

Package ‘healthfinance’

October 13, 2022

Title Financial Projections and Planning for Health Care Practices

Version 0.1.0

Description Provides a shiny interface for a free, open-source managerial accounting-like system for health care practices. This package allows health care administrators to project revenue with monthly adjustments and procedure-specific boosts up to a 3-year period. Granular data (patient-level) to aggregated data (department- or hospital-level) can all be used as valid inputs provided historical volume and revenue data is available. For more details on managerial accounting techniques, see Brewer et al. (2015, ISBN:9780078025792).

License GPL-3

Encoding UTF-8

LazyData true

Depends R (>= 2.10)

Imports ggplot2 (>= 3.3), lubridate (>= 1.7), readr (>= 1.3), scales (>= 1.1), shiny (>= 1.4), tibble (>= 3.0)

RoxygenNote 7.1.1

URL <https://rrrlw.github.io/healthfinance/>

BugReports <https://github.com/rrrlw/healthfinance/issues>

Suggests testthat (>= 2.3)

NeedsCompilation no

Author Raoul Wadhwa [aut, cre],
Vigneshwar Subramanian [aut],
Milind Desai [aut]

Maintainer Raoul Wadhwa <raoulwadhwa@gmail.com>

Repository CRAN

Date/Publication 2020-10-24 09:00:02 UTC

R topics documented:

calc_rev	2
healthfinance	3
hfin	4

Index	5
--------------	----------

calc_rev	<i>Calculate 3-year Revenue for Healthcare Practice</i>
----------	---

Description

Allows calculation of projected revenue for upcoming 36 months along with target revenue for corresponding months.

Usage

```
calc_rev(
  procedures,
  growth = rep(0, 3),
  comp_ratio = rep(1, 4),
  ins_prop = rep(0.25, 4),
  tech_fee_mult = 10,
  month_prop = rep(1/12, 12),
  restoration = rep(1, 36),
  boost_amt = numeric(0),
  boost_proc = list(),
  boost_start = integer(0),
  boost_end = integer(0)
)
```

Arguments

procedures	df or tibble containing 3 columns (name, annual volume, annual revenue)
growth	numeric vector of length 3; c(1, 10, 100) would represent expected growth of 1 percent in year 1, 10 percent in year 2 (compared to year 1), and 100 percent in year 3 (compared to year 2)
comp_ratio	numeric vector of length 4 containing compensation ratio (on average) of following insurances relative to Medicare: Medicare (should be 1), Medicaid, Commercial (private), and Other (self-pay, bad debt)
ins_prop	numeric vector of length 4 containing proportion of patients with following types of insurance: Medicare, Medicaid, Commercial (private), and Other (self-pay, bad debt); sum of this vector should equal unity
tech_fee_mult	technical fee as a multiple of procedural fee
month_prop	proportion of revenue expected in each of 12 months of the year

restoration	proportion of expected revenue expected in each of 36 upcoming months due to acute economic event being modeled
boost_amt	boost amount for up to 8 procedure sets
boost_proc	list of boost procedures for each of 8 boosts above
boost_start	start month (between 1 and 36, inclusive) for each of 8 boosts above
boost_end	end month (between 1 and 36, inclusive) for each of 8 boosts above

Value

list with 2 numeric vectors of length 36 each

Examples

```
# sample dataset of procedures
eg_procs <- data.frame(Name = c("Sample 1", "Sample 2", "Sample 3"),
                      Revenue = c(100000, 200000, 150000),
                      Volume = 1000, 25, 750)

# calculate revenue projections for next 36 months with default parameters
proj <- calc_rev(eg_procs)

# print 36-month target revenues
print(proj$Target)

# print 36-month projected revenues
print(proj$Projected)
```

healthfinance

Financial Projections and Planning for Healthcare Practices

Description

Provides a shiny interface for a free, open-source managerial accounting-like system for healthcare practices. This package allows healthcare administrators to project revenue with monthly adjustments and procedure-specific boosts up to a 3-year period. Granular data (patient-level) to aggregated data (department- or hospital-level) can all be used as valid inputs provided historical volume and revenue data is available.

`hfin`*Shiny App for Health Finance*

Description

Opens the shiny interface for the health finance functionality provided by the `healthfinance` package. The interface currently consists of 3 tabs: (1) import; (2) model; and (3) export.

Usage

```
hfin()
```

Value

shiny application object

Index

calc_rev, 2

healthfinance, 3

hfin, 4