

# Package ‘akiFlagger’

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**Title** Flags Acute Kidney Injury (AKI)

**Version** 0.1.2

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**Description** Flagger to detect acute kidney injury (AKI) in a patient dataset.

**License** MIT + file LICENSE

**Encoding** UTF-8

**LazyData** true

**RoxygenNote** 7.1.1

**Imports** dplyr, data.table, zoo

**Suggests** testthat

**Depends** R (>= 2.10)

**URL** <https://github.com/isaranwrap/akiFlagger>

**BugReports** <https://github.com/isaranwrap/akiFlagger/issues>

**NeedsCompilation** no

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**Repository** CRAN

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addBackCalcAKI      *Back Calculation AKI*

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### Description

Back Calculation AKI

### Usage

```
addBackCalcAKI(
  dataframe,
  lookforward = as.difftime(7, units = "days"),
  add_baseline_creat = FALSE
)
```

### Arguments

dataframe      patient dataset

lookforward    amount of time to look forward after admission before the back-calculation method no longer applies

add\_baseline\_creat    boolean to add the intermediate column generated during calculation

### Value

patient dataset with the back-calculation AKI column added in

### Examples

```
library(dplyr)
toy <- toy %>% rename('patient_id' = 'mrn', 'encounter_id' = 'enc', 'inpatient' = 'inpatient',
  'creatinine' = 'creat', 'admission' = 'admission', 'time' = 'time')
toy <- transform(toy, time = as.POSIXct(time, format='%Y-%m-%d %H:%M:%S'),
  admission = as.POSIXct(admission, format='%Y-%m-%d %H:%M:%S'))
addBackCalcAKI(toy)
```

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addRollingWindowAKI      *Add in rolling-window AKI*

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### Description

Add in the AKI column in a patient dataframe according to the rolling-window KDIGO criterion

**Usage**

```
addRollingWindowAKI(
  dataframe,
  window1 = as.difftime(2, units = "days"),
  window2 = as.difftime(7, units = "days"),
  add_min_creat = FALSE
)
```

**Arguments**

dataframe	patient dataset
window1	rolling window length of the shorter time window; defaults to 48 hours
window2	rolling window length of the longer time window; defaults to 162 hours
add_min_creat	boolean to add the intermediate columns generated during calculation

**Value**

patient dataset with the rolling-window AKI column added in

#Imports

**Examples**

```
library(dplyr)
toy <- toy %>% rename('patient_id' = 'mrn', 'encounter_id' = 'enc', 'inpatient' = 'inpatient',
  'creatinine' = 'creat', 'admission' = 'admission', 'time' = 'time')
toy <- transform(toy, time = as.POSIXct(time, format='%Y-%m-%d %H:%M:%S'),
  admission = as.POSIXct(admission, format='%Y-%m-%d %H:%M:%S'))
addRollingWindowAKI(toy)
```

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toy

*Toy dataset*

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**Description**

Since real patient data is probably protected health information (PHI), this toy dataset contains all the relevant columns the flagger takes in.

**Usage**

toy

**Format**

A data frame (1078 x 6) consisting of relevant AKI measurements for patients

**V1** int, sometimes an extra index which pops up

**mrn** int, the patient identifier

**enc** int, the encounter identifier

**inpatient** boolean, whether or not the creatinine measurement taken was an inpatient measurement

**admission** POSIXct, the time the patient was admitted

**time** POSIXct, the time at which the creatinine measurement was taken

**creat** float, the creatinine value of the measurement taken @source <http://akiflagger.readthedocs.io/>

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