care Provider	Authorizing Provider	ED Visits	Observation Stays	Hospitalizations	Total Transfers
Brown. B.	Primary care physician	2	0	1	3
Brown, B.	Covering provider	4	1	0	5
Total					8
White. W.	Primary care physician	1	0	1	2
Total					2
Franklin, B	Primary care physician	2	1	1	4
Franklin, B.	Medical director	1	0	0	1
Franklin, B.	Managed care case manager	1	0	0	1
Total					6

Purpose

The Monthly Transfers by Provider Report provides nursing home management with information on how many residents each provider is sending to the hospital or ED. Further investigation of these hospital and ED visits can help determine if the visits were for potentially preventable conditions, the time of day/day of week the transfers occurred, and whether the transfer order was made by the primary care physician, a covering physician, or another provider.

If a trend is detected, leadership staff such as the Director of Nursing and the medical director can work with individual providers to review cases, educate providers on the nursing home's capabilities, and invite providers to participate in root cause analysis of preventable hospital and ED visits.

Description

The report displays the number of ED visits, observations stays, hospitalizations, and total transfers for each of the facility's providers. Each transfer is counted only once at the highest level of care provided. For example, if an ED visit results in a hospitalization, the transfer is counted as one hospitalization.

Users and Potential Uses

The Director of Nursing, administrator, nurse managers, nursing supervisors, and medical director will use this report. The table below displays potential users of the Monthly Transfers by Provider Report and potential uses.

Table 9. Monthly Transfers Report by Providers Users and Potential Uses

Users	Potential Uses
Director of Nursing (DON), nurse managers, nursing supervisors	Nursing leadership meeting
Administrator, DON or Assistant DON, nurse managers, dietitian, Rehab director, quality improvement director, medical director, consultant pharmacist	Root cause analysis for hospital admissions/ED visits

Key Metrics Trend Report

Table 10. Sample Key Metrics Trend Report

Unit Name: A100	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Monthly Census (ADC)	30	28	35	35	31	30	30	23	24	27	32	30
Resident Days (Including Bed Hold)	900	840	1,050	1,050	930	900	900	690	720	810	960	900
Total Transfers From Nursing Home to ED or Hospital	24	14	14	14	16	25	11	11	12	11	3	15
Total Residents Transferred From Nursing Home to ED or Hospital	19	10	14	9	20	14	14	10	10	10	3	17
Observation Stays												
# Observation Stays	2	3	1	0	3	5	5	2	1	0	0	3
Observation Stay Rate: # Observation Stays/1,000 Resident Days	2.2	3.6	1.0	0.0	3.2	5.6	5.6	2.9	1.4	0.0	0.0	3.3
# Residents in Observation Stays	2	3	1	0	1	3	4	2	1	0	0	2
Residents in Observation Stays/Monthly Census (ADC) (%)	7%	11%	3%	0%	3%	10%	13%	9%	4%	0%	0%	7%
ED Visits (Treat and Return to Nursing Home)												
# ED Visits	10	8	3	10	11	5	3	4	3	5	0	10
ED Visit Rate: # ED Visits/1,000 Resident Days	11.1	9.5	2.9	9.5	11.8	5.6	3.3	5.8	4.2	6.2	0.0	11.1
# Residents to ED	9	4	3	8	10	3	2	3	2	3	0	10
Residents to ED/Monthly Census (ADC) (%)	30%	14%	9%	23%	32%	10%	7%	13%	8%	11%	0%	33%
# Residents With >1 ED Visit in Last 30 Days	1	1	1	1	1	1	1	1	1	1	1	1
Hospital Visits												
# Hospital Visits of Nursing Home Residents	12	3	10	4	2	15	3	5	8	6	3	2
# Hospital Visits With Preventable Discharge Diagnosis	4	0	8	4	2	1	1	1	3	4	2	1
Hospital Visits With Preventable Discharge Diagnosis/Total Hospital Visits (%)	33%	0%	80%	100%	100%	7%	33%	20%	38%	67%	67%	50%
Hospitalization Rate: # Hospitalizations/1,000 Resident Days	13.3	3.6	9.5	3.8	2.2	16.7	3.3	7.2	11.1	7.4	3.1	2.2
# Residents Readmitted to Nursing Home From Hospital	8	3	10	1	9	8	8	5	7	7	3	5
Residents Hospitalized/Monthly Census (ADC) (%)	27%	11%	29%	3%	29%	27%	27%	22%	29%	26%	9%	17%
Hospital Readmissions (All Cause)												
# Residents Hospitalized With Previous Hospitalization in Last 3 Days	1	1	3	0	3	0	0	0	0	1	0	0
# Residents Hospitalized With Previous Hospitalization in Last 7 Days	1	1	3	0	4	0	0	0	3	1	0	0
# Residents Hospitalized With Previous Hospitalization in Last 30 Days	3	1	5	0	4	0	2	1	4	1	0	0
# Residents Hospitalized With Previous Hospitalization in Last 90 Days	4	1	5	0	4	0	2	1	7	3	0	0
# Residents Hospitalized With Previous Hospitalization in Last 180 Days	5	1	6	1	5	0	5	1	7	5	0	0

Purpose

The Key Metrics Trend Report summarizes and shows the monthly trends for key metrics related to rates of transfer to the ED and hospital. Key rates are calculated each month and trended over time. Management teams can use the report to track patterns, follow up on areas of decline, and monitor progress of new prevention strategies and programs. In addition, these data can be used in discussions with hospital stakeholders or managed care organizations.

Description

This report displays the total number of transfers from nursing home to hospital or ED and the total number of residents transferred from the nursing home to acute care. It also displays:

- Observation Stays: number of observation stays, observation stay rate, number of residents with observation stays, percentage of residents in observation stays.
- ED Visits: number of ED visits, ED visit rate, number of residents transferred to the ED, percentage of residents transferred to the ED, number of residents with more than one ED visit in the last 30 days.
- Hospitalizations: number of hospital visits of nursing home residents, number of hospitalizations with preventable diagnoses, percentage of hospitalizations with preventable diagnoses, hospitalization rate, number of residents readmitted to nursing home from hospital, percentage of residents hospitalized. Preventable discharge diagnoses include congestive heart failure, pneumonia, urinary tract infection, sepsis/fever/infection, skin ulcers or cellulitis, dehydration, chronic obstructive pulmonary disease, asthma, circulatory problems, hypertension, gastroenteritis, angina, falls/trauma, anemia, and diabetes.
- Hospital Readmissions (all cause in last 180 days): number of residents readmitted with previous hospital discharge in last 3, 7, 30, 90, and 180 days.

Users and Potential Uses

The primary users of this report are facility leadership, directors of nursing, medical directors, and quality improvement teams. The table below displays other potential users of the Key Metrics Trend Report and potential uses.

Table 11. Key Metrics Trend Report Users and Potential Uses

Users	Potential Uses
Director of Nursing (DON), nurse managers, nursing supervisors, MDS nurse, quality improvement nurse, infection control nurse	Nursing leadership
Department heads, medical director	Quality improvement review
DON or Assistant DON, nurse manager, dietitian, Rehab director, medical director, consultant pharmacist	Root cause analysis for hospital admission/ED visits

* MDS=Minimum Data Set.