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# Benchmarks for Academic Oncology Faculty

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**QUESTION ASKED:** What is the faculty percentage of effort required to drive a successful clinical research enterprise in academia?

**SUMMARY ANSWER:** National benchmarks are needed to account for a productive academic career in clinical research.

**WHAT WE DID:** Division chiefs and department chairs of hematology/medical oncology, connected through myConnection created by ASCO, reviewed the percentage of effort dedicated to the various academic areas.

**WHAT WE FOUND:** The consensus opinion was that an appropriate benchmark for clinical researchers is a 50/50 partitioning between clinical care and clinical research, and measures for clinical research. Measures for clinical activities are needed, given the clinical nature and uniformly recognized value of the effort in the absence of relative value unit attribution.

**BIAS, CONFOUNDING FACTORS, DRAWBACKS:** This was a voluntary survey. Only 14 division/department chairs answered.

**REAL-LIFE IMPLICATIONS:** There is a need for national benchmarks for clinical research efforts to determine appropriate funding to support the salaries of physicians who embark on a clinical research career.

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# Benchmarks for Academic Oncology Faculty

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abstract

The role of clinical researchers is vital to cancer progress. The teaching, research, and leadership roles that academic oncologists hold need to be accounted for and appropriately compensated. National metrics are currently inexistent, but are necessary to move the oncology research field forward. Clinical research and routine clinical care must be harmoniously integrated without competing. This article reviews the national landscape of clinical cancer research and proposes a call for action.

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## CANCER CLINICAL RESEARCH CHALLENGES

In the last 30 years, cancer biology discoveries have led to improved patient care. These advances stem from clinical research mainly performed at academic centers. Clinical trial portfolios require substantial research and administrative time.[1] This effort is directly related to patient care, but not clinically benchmarked. Academic medical oncologists face the challenge of adapting to compensation models,[2] usually measured in relative value units (RVUs) and developed wholly on benchmarks based on patient-facing clinical work,[3] which limits time and effort for non–RVU-generating academic activities. Clinical research effort has no standardized measure to support salaries of physicians conducting clinical research.

In June 2019, ASCO invited oncology division chiefs and department chairs to meet to exchange ideas and management strategies. Among the issues identified was a high degree of heterogeneity in how institutions handled clinician workload. There was significant variation in expected number of clinic sessions and inpatient service time, RVU benchmarks, and support for non–RVU-generating clinical work. The current trend of academic centers competing with private hospitals further encroaches on the research mission. Lack of benchmarks for the academic mission was uniformly perceived as affecting physician work/life balance and burnout[4-6] and highlighted the need for national standards.

## PHENOTYPES OF CLINICIANS IN ONCOLOGY

Fourteen participating leaders reviewed the current state within their institutions. These leaders represented medical oncology divisions and departments across the United States, from community-based practices to university-based matrix or free-standing National Cancer Institute (NCI) –designated cancer centers.[7] Three main phenotypes of medical oncology faculty were apparent:

1. Clinicians: physicians both in private practice models and academic oncologists, whose primary focus is patient care. These are typically full-time clinicians with little educational or research responsibilities, who may enroll patients in clinical trials.
2. Clinical researchers: academic physicians, who have significant patient care and clinical trial responsibility (design, oversight, accrual, analysis, presentation, and publication). Clinical researchers may also conduct other kinds of research (epidemiology, health service). Although research is usually funded by grants or contracts, the funding rarely supports the investigator salary.
3. Physician scientists: academic physicians, who have peer-reviewed funding and spend the majority of their time on non–patient-facing research (eg, laboratory-based, population sciences, or other health services research). They see patients to a smaller extent and may or may not be involved in clinical trials. Peer-reviewed research

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**TABLE 1.** Summary of the Clinical Workload by Physician Category

| Setting | Clinical Oncologist | Clinical Researcher | Physician Scientist |
|---|---|---|---|
| Community | | | |
| Outpatient sessions[a] | 8-9 | NA | NA |
| Inpatient weeks[b] | 0-6 | NA | NA |
| Academic | | | |
| Outpatient sessions (median)[a] | 6-9 (8) | 4-6 (4) | 0.5-2 (2) |
| Inpatient weeks (average)[b] | 0-6 | 2-12 (5) | 0-4 |

Abbreviation: NA, not applicable.
[a]One outpatient session, 4 hours per week.
[b]Inpatient, weeks per year.

funding supports a percentage of their salary, often with an institutional cost-share mechanism.

Table 1 summarizes the clinical roles played by these physicians and highlights heterogeneity. At community-based centers, clinicians are typically full-time physicians (6-9 clinic sessions per week; median, 8 sessions) with salaries linked to clinical productivity (Table 2). These physicians generally see a mixture of tumor types and benign hematology. Academic efforts are possible by approval, with hours deducted from outpatient expectations, sometimes leading to reduced salary. At all academic centers, the three phenotypes were recapitulated. The clinician phenotype resembles community practice. Physician scientist research efforts are funded by grants or other research mechanisms, with cost-share above the National Institutes of Health salary cap generally covered by the cancer center; these physicians have fewer clinical duties (approximately 25% of full-time clinical equivalent [cFTE], with a median of 1 clinic per week; range, 1-2 sessions). In contrast, for clinical researchers, the greatest variability in clinical sessions was observed.

## CLINICAL RESEARCHER DILEMMA

This article addresses the lack of appropriate metrics and support for the clinical research phenotype. For clinical researchers, the median time dedicated to clinical duties is approximately 50% (range, 40%-80%) of the cFTE. Notably, the percentage of the cFTE of clinical researchers

**TABLE 2.** RVUs and Salary Benchmarks From 2016 to 2018

| Benchmark, Percentile | RVU Estimations | Total Cash Compensation Estimations ($)[a] |
|---|---|---|
| AAMC/CPSC | | |
| Medical oncology | | |
| 10th | 2,500 | 158,000-231,000 |
| 50th | 4,900 | 247,000-355,000 |
| 90th | 8,500 | 450,000-473,000 |
| Hematology/oncology | | |
| 10th | 2,900 | 150,000-218,000 |
| 50th | 5,000 | 244,000-355,000 |
| 90th | 8,000 | 450,000-473,000 |
| MGMA | | |
| Medical oncology | | |
| 10th | 2,300 | 235,000 |
| 50th | 4,400 | 410,000 |
| 90th | 8,700 | 650,000 |
| Hematology/oncology | | |
| 10th | 2,700 | 310,000 |
| 50th | 4,700 | 470,000 |
| 90th | 7,700 | 775,000 |

Abbreviations: AAMC, American Association of Medical Colleges; CPSC, Clinical Practice Solutions Center; MGMA, Medical Group Management Association; RVU, relative value unit.
[a]Ranges for assistant professor to full professor.

does not overlap with that of clinicians or physician scientists, creating this de facto category of clinically oriented physicians dedicated to clinical research, producing valuable efforts typically not protected through grants or other mechanisms. The lack of national benchmarks to reflect clinical research, teaching, or administrative effort is a consistent challenge, because institutions use diverse sets of expectations for various activities.

There are two main RVU benchmarking categories, based on self-reported data from hospitals and practices, for clinical productivity and salary. Academic practice benchmarks are assessed by the American Association of Medical Colleges and its associated Clinical Practice Solutions Center (AAMC/CPSC)[8] or by the University Health System Consortium (UHC). Private oncology practice benchmarks are provided by the Medical Group Management Association (MGMA), the American Medical Group Association, SullivanCotter, or ECG Management Consultants[9] (Table 2). Most academic practices use the AAMC/CPSC or UHC benchmarks, and community practices often use the MGMA or SullivanCotter benchmarks, but no standardization was seen among our 14 centers. Curiously, the AAMC/CPSC benchmarks calculate higher RVUs and lower salaries than the MGMA benchmarks (Table 2). This is a potential impediment to implementation of effective models for academic oncology.[2,10,11]

Medical oncology generates 30% to 50% of net hospital margins, although this is hard to quantify accurately.[12] This real bottom line does not derive from RVUs generated through evaluation and management coding, which contributes on average 25% of medical oncologists' salaries[13]; the profit is through revenues from cancer therapies.[14,15] Infrequently, when the profit goes to the cancer center, substantial funds might be available to compensate faculty clinical research efforts. More commonly, internal accounting and complicated fund flows set by administrators and senior leadership direct faculty salaries. Division chiefs or department chairs are responsible for budgets that include not only salaries but sometimes clinic management as well, over which they usually have little control. The one constant in funds flow is a transfer of dollars, using the net margins created by oncology services, to support RVU-based salaries. However, there is no consistent model of institutional support to cover clinical research time, which is a critical driver of improvements in cancer clinical care and a major attraction for patients seeking care at academic centers.

## NEED FOR CLINICAL RESEARCH NATIONAL BENCHMARKS

Clinical researchers spend considerable time studying, writing, and teaching as subject matter experts within their particular tumor types and have many required activities, besides clinic visits, that are not easily accounted for in RVU-based compensation models. Clinical research duties are varied and increase with trial complexity and volume. Clinical research is heavily regulated through the International Conference on Harmonisation Good Clinical Practice (GCP), which aligns to the Code of Federal Regulations.[16] Evolving regulations and increasing regulatory burdens are imposed on investigators without compensatory resources.[17,18] ASCO measured trial acuity to describe the complexity of trials,[19,20] and the National Comprehensive Cancer Network published benchmarks in 2007,[21] but these analyses may be outdated. In our survey, the dedicated effort needed to successfully perform all required GCP tasks[22] was 40% to 60% of the cFTE. Clinical trial contracts with the commercial sector or awards from NCI mechanisms do not provide adequate support for clinical investigator time and effort. Furthermore, the reconciliation of clinical trial budgets is often a retrospective measure of effort already spent that does not directly compensate an investigator's time. Alternative sources of support for clinical research and clinical researchers are therefore required. If an academic medical oncology clinical researcher workforce is to be maintained to improve the outcomes of patients with cancer through research, it is critical that these efforts are appropriately recognized, measured, and compensated at all institutions. Successful support for this critical workforce requires a degree of stability and a common language of effort allocation, even as academic centers attempt to become cost competitive in an increasingly consolidated marketplace.

## CALL FOR ACTION

Division chiefs and department chairs of medical oncology, connected through ASCO myConnection, started a dialogue on the need for clinical research benchmarks. The consensus was that an appropriate benchmark for clinical researchers is a partitioning between clinical care and clinical research, with at least 50% protected time for clinical research; institutional or other official support is required; and objective measures for clinical research activities are needed, given the clinical nature and uniformly recognized value of the effort in the absence of RVU attribution.

The complex business of academic medicine needs to integrate the vital role of clinical researchers and adopt metrics necessary to move the oncology research field forward without being tied to generation of RVUs. The teaching, research, and leadership roles that academic oncologists hold need to be accounted for and compensated.[6] We are calling for action to develop clinical research benchmarks. ASCO is ideally positioned to help create standards aligned with funding recommendations to support clinical researchers.

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## AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST

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