**2025 NTHU CS5553 Data Science for Digital Health Homework 1**

**(Deadline: Apr. 13, 23:59)**

#HW1-1 Predicting Mortality of Pulmonary Embolism Patients in the ICU (50%)

1. Flowchart1

Adults (age ≥ 21) in ICU

with pulmonary embolism

(N = ????) (30%)

Alive in hospital

(N = ????) (10%)

Die in hospital

(N = ???) (10%)

1. Describe your data extraction steps and your findings.

(Remember to show your code either in the report or in your attachment. Points will be deducted if there is no code or explanation.)

#HW1-2 Predicting Successful Discontinuation of Continuous Renal Replacement Therapy (50%)

1. Flowchart2

Adults (age ≥ 21) in ICU requiring hemodialysis

(N = ????) (20%)

In hospital death within 84 hours after latest hemodialysis order

Underlying “ESRD”

Included patients

(N = ???) (20%)

Discontinuation group

(N = ???) (5%)

Re-initiation group

(N = ??) (5%)

Exist a successful

discontinuation record

1. Describe your data extraction steps and your findings.

(Remember to show your code either in the report or in your attachment. Points will be deducted if there is no code or explanation.)