

CASE STUDY NARRATIVE

Introduction

The Skilled Nursing Facility (SNF) Case Study is an optional training asset intended to provide additional support in assisting providers with knowledge integration of the new and revised Minimum Data Set (MDS) 3.0 Resident Assessment Instrument (RAI) v1.18.11 data elements and coding concepts. The activity is designed as a self-paced exercise that can be used individually or in a group setting.

The Case Study involves coding the following MDS data elements based on a clinical resident scenario. For this activity, you will complete select data elements from a combined 5-Day Prospective Payment System (PPS) Assessment (NP) and Omnibus Reconciliation Act (OBRA) Admission assessment. For the Discharge assessment, select data elements from a combined MDS 3.0 Nursing Home Discharge (ND) assessment and SNF Part A PPS Discharge (NPE) assessment will be used for coding. The Assessment Reference Date (ARD) for this scenario is April 25, 2023. Items listed below are assessed on both admission and discharge unless otherwise indicated.

- A1005. Ethnicity
- A1010. Race
- A1110. Language
- A1250. Transportation
- A2105. Discharge Status
- A2121. Provision of Current Reconciled Medication List to Subsequent Provider at Discharge
- A2122. Route of Current Reconciled Medication List Transmission to Subsequent Provider
- A2123. Provision of Current Reconciled Medication List to Resident at Discharge
- A2124. Route of Current Reconciled Medication List Transmission to Resident
- B1300. Health Literacy
- D0700. Social Isolation
- GG0115. Functional Limitation in Range of Motion (admission)
- GG0120. Mobility Devices (admission)
- J0200. Should Pain Assessment Interview be Conducted?
- J0300. Pain Presence
- J0410. Pain Frequency
- J0510. Pain Effect on Sleep
- J0520. Pain Interference with Therapy Activities
- J0530. Pain Interference with Day-to-Day Activities
- K0520. Nutritional Approaches
- N0415. High-Risk Drug Classes: Use and Indication
- O0110. Special Treatments, Procedures, and Programs

The following components comprise the Case Study activity:

- Case Study Narrative (resident scenario).
- Case Study Coding Response Sheet.
- Case Study Answer Sheet.

Instructions

1. Download or print this Case Study Narrative and corresponding Coding Response Sheet.
2. Review the narrative and note the aspects of the clinical scenario that are relevant to the select items being coded.
3. Complete the Coding Response Sheet for admission and discharge. (You may also record your responses using the fillable online version of the form.)
4. Compare your answers with the correct coding responses provided on the Case Study Answer Sheet. The rationale is provided to assist you in understanding why a specific coding response option is the correct choice.

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Clinical Scenario – Recent Medical History

Mrs. Z. is a 73-year-old female who was admitted to an acute care hospital on April 10, 2023, after sustaining a fall outside her home while walking with a neighbor. She tripped and hit her head on the sidewalk curb and sustained an abrasion on her face over the right temporal area. She was a bit dazed and unable to stand up due to severe pain in her right hip and her neighbor called 911. Mrs. Z. also complained that her right lower arm was sore. She was transported to the emergency department of a nearby acute care hospital for evaluation.

Based on the emergency department assessment, Mrs. Z. was diagnosed with a mild concussion, right hip fracture, right facial abrasion, and right lower arm contusion and was admitted to the hospital. On April 12, 2023, Mrs. Z. underwent surgery for repair and internal fixation of a non-displaced right femoral neck fracture.

Mrs. Z.'s past medical history includes being a former cigarette smoker (quitting 15 years ago), hypertension, obstructive sleep apnea requiring the use of a continuous positive airway pressure (CPAP) machine, atrial fibrillation, hypertension, and iron deficiency anemia.

Postoperatively, Mrs. Z. received intravenous (IV) antibiotics for surgical prophylaxis for 24 hours per protocol. She was also noted to be dehydrated on admission and continued to receive supplemental IV hydration via peripheral IV site throughout her stay. Her dehydration was further perpetuated by nausea and a lack of appetite due to the concussion. The right lower arm contusion was treated with ice and a compression wrap.

During the acute care stay, Mrs. Z. had an episode of rapid atrial fibrillation responsive to chemical cardioversion, and her routine dose of metoprolol succinate ER was increased from 25 to 50 mg daily. She resumed her routine dose of apixaban (which had been held due to surgery) for both atrial fibrillation and postoperative anticoagulation.

On April 15, 2023, Mrs. Z. was diagnosed with left lower lobe pneumonia, requiring a 14-day course of IV antibiotics. She was placed on oxygen therapy at 2 liters per minute continuously via nasal cannula due to a low oxygen saturation level. Attempts at weaning the oxygen were unsuccessful. She received a transfusion of packed red blood cells to treat a low hemoglobin level related to anemia.

Mrs. Z. had difficulty engaging in physical and occupational therapy due to post-operative pain and fear of falling again. She was resistant to getting out of bed due to pain, fatigue, and generalized weakness. Mrs. Z. required therapist supervision to ambulate with a standard walker and required a wheelchair for long distance transport. On a few occasions, therapy sessions were either shortened or rescheduled because of hip pain and right lower arm pain that impaired her ability to lift and advance the walker effectively. The hospital pain team was consulted to recommend a more effective pain management plan.

Mrs. Z. was transferred to a skilled nursing facility on April 18, 2023, for continued physical and occupational therapy, supplemental IV hydration, IV antibiotic therapy, assessment of the need for supplemental oxygen, and pain management.

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Excerpt From the SNF Admitting Physician Note and Orders

On admission to the SNF, Mrs. Z. reported being allergic to sulfa drugs and strawberries. Mrs. Z. has been ordered the following medications:

- Lisinopril 10 mg by mouth daily for hypertension.
- Metoprolol succinate ER 50 mg by mouth daily for atrial fibrillation.
- Apixaban 5.0 mg by mouth twice a day to prevent thromboembolic complications associated with atrial fibrillation and for DVT prophylaxis.
- Levofloxacin 750 mg IV once daily for pneumonia. Discontinue after last dose on April 28, 2023.
- Ondansetron 4 mg IV or by mouth every 8 hours as needed for nausea.
- Acetaminophen 500 mg by mouth every 6 hours as needed for mild pain (pre-medicate prior to rehabilitation therapy).
- Tramadol 50 mg by mouth every 12 hours as needed for hip pain greater than 7/10.
- Oxygen at 2 liters per minute continuously via nasal cannula to maintain oxygen saturation greater than 92 percent, including use during CPAP therapy, at bedtime and with any naps.
- D5NS (sodium chloride 0.9% with dextrose 5%) intravenously via continuous infusion at 50 ml per hour.

Mrs. Z. was also ordered to have physical and occupational therapy evaluations and a nutritional consultation. She will remain on a heart-healthy diet, continue to receive nutritional supplements with meals, and continue peripheral IV hydration due to nutritional risk associated with reduced oral intake related to anorexia. Pain management and continued IV antibiotics will be provided.

Excerpt From the SNF Admission Assessment

On admission, Mrs. Z. is alert and oriented. She indicated that her mind feels foggy at times and that she fatigues easily. Her daughter, Lily, was present during the admission assessment. When asked to select the categories that most closely correspond to her ethnicity, Mrs. Z. stated that the choices were confusing and she was not sure. Lily confirmed that Mrs. Z.'s ethnicity is not of Hispanic, Latino/a, or Spanish origin. Mrs. Z. identified her race as Chinese and Filipino, and Lily confirmed these responses as correct. Mrs. Z. speaks fluent Chinese with her family, but indicated that she prefers conversing in English and declined the need for an interpreter. Mrs. Z. reported that she lives alone in a small single-family, one-level home and does not drive. She has several adult children, and her daughter Lily lives in the same town and visits during the week. Mrs. Z. continued to describe her living situation at home, stating that for the past year, she has used the local Dial-A-to attend activities and lunch weekly at the Senior Center. Her daughter takes her grocery shopping, to church, and to medical appointments. Mrs. Z. stated that she does not have any trouble getting to medical appointments or getting the things she needs based on the combined support of her daughter, neighbor, and local transportation services.

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Mrs. Z. indicated that she stays busy on most days and is in good spirits. However, she admitted that despite all this support, she sometimes feels a bit lonely on days when her daughter does not visit, or on rainy days when she lacks the motivation to go out. When asked how often she needs to have someone help her read instructions, pamphlets, or other written material from her doctor or pharmacy, Mrs. Z. stated that she could not remember. Lily reported that she typically helps her mother read medical instructions and pamphlets from her doctor to assist her in understanding the information.

Mrs. Z. reported that she usually eats a heart-healthy diet at home to help manage her cardiac conditions. Since the hip surgery, her appetite has been poor and she continues to suffer from intermittent nausea, a sequela of the concussion. As a result, she is receiving an antiemetic, IV fluids, and has been drinking nutritional supplements with her meals. Mrs. Z. asked to meet with a dietitian during her facility stay to review the list of foods that are high in sodium. She admitted not paying as much attention to this aspect of her diet as she knows she should. Her blood pressure and atrial fibrillation are currently well-controlled, based on physical exam and electrocardiogram. Prior to this fall, Mrs. Z. could perform her activities of daily living (ADLs) without any assistive devices or assistance. She now requires maximal assistance with bathing, dressing, and mobility due to the lack of functional range of motion in her right arm and right leg. Mrs. Z.'s gastrointestinal and behavioral/cognitive assessments were unremarkable, with the exception of feeling a little "foggy" at times. She has a 6-inch long incision on her right hip; the suture line is well approximated, clean with no drainage or signs/symptoms of infection, and the surrounding skin is ecchymotic. There is still some fading bruising noted on her right lower arm. The temporal abrasion has healed.

On admission to the SNF, Mrs. Z. indicated that she has been experiencing pain since her admission to the acute care hospital and it is almost constantly present but at varying levels. She described the pain in her right hip as a level 6 out of 10 on the pain scale. She stated that her hip aches while sitting or lying, and the pain becomes worse when walking and at night. The arm contusion has almost resolved and she described the pain in her right lower arm as "just a slight black and blue feeling," indicating the pain level as 1–2 and stating that it does not impact her functional ability. She stated that since being in the hospital, she occasionally wakes up at night due to hip pain and requests her PRN (as needed) pain medication so that she can fall back to sleep. Over the past 5 days, her engagement with rehabilitation therapy sessions has improved but continues to be inconsistent. Taking pain medication before the session is helpful, but she still occasionally refuses or requests to shorten the session due to pain. Mrs. Z. continues to use the walker for mobility. Over the past 5 days, her ability to complete day-to-day activities was occasionally limited by pain that is effectively relieved by acetaminophen.

SNF Nursing Progress Note

After admission to the SNF, Mrs. Z. continued to experience hip pain. She was medicated with acetaminophen around the clock and used tramadol occasionally for any breakthrough pain. It was noted that her oxygen saturation level would drop to between 87 and 89 percent after taking the tramadol, and this medication was discontinued on April 25, 2023. Subsequently, her pain was well managed using only acetaminophen. Given the slowly resolving pneumonia, Mrs. Z. remained on oxygen at 2 liters per minute continuously until it was successfully weaned and discontinued on April 30, 2023.

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Follow-up lab work was performed on April 22, 2023, to evaluate Mrs. Z.'s metabolic and hematologic status. Her hematocrit and hemoglobin were low, and a blood transfusion was ordered and scheduled for the next day at a local infusion center. Mrs. Z. received one unit of packed red blood cells via a second peripheral site inserted and removed at the infusion center. The procedure was well tolerated. While in the SNF, Mrs. Z.'s blood pressure was elevated requiring medication adjustment. Amlodipine 2.5 mg by mouth daily was added to her medication regimen with good effect.

During the SNF stay, Mrs. Z. engaged in physical and occupational therapy sessions to increase strength, endurance, functional mobility, and independence with ADLs. Her progress was slow but ongoing. She continued to use a walker for ambulation, demonstrating increased confidence using this device, but still required the use of a wheelchair for long distances. Her ability to complete functional tasks using her right arm steadily improved due to decreased pain. Two weeks into her SNF stay, she required partial/moderate assistance with bathing and dressing. Taking acetaminophen prior to therapy sessions and at bedtime has been an effective pain control strategy.

Mrs. Z. was initially prescribed a heart-healthy diet, additionally supported by IV fluids and oral nutritional supplements. The nausea related to the concussion slowly resolved and her appetite and nutritional intake improved. The IV fluids were discontinued on April 24, 2023. She continued to take one nutritional supplement with dinner until May 5, 2023, when it was discontinued. Her peripheral IV site was removed on April 28, 2023, after the last dose of levofloxacin was given.

Excerpt From the Nursing Discharge Assessment

Throughout the SNF stay, discharge planning was discussed with Mrs. Z. and an anticipated discharge date of May 10, 2023, was established. Mrs. Z. did not have any signs of increased temperature or infections aside from resolving pneumonia. Her cardiovascular status stabilized and the mental foggy associated with concussion resolved. Mrs. Z. will continue to use her CPAP machine on room air, at night and during naps, after returning home. The surgical incision healed without complication, and the ecchymotic areas on her hip and arm resolved.

During the Discharge assessment, Mrs. Z. stated that over the last 5 days, she was still experiencing pain occasionally, although it has improved since her admission to the SNF. Mrs. Z. reports that pain no longer affects her sleep. She does occasionally experience pain with rehabilitation therapy sessions and with some day-to-day activities. However, acetaminophen has been effective in relieving pain. Mrs. Z. has made progress with strength and activity tolerance as a result of physical and occupational therapy services. Since she is still not at her prior level of function, physical and occupational therapy services will continue after discharge to home.

Since Mrs. Z. is not independent with her ADLs, she will reside with Lily for a period of time after discharge. Given the need for ongoing physical and occupational therapy services, blood pressure monitoring, medication management, and diet teaching reinforcement, Mrs. Z. is being referred to home health services post-discharge.

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At discharge, Mrs. Z. will continue on her prescribed heart-healthy diet. Mrs. Z. met with the dietitian prior to discharge to receive verbal and written nutritional education on her diet and the management of sodium. Since the mental foginess resolved, Mrs. Z. was able to report sometimes having difficulty understanding the discharge instructions provided to her by her physician or pharmacy and requiring additional help to understand this material. Lily attended the education session provided by the dietitian to assist her mother in understanding this information. A packet of written educational material was provided to each of them.

Mrs. Z. was asked if in the past 6 months to a year, lack of transportation has kept her from medical appointments, meetings, work, or from getting things needed for daily living. She stated that this has not been a problem in the past and since she will be living with her daughter while recuperating after discharge, she does not anticipate any transportation problems in the future either. During the Discharge assessment, when asked about social determinants of health, Mrs. Z stated that her ethnicity is not of Hispanic, Latino/a, or Spanish origin. She identified her race as Chinese and Filipino. Mrs. Z. reported that she speaks fluent Chinese with her family but prefers conversing in English and did not require an interpreter. When asked how often she feels lonely or isolated from those around her, Mrs. Z. stated, "never." She indicated that the nursing staff and other residents were great company. She also remarked how happy she was to be going to live with her daughter and being able to see her every day.

Mrs. Z.'s reconciled discharge medication profile included the following:

- Lisinopril 10 mg by mouth daily for hypertension.
- Metoprolol succinate ER 50 mg by mouth daily for atrial fibrillation.
- Amlodipine 2.5 mg by mouth daily for hypertension.
- Apixaban 5.0 mg by mouth twice a day to prevent thromboembolic complications associated with atrial fibrillation and for DVT prophylaxis.
- Acetaminophen 500 mg by mouth every 6 hours as needed for mild pain.

Mrs. Z. was provided with her reconciled written medication list in large-font type. A copy was also given to her daughter. Mrs. Z. was instructed on the medication regimen using this list, but will require continued teaching and reinforcement to promote understanding and adherence related to the medication changes made during this illness. A copy of the current reconciled medication list has been provided via electronic fax to the home health agency that she has chosen as her at-home provider. She was instructed to follow up with her primary care physician after discharge.

Mrs. Z. was discharged from the SNF on May 10, 2023.