

# Package: reskit (via r-universe)

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**Title** Nice selection box of goodies for hobnobbing with NHP model results

**Version** 1.0.0

**Description** 'Wafer' goodbye to crumbly code, and dunk a sturdy reskit function in your data cuppa instead. We've clustered the cream of our results code here - it's a cracker!

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## Contents

add_change_cols . . . . .	2
compile_change_factor_data . . . . .	3
compile_detailed_activity_data . . . . .	4

compile_distribution_plot_data . . . . .	5
compile_distribution_summary_data . . . . .	6
compile_indiv_change_factor_data . . . . .	6
compile_principal_los_data . . . . .	7
compile_principal_pod_data . . . . .	8
export_detailed_activity_data . . . . .	9
export_distribution_summary_data . . . . .	10
export_principal_cf_data . . . . .	10
export_principal_los_data . . . . .	11
export_principal_pod_data . . . . .	12
get_detailed_pods . . . . .	12
get_results_dir_path . . . . .	13
get_tpma_label_lookup . . . . .	14
get_tretspef_lookup . . . . .	14
get_trust_sites . . . . .	15
make_beeswarm_distrib_plot . . . . .	15
make_cumulative_distrib_plot . . . . .	16
make_detailed_activity_table . . . . .	16
make_distribution_summary_table . . . . .	17
make_individual_cf_plot . . . . .	17
make_overall_cf_plot . . . . .	18
make_principal_los_table . . . . .	18
make_principal_pod_table . . . . .	19
read_results_parquet_files . . . . .	19
shim_results . . . . .	20

## Index 21

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add_change_cols	<i>Add change and change_pct columns to a prepared results table</i>
-----------------	--

---

### Description

Add change and change\_pct columns to a prepared results table

### Usage

```
add_change_cols(tbl)
```

### Arguments

tbl	A tibble of appropriately prepared results
-----	--

### Value

A tibble

---

 compile\_change\_factor\_data

*Prepare data from the step\_counts results table for display as charts*


---

## Description

Prepare data from the step\_counts results table for display as charts

## Usage

```
compile_change_factor_data(
  results,
  measure,
  activity_type = c("ip", "op", "aae"),
  pods = NULL,
  sites = NULL,
  pod_lookup = get_principal_pods(),
  tpma_lookup = get_tpma_label_lookup(),
  include_baseline = TRUE
)
```

## Arguments

results	A named list containing NHP results tables
measure	The measure to focus on for the output table. Valid values depend on which activity_type is selected
activity_type	string. One of "ip", "op", "aae". "ip" is the default.
pods	character vector. PoD labels to filter data to. The default value of NULL means no PoDs will be filtered out
sites	Either NULL (the default) or a vector of site codes to filter to. NULL means don't filter; include all sites present in the data
pod_lookup	A tibble, or a function that returns a tibble, containing columns named activity_type_label, pod and pod_label. This provides friendly labels for POD variables in the data. pod is the key column used for joining to data tables.
tpma_lookup	A tibble, or a function that returns a tibble, containing a column named strategy (used as a key for joining to the step_counts table) and a column named tpma_label that provides friendly labels for all TPMAs/strategies
include_baseline	Boolean. Whether to include baseline data

## Value

A prepared tibble of step count changes for each included TPMA

---

```
compile_detailed_activity_data
```

*Prepare data from the sex+age\_group or sex+tretspef\_grouped table*

---

## Description

Prepare data from the sex+age\_group or sex+tretspef\_grouped table

## Usage

```
compile_detailed_activity_data(
  results,
  measure,
  pod_lookup = get_detailed_pods(),
  tretspef_lookup = get_tretspef_lookup(),
  activity_type = c("ip", "op", "aae"),
  aggregation = c("age_group", "tretspef_grouped"),
  pods = NULL,
  sites = NULL
)
```

## Arguments

results	A named list containing NHP results tables
measure	The measure to focus on for the output table. Valid values depend on which activity_type is selected
pod_lookup	A tibble, or a function that returns a tibble, containing columns named activity_type_label, pod and pod_label. This provides friendly labels for POD variables in the data. pod is the key column used for joining to data tables.
tretspef_lookup	A tibble, or a function that returns a tibble, containing a code column (used as a key for joining to the tretspef table) and a tretspef column that provides friendly labels for specialties
activity_type	string. One of "ip", "op", "aae". "ip" is the default.
aggregation	string. One of "age_group" or "tretspef_grouped"
pods	character vector. PoD labels to filter data to. The default value of NULL means no PoDs will be filtered out
sites	Either NULL (the default) or a vector of site codes to filter to. NULL means don't filter; include all sites present in the data

---

`compile_distribution_plot_data`*Compile data to support the "activity distribution summary" tables*

---

## Description

Compile data to support the "activity distribution summary" tables

## Usage

```
compile_distribution_plot_data(  
  results,  
  measure,  
  activity_type = c("ip", "op", "aae"),  
  pods = NULL,  
  pod_lookup = get_detailed_pods(),  
  sites = NULL  
)
```

## Arguments

<code>results</code>	A named list containing NHP results tables
<code>measure</code>	The measure to focus on for the output table. Valid values depend on which <code>activity_type</code> is selected
<code>activity_type</code>	string. One of "ip", "op", "aae". "ip" is the default.
<code>pods</code>	character vector. PoD labels to filter data to. The default value of NULL means no PoDs will be filtered out
<code>pod_lookup</code>	A tibble, or a function that returns a tibble, containing columns named <code>activity_type_label</code> , <code>pod</code> and <code>pod_label</code> . This provides friendly labels for POD variables in the data. <code>pod</code> is the key column used for joining to data tables.
<code>sites</code>	Either NULL (the default) or a vector of site codes to filter to. NULL means don't filter; include all sites present in the data

## Value

A tibble

---

 compile\_distribution\_summary\_data

*Compile data to support the "activity distribution summary" tables*


---

### Description

Compile data to support the "activity distribution summary" tables

### Usage

```
compile_distribution_summary_data(
  results,
  value_type = c("median", "principal"),
  pod_lookup = get_detailed_pods(),
  sites = NULL
)
```

### Arguments

results	A named list containing NHP results tables
value_type	string Either "median" or "principal"
pod_lookup	A tibble, or a function that returns a tibble, containing columns named activity_type_label, pod and pod_label. This provides friendly labels for POD variables in the data. pod is the key column used for joining to data tables.
sites	Either NULL (the default) or a vector of site codes to filter to. NULL means don't filter; include all sites present in the data

### Value

A tibble

---

 compile\_indiv\_change\_factor\_data

*Prepare data from step\_counts results table for display as charts*


---

### Description

Prepare data from step\_counts results table for display as charts

**Usage**

```
compile_indiv_change_factor_data(
  results,
  measure,
  activity_type = c("ip", "op", "aae"),
  pods = NULL,
  sites = NULL,
  pod_lookup = get_principal_pods(),
  tpma_lookup = get_tpma_label_lookup(),
  sort_by = c("value", "tpma_label")
)
```

**Arguments**

results	A named list containing NHP results tables
measure	The measure to focus on for the output table. Valid values depend on which activity_type is selected
activity_type	string. One of "ip", "op", "aae". "ip" is the default.
pods	character vector. PoD labels to filter data to. The default value of NULL means no PoDs will be filtered out
sites	Either NULL (the default) or a vector of site codes to filter to. NULL means don't filter; include all sites present in the data
pod_lookup	A tibble, or a function that returns a tibble, containing columns named activity_type_label, pod and pod_label. This provides friendly labels for POD variables in the data. pod is the key column used for joining to data tables.
tpma_lookup	A tibble, or a function that returns a tibble, containing a column named strategy (used as a key for joining to the step_counts table) and a column named tpma_label that provides friendly labels for all TPMA/strategies
sort_by	string, one of "value" or "tpma_label". The former sorts the output table by the value of the change, the latter alphabetically by the TPMA label

**Value**

A prepared tibble of projected negative changes in activity, by TPMA

---

compile\_principal\_los\_data

*Prepare data from tretspef+los\_group results for displaying as summary table*

---

**Description**

Prepare data from tretspef+los\_group results for displaying as summary table

**Usage**

```
compile_principal_loos_data(
  results,
  measure,
  pod_lookup = get_principal_pods(),
  sites = NULL
)
```

**Arguments**

results	A named list containing NHP results tables
measure	Either "admissions" or "beddays". The measure to focus on for the output table
pod_lookup	A tibble, or a function that returns a tibble, containing columns named activity_type_label, pod and pod_label. This provides friendly labels for POD variables in the data. pod is the key column used for joining to data tables.
sites	Either NULL (the default) or a vector of site codes to filter to. NULL means don't filter; include all sites present in the data

**Value**

A filtered and sorted tibble of principal projections of results, by point of delivery and grouped length of stay

---

compile\_principal\_pod\_data

*Prepare data from default results table for displaying as summary table*

---

**Description**

Prepare data from default results table for displaying as summary table

**Usage**

```
compile_principal_pod_data(
  results,
  pod_lookup = get_principal_pods(),
  sites = NULL
)
```

**Arguments**

results	A named list containing NHP results tables
pod_lookup	A tibble, or a function that returns a tibble, containing columns named activity_type_label, pod and pod_label. This provides friendly labels for POD variables in the data. pod is the key column used for joining to data tables.
sites	Either NULL (the default) or a vector of site codes to filter to. NULL means don't filter; include all sites present in the data

**Value**

A filtered and sorted tibble of principal projections of results, by activity type and point of delivery (PoD)

---

export\_detailed\_activity\_data

*Prepare a site-level summary of detailed activity results by PoD and LoS*

---

**Description**

Intended to be used to create a table to be exported to .csv/.xlsx

**Usage**

```
export_detailed_activity_data(
  results,
  pod_lookup = get_detailed_pods(),
  tretspef_lookup = get_tretspef_lookup(),
  aggregation = c("age_group", "tretspef_grouped"),
  sites = NULL
)
```

**Arguments**

results	A named list containing NHP results tables
pod_lookup	A tibble, or a function that returns a tibble, containing columns named activity_type_label, pod and pod_label. This provides friendly labels for POD variables in the data. pod is the key column used for joining to data tables.
tretspef_lookup	A tibble, or a function that returns a tibble, containing a code column (used as a key for joining to the tretspef table) and a tretspef column that provides friendly labels for specialties
aggregation	string. One of "age_group" or "tretspef_grouped"
sites	Either NULL (the default) or a vector of site codes to filter to. NULL means don't filter; include all sites present in the data

**Value**

A tibble

---

 export\_distribution\_summary\_data

*Prepare a site-level summary of activity distribution summary data*


---

### Description

Intended to be used to create a table to be exported to .csv/.xlsx

### Usage

```
export_distribution_summary_data(
  results,
  pod_lookup = get_detailed_pods(),
  sites = NULL
)
```

### Arguments

results	A named list containing NHP results tables
pod_lookup	A tibble, or a function that returns a tibble, containing columns named activity_type_label, pod and pod_label. This provides friendly labels for POD variables in the data. pod is the key column used for joining to data tables.
sites	Either NULL (the default) or a vector of site codes to filter to. NULL means don't filter; include all sites present in the data

### Value

A tibble

---

 export\_principal\_cf\_data

*Prepare a site-level summary table of change\_factor results*


---

### Description

Intended to be used to create a table to be exported to .csv/.xlsx

### Usage

```
export_principal_cf_data(
  results,
  sites = NULL,
  pod_lookup = get_principal_pods(),
  tpma_lookup = get_tpma_label_lookup()
)
```

**Arguments**

results	A named list containing NHP results tables
sites	Either NULL (the default) or a vector of site codes to filter to. NULL means don't filter; include all sites present in the data
pod_lookup	A tibble, or a function that returns a tibble, containing columns named activity_type_label, pod and pod_label. This provides friendly labels for POD variables in the data. pod is the key column used for joining to data tables.
tpma_lookup	A tibble, or a function that returns a tibble, containing a column named strategy (used as a key for joining to the step_counts table) and a column named tpma_label that provides friendly labels for all TPMA/strategies

**Value**

A tibble

---

export\_principal\_los\_data

*Prepare a site-level summary of main projection results by PoD and LoS*

---

**Description**

Intended to be used to create a table to be exported to .csv/.xlsx

**Usage**

```
export_principal_los_data(
  results,
  pod_lookup = get_principal_pods(),
  sites = NULL
)
```

**Arguments**

results	A named list containing NHP results tables
pod_lookup	A tibble, or a function that returns a tibble, containing columns named activity_type_label, pod and pod_label. This provides friendly labels for POD variables in the data. pod is the key column used for joining to data tables.
sites	Either NULL (the default) or a vector of site codes to filter to. NULL means don't filter; include all sites present in the data

**Value**

A tibble

---

 export\_principal\_pod\_data

*Prepare a site-level summary of main projection results*

---

### Description

Intended to be used to create a table to be exported to .csv/.xlsx

### Usage

```
export_principal_pod_data(
  results,
  pod_lookup = get_principal_pods(),
  sites = NULL
)
```

### Arguments

results	A named list containing NHP results tables
pod_lookup	A tibble, or a function that returns a tibble, containing columns named activity_type_label, pod and pod_label. This provides friendly labels for POD variables in the data. pod is the key column used for joining to data tables.
sites	Either NULL (the default) or a vector of site codes to filter to. NULL means don't filter; include all sites present in the data

### Value

A tibble

---

 get\_detailed\_pods

*Prepare a lookup table with activity type labels and PoD labels for each PoD*

---

### Description

This function condenses all A&E activity to a single category - compare get\_detailed\_pods() which *keeps* all A&E categories

### Usage

```
get_detailed_pods(use_local = FALSE)
get_principal_pods(use_local = FALSE)
```

**Arguments**

use\_local      logical. Whether to use a local file (internal to the reskit package) or attempt to pull the lookup file from GitHub. Default is FALSE, meaning it will use the GitHub route. If you want to always use a local file (for example, for fully offline working), you can set the `reskit.local.lookups` option to TRUE using `options(reskit.local.lookups = TRUE)` or `withr::with_options()`

**Value**

A tibble

A tibble

---

`get_results_dir_path`    *Return a path to a specific results directory*

---

**Description**

Provides some logic and checks to assist the user in locating a valid directory from which to read in NHP results data

**Usage**

```
get_results_dir_path(
  container,
  path,
  version,
  scheme,
  scenario = NULL,
  dtm_stamp = NULL
)
```

**Arguments**

container      An Azure container.

path            string. The path to the directory within the container, where the desired results data is stored

version        string. The NHP model version in the format "v3.6", or "dev"

scheme         string. The code/name of the NHP scheme. May be "national" etc

scenario        string. If NULL, the default, and only a single scenario is available within the particular combination of `version` and `scheme`, this single path will be followed. However if multiple scenarios are available, an error will be thrown. The user may avert this by simply supplying an existent scenario name

dttm\_stamp string. If NULL (the default) and only a single model run directory is available within the particular combination of version scheme and scenario, this path will be returned. If NULL, and multiple model runs are found, an error will be thrown. Alternatively, the date-time stamp of the desired model run can be supplied. This is expected to be in the format 'YYYYMMDD\_HHMMSS', and must of course match a subdirectory of the selected 'scenario' directory, else an error will be thrown. A third alternative is to supply the string "max", which will return the path to the most recent model run, where multiple runs are found

**Value**

A path to an Azure blob storage directory, as a string

---

get\_tpma\_label\_lookup *Get a lookup of TPMA labels*

---

**Description**

Currently reads from a fixed location within the package.

**Usage**

```
get_tpma_label_lookup()
```

**Value**

A 2-column tibble, with columns strategy and tpma\_label

---

get\_tretspef\_lookup *Get a lookup of tretspef codes to descriptions*

---

**Description**

Currently reads from a fixed location within the package.

**Usage**

```
get_tretspef_lookup()
```

**Value**

A 2-column tibble with columns code and tretspef

---

get_trust_sites	<i>From any results table, get list of all site codes for this scheme</i>
-----------------	---

---

### Description

The "default" table is recommended

### Usage

```
get_trust_sites(res_tbl, col = "sitetret")
```

### Arguments

res_tbl	A tibble from the results list
col	string The name of the column containing site codes. sitetret by default

### Value

A character vector

---

make_beeswarm_distrib_plot	<i>Generate a "beeswarm" chart showing the distribution of model run values</i>
----------------------------	---

---

### Description

Generate a "beeswarm" chart showing the distribution of model run values

### Usage

```
make_beeswarm_distrib_plot(distrib_plot_data, show_zero = FALSE)
```

### Arguments

distrib_plot_data	data frame. As produced by <a href="#">compile_distribution_plot_data</a>
show_zero	Boolean. Whether to extend the chart to show a zero value, for context.

---

make\_cumulative\_distrib\_plot

*Generate a cumulative distribution function (ecdf) chart of model run values*

---

### Description

Generate a cumulative distribution function (ecdf) chart of model run values

### Usage

```
make_cumulative_distrib_plot(distrib_plot_data, show_zero = FALSE)
```

### Arguments

distrib\_plot\_data

data frame. As produced by [compile\\_distribution\\_plot\\_data](#)

show\_zero

Boolean. Whether to extend the chart to show a zero value, for context.

---

make\_detailed\_activity\_table

*Create a gt table with data from compile\_detailed\_activity\_data()*

---

### Description

Create a gt table with data from compile\_detailed\_activity\_data()

### Usage

```
make_detailed_activity_table(detailed_activity_data, final_year)
```

### Arguments

detailed\_activity\_data

A suitable tibble

final\_year

string. The horizon year eg "2042/43"

### Value

A gt table

---

```
make_distribution_summary_table
      Create a gt table with data from compile_distribution_summary_data()
```

---

### **Description**

Create a gt table with data from `compile_distribution_summary_data()`

### **Usage**

```
make_distribution_summary_table(distr_summary_data)
```

### **Arguments**

`distr_summary_data`  
A suitable tibble

### **Value**

A gt table

---

```
make_individual_cf_plot
      Generate bar charts by change factor at individual TPMA level
```

---

### **Description**

Generate bar charts by change factor at individual TPMA level

### **Usage**

```
make_individual_cf_plot(indiv_change_factor_data)
```

### **Arguments**

`indiv_change_factor_data`  
data frame. As produced by [compile\\_indiv\\_change\\_factor\\_data](#)

---

make\_overall\_cf\_plot *Generate overall change factor ("waterfall") chart*

---

**Description**

Generate overall change factor ("waterfall") chart

**Usage**

```
make_overall_cf_plot(principal_change_factor_data)
```

**Arguments**

principal\_change\_factor\_data  
data frame. As produced by [compile\\_change\\_factor\\_data](#)

---

make\_principal\_los\_table  
*Create a gt table with data from [compile\\_principal\\_los\\_data](#)*

---

**Description**

Create a gt table with data from [compile\\_principal\\_los\\_data](#)

**Usage**

```
make_principal_los_table(principal_los_data)
```

**Arguments**

principal\_los\_data  
A suitable tibble

**Value**

A gt table

---

 make\_principal\_pod\_table

*Create a gt table with data from [compile\\_principal\\_pod\\_data](#)*


---

**Description**

Create a gt table with data from [compile\\_principal\\_pod\\_data](#)

**Usage**

```
make_principal_pod_table(principal_pod_data)
```

**Arguments**

principal\_pod\_data  
A suitable tibble

**Value**

A gt table

---

read\_results\_parquet\_files

*Read a selection of (or all) parquet files in an Azure directory*


---

**Description**

Read a selection of (or all) parquet files in an Azure directory

**Usage**

```
read_results_parquet_files(container, path, tables = NULL)
```

**Arguments**

container      An Azure container.  
 path            string. Path to an Azure directory of results data. Potentially produced by [get\\_results\\_dir\\_path](#)  
 tables          character vector. NULL, the default, results in all available parquet files in the path folder being read in. If you wish only to read in a subset of the files, specify their names here, without the ".parquet" file extension

**Value**

A named list of tibbles

**Examples**

```
## Not run:
data <- azkit::get_container("data_container") |>
  read_results_parquet_files("data/dev/national/test", "acuity")

data_list <- azkit::get_container("data_container") |>
  get_results_dir_path("files", version = "v4.0", scheme = "national") |>
  read_results_parquet_files()

## End(Not run)
```

---

shim_results	<i>Wrangle tables from old-style results to match format of new-style results</i>
--------------	---

---

**Description**

Wrangle tables from old-style results to match format of new-style results

**Usage**

```
shim_results(results)
```

**Arguments**

results      List of old style NHP results tables

**Value**

List of NHP results tables in the "new" format

# Index

add\_change\_cols, 2

compile\_change\_factor\_data, 3, 18  
compile\_detailed\_activity\_data, 4  
compile\_distribution\_plot\_data, 5, 15,  
16  
compile\_distribution\_summary\_data, 6  
compile\_indiv\_change\_factor\_data, 6, 17  
compile\_principal\_los\_data, 7, 18  
compile\_principal\_pod\_data, 8, 19

export\_detailed\_activity\_data, 9  
export\_distribution\_summary\_data, 10  
export\_principal\_cf\_data, 10  
export\_principal\_los\_data, 11  
export\_principal\_pod\_data, 12

get\_detailed\_pods, 12  
get\_principal\_pods (get\_detailed\_pods),  
12  
get\_results\_dir\_path, 13, 19  
get\_tpma\_label\_lookup, 14  
get\_tretspef\_lookup, 14  
get\_trust\_sites, 15

make\_beeswarm\_distrib\_plot, 15  
make\_cumulative\_distrib\_plot, 16  
make\_detailed\_activity\_table, 16  
make\_distribution\_summary\_table, 17  
make\_individual\_cf\_plot, 17  
make\_overall\_cf\_plot, 18  
make\_principal\_los\_table, 18  
make\_principal\_pod\_table, 19

read\_results\_parquet\_files, 19

shim\_results, 20