Background Assessing functional status is integral to the care of patients with serious illness. Accurate assessments of a patient’s functional capacity can enable clinicians to better understand a patient’s rehabilitation potential, caregiving needs, and prognosis (1). Validated tools that are relevant to the patient’s clinical situation can provide a more uniform language for clinicians to describe functional capacity (2). They can also be another tool to guide pain and symptom management (2). A plethora of functional status scales are available in clinical practice. This Fast Fact reviews functional status scales that are most relevant and validated for patients with life-limiting illnesses.

Katz Index of Independence in Activities of Daily Living (ADL) This tool was developed in the 1970s for evaluating chronically ill patients with lower physical functional status and geriatric patients in the community (3,4). It can be quickly administered via a single question about six domains that are foundational to independent living (bathing, toileting, dressing, feeding, transferring, and continence) (3). It is reliably reproducible with an intraclass correlation (ICC) of 0.91 (5) and requires no specialized training. However, it has low sensitivity and specificity for patients with dementia and Parkinson’s disease in detecting smaller functional changes over time and determining home care needs (6).

Lawton Instrumental Activities of Daily Living (IADL) Also developed in the 1970s, this tool evaluates more complex functional abilities in outpatients and can be administered over a few minutes by a clinician without specialized training. IADL assesses 8 domains: housekeeping, telephone use, food preparation, financial management, shopping, medication management, laundry, and transportation (7,8). It has shown better sensitivity and specificity than the ADL scale in patients with dementia and for determining home care needs (9). It is reliably reproducible (r=0.85-0.95) (9).

6 Minute Walk Test (6MWT) 6MWT was developed in 2002 and can be administered in office settings. The patient is asked to walk across a stretch of 30 meters for 6 minutes, while their distance, vital signs are monitored (11,12). The 6MWT gives a broad assessment of a patient’s cardiorespiratory, musculoskeletal, and vestibular systems. Most data on 6MWT comes from patients with advanced cardiopulmonary diseases such as CHF, COPD, and interstitial lung disease. It has high reproducibility (ICC: 0.97) and can be repeated serially to gauge response to cardiopulmonary rehabilitation (5,13). Lower scores (total distance walked <300 meters) have been associated with lower survival rates in patients who suffered a stroke and in patients with advanced CHF (14,15).

Karnofsky Performance Status (KPS) Introduced in 1949, KPS is a commonly used 100-point scale that evaluates functional status in oncology settings (16). It can be administered reliably by a clinician without specialized training (ICC 0.787) and quickly (few minutes) in an office setting (17). It looks at patient’s baseline activity levels, disease related disability, and dependence on caregivers to determine a numerical value of function on a scale of 0-100, with 0 being dead, and 100 no functional limitation (18). A KPS score 50 percent or less predicts a median life expectancy of two months for patients with a progressive underlying cancer (19).

Eastern Cooperative Oncology Group (ECOG) Performance Scale One of the most used functional assessment tools in oncology, it was derived from KPS for its relative ease of use before being formalized in 1982 by ECOG (20). It is a 5-point global functional scale with 0 set as normal function without limitation and 4 being a moribund functional status. It only takes a few minutes to administer with 3-4 basic questions evaluating dependence on caregivers and ability to walk and perform self-care (20,21). This scale has good inter-operator reproducibility >0.8 (22), but there is growing literature that patient’s self-reported ECOG and clinician ECOG do not always align (23). Of note, most efficacy trials of systemic cancer therapy have been limited to patients with an ECOG of 0 and 1 (20). ECOG ≥ 2 has been correlated with a prognosis of < 3 months in patients on chemotherapy for solid cancers, at least in the pre-immunotherapy era (24-29). In general, there is significant correlation of ECOG status and overall
survival for adults receiving chemotherapy for a variety of solid tumors (24-29); but like KPS, it has correlated poorly with prognosis in non-malignant illnesses (20).

**Palliative Performance Scale (PPS)** Commonly used in hospice settings or palliative care units, the PPS is a modernized version of KPS that also incorporates oral intake and level of consciousness. It has been shown to be a validated clinical assessment and prognostic tool in patients already identified as having palliative care goals (30). See Fast Fact #125 for more information.

**Edmonton Functional Assessment Tool (EFAT)** was introduced in 2001 to evaluate functional status in palliative care inpatient units (31). It is reliable (ICC 0.97) (32), but because it evaluates 10 domains (communication, mental status, respiratory function, pain, mobility, balance, walking, ADLs, fatigue, and motivation), it can take up to 15 minutes for a clinician to complete (31). Therefore, it may be more applicable to research rather than clinical settings.

**Conclusion** Given the association of functional status with quality of life and prognosis, clinicians should routinely implement functional assessment into the clinical care of patients with life-limiting illnesses. While there are insufficient data to broadly recommend any scale, clinicians should be familiar with validated functional assessment scales which can be applied to the relevant underlying illness.

**References:**


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