

Background

- Multiple myeloma (MM) is the 2nd most common hematologic malignancy in the U.S. and is disproportionately a disease of older adults, with a median age at diagnosis of 69 years and approximately 40% of new cases developing in those over the age of 75 years.¹
- Geriatric Assessment (GA)
 - There is substantial heterogeneity in the process of aging.²
 - Comprehensive GA entails a multidisciplinary evaluation of the older adult's physical capabilities, function, nutrition, comorbidities, cognition, and psychosocial status.
 - Difficult to incorporate into oncology practice due to the need for expertise in geriatrics and time commitment (approximately 2 hours to complete).³
 - Brief GAs have therefore been developed to evaluate multiple health domains using shorter assessments, often relying to a greater extent on self-reported items.
 - Brief GAs are feasible in oncology care settings and have been shown to identify important deficits even in older adults otherwise thought to have good performance status on routine evaluations.³
- In MM
 - Scoring systems incorporating functional correlate with treatment tolerance, healthcare utilization, stem cell transplant candidacy, and mortality.⁴
 - However, the GAs in many studies to date have been limited in scope.

Methods

- University of North Carolina (UNC) Plasma Cell Disorders Registry (ClinicalTrials.gov identifier NCT03717844)⁵
- Adults age 18 and older with MM were recruited into an observational study from 2018 to 2020.
- Modified Cancer and Aging Research Group (CARG) GA was administered at enrollment.
 - Enrollees also completed the European Organization for Research and Treatment of Cancer (EORTC) Quality of Life of Cancer Patients Core 30 questionnaire (QLQ-C30)
 - Scores range 0-100; higher values indicate better function).
- Data analyzed using descriptive statistics for the full cohort and stratified by Karnofsky Performance Status (score < 80 vs ≥ 80).

Results⁵

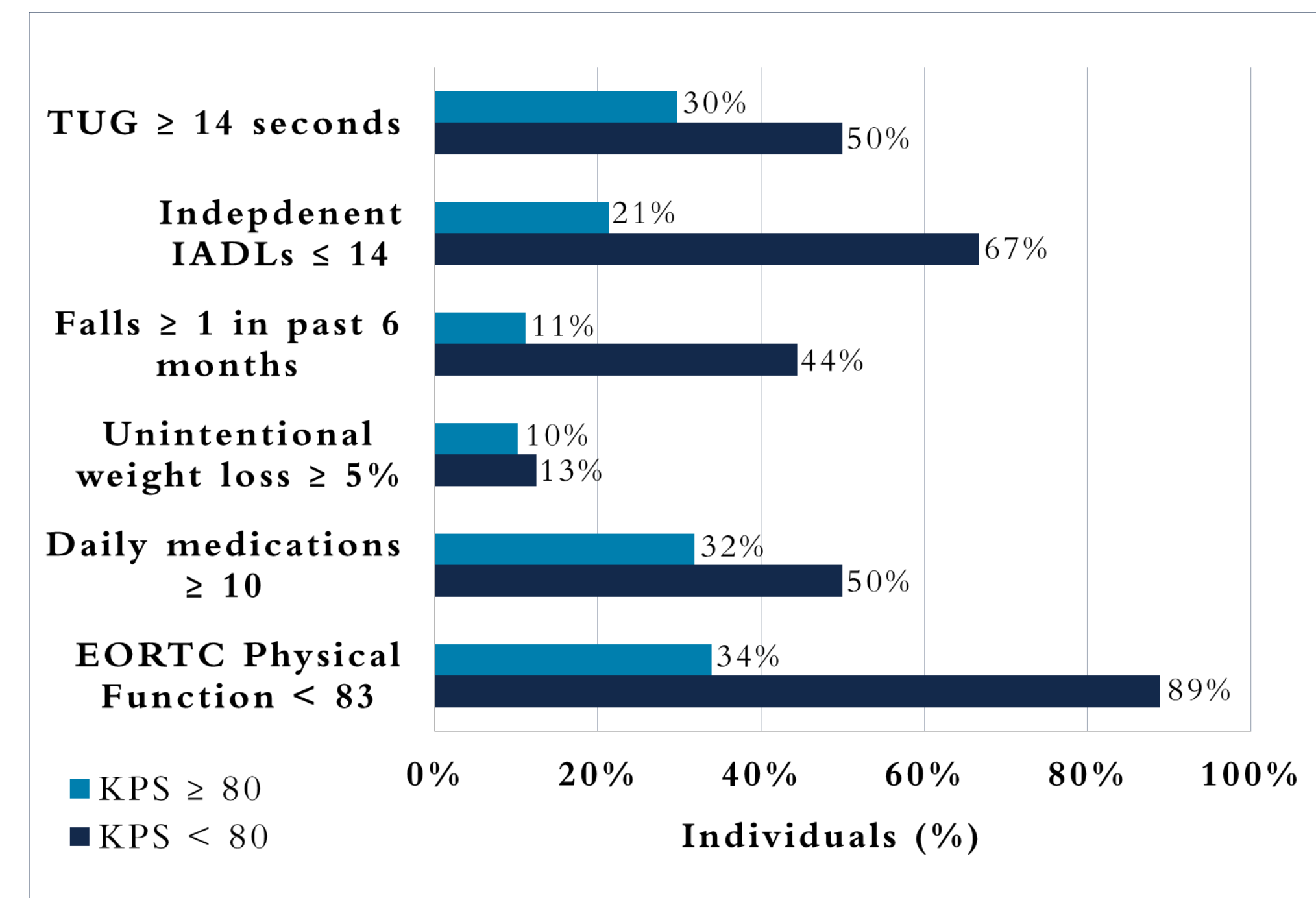


Figure 1. Geriatric assessment (GA) identified deficits among adults with multiple myeloma, stratified by Karnofsky Performance Status (KPS)

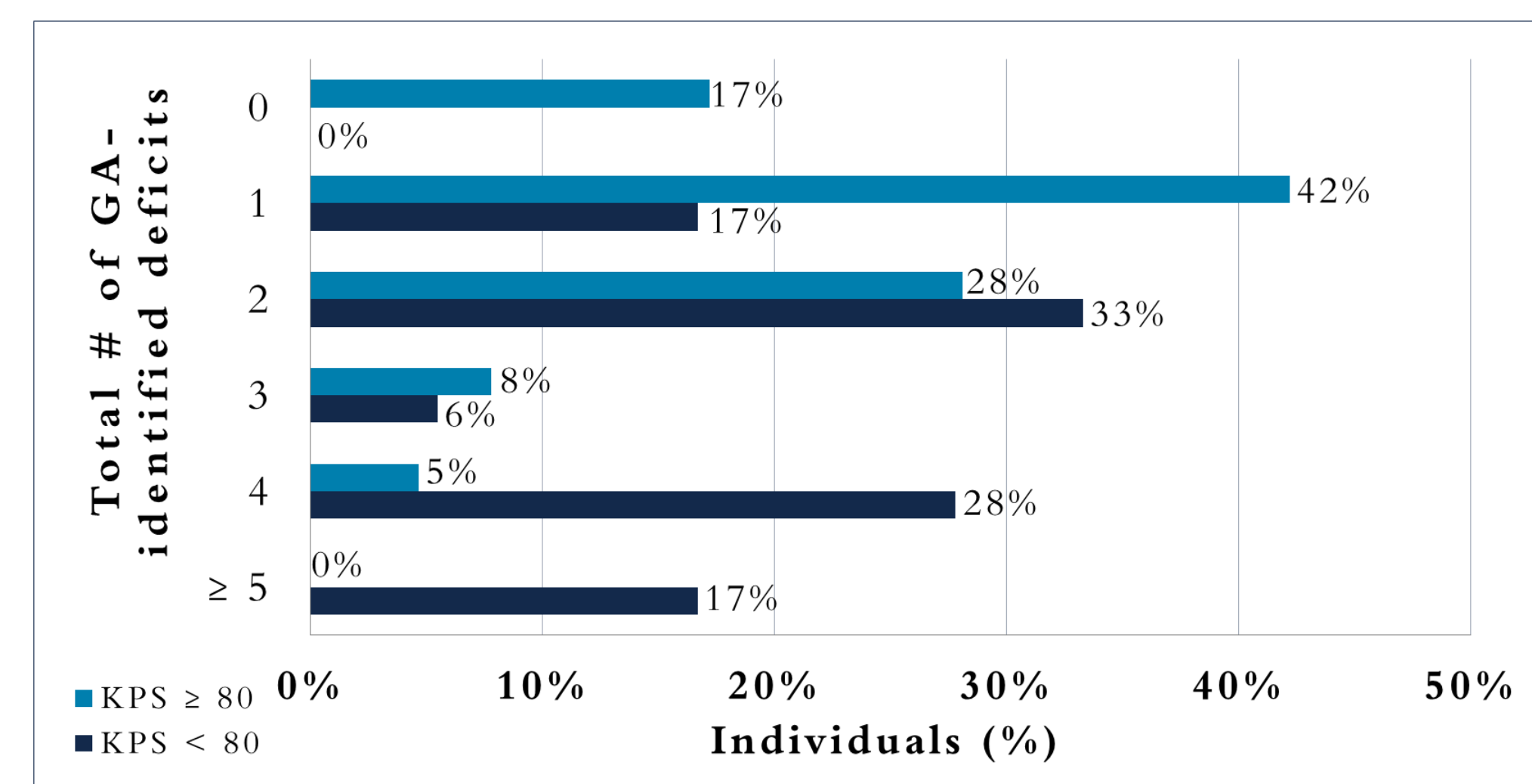


Figure 2. Total number of GA deficits per study participant, stratified by KPS

- Demographics
 - Among 89 adults, mean age was 69.1 years, 68% were aged ≥ 65 years, and 70% were white.
- Karnofsky Performance Status (research-staff assessed):
 - 78% KPS ≥ 80.
 - 22% KPS < 80.
- Time from diagnosis
 - 17% 0-6 months
 - 7% 6-12 months
 - 9% 1-2 years
 - 67% >2 years
- Current line of therapy
 - 46% 1st line
 - 40% 2nd-3rd
 - 14% 4th or greater

Discussion

- Using a modified CARG GA and EORTC questionnaire, important functional impairments were identified among adults with MM considered to have a good performance status based on a KPS (≥ 80).
- Future studies should focus on using GA measures for therapy assignment.
 - The relationship between GA parameters and longitudinal changes in therapy will be a subject of future analyses in this cohort.
 - A prospective evaluation of a frailty-adjusted dosing strategy versus standard dosing is ongoing (FITNEss Trial; NCT03720041).
- Interventions targeting GA-identified deficits should be evaluated.
 - Recent data support the efficacy of GA-guided supportive care interventions in improving clinically relevant outcomes for older adults with solid-organ malignancies, both in the perioperative setting⁶ and at the start of new lines of systemic therapy.⁷
 - Similar studies for older adults with hematologic malignancies (including MM) are lacking.

References

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