



Missing/Inadequate Information for Physician  
(n=100, <1%)

Non-physician Agreed Records  
(n=4878, 41%)

HEAL-SL  
Verbal Autopsy  
(n=11,920, 100%)

Physician Assigned Records  
(n=11,820, 99%)

ICD-10 Physician Agreed Records  
(n=6942, 59%)

ICD-10 Not Captured by CGHR-10  
(n=3, <1%)

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CGHR-10 Physician Agreed Records  
(n=6939, >99%)

Adult (12 to 69 Years)  
Physician Agreed Records  
(n=3826, 55%)

Child (28 days to 11 Years)  
Physician Agreed Records  
(n=2636, 38%)

Neonatal (0 to 28 Days)  
Physician Agreed Records  
(n=477, 7%)

2

Input Data and Preprocessing  
(n=6939, 100%)

Text Prompts from  
Open Narratives  
(n=6939, 100%)

WHO VA 2016 v1.5.1  
526 Variables  
(n=6939, 100%)

OpenVA (pyCrossVA)  
353 Variables  
(n=6939, 100%)

3

Models and Parameters



GPT-3.5  
OpenAI API using Python  
(gpt-3.5-turbo, top\_p=0.3)



GPT-4  
OpenAI API using Python  
(gpt-4-0613, top\_p=0.3)



InterVA-5  
openVA R Package  
(Malaria=h, HIV=h)



InSilicoVA  
openVA R Package  
(Nsim=9500)

4

Output Data and Code Conversions  
(n=6939, 100%)

ChatGPT-3.5  
ICD-10  
(n=6929, >99%)

ChatGPT-3.5  
CGHR-10  
(n=6892, 99%)

ChatGPT-4  
ICD-10  
(n=6909, >99%)

ChatGPT-4  
CGHR-10  
(n=6856, 99%)

InterVA-5  
WHO VA 2016 v1.5.1  
(n=6805, 98%)

ICD-10 Not Captured  
by CGHR-10  
(n=37, <1%)

InSilicoVA  
WHO VA 2016 v1.5.1  
(n=6729, 97%)

ICD-10 Not Captured  
by CGHR-10  
(n=53, <1%)

InterVA-5  
ICD-10  
(n=6805, 100%)

InterVA-5  
CGHR-10  
(n=6805, 100%)

InSilicoVA  
ICD-10  
(n=6729, 100%)

InSilicoVA  
CGHR-10  
(n=6729, 100%)

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Performance Evaluation  
(n=6939, 100%)

ChatGPT-3.5  
CGHR-10  
(n=6892, 99%)

ChatGPT-4  
CGHR-10  
(n=6856, 99%)

Cause Specific  
Mortality Accuracy  
(CSMF Accuracy)

Overall  
(All Records)

By Age Group  
(Adult, Child, Neonatal)

InterVA-5  
CGHR-10  
(n=6805, 98%)

InSilicoVA  
CGHR-10  
(n=6729, 97%)

Partial Chance  
Corrected Concordance  
(PCCC)

By Cause of Death (COD)  
(19 Adult, 10 Child, 7 Neonatal)

By 5-Year Age Ranges Per Age Group  
(0 Days to 69 Years)