Geriatric Assessment for Nurses

Clinical guide: Assessment of Comorbidities in Older Adults

Clinical Training Guide

Learning outcomes

- Identify and describe commonly used comorbidity assessment tools in geriatric care (CCI, CIRS-G, FCI, Elixhauser).
- Collect relevant patient information required to assess comorbidity burden.
- Demonstrate accurate scoring using CCI, CIRS-G, FCI, and Elixhauser Comorbidity Measure.
- Interpret scores to determine the impact of comorbidities on mortality risk, functional ability, hospitalization risk, and care needs.
- Develop a basic nursing care plan tailored to the comorbidity burden of an older adult patient.
- Educate patients/families on the importance of monitoring chronic illnesses and preventing complications.

Required assessment tools

Students must have access to:

1 **Charlson Comorbidity Index (CCI)**
- List of 17 conditions with assigned weights
- CCI scoring sheet or calculator

2 **Cumulative Illness Rating Scale – Geriatrics (CIRS-G)**
- Rating sheet for **14 organ system categories**
- Severity scoring scale (0–4)

3 **Functional Comorbidity Index (FCI)**
- List of **18 chronic conditions** scored as present/absent
- Functional status checklist (ADLs/IADLs)

4 **Elixhauser Comorbidity Measure**
- List of **31 comorbidities** recorded as yes/no
- Paper or electronic scoring worksheet

5 **Additional Materials**
- Patient's medical records
- Medication list
- Observation chart
- Functional assessment forms (ADL, mobility chart)

- Pens, clipboard, reporting sheet

Clinical skills procedures

STEP 1: PREPARATION

1. Wash hands and ensure patient privacy.
2. Introduce yourself and explain purpose: *"I'm going to review your medical history to understand your chronic health conditions."*
3. Obtain consent.
4. Collect available documentation (medical notes, lab reports, imaging summaries, medication history).

Step 2: Patient Interview & Data Gathering

1. Ask about diagnosed chronic illnesses.
2. Review medication list to identify chronic disease categories.
3. Assess functional status:
    - Activities of Daily Living (ADL)
    - Instrumental ADL
    - Mobility status
4. Identify recent hospital admissions or complications.

Step 3: Apply the Tools

a. Charlson Comorbidity Index (CCI)

1. Review conditions present.
2. Assign corresponding weights (1, 2, 3, or 6).
3. Calculate total score.
4. Interpret mortality risk category.

b. Cumulative Illness Rating Scale – Geriatrics (CIRS-G)

1. Evaluate each of the 14 organ systems.
2. Assign severity score:
    - 0 = No problem
    - 1 = Mild
    - 2 = Moderate
    - 3 = Severe
    - 4 = Extremely severe
3. Calculate:
    - Total score
    - Number of categories scored 3 or 4

4. Interpret illness burden and severity.

c. Functional Comorbidity Index (FCI)

1. Tick each condition present (18 total).
2. Add total: each condition = 1 point.
3. Combine with functional assessment to determine impact on:
    - Mobility
    - ADLs/IADLs
4. Interpret functional impairment risk.

d. Elixhauser Comorbidity Measure

1. Review 31 comorbidities.
2. Mark each as yes/no.
3. Convert to weighted score (if using weighted version).
4. Interpret risk for:
    - Length of stay
    - Mortality
    - Readmissions
    - Resource use

Step 4: Document and Interpret Findings

1. Summarize all comorbidity scores.
2. Determine:
    - Overall disease burden
    - Organ systems most affected
    - Functional deficits
    - Risks for falls, hospitalization, complications
3. Compare normal vs abnormal:
    - High CCI or Elixhauser ⟶ high mortality risk
    - High CIRS-G severity ⟶ unstable chronic illness
    - High FCI ⟶ reduced mobility/function

Step 5: Nursing Care Planning

1. Identify patient-specific comorbidity-related problems.
2. Set goals (short-term and long-term).
3. Plan interventions based on:
    - Disease burden
    - Functional impairment
    - Risk levels

4. Implement patient education and self-management guidance.
5. Document plan and evaluate outcomes with MDT.

Nursing care planning guide

Common Nursing Problems Related to High Comorbidity Burden

- Risk of medication interactions/polypharmacy
- Poor mobility/fall risk
- Poor symptom control
- Increased hospitalization risk
- Fatigue and reduced ADLs
- Nutrition challenges
- Poor chronic disease self-management

Sample Nursing Care Plan Structure

Assessment Findings:

- High CCI score (e.g., ≥5) ⟶ high 10-year mortality risk
- CIRS-G severity ≥3 in cardiac, respiratory systems
- FCI 6 ⟶ reduced mobility and ADL difficulty
- Multiple Elixhauser comorbidities

Nursing Diagnoses:

- *Activity intolerance* related to multiple chronic conditions
- *Risk for falls* related to functional deficits
- *Ineffective health management* related to multiple comorbidities
- *Risk for complications* related to chronic disease burden

Goals:

- Patient will maintain optimal function.
- Patient will demonstrate understanding of illness management.
- Patient will prevent avoidable complications.

Interventions:

- Monitor vital signs, oxygen saturation, and symptoms
- Monitor medication adherence and interactions
- Implement fall prevention measures
- Provide disease-specific education
- Coordinate with physiotherapy, nutrition, and medical staff

- Encourage mobility as tolerated
- Monitor for red flags of major illnesses

Evaluation:

- Improved symptom control
- Safe mobility
- Effective medication management
- Patient demonstrates understanding of health management

Clinical Practice Activity

Activity Title:
Assessment of Comorbidity Burden in an Older Adult Client
Steps:

1. Select an older adult patient (real patient in ward or simulated case).
2. Collect history and review medical records.
3. Apply all four tools:
    - CCI
    - CIRS-G
    - FCI
    - Elixhauser
4. Interpret results.
5. Write a short summary (150–200 words):
    - Disease burden
    - Functional impact
    - Nursing priorities
6. Present the case to your supervising instructor or small group.

Assessment criteria for students

6 Clinical Assessment Checklist

Competency Area	Criteria	Score/Remarks
Preparation	Introduces self, explains procedure, maintains privacy	☐
History Taking	Gathers complete chronic illness history, reviews medications	☐

CCI Application	Correctly identifies conditions, assigns weights, totals score	☐
CIRS-G Application	Accurately scores 14 organ systems	☐
FCI Application	Correct condition selection, correct scoring	☐
Elixhauser Application	Correct condition selection (31 items)	☐
Interpretation	Identifies normal vs abnormal, explains disease burden	☐
Clinical Reasoning	Identifies nursing problems from comorbidity scores	☐
Documentation	Clear, accurate charting of findings	☐
Professionalism	Respectful communication, appropriate behavior	☐
Total Marks - 100		

Patient education checklist

Education Component	**Completed**
Explains what comorbidities are and why assessment is important	☐
Reviews patient's chronic illnesses clearly	☐
Explains medication purpose & schedule	☐
Teaches warning signs (e.g., chest pain, breathlessness, confusion)	☐
Provides lifestyle guidance (diet, exercise, hydration)	☐
Addresses fall prevention	☐
Reviews follow-up appointments	☐
Encourages patient/family participation in care planning	☐
Checks understanding using "teach-back" method	☐

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