**Results**

- In total, 1,571 records were identified, of which 29 reports from 17 studies were included. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram is presented in Figure 1. More than half (56%) of the studies were observational (89% of which had a cross-sectional design); the remaining 44% of studies used data from randomized trials.

**Figure 1. PRISMA flow diagram**

**Objectives**

- The objective of this systematic literature review was to assess the usage of work productivity measurement to assess their impact on cost outcomes and economic evaluations results, with a focus on oncology indications.

**Methods**

**Systematic literature review methodology**

- A systematic search was conducted in MEDLINE and Embase (via Ovid) for studies published between January 1, 2012 and November 30, 2022.
- Studies published in English were retrieved and assessed for eligibility according to the criteria listed in Table 1.

**Table 1. SLR inclusion criteria**

**Abbreviation: PICOS, population, intervention, comparators, outcomes, and study design**

**Population**

- Adults with cancer

**Intervention/ comparators**

- Any interventions, including studies with no specific interventions

**Outcomes**

- Types of studies used to assess work productivity
- Methodology for estimating costs related to productivity loss
- Methodology for incorporating work productivity loss in economic evaluations
- Impact of incorporating work productivity on the results of economic evaluations (i.e., scenario analyses, cost drivers)

**Study design**

- Studies measuring work productivity loss: clinical trials, observational studies
- Economic evaluations including work productivity loss

**Other restrictions**

- Publication date: January 1, 2012 to November 30, 2022
- English language

**Abbreviations:** PICOS, population, intervention, comparison, outcomes, and study design.

- **PICOS**
  - Population: adults with cancer
  - Intervention: any interventions, including studies with no specific interventions
  - Comparators: none
  - Outcomes: types of studies used to assess work productivity, methodology for estimating costs related to productivity loss, methodology for incorporating work productivity loss in economic evaluations, impact of incorporating work productivity on the results of economic evaluations (i.e., scenario analyses, cost drivers)
  - Study design: studies measuring work productivity loss: clinical trials, observational studies

**Results**

- Among 12 studies that specified oncology indication, multiple myeloma (n=6) and head and neck cancer (n=3) were reported most often. Four studies were done in non-cancer populations of patients with cancer and cancer survivors.

- **Table 2. Impact of work productivity loss on economic outcomes**

**Discussion**

- A significant negative was noted correlation between indirect costs and health-related quality of life.
- Patients with cancer had higher productivity losses compared with those without, and the corresponding indirect costs driven by absenteeism and presenteeism were higher.
- **Strengths**
  - The search strategy used for this SLR was not restricted to any specific population, allowing the comprehensive identification of studies on a wide variety of oncology indications.
  - **Limitations**
  - Potential limitations of this study may result from the exclusion of non-English studies published outside of English-speaking countries.
  - The impact of work productivity on economic evaluations was highly heterogeneous due to the variety of oncologic indications and tools included.
  - Differences in recall periods were noted among the included studies, which could introduce bias to the interpretation of the results.

**Conclusion**

- Although many economic analyses have been conducted in adults with cancer, few incorporated work productivity in the estimations of economic burden. The monetary valuation of work productivity remains to be further utilized.
- Future research is warranted to understand the reasons for the apparent underutilization of work productivity measurements in economic evaluations.

**References**


