

# The State of Cost-Effectiveness Analyses on Health Services and Procedures

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## OBJECTIVES

- To summarize the number and type of published cost-effectiveness analyses (CEAs) on medical interventions
- To examine the data sources used to inform CEAs on health services and procedures

## METHODS

- We summarized both the total volume of studies and types of interventions under investigation
- We examined the primary sources of data on effectiveness for CEAs published in 2021
- We compared the sources of effectiveness data between pharmaceutical and service/procedure CEAs

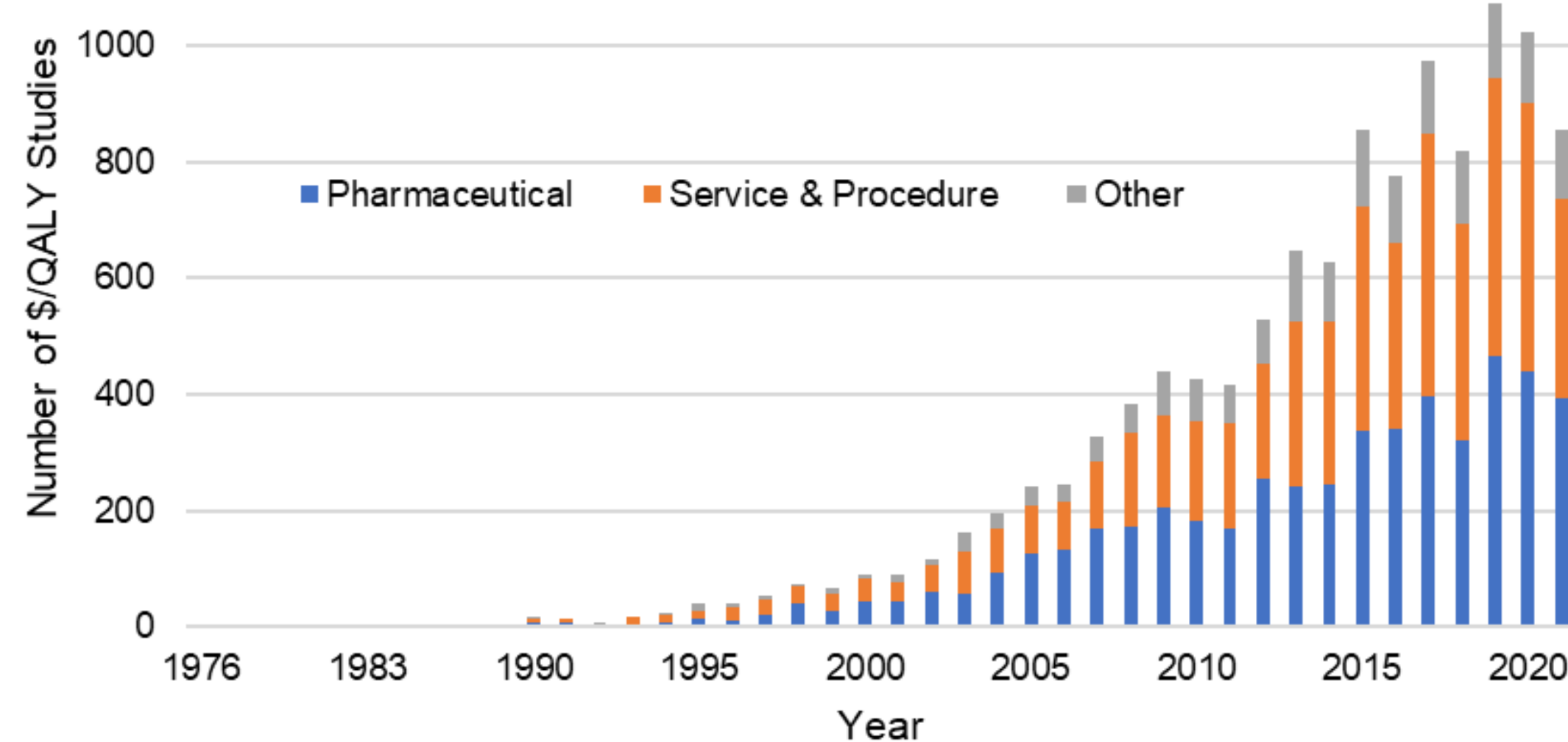
## DATA SOURCE

Tufts Medical Center  
CEA Registry, 1979-2021

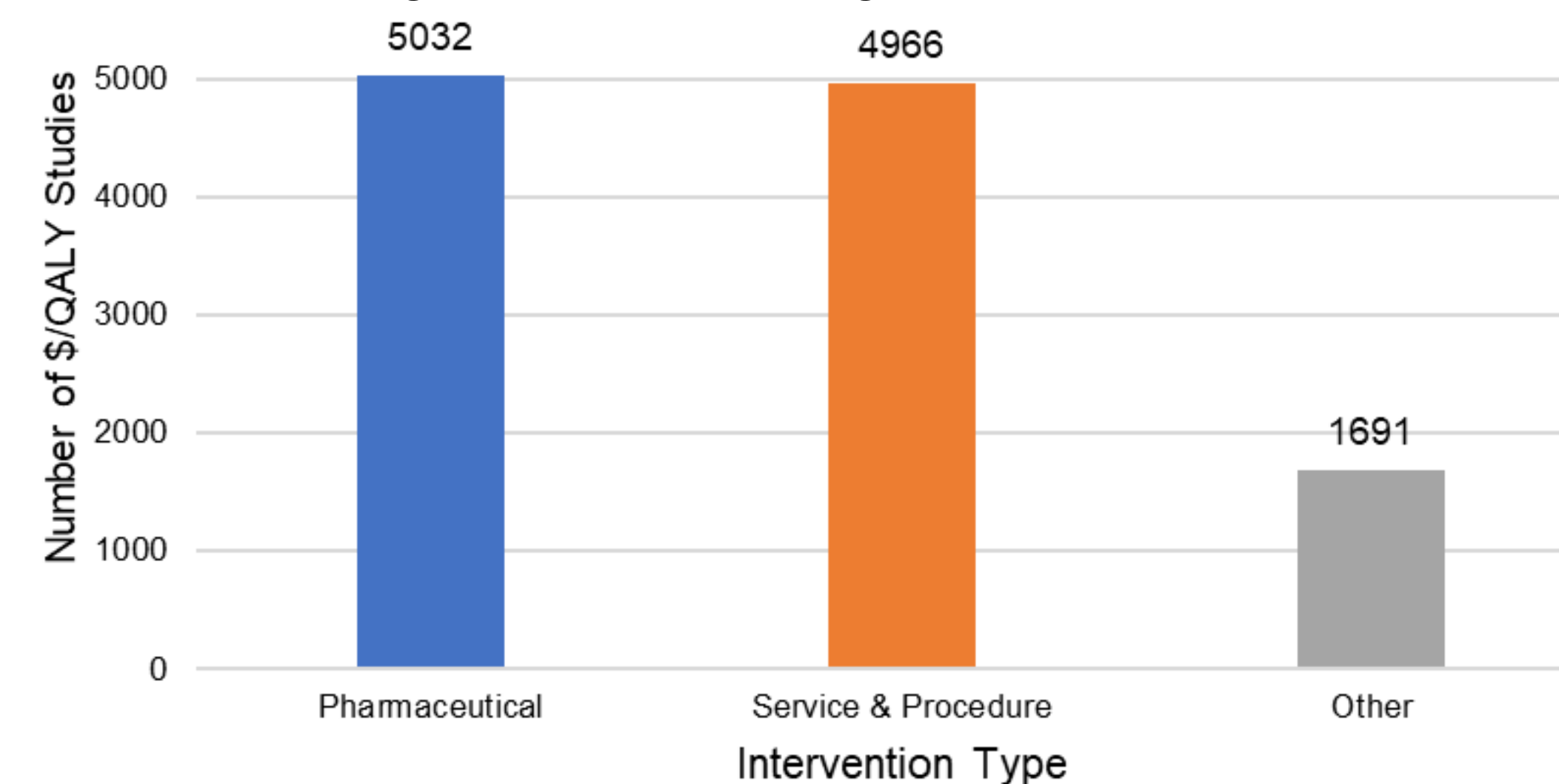


## RESULTS

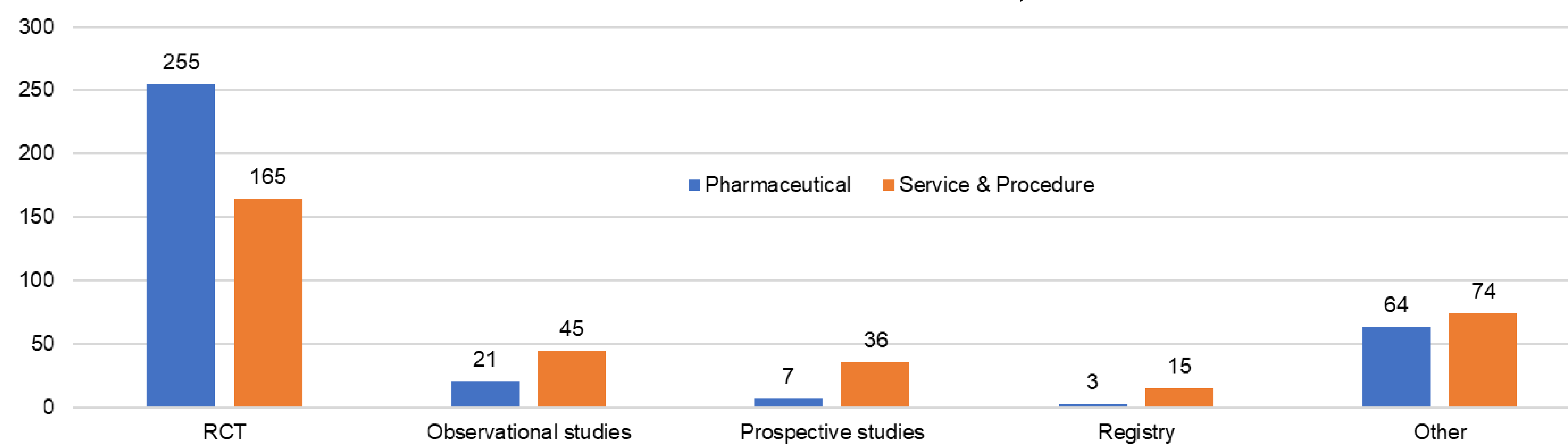
Number of \$/QALY studies by intervention type, 1979-2021



Aggregate number of \$/QALY studies by intervention type, 1979-2021



Sources of Effectiveness Data, 2021



Sources of Effectiveness Data, 2021

|                     | Randomized Controlled Trials (RCT) (%) | Non-RCT (%) | Total | Chi Square p-value |
|---------------------|--|-------------|-------|--------------------|
| Pharmaceutical      | 255 (72.9)                             | 95 (27.1)   | 350   | <0.001             |
| Service & Procedure | 165 (49.3)                             | 170 (50.7)  | 335   |                    |
| Total               | 420                                    | 265         | 685   |                    |

## CONCLUSION

- In total, pharmaceutical and service/procedure interventions represented 43% and 42% of CEAs respectively, while pharmaceuticals comprise roughly 15% of health spending
- While the proportion of pharmaceutical and service/procedure CEAs has remained relatively constant over time, the type and quality of data sources informing these evaluations differs significantly
- Researchers should explore opportunities to promote CEAs of services/procedures, including through prospective clinical trials and rigorous observational studies for effectiveness data

## ACKNOWLEDGEMENT

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