

Assessing Management of Comprehensive Cancer Centers

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Introduction

Cancer is the second highest cause of death among Americans, claiming approximately 600,000 lives every year (1). For this reason, high-quality cancer treatment, research, and training is a top concern for healthcare and the nation. Since 1937, the National Cancer Institute (NCI) has been the federal government's principal agency for cancer research and training. Across the United States, 71 institutions have earned the title of NCI Designated Cancer Center. Among these institutions, 51 are Comprehensive Cancer Centers, which are specifically "recognized for their leadership and resources." (2)

Good management practices are associated with high performance of organizations, including hospitals (3). Recent research has demonstrated that better management practices in hospitals are correlated with better patient outcomes for several medical conditions (4). To date, there is no insight into the management practices of NCI Cancer Centers, beyond a short paragraph written annually by each center. This study aimed to better understand the management and performance of NCI Cancer Centers and begin providing information that is long overdue.

Research Question

Are NCI Designated Comprehensive Cancer Centers well-managed?
Are available rankings related to measures of being well-managed?

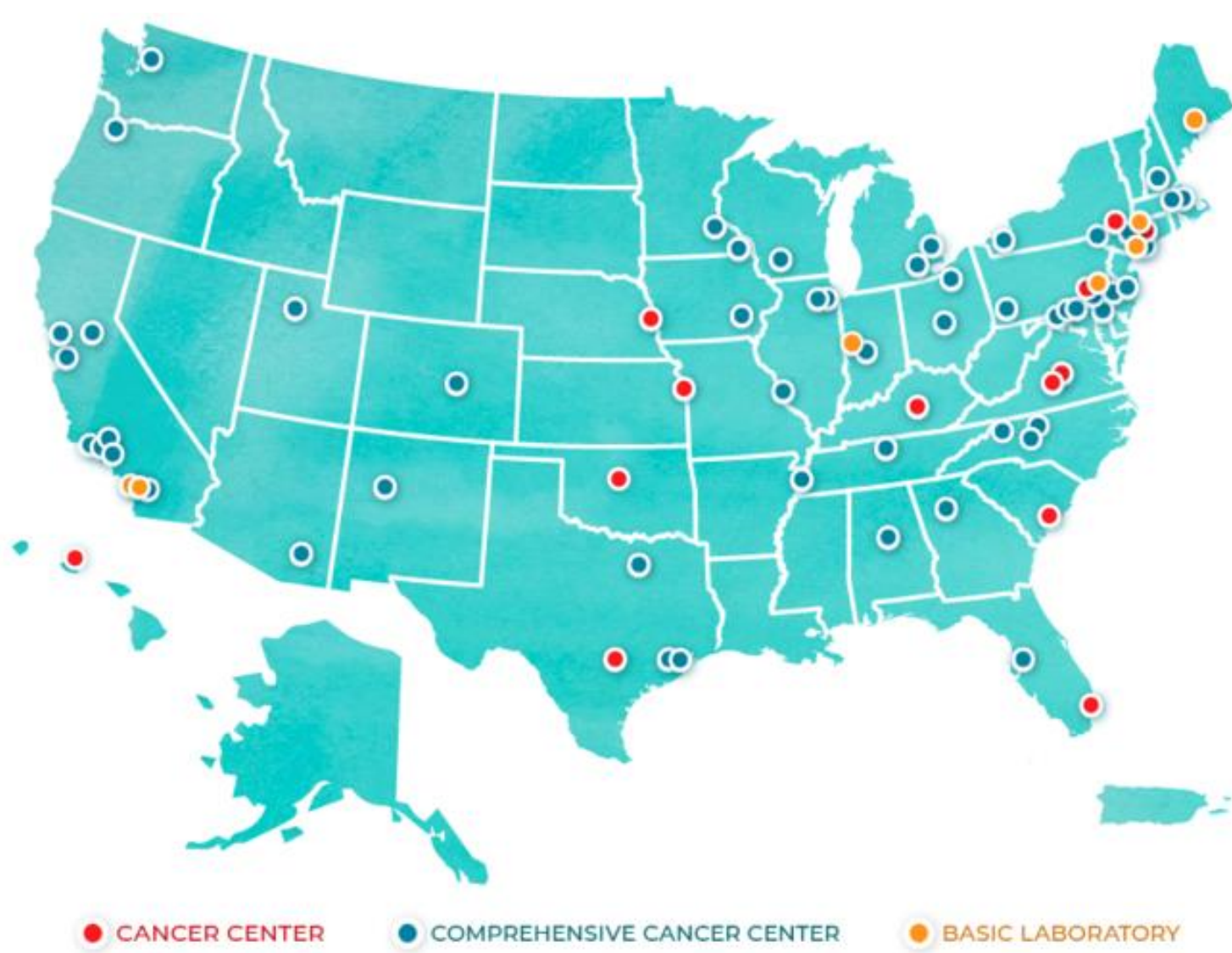


Figure 1. NCI Cancer Centers. There are 71 NCI Cancer Centers: 51 Comprehensive Cancer Centers, 13 Cancer Centers, and 7 Basic Laboratory Cancer Centers.

Methods

In this project, we sought, but found no measures of management. We also sought measures of performance and found healthcare ranking systems, which are the only publicly available healthcare performance measures. Apart from U.S. News & World Report, there are no direct performance evaluations of cancer centers themselves, only their affiliated hospitals.

We collected data from four different healthcare ranking/scoring systems: U.S. News & World Report, Lown Institute, Leapfrog Hospital Safety Grade and Newsweek Best Hospitals. We assembled a list of all the affiliated hospitals and cataloged their rankings and overall performance for each ranking system we included in our study. We used data from 2019 in order to not have rankings skewed from the effects of COVID-19 pandemic.

U.S. News & World Report

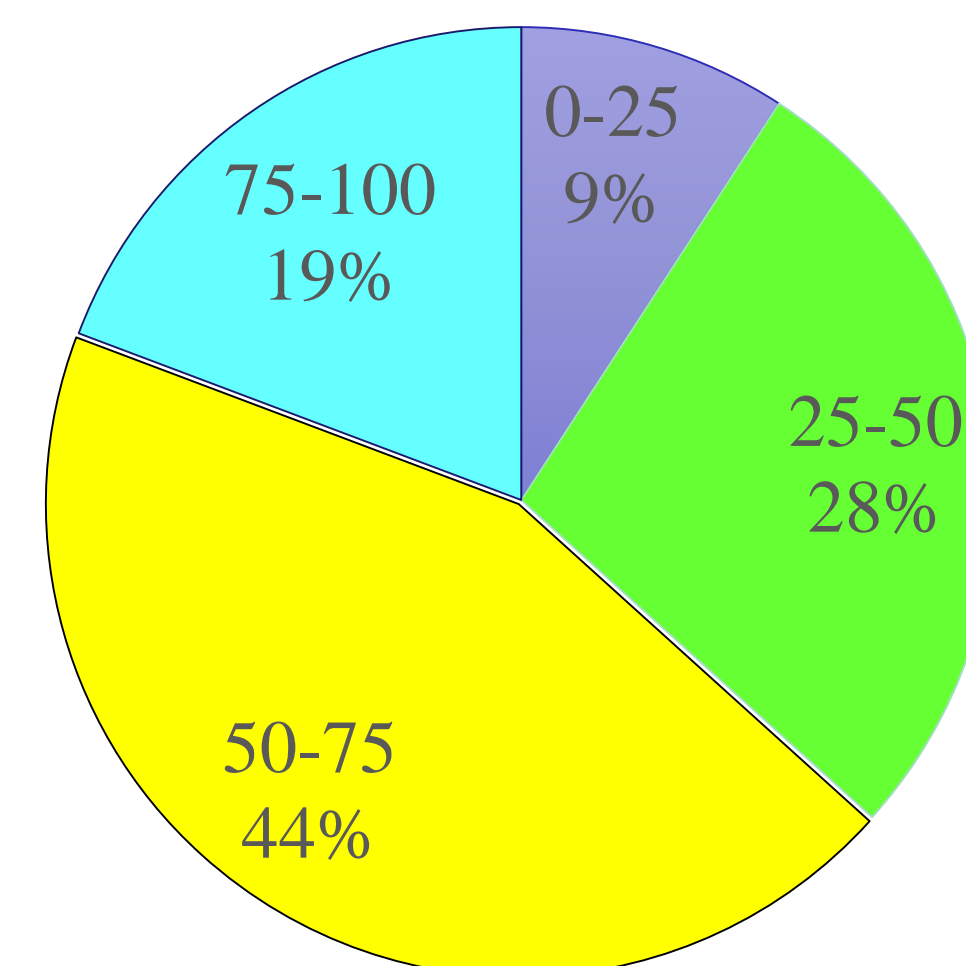


Figure 2 U.S. News & World Report. (https://health.usnews.com/best-hospitals) There were a total number of 109 affiliated hospitals scored by U.S. News & World Report. Almost half (44%) of the scores fell within the 50-75 range. A nonnegligible amount (9%) of scores performed in the lowest category eligible for scoring, 0-25.

Lown Institute Hospital Index

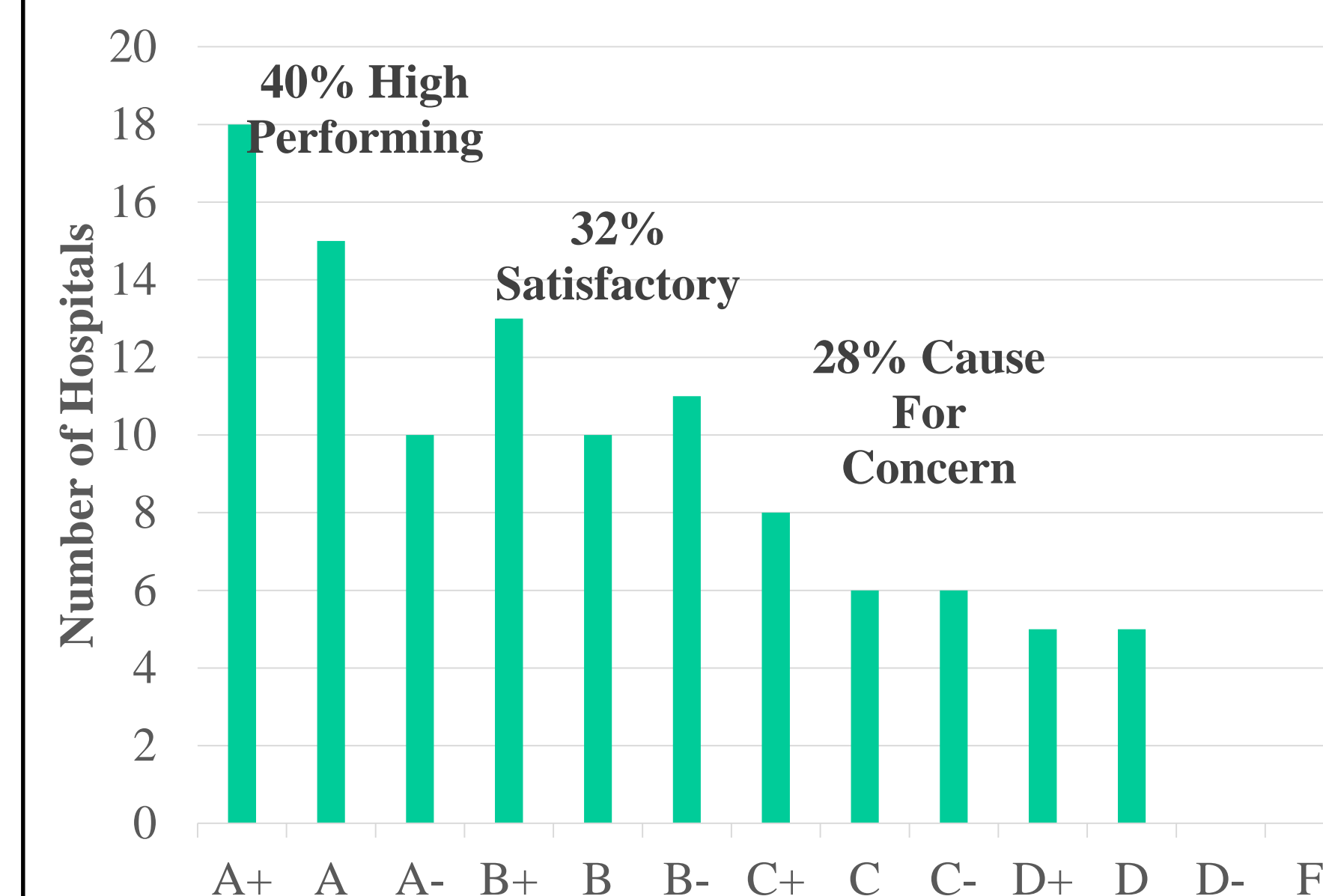


Figure 3 Lown Institute (lownhospitalsindex.org). There were a total number of 107 affiliated hospitals scored by the Lown Institute. Approximately 40% scored within the A range which we considered "High Performing" and 32% within the B range or "Satisfactory." The remaining 28% low scorers were deemed "Cause for Concern".

Leapfrog Hospital Safety Grade

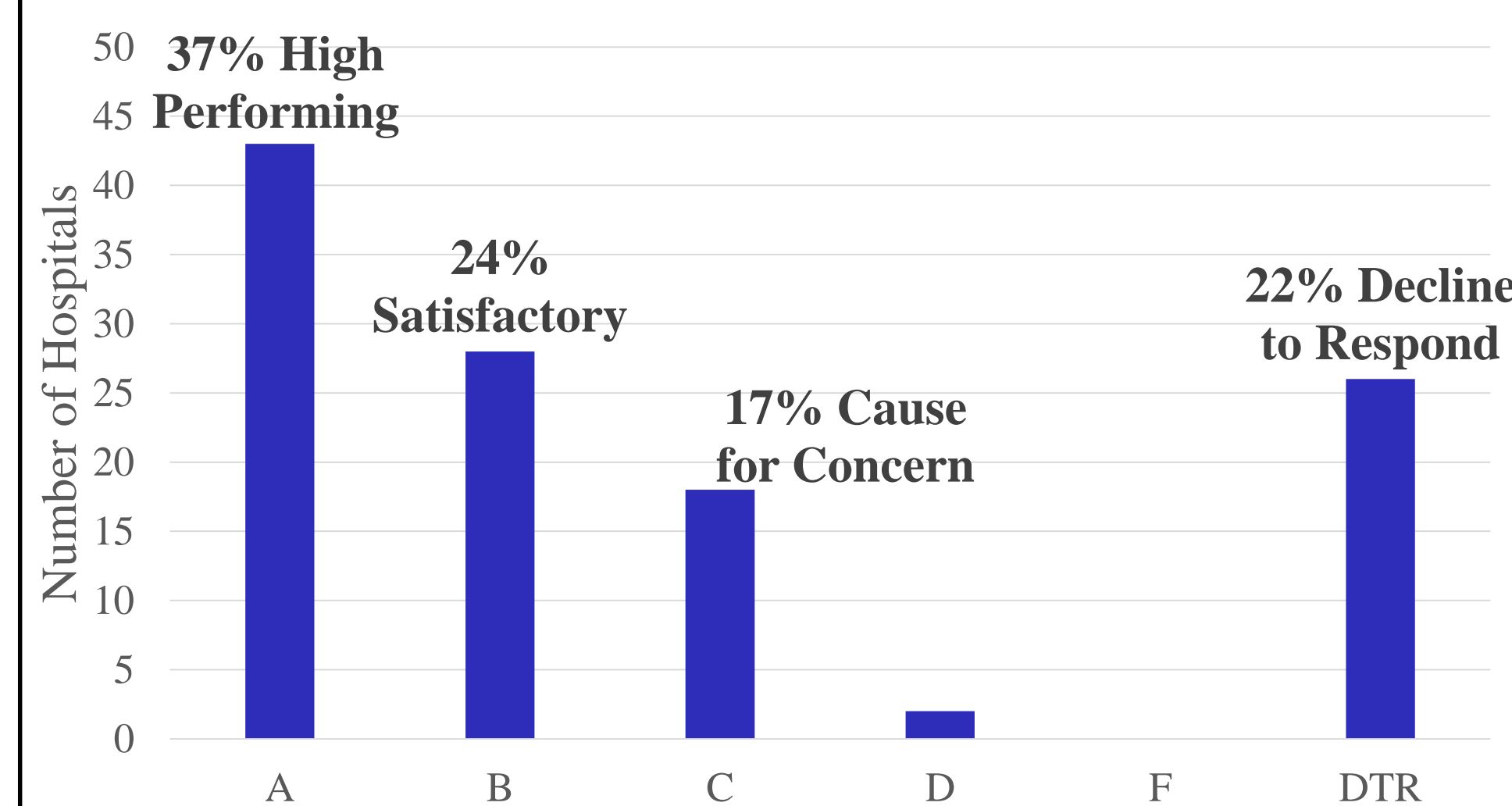


Figure 4 Leapfrog (https://www.leapfroggroup.org). There were a total number of 117 affiliated hospitals scored by Leapfrog. Approximately 37% scored an A which we considered "High Performing" and 24% received a B or "Satisfactory." A significant amount (22%) of hospitals declined to respond to the survey, which could be cause for concern.

Newsweek Best Hospitals

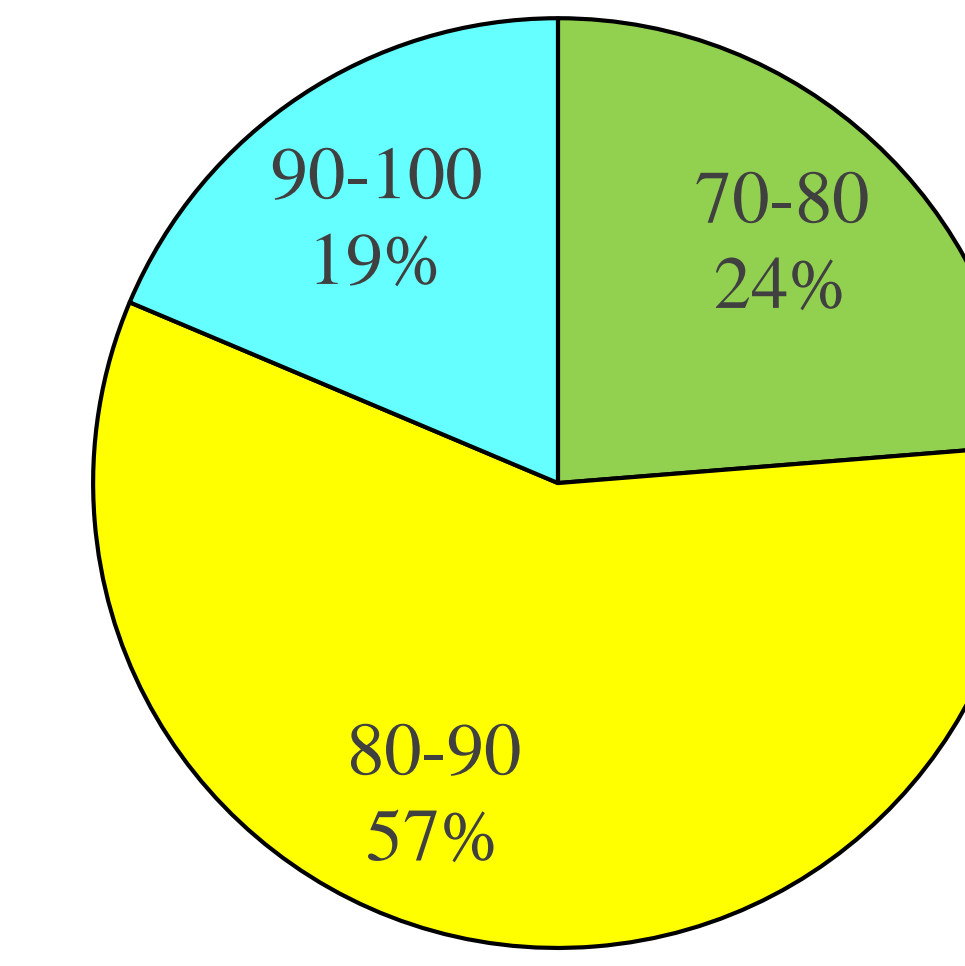


Figure 4 Newsweek (https://www.newsweek.com/best-hospitals). There were 59 affiliated hospitals scored by Newsweek – among the top 100 hospitals in the U.S. - the smallest sample in the set. Accordingly, all hospitals obtained a high score of above 70 out of 100. The majority of the scores (58%) fell within the 80-90 range.

Conclusions

In beginning our research, we hoped to find assessments of cancer center management. Annual reports are not publically available. Leapfrog includes a measure of *Effective Leadership*. We discovered that an overwhelming majority of hospitals received perfect scores.

With regards to performance measures, we expected the majority of affiliated hospitals to be within the top ranks, as they are supported by the National Cancer Institute. In the course of our research, we observed that the number of hospitals in the lower ranges were larger than we initially anticipated. This information additionally supports our assertion that in-depth evaluations into the management and performance of the NCI Cancer Centers would be useful. The differences in score distributions across ranking systems could stem from a variety of factors, one being the differences in criteria used to determine ranking. U.S. News & World Report and Newsweek both include the reputation of the hospital among physicians, whereas Lown and Leapfrog did not. Alternatively, Lown included a measure of community engagement.

While we did gain some insight into the performance of NCI Cancer Centers through these rankings, a cancer-specific management survey will be required to truly address our specific aim. A possible model for this could be the survey of "structured" management practices used by Nick Bloom and others in partnership with the U.S. Census Bureau (5).

References

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