

# Package ‘ParCC’

October 8, 2026

**Title** Parameter Converter and Calculator for Health Technology Assessment

**Version** 1.4.1

**Description** An interactive 'shiny' application for Health Technology Assessment (HTA) parameter estimation. Converts between rates, probabilities, odds, and hazard ratios (HR); extrapolates survival curves (Exponential, Weibull, Log-Logistic); fits probabilistic sensitivity analysis (PSA) distributions (Beta, Gamma, LogNormal, Dirichlet) via the method of moments; calculates incremental cost-effectiveness ratios (ICERs), net monetary benefit (NMB), value-based pricing, and budget impact; adjusts costs for inflation, discounting, and purchasing power parity (PPP) across 30 countries; and adjusts background mortality using life-table methods. Designed for researchers building cost-effectiveness and budget-impact models who need auditable, formula-documented parameter transformations. Methods include Zhang and Yu (1998) [doi:10.1001/jama.280.19.1690](https://doi.org/10.1001/jama.280.19.1690) for odds ratio (OR) to relative risk (RR) conversion and Chinn (2000, Statistics in Medicine, 19, 3127-3131) for effect-size transformations.

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**Encoding** UTF-8

**Imports** shiny, shinythemes, ggplot2, plotly, DT, rmarkdown, magrittr

**RoxygenNote** 7.3.3

**URL** <https://drpakhare.github.io/ParCC/>,  
<https://github.com/drpakhare/ParCC>

**BugReports** <https://github.com/drpakhare/ParCC/issues>

**VignetteBuilder** knitr

**Config/testthat/edition** 3

**Suggests** knitr, testthat (>= 3.0.0)

**NeedsCompilation** no

**Author** Abhijit Pakhare [aut, cre],  
 Soumya Jain [aut],  
 Anvita Malhotra [aut],  
 Shivansh Verma [aut],  
 Biju Somen [aut],  
 Oshima Sachin [aut],  
 Beena Joshi [aut],  
 Ankur Joshi [aut]

**Maintainer** Abhijit Pakhare <drpakhare@gmail.com>

**Repository** CRAN

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|         |                                  |
|---------|----------------------------------|
| run_app | <i>Run the ParCC Application</i> |
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## Description

Launches the ParCC Shiny application in the default web browser. The application provides interactive tools for Health Technology Assessment parameter conversions, survival extrapolation, PSA distribution fitting, economic evaluation, and more.

## Usage

```
run_app()
```

## Value

A Shiny application object (invisibly). Called for its side effect of launching the application.

## Examples

```
if (interactive()) {
  run_app()
}
```

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