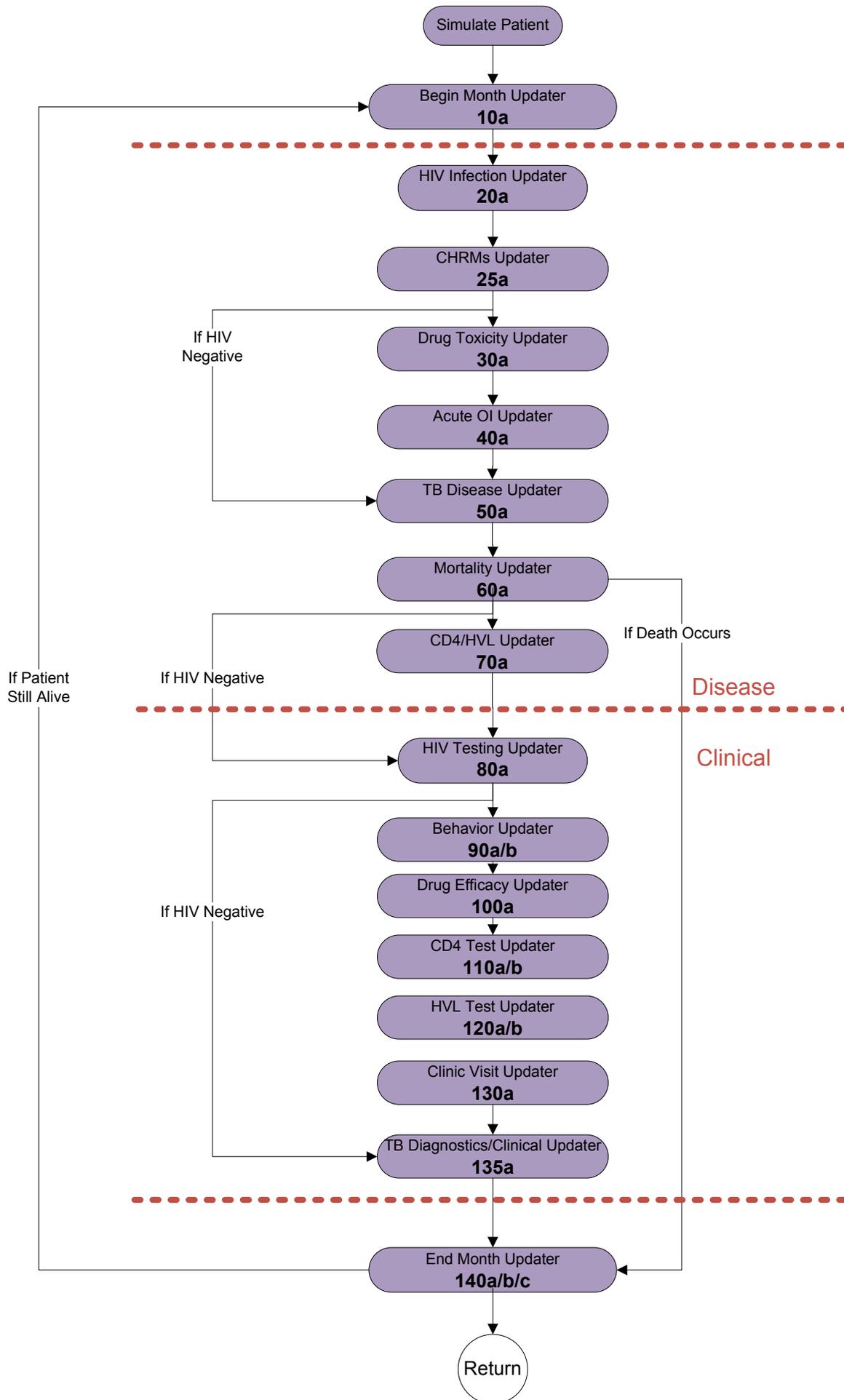
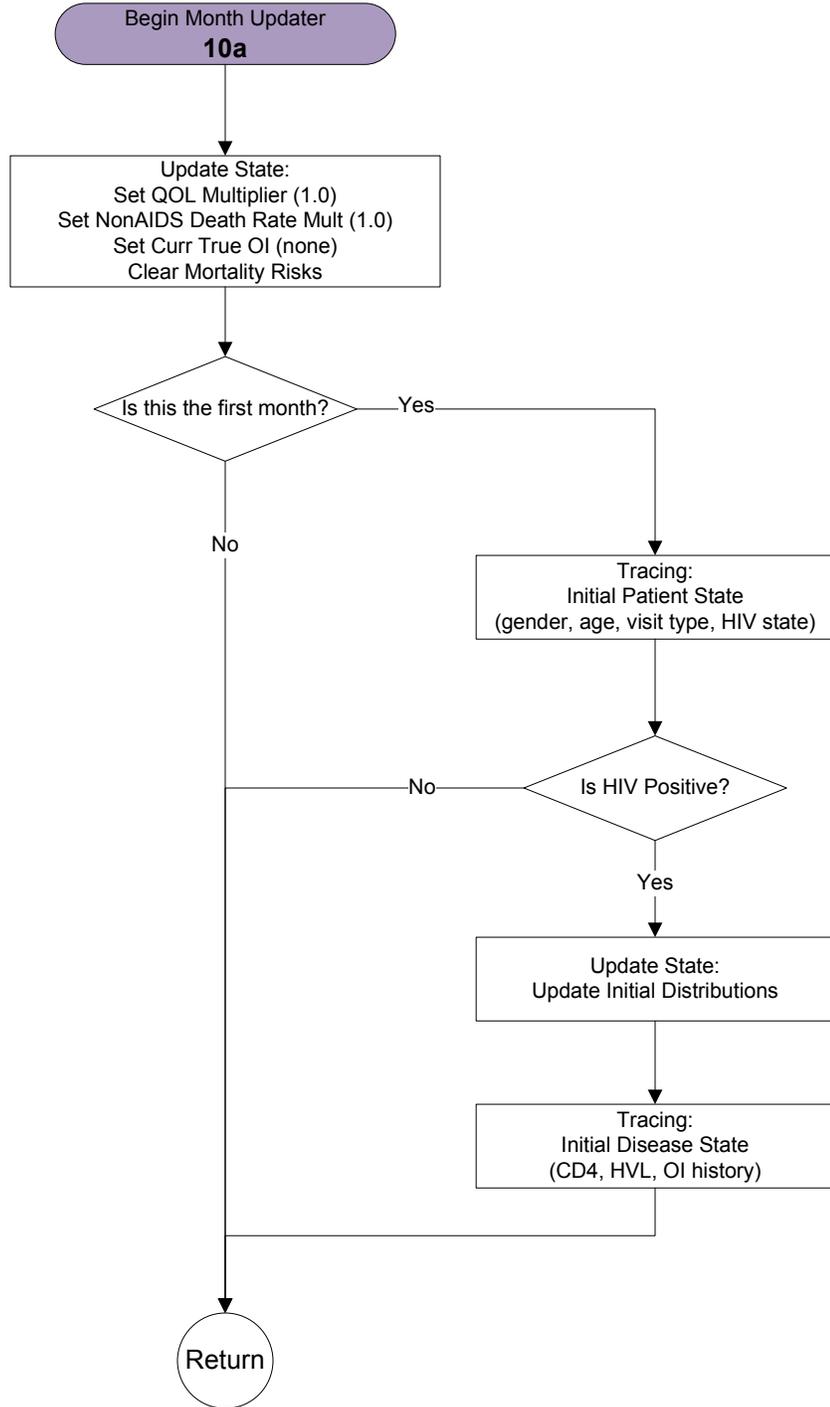


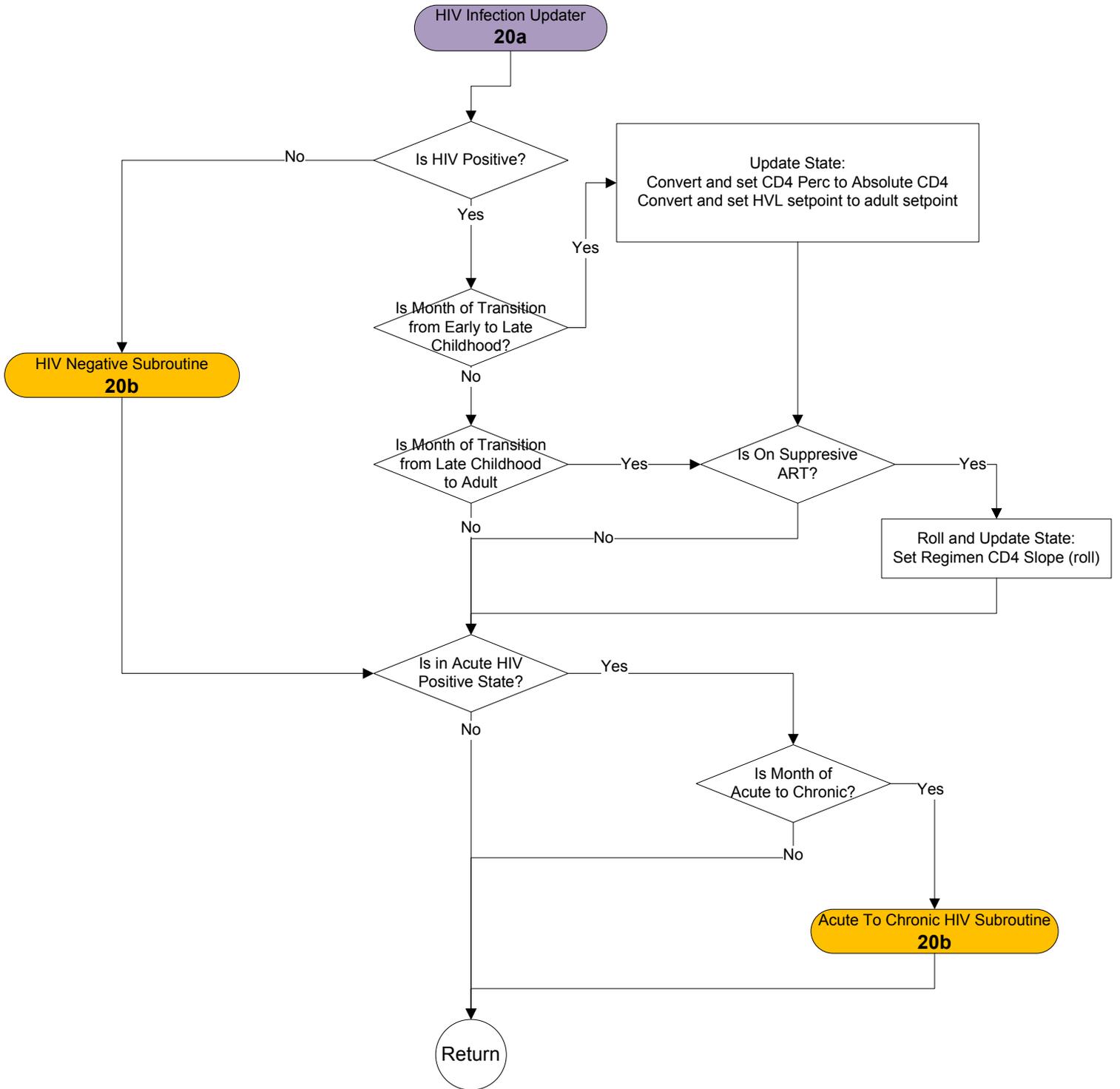
Ordering of Patient Simulation in CEPAC



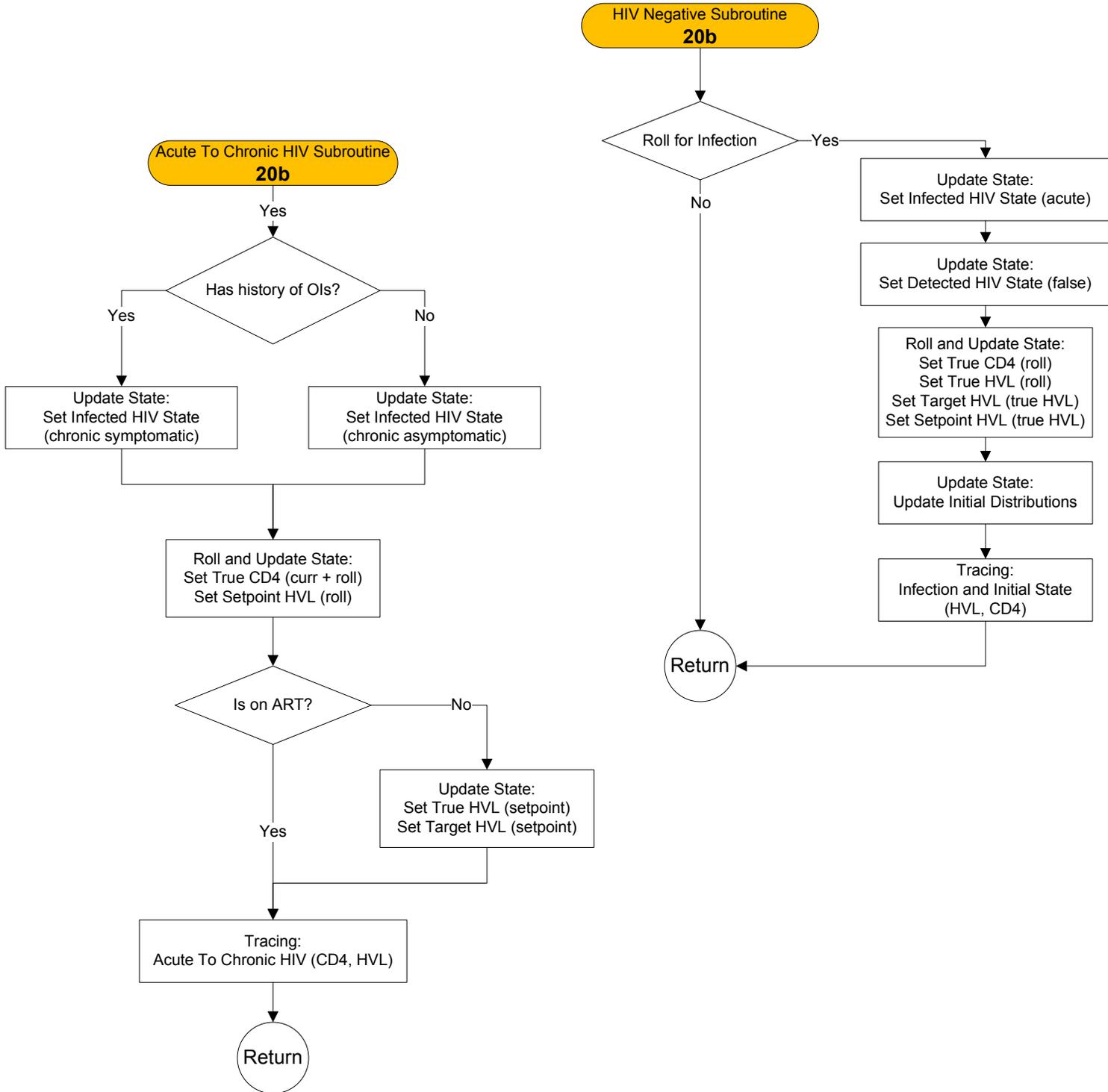
Begin Month Updater – 10a



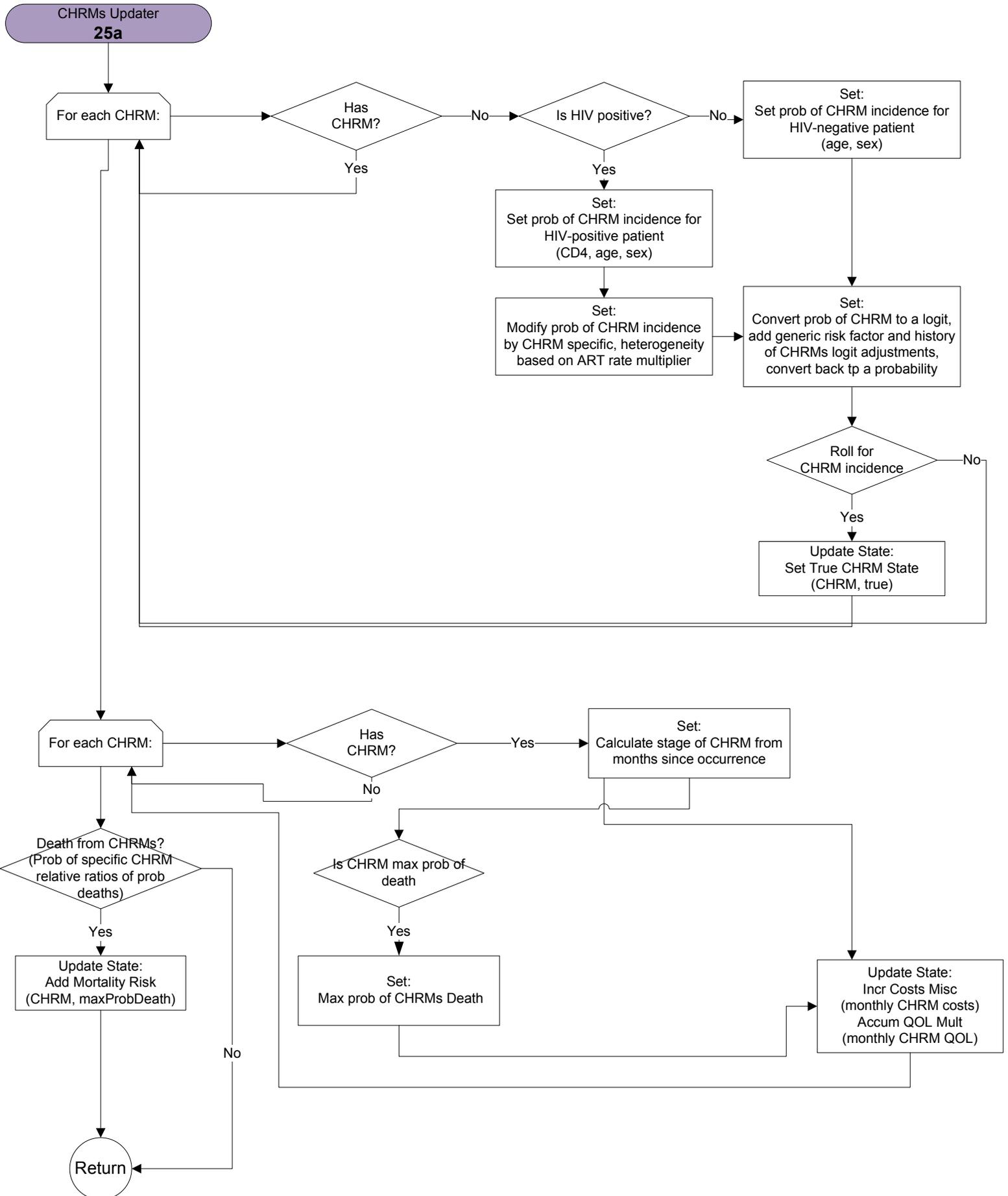
HIV Infection Updater – 20a



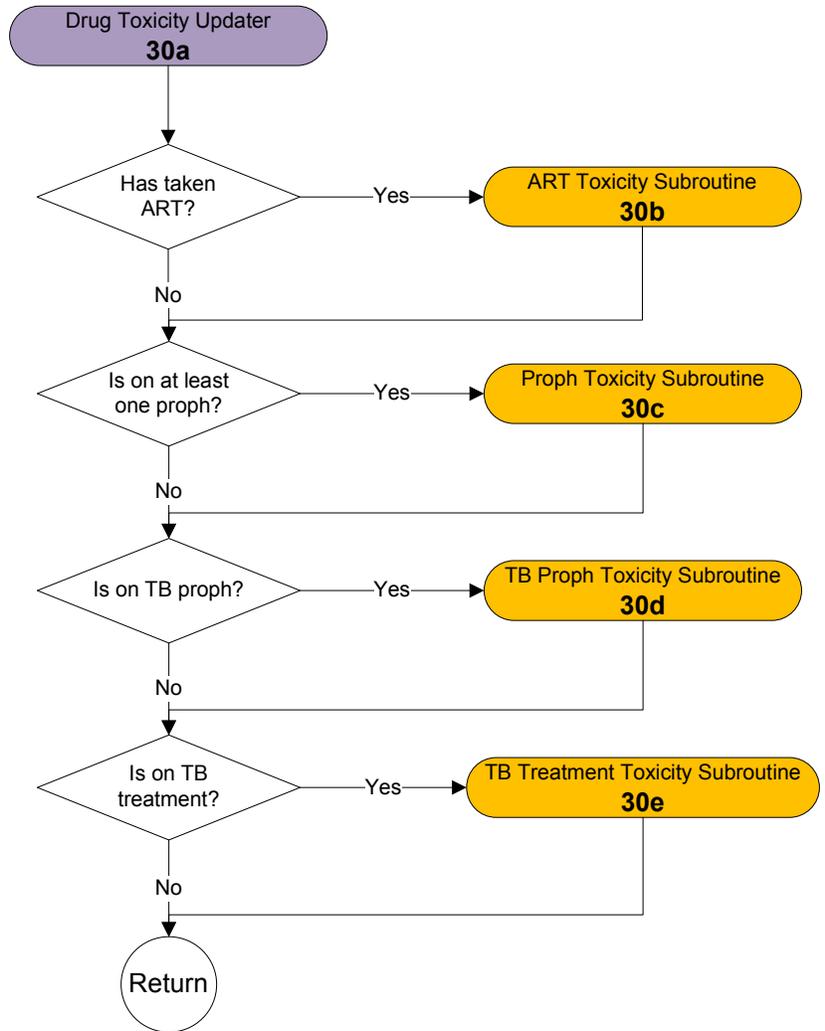
HIV Negative Subroutine and Acute to Chronic HIV Subroutine – 20b



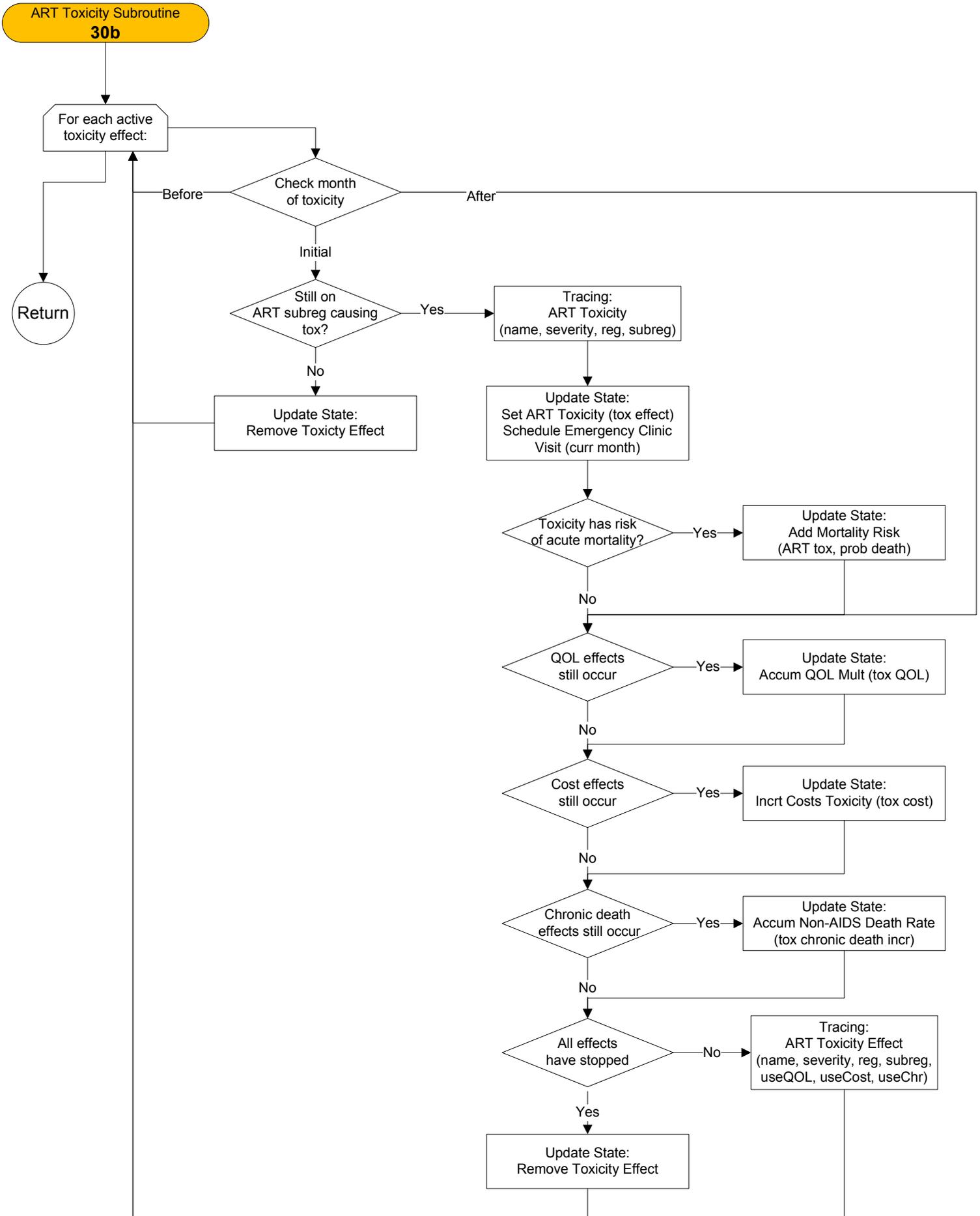
CHRM's Updater – 25a



Drug Toxicity Updater – 30a

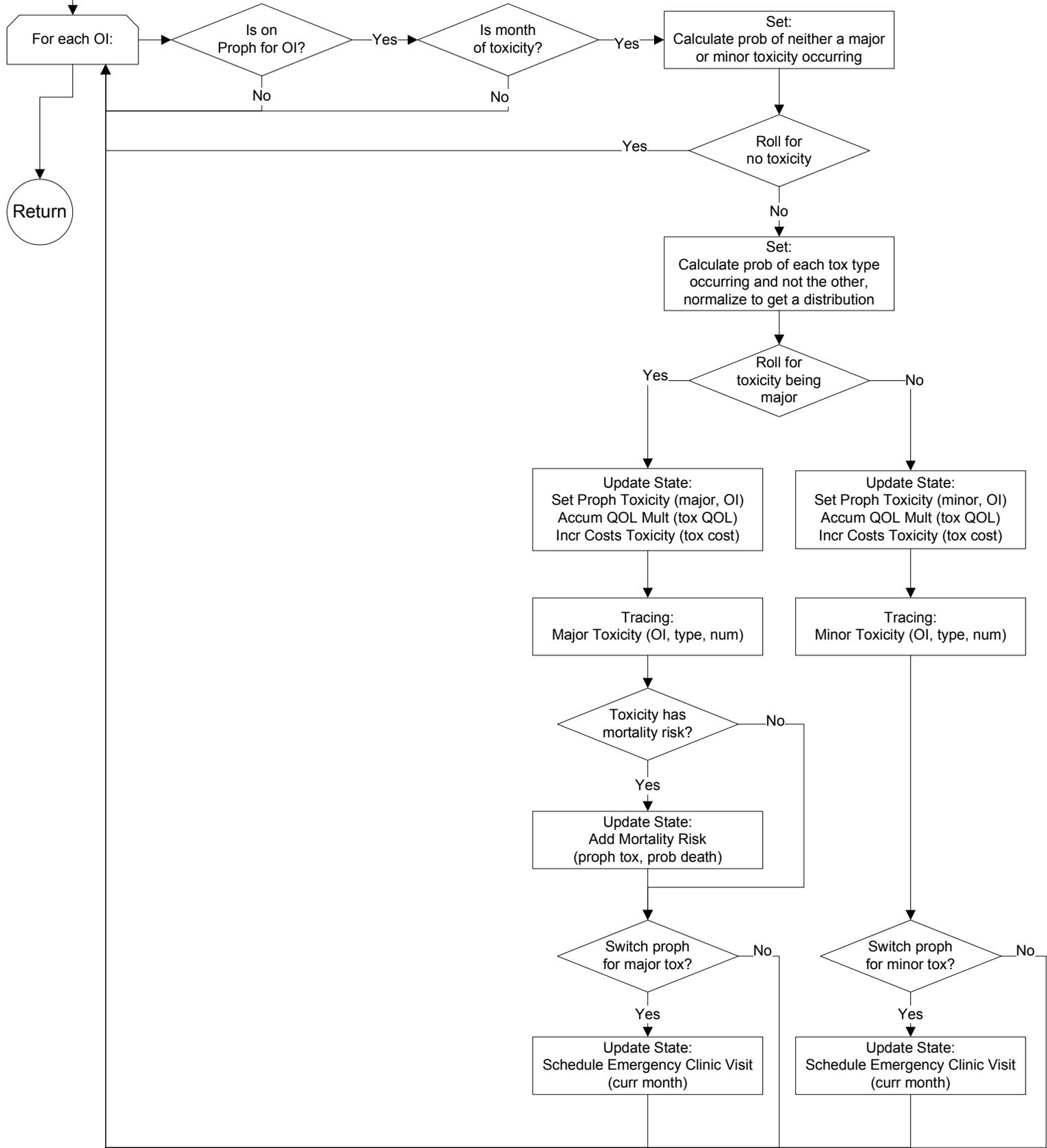


ART Toxicity Subroutine – 30b



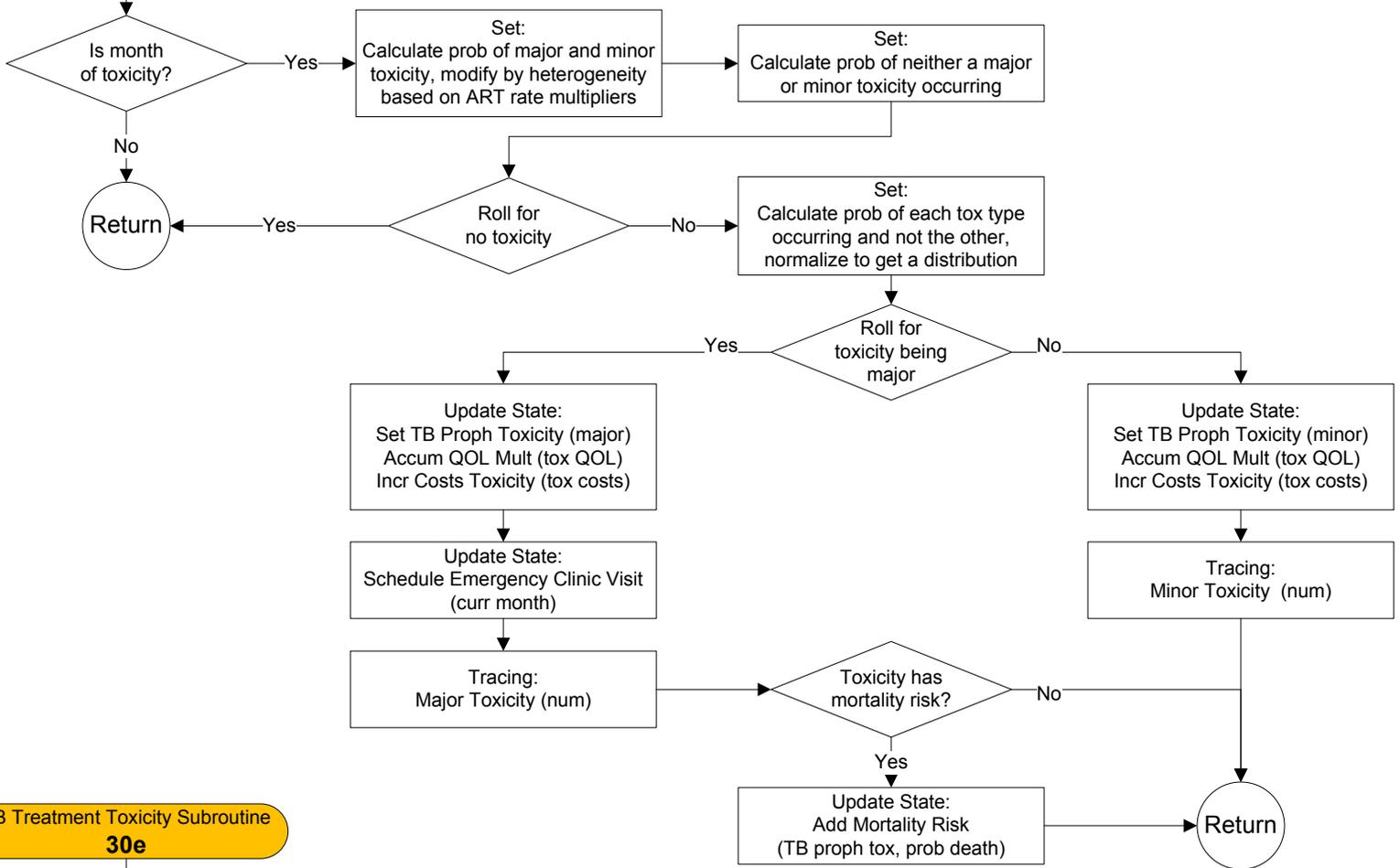
Proph Toxicity Subroutine – 30c

Proph Toxicity Subroutine
30c

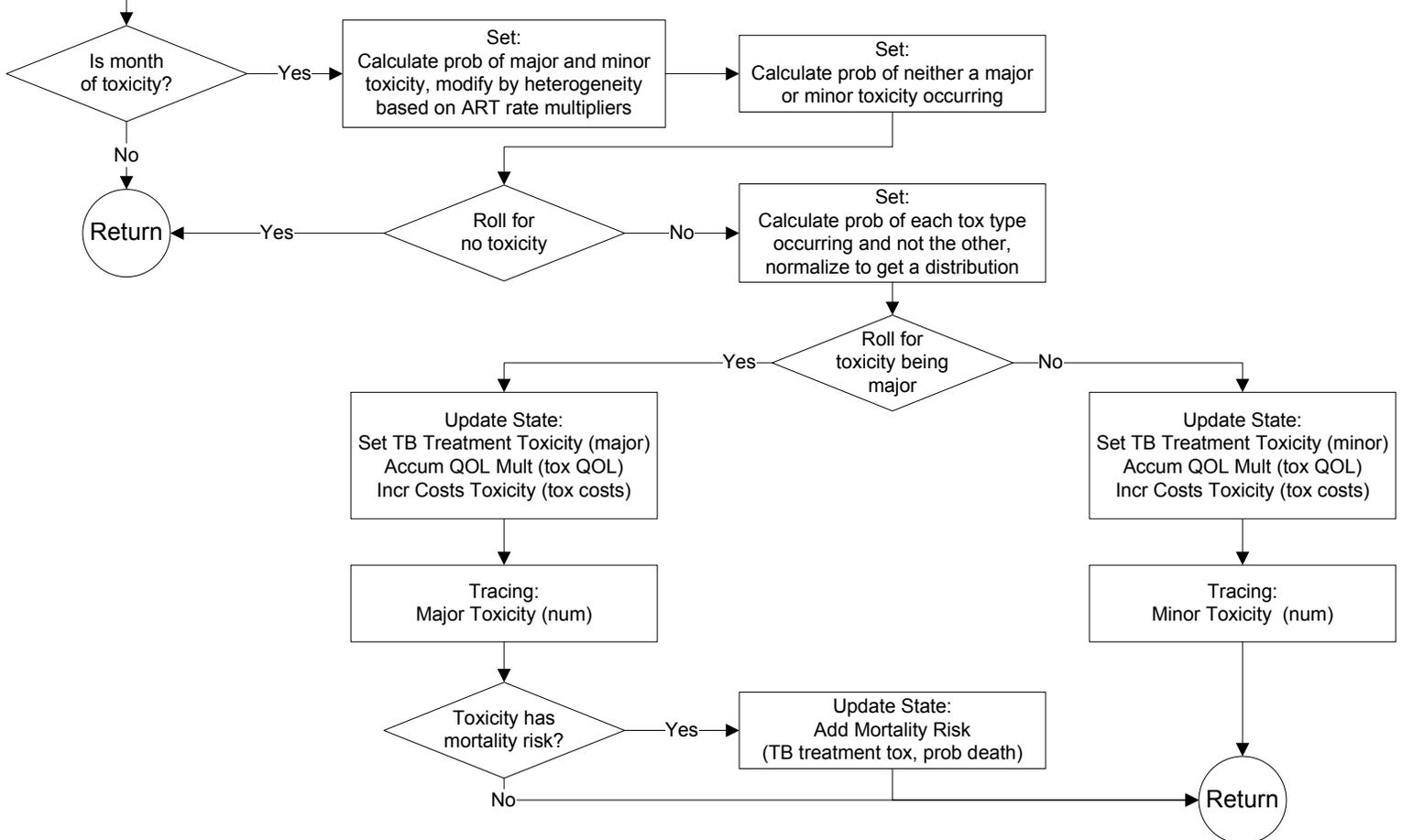


TB Proph Toxicity Subroutine and TB Treatment Toxicity Subroutine – 30d/30e

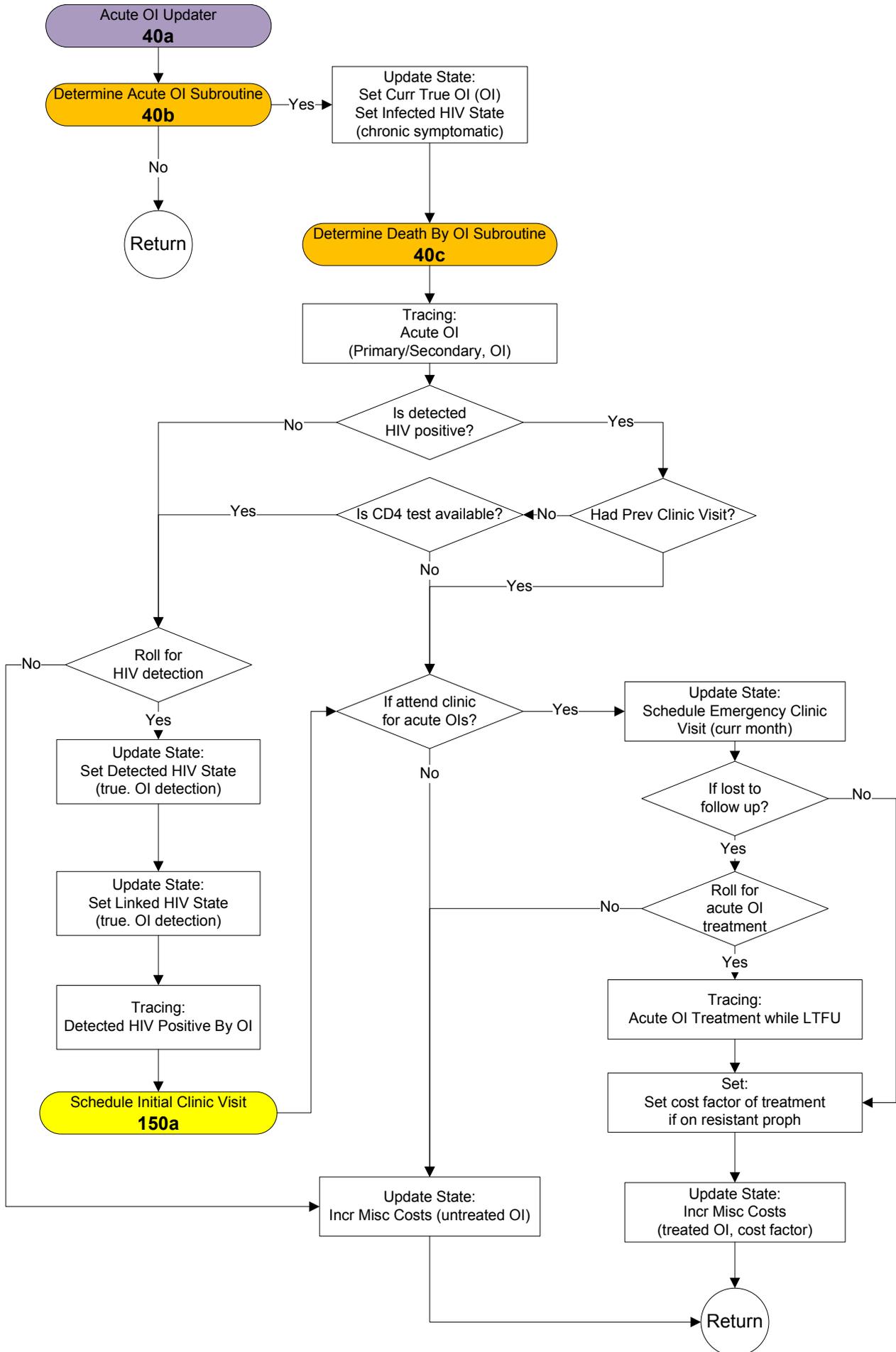
TB Proph Toxicity Subroutine 30d



TB Treatment Toxicity Subroutine 30e

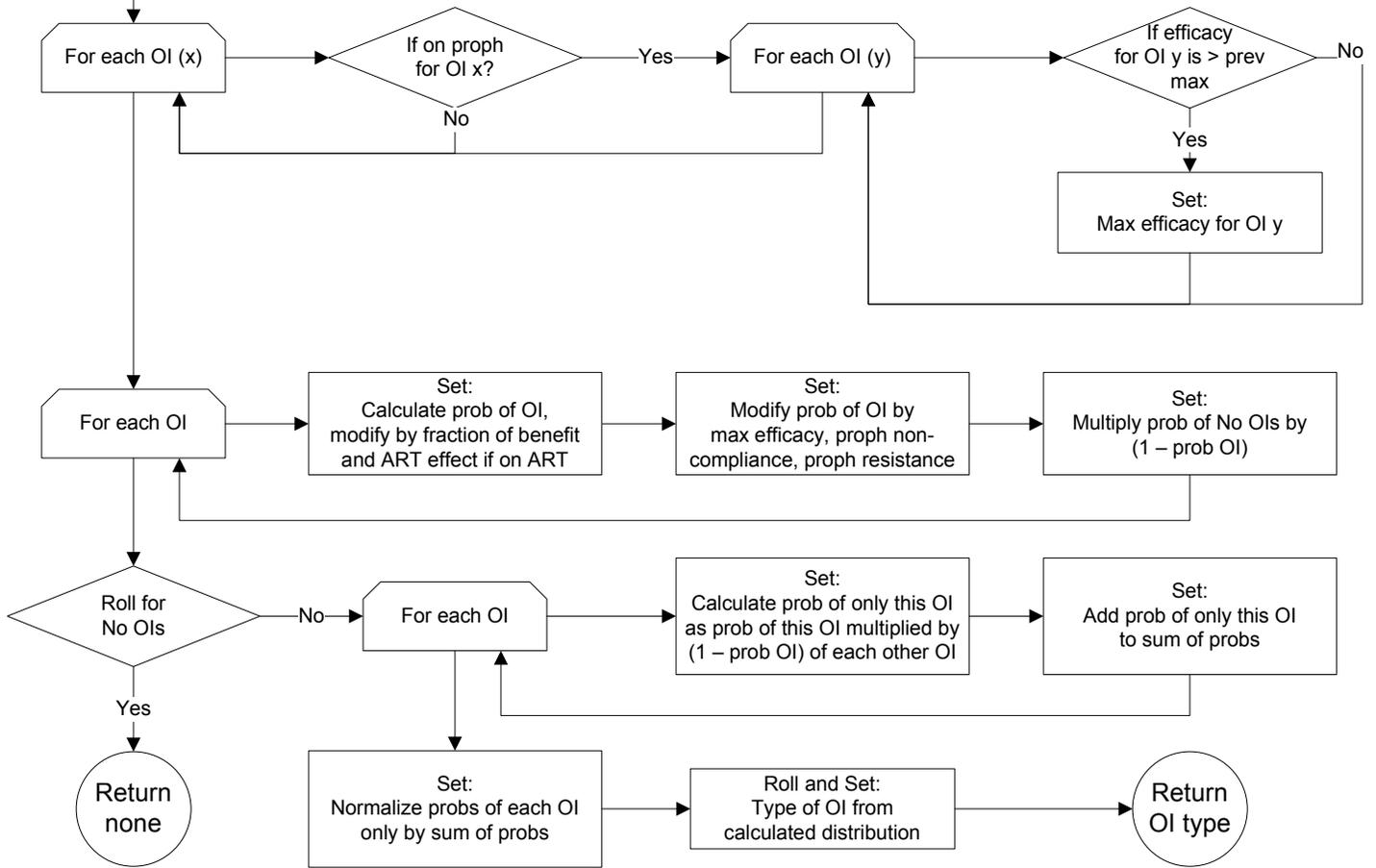


Acute OI Updater – 40a

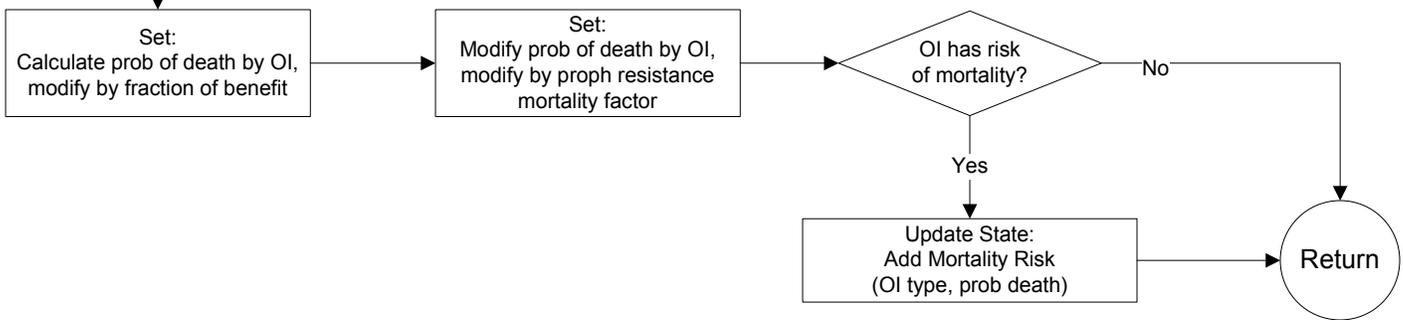


Determine Acute OI Subroutine and Determine Death By OI Subroutine – 40b/c

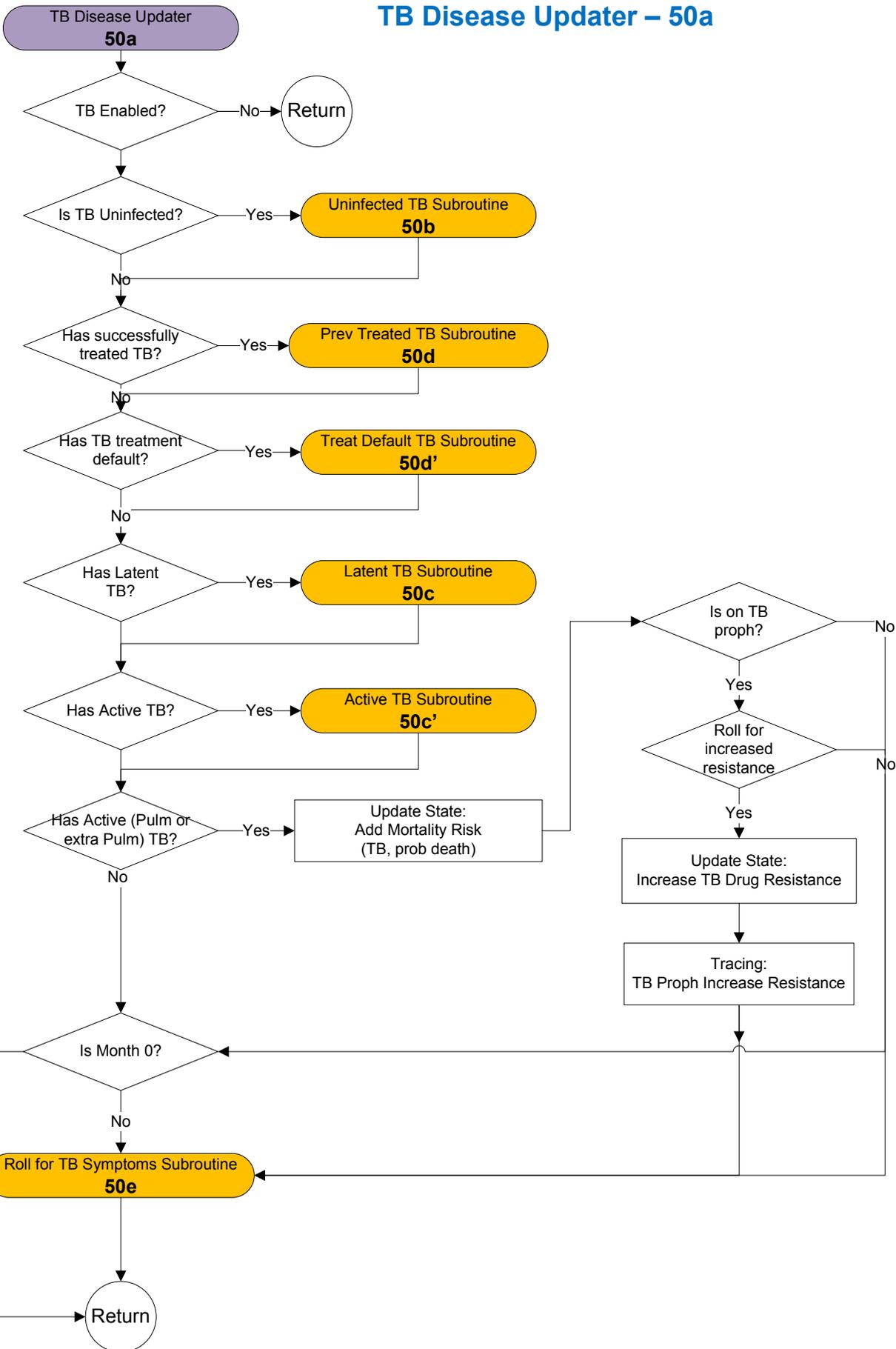
Determine Acute OI Subroutine 40b



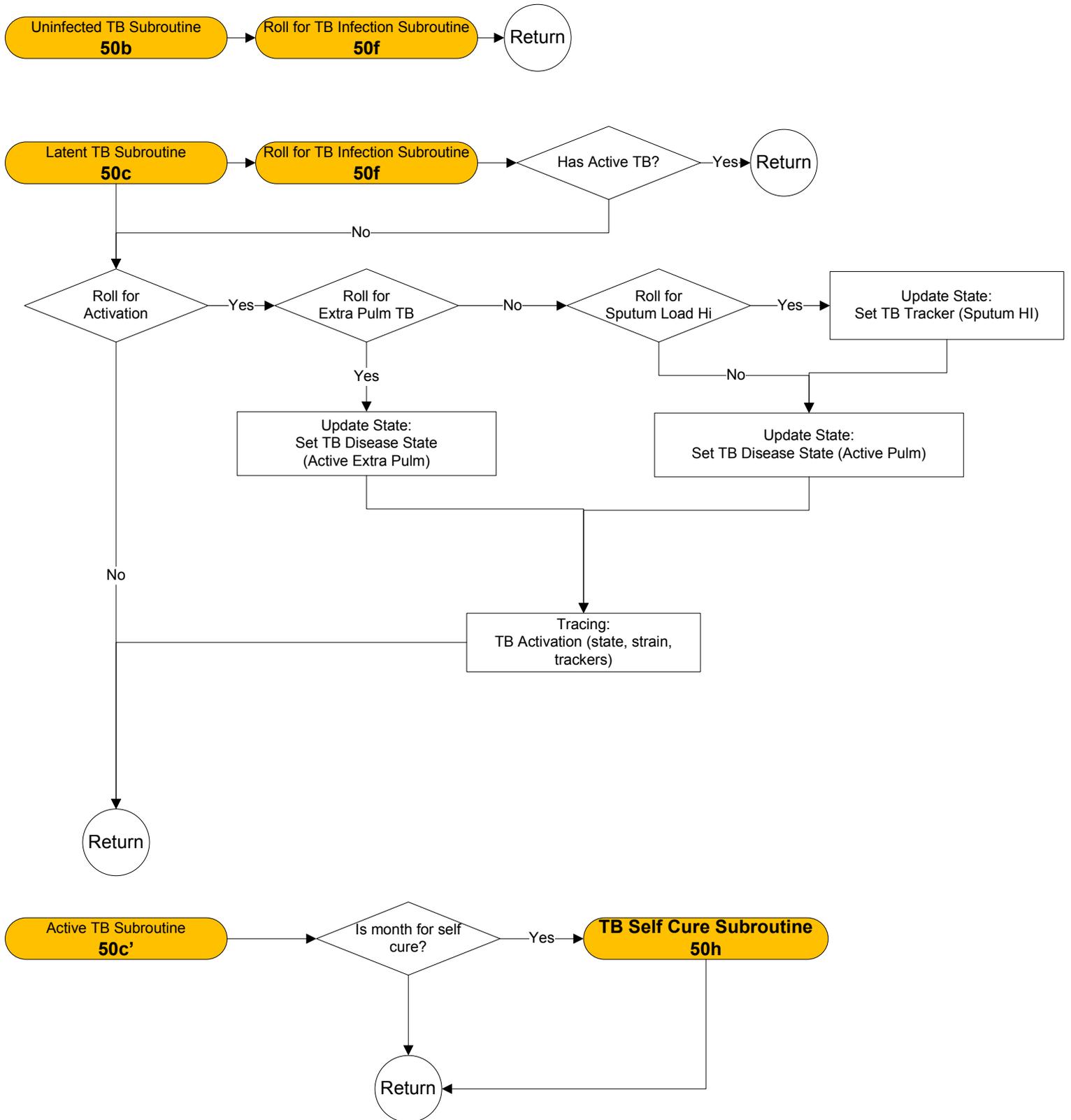
Determine Death By OI Subroutine 40c



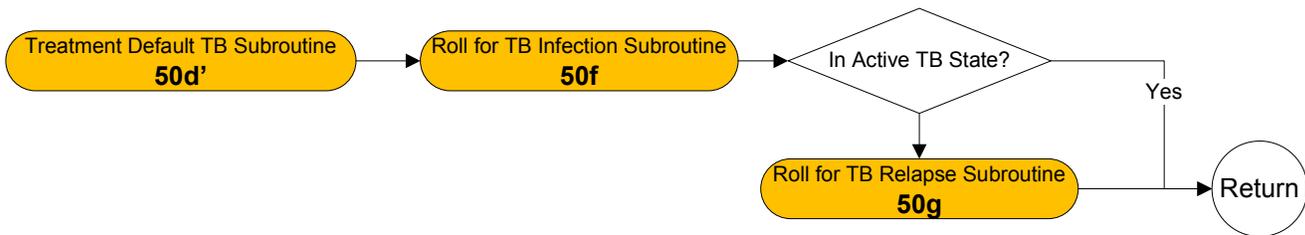
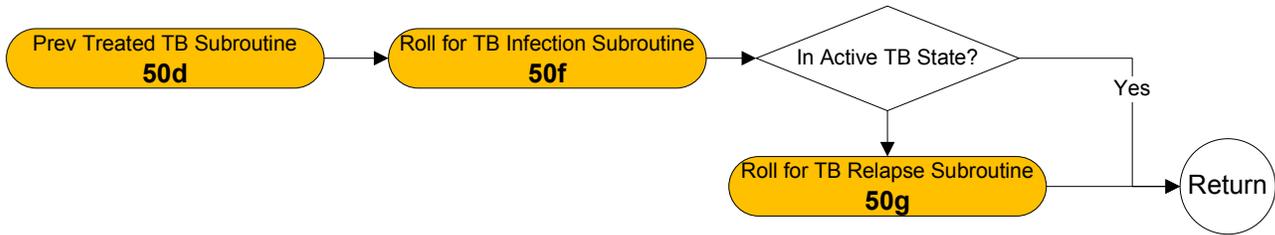
TB Disease Updater – 50a



Uninfected TB Subroutine and Latent TB Subroutine – 50b/c

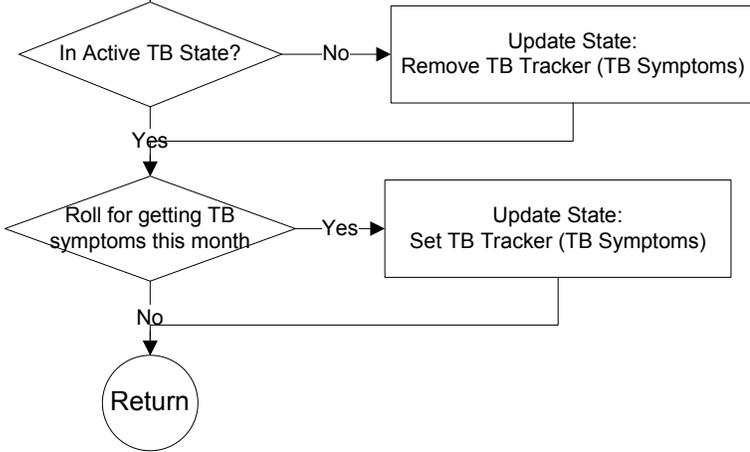


Prev Treated TB Subroutine and Treatment Default TB Subroutine – 50d/50d'

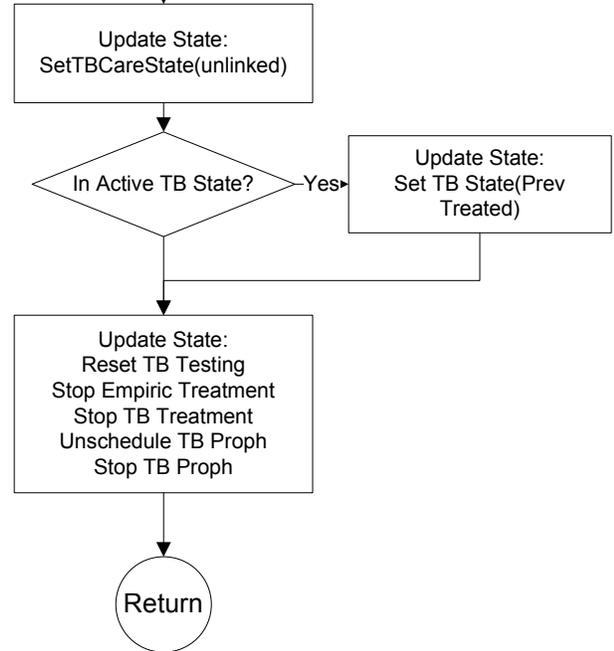


TB Disease Updater – 50e/50f/50g/50h

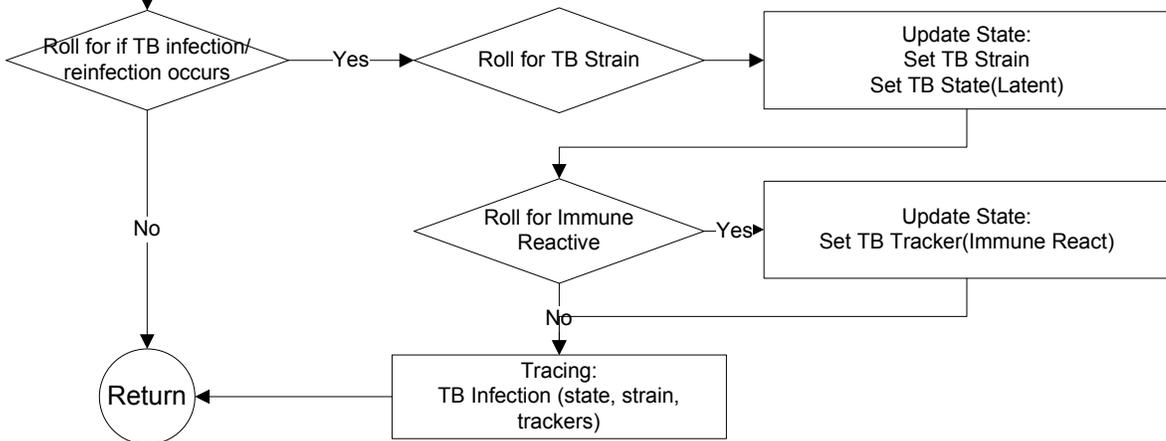
Roll for TB Symptoms Subroutine 50e



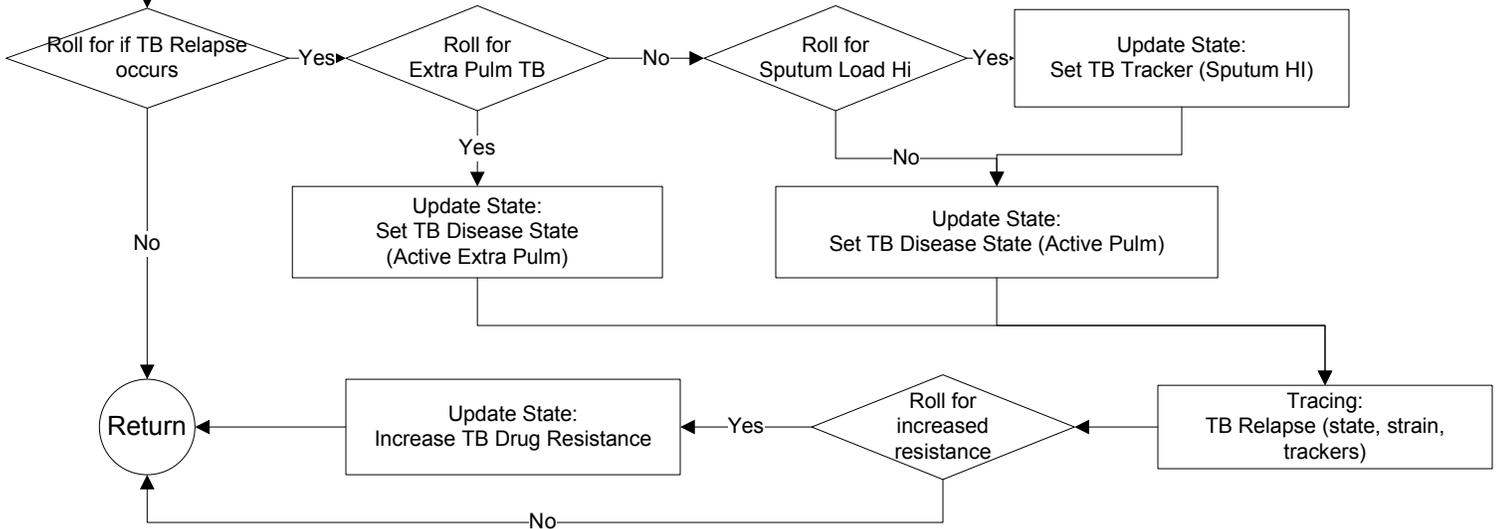
TB Self Cure Subroutine 50h



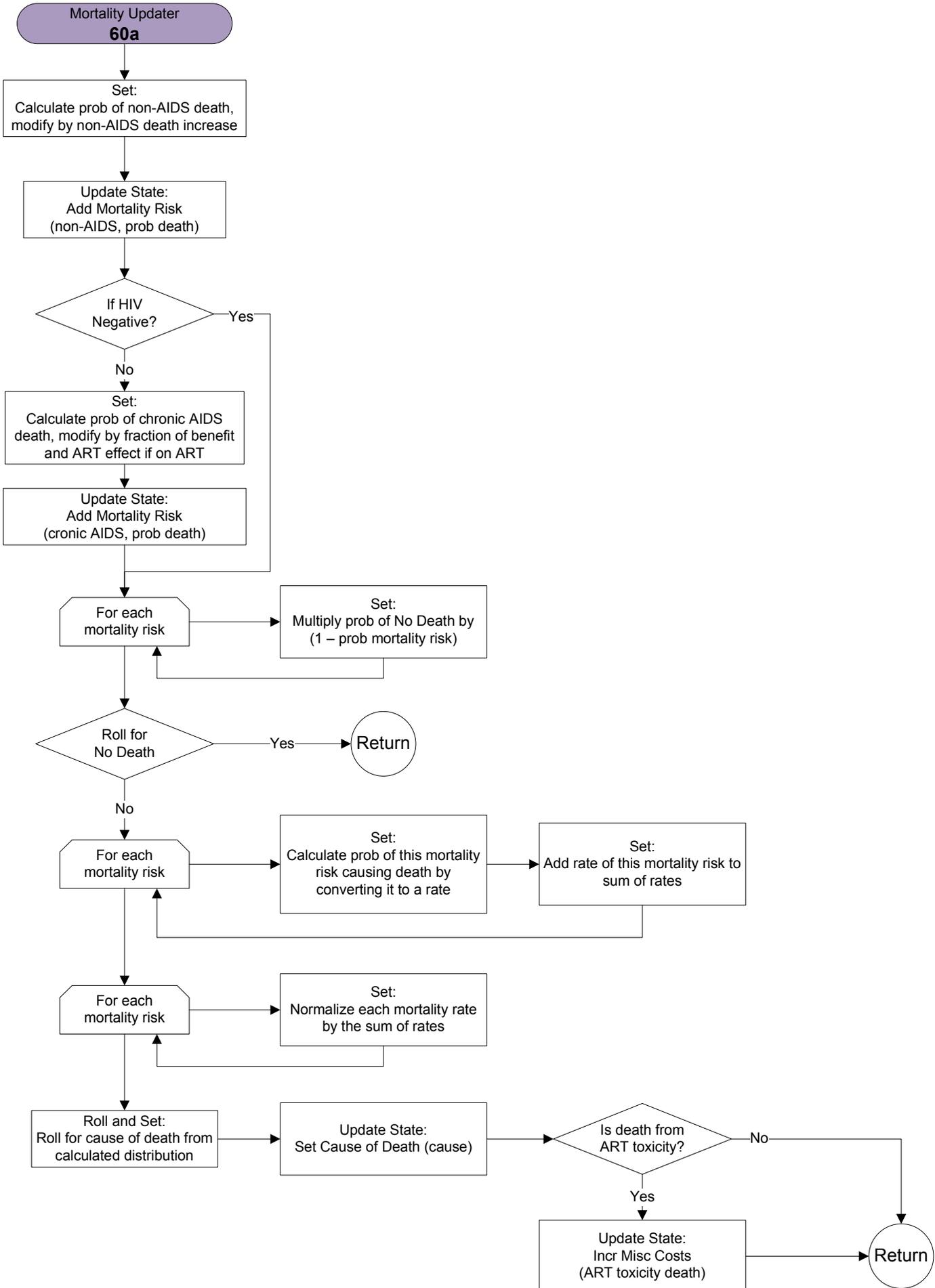
Roll for TB Infection Subroutine 50f



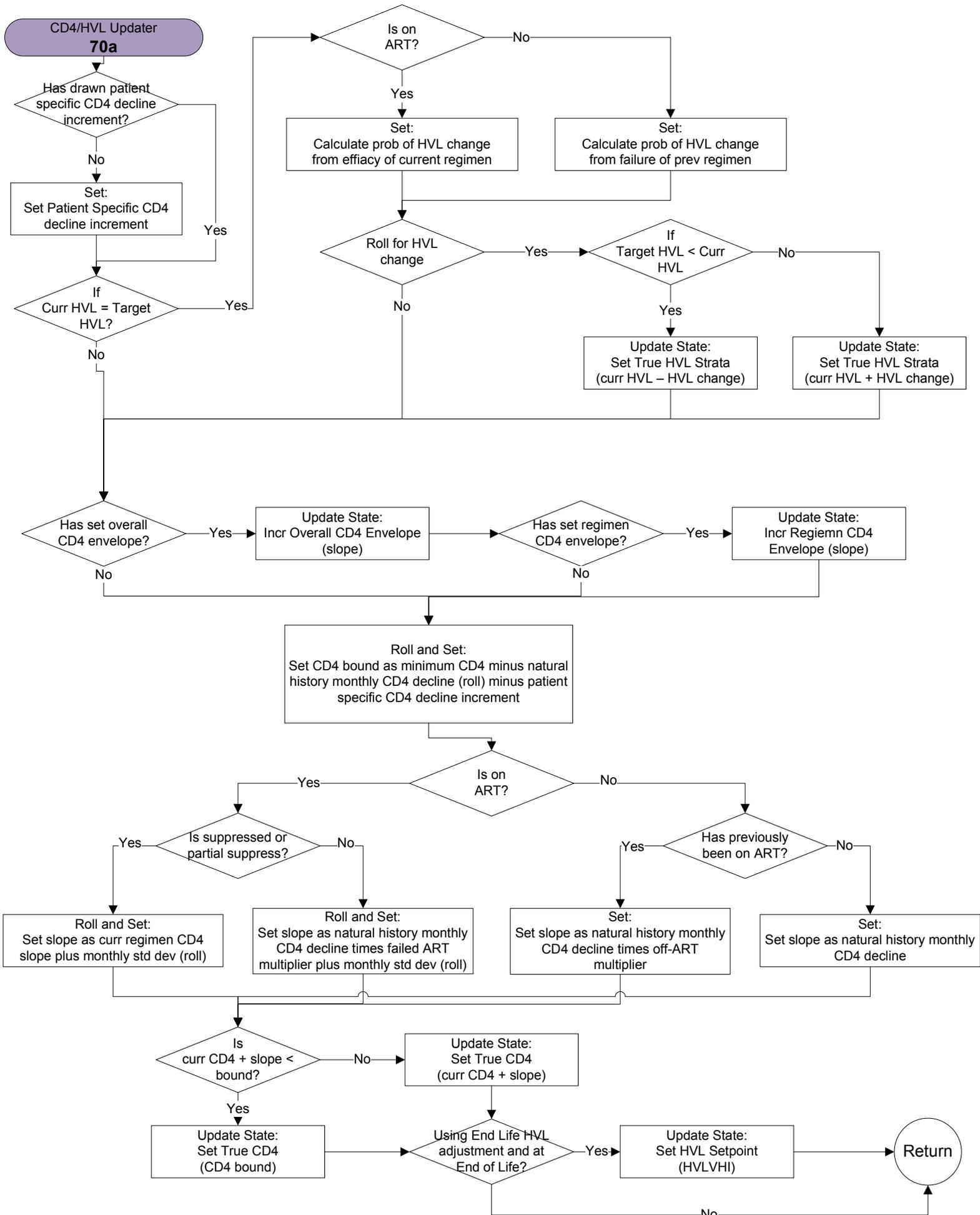
Roll for TB Relapse Subroutine 50g



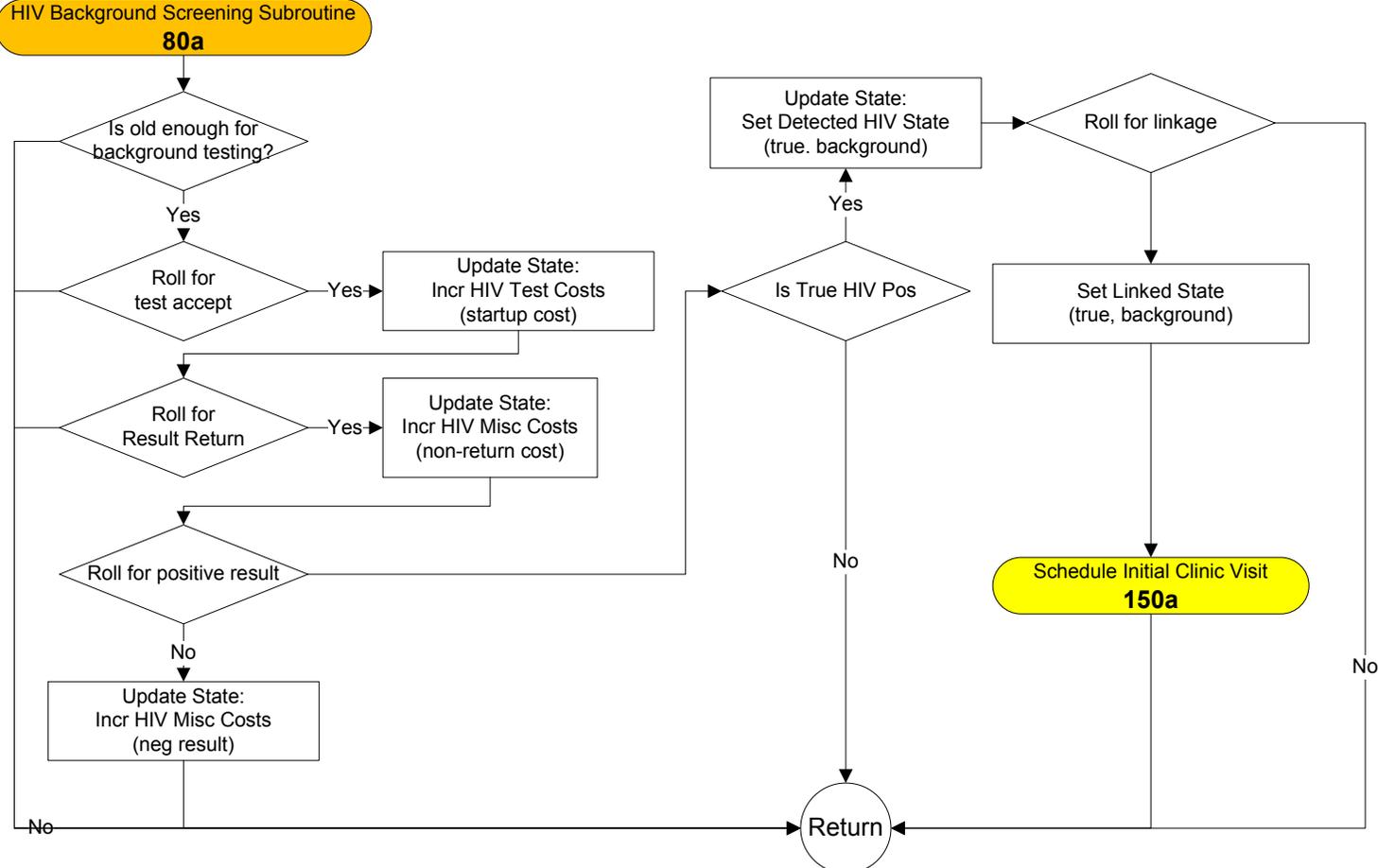
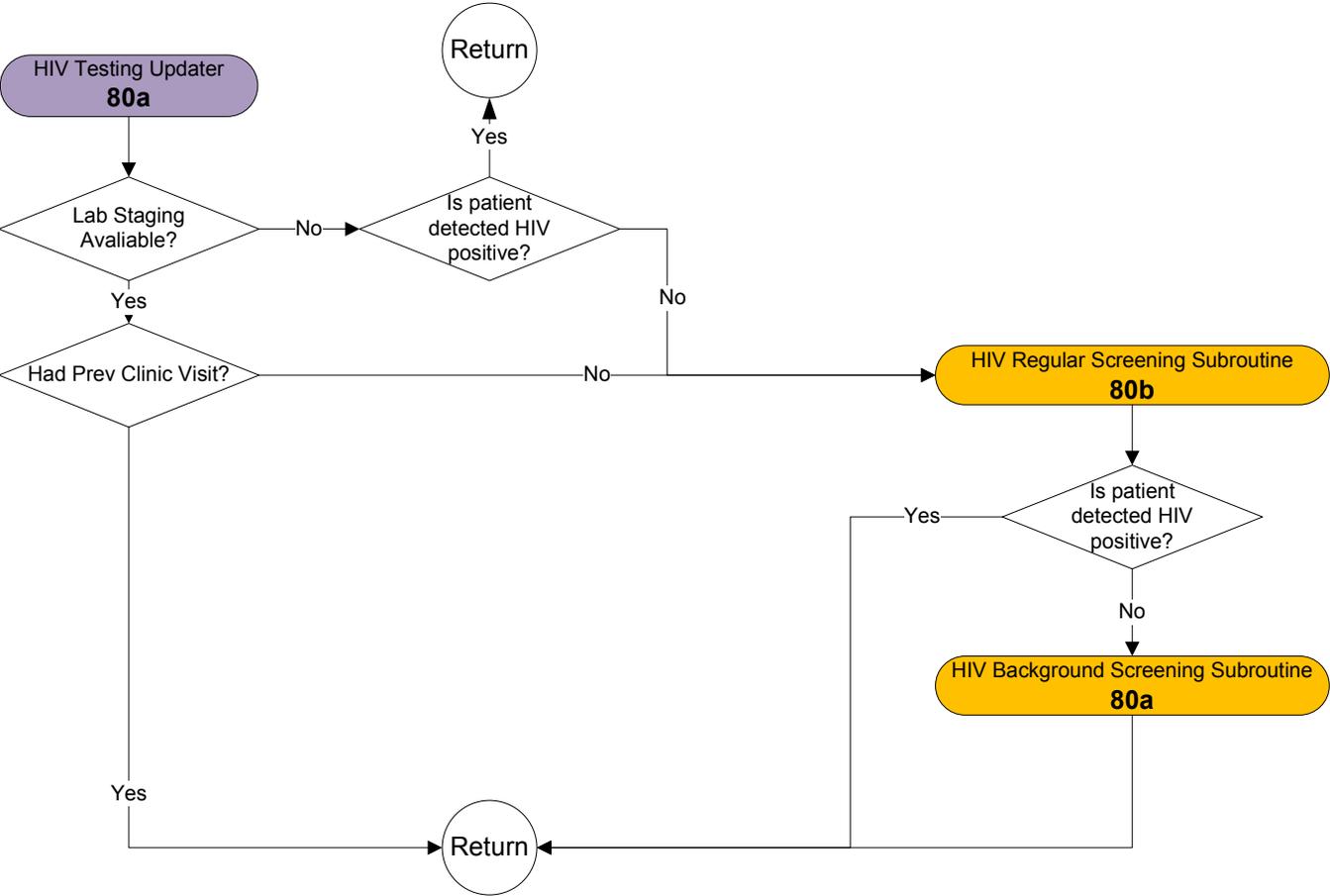
General Mortality Updater – 60a



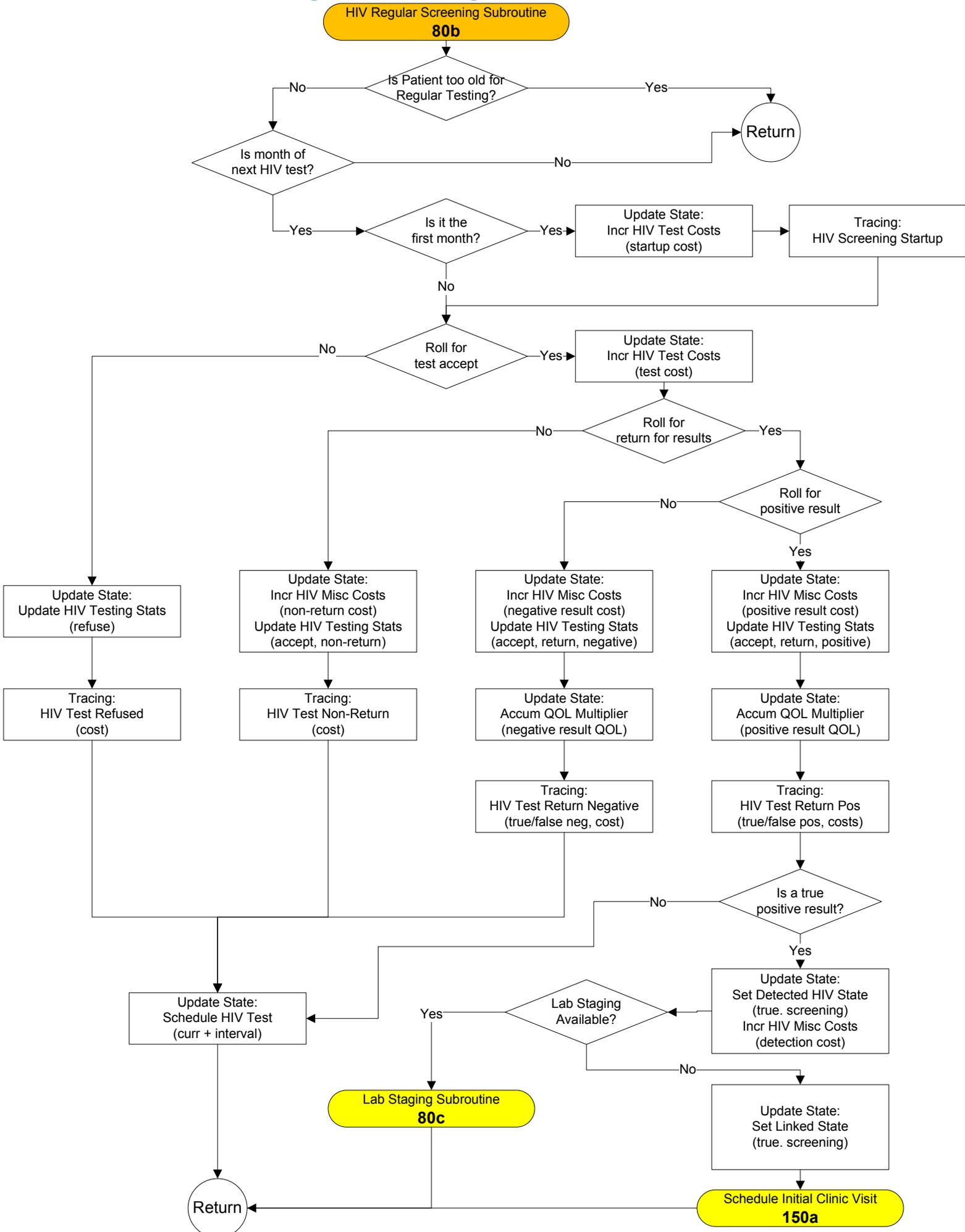
CD4/HVL Updater – 70a



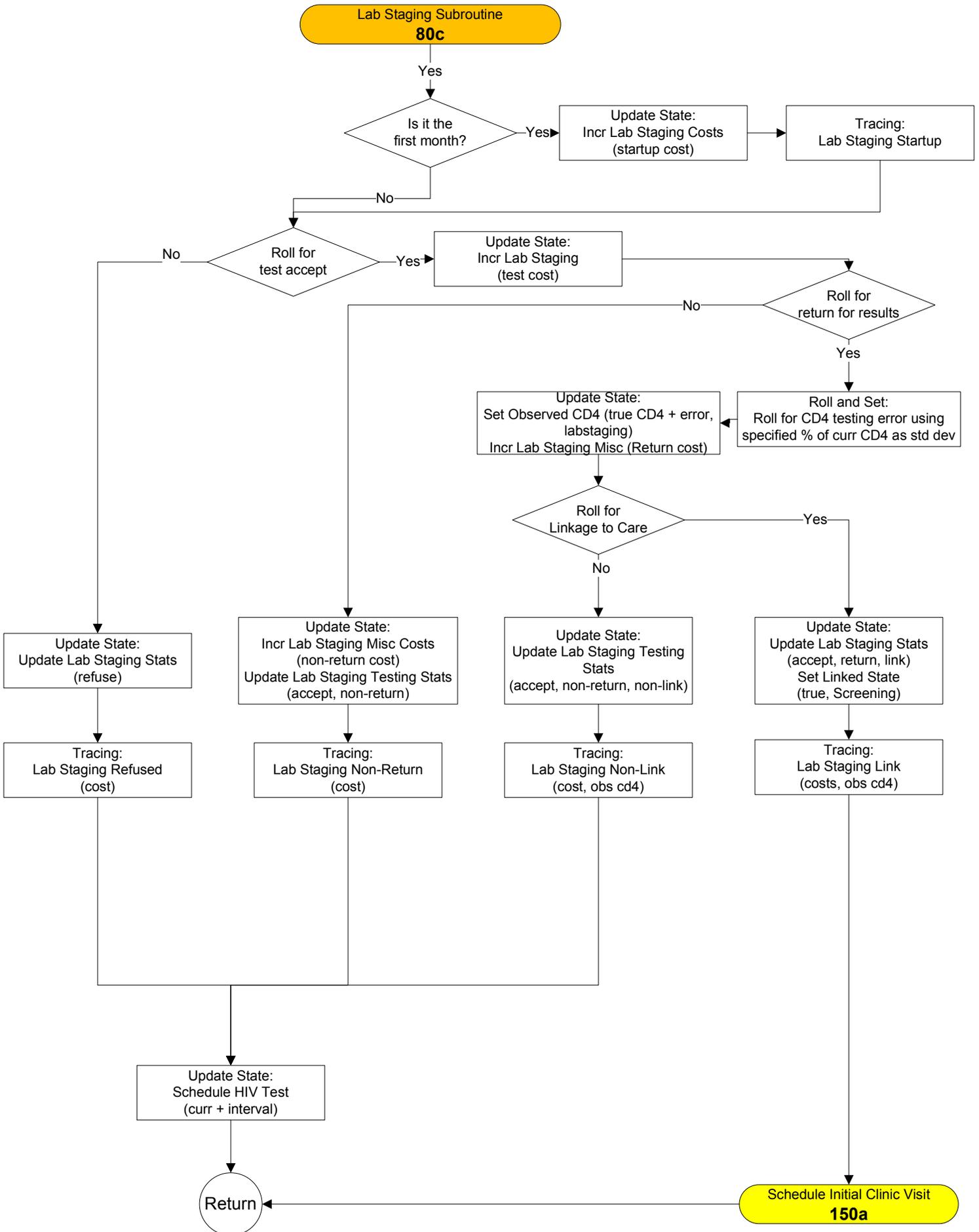
HIV Testing Updater and HIV Background Screening Subroutine – 80a



HIV Regular Screening Subroutine – 80b

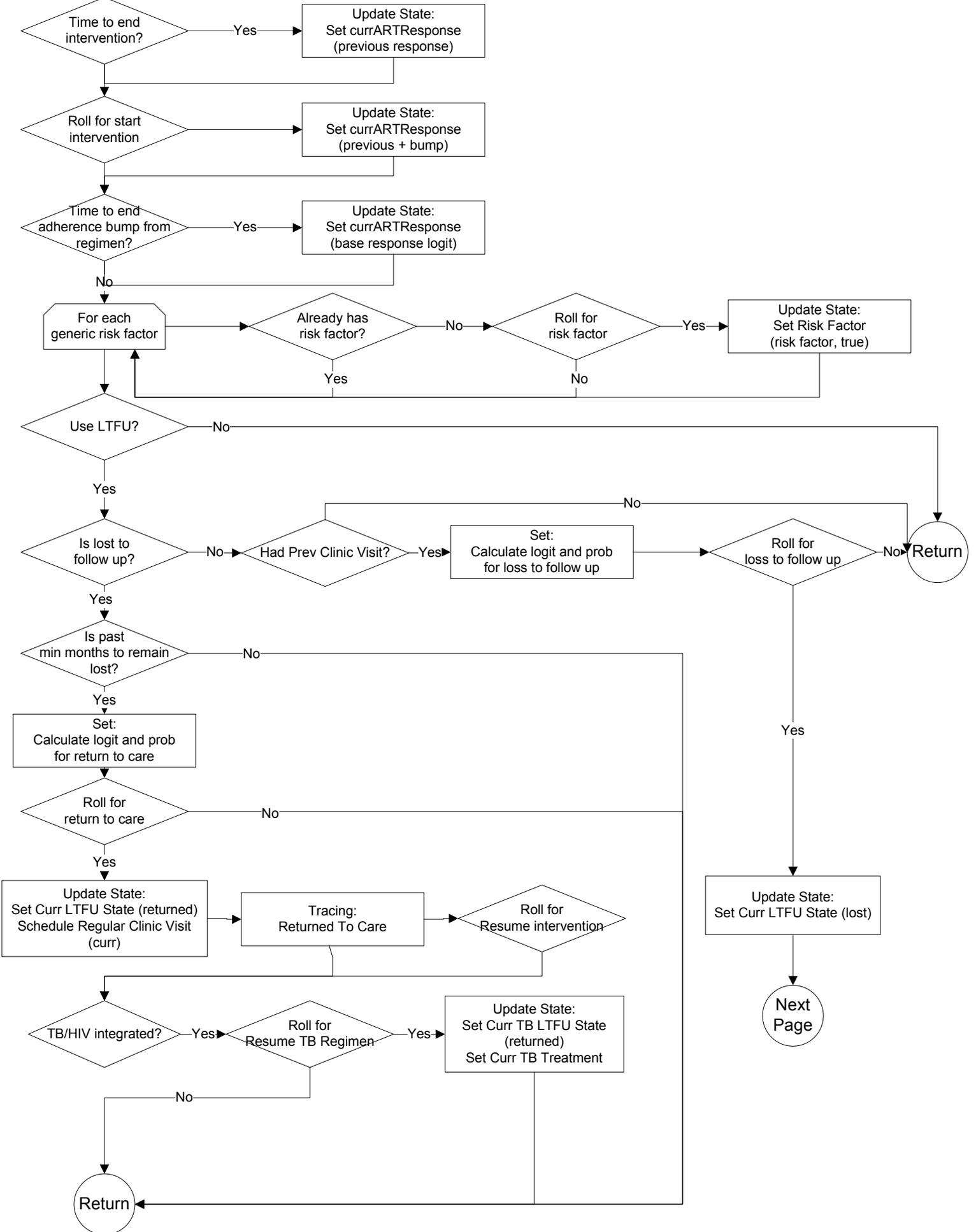


Lab Staging Subroutine– 80c

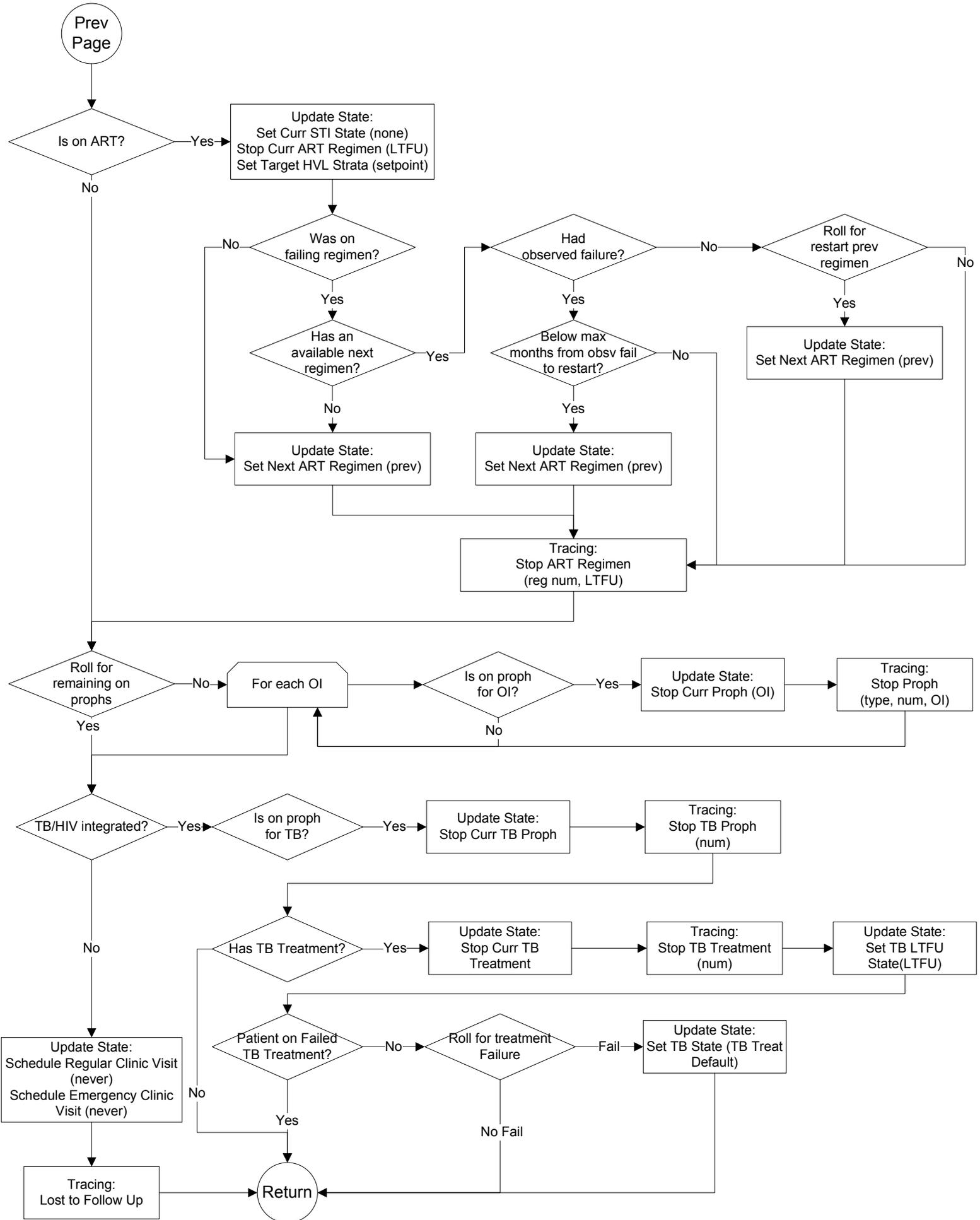


**Behavior Updater
90a/b**

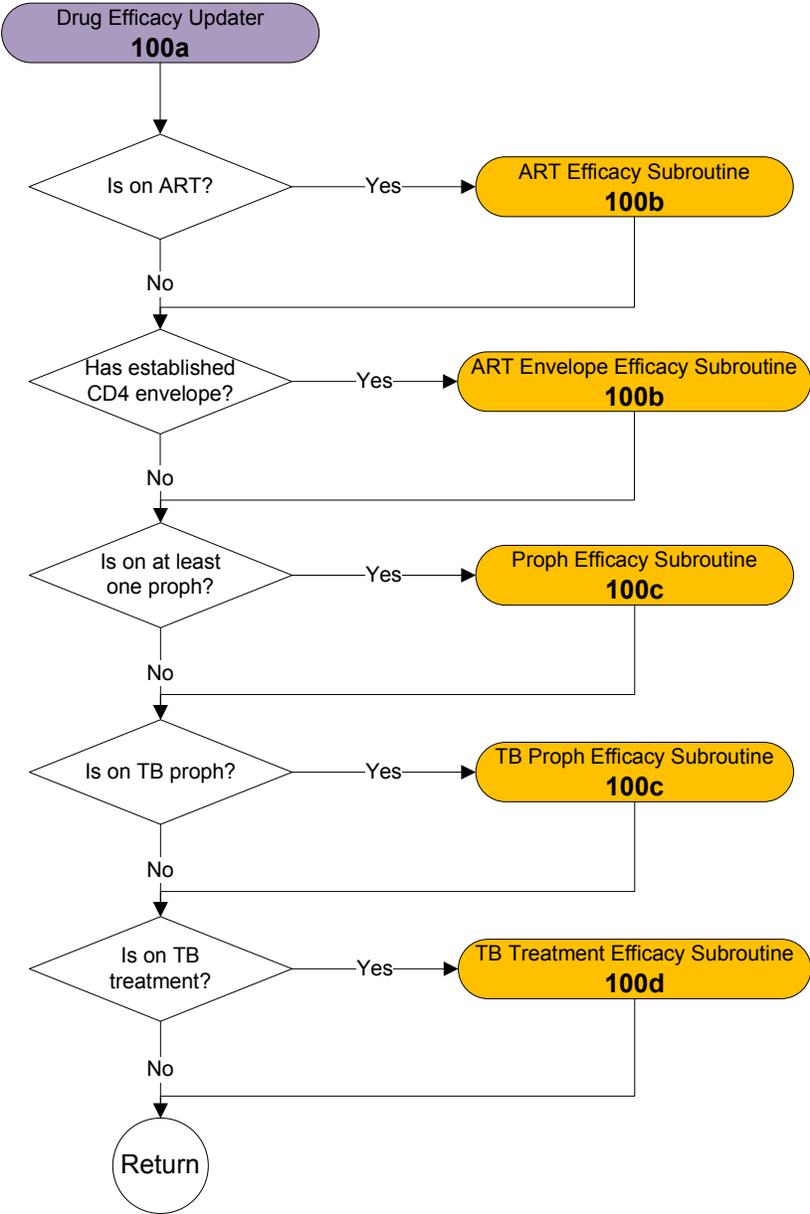
Behavior Updater – 90a



Behavior Updater – 90b

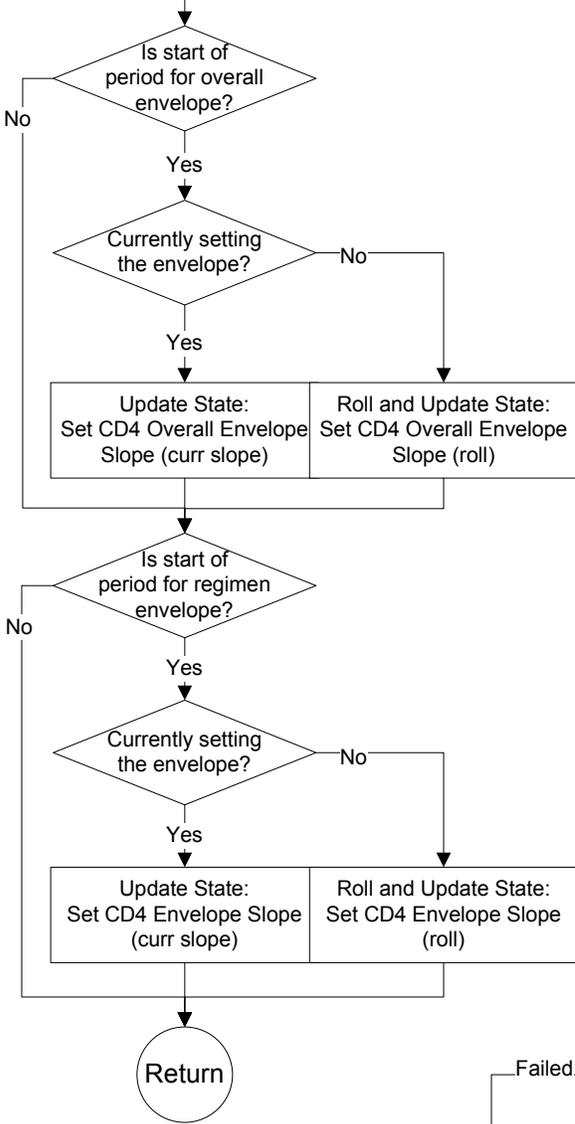


Drug Efficacy Updater – 100a

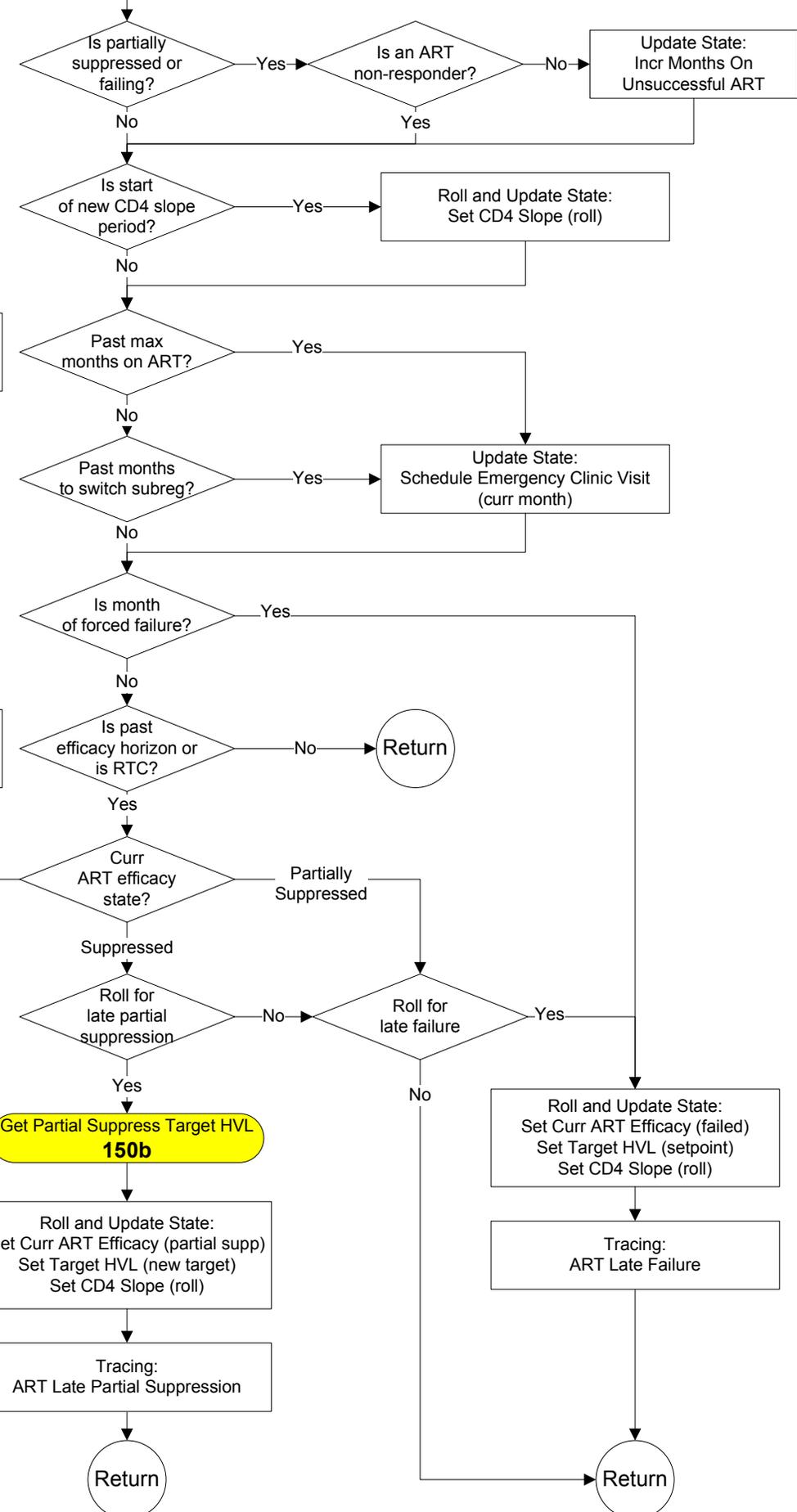


ART Efficacy Subroutine and ART Envelope Efficacy Subroutine – 100b

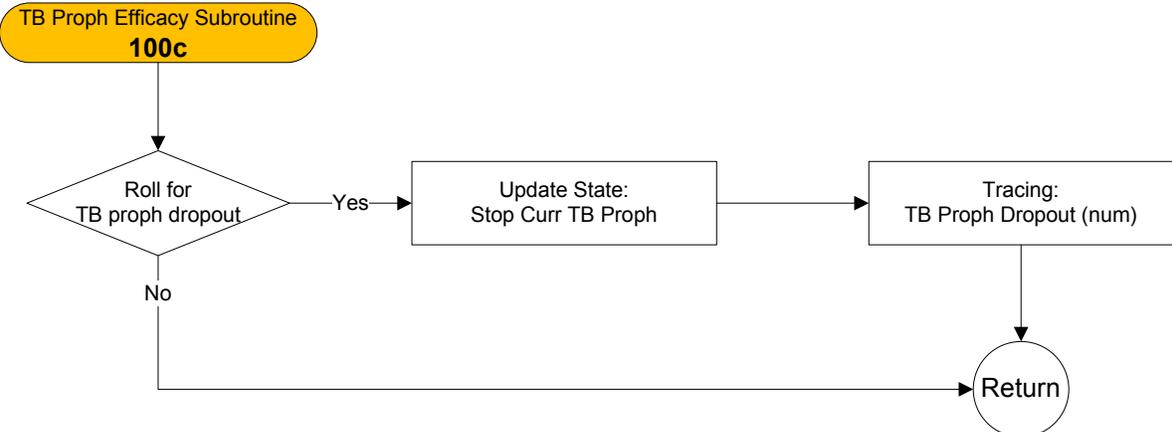
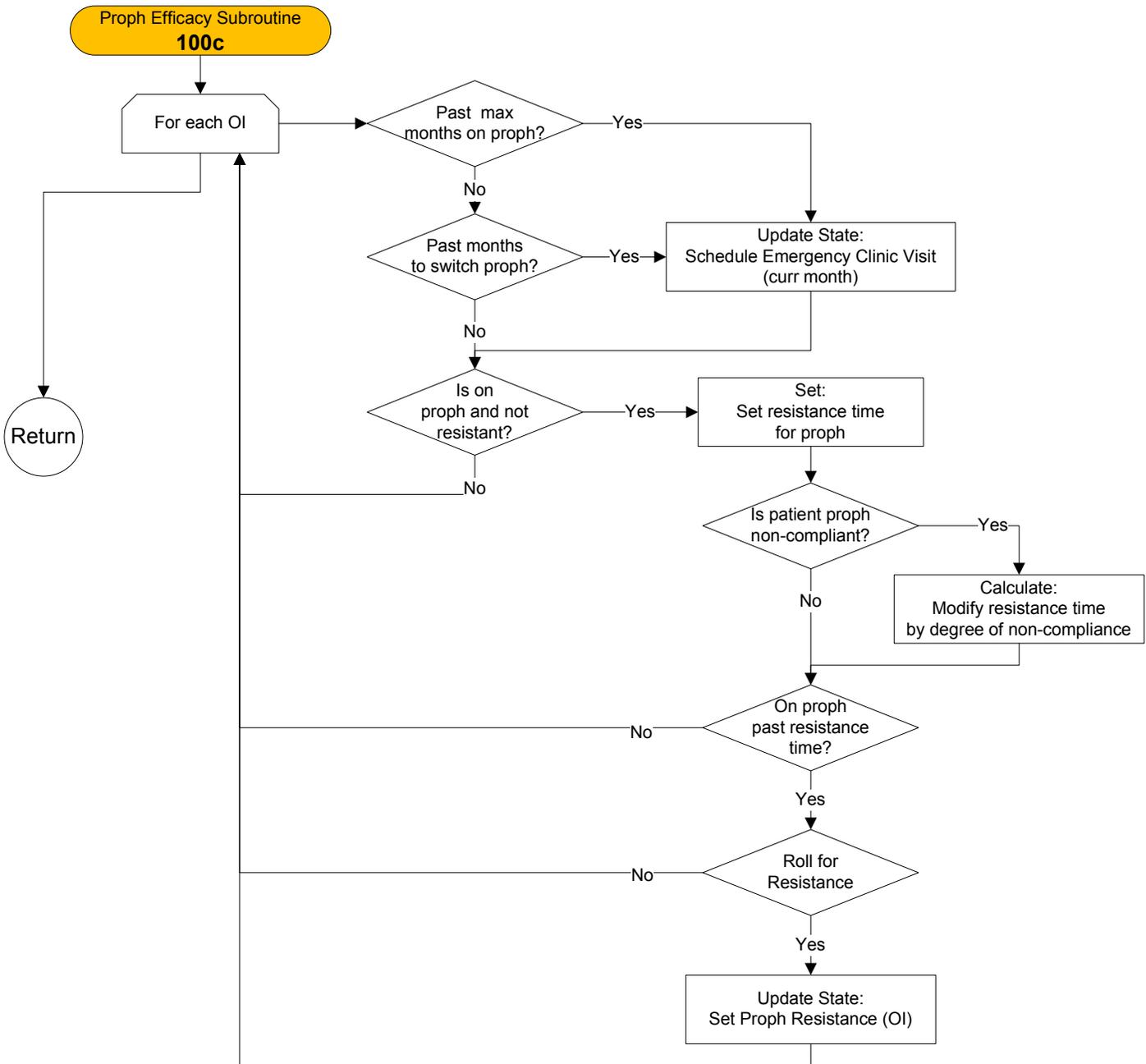
ART Envelope Efficacy Subroutine 100b



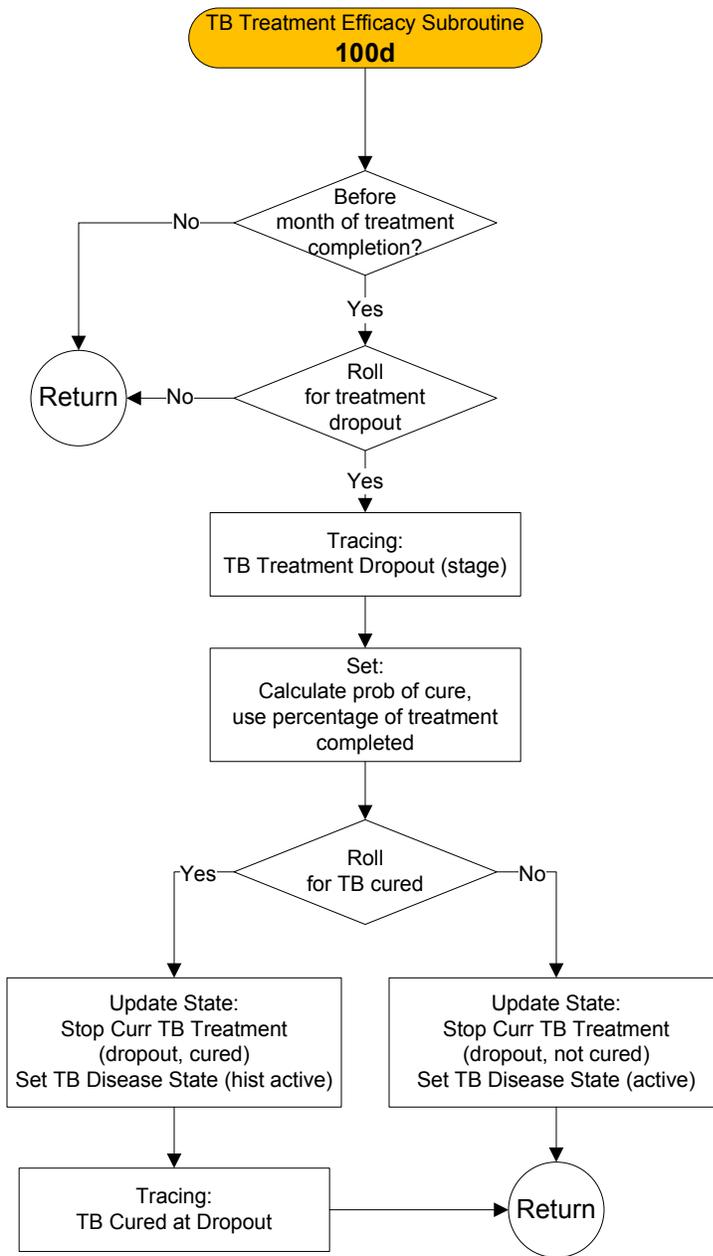
ART Efficacy Subroutine 100b



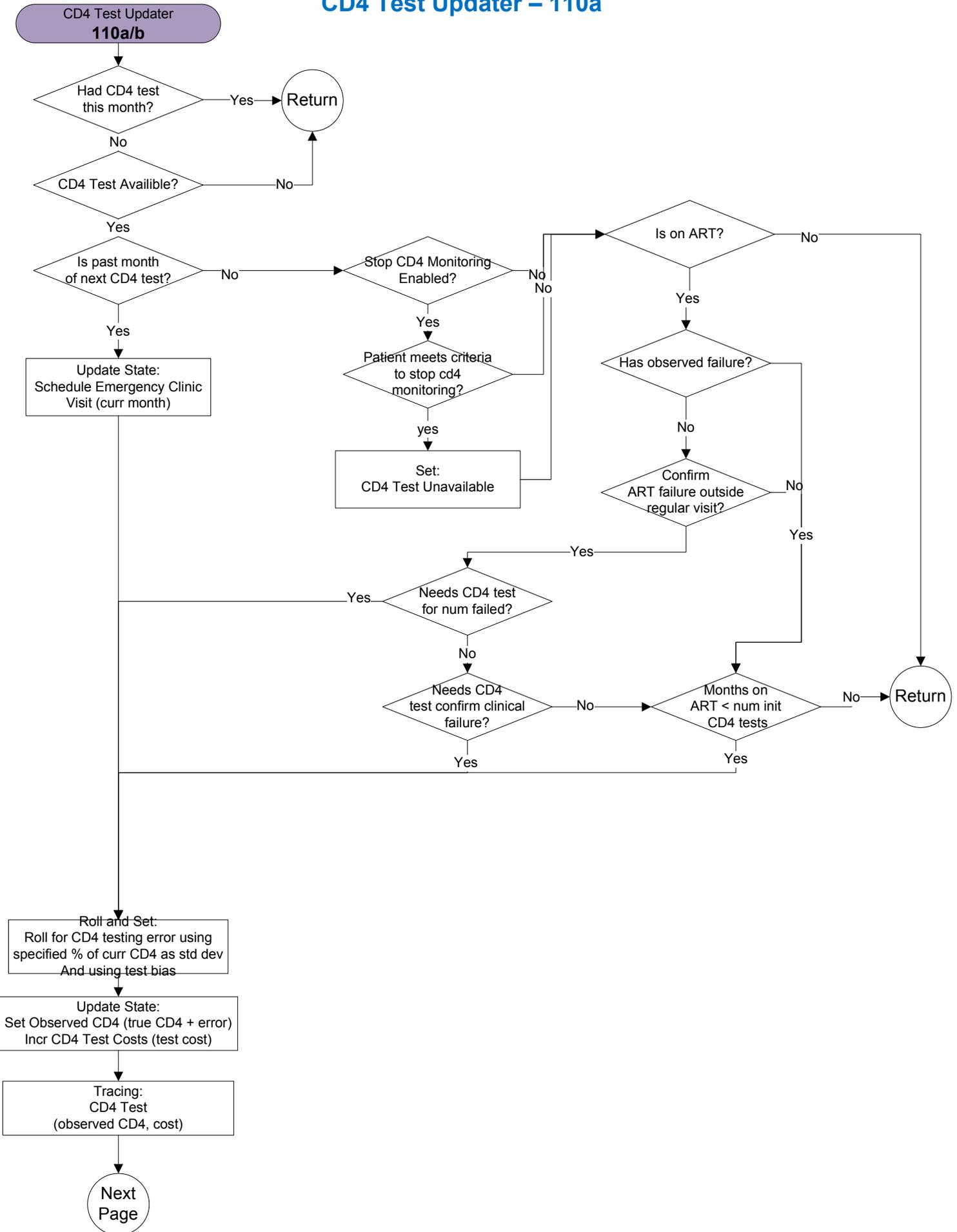
Proph Efficacy Subroutine and TB Proph Efficacy Subroutine – 100c



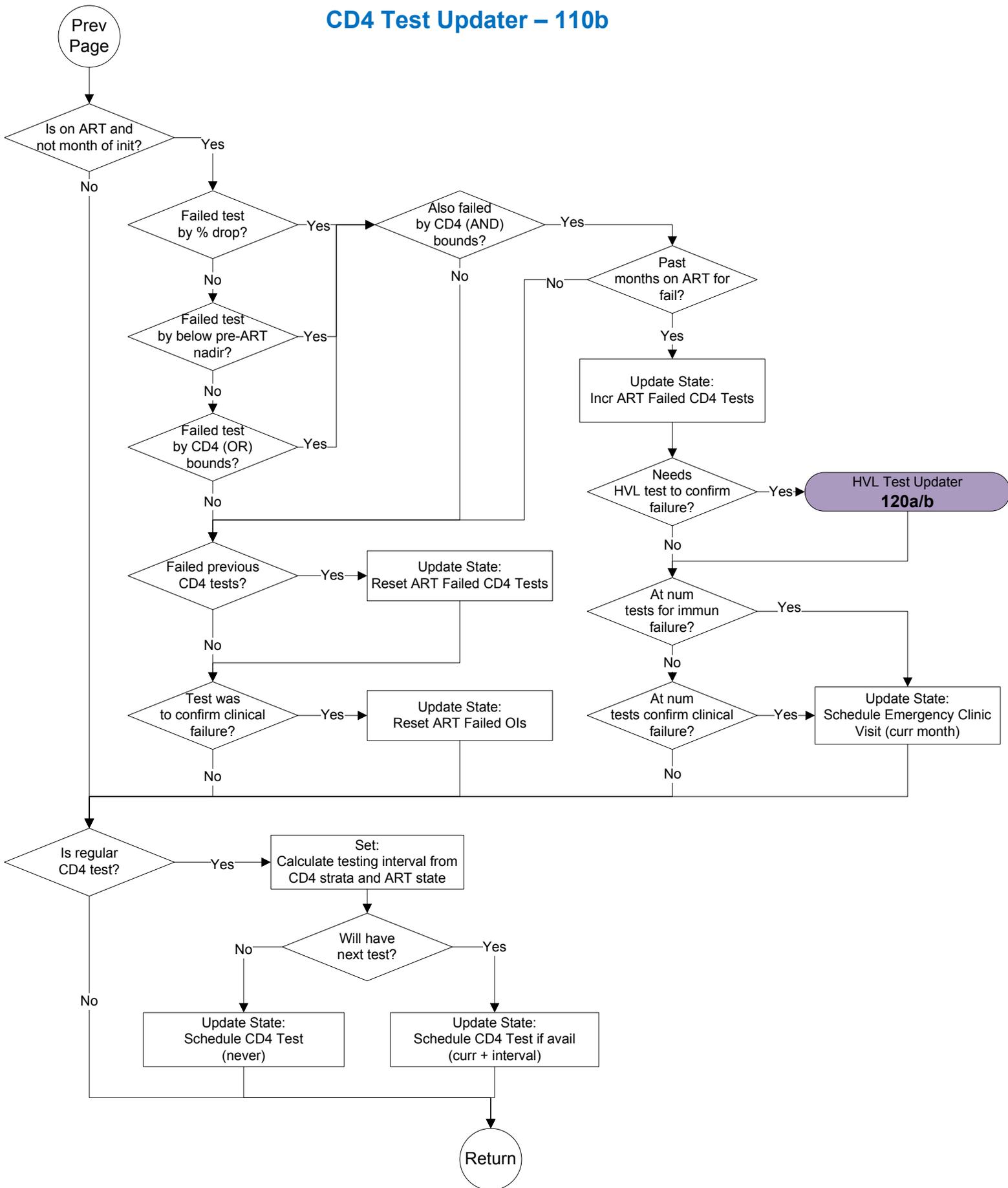
TB Treatment Efficacy Subroutine – 100d



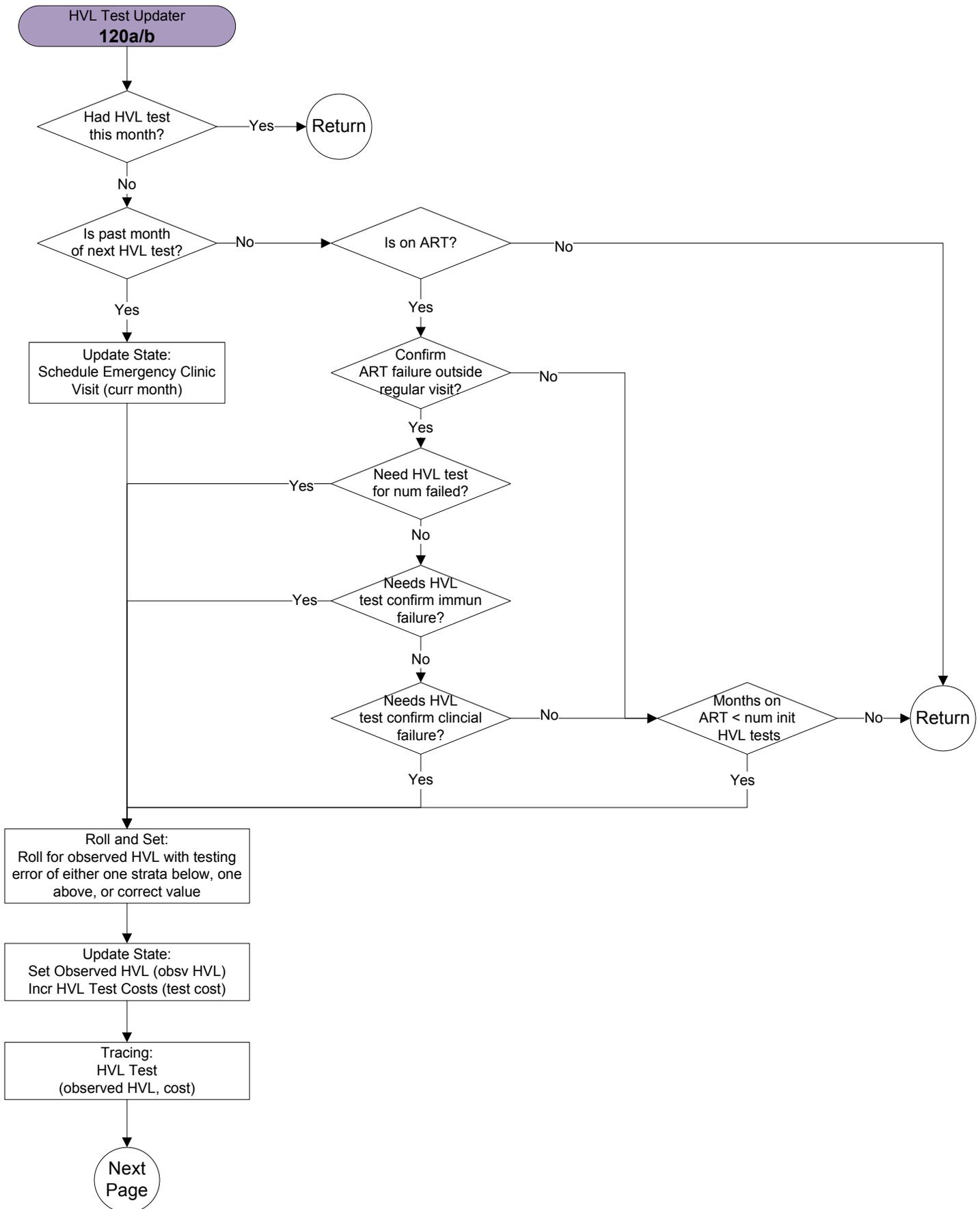
CD4 Test Updater – 110a



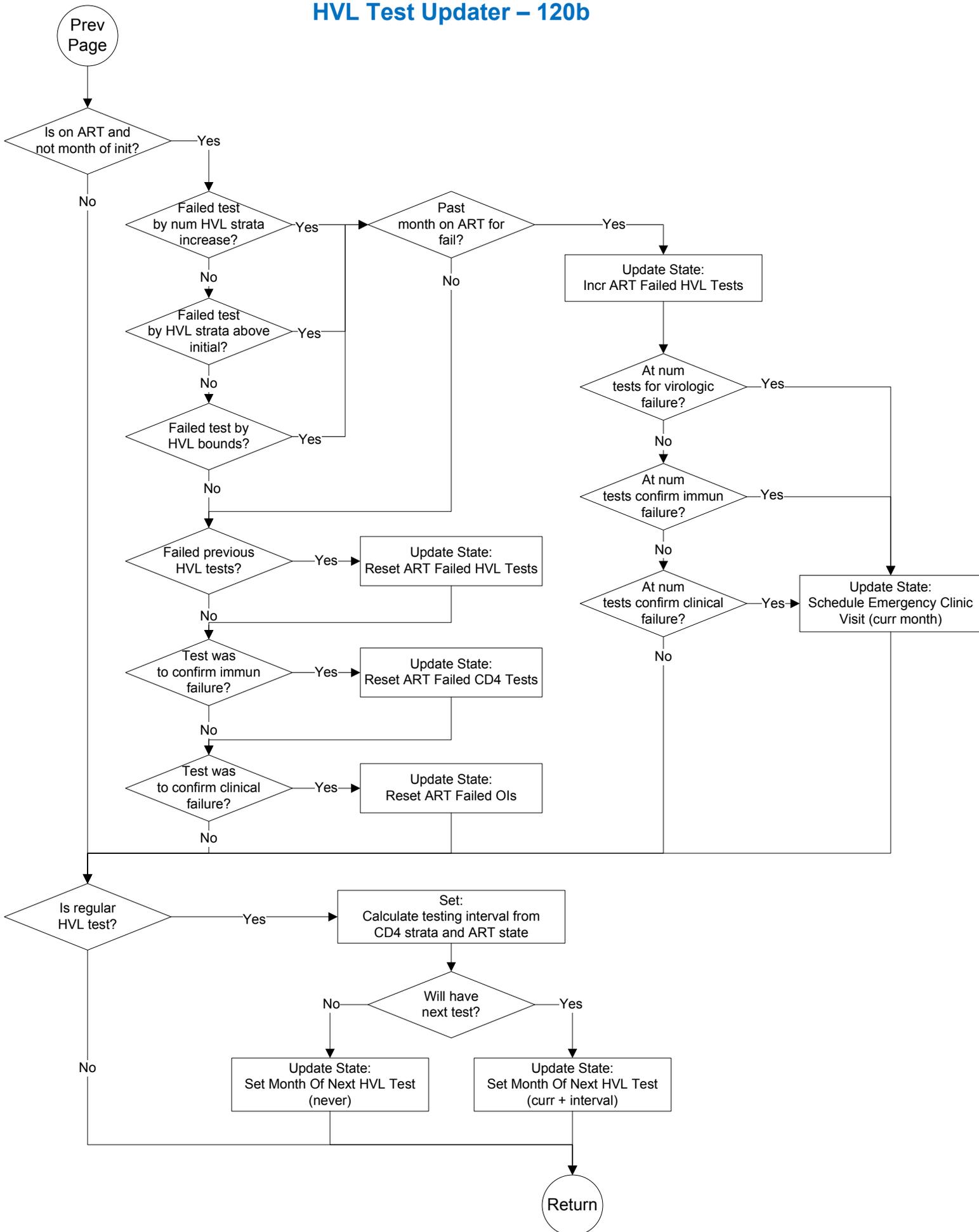
CD4 Test Updater – 110b



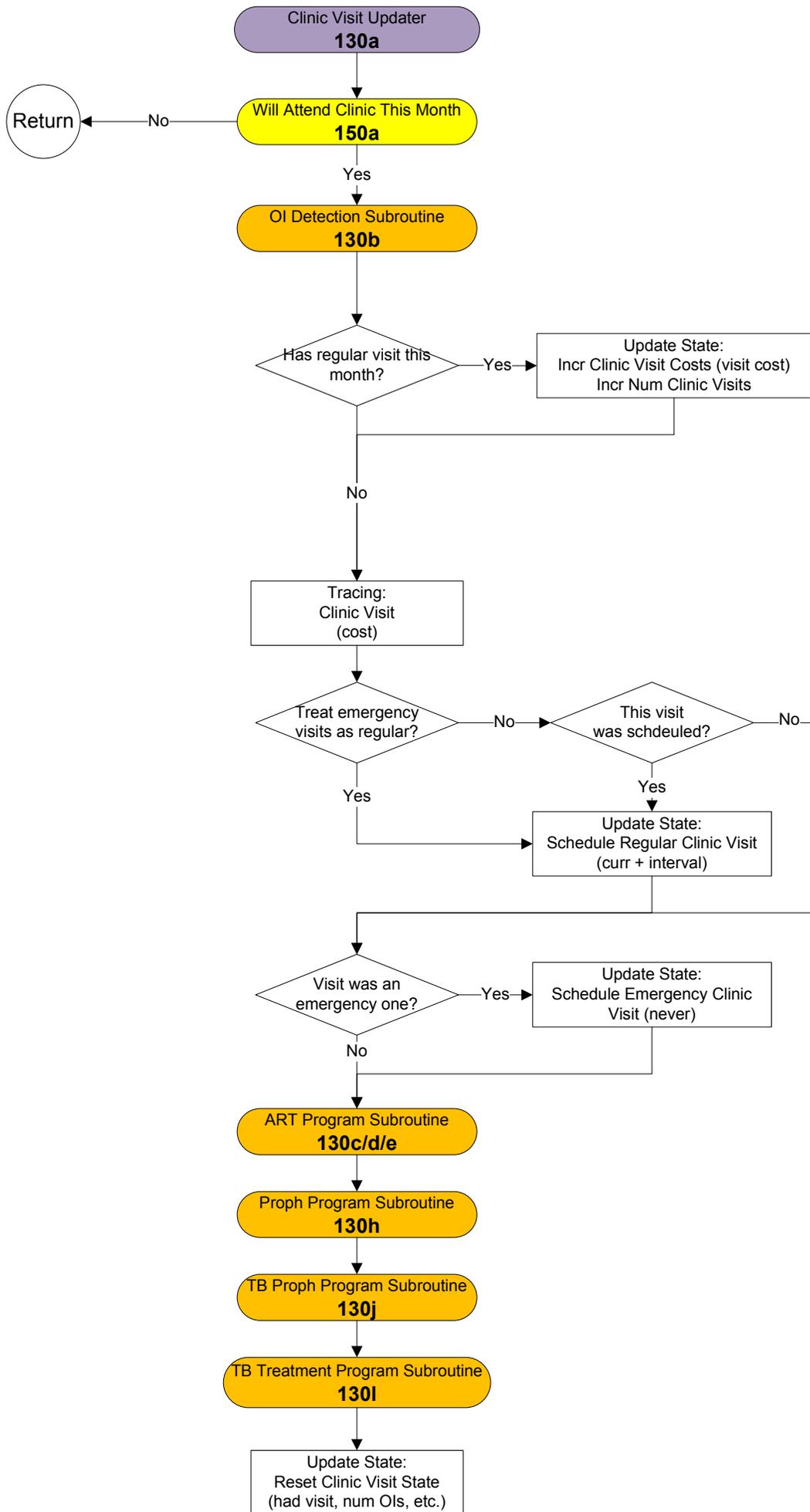
HVL Test Updater – 120a



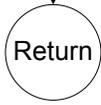
HVL Test Updater – 120b



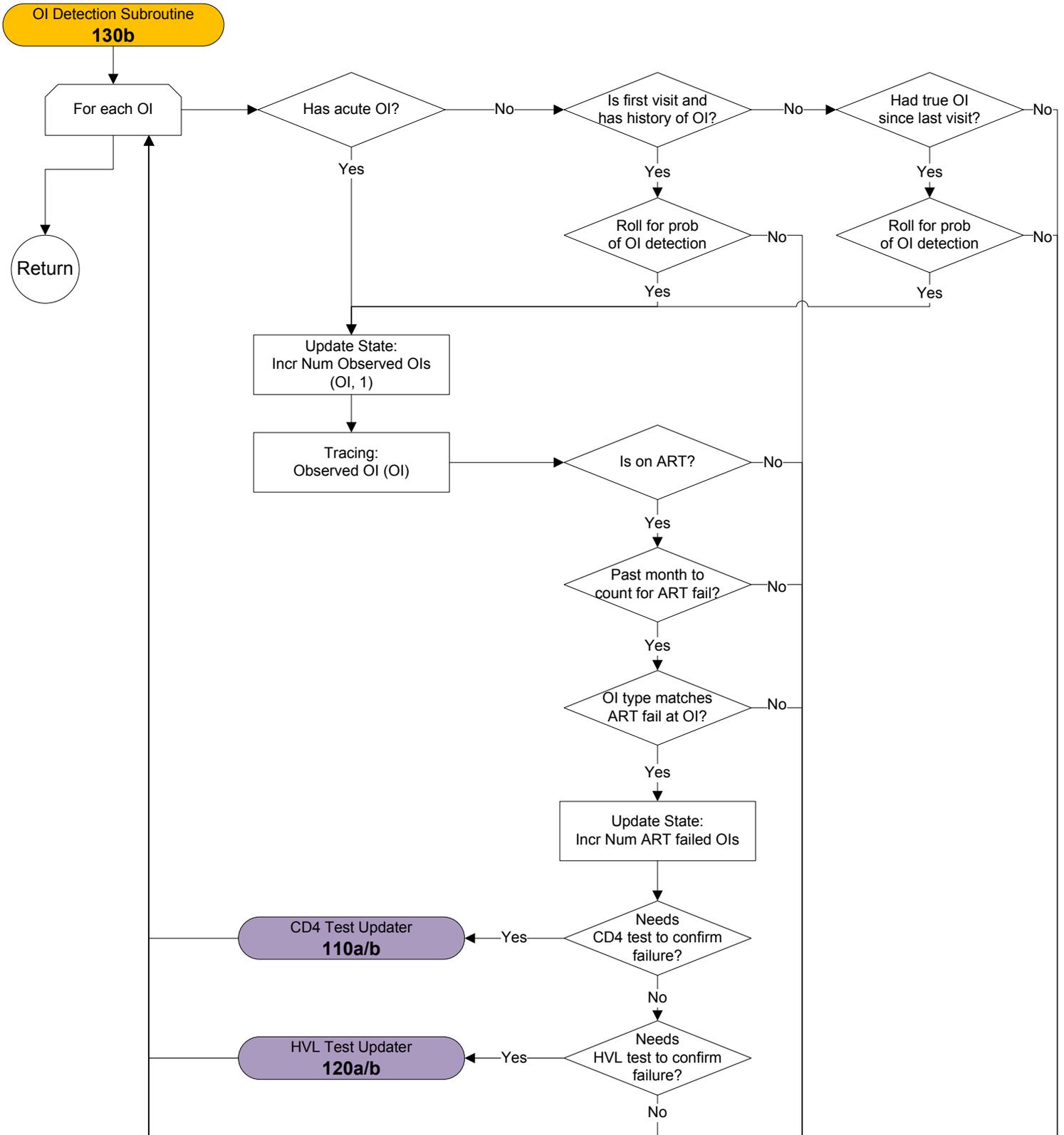
Clinic Visit Updater – 130a



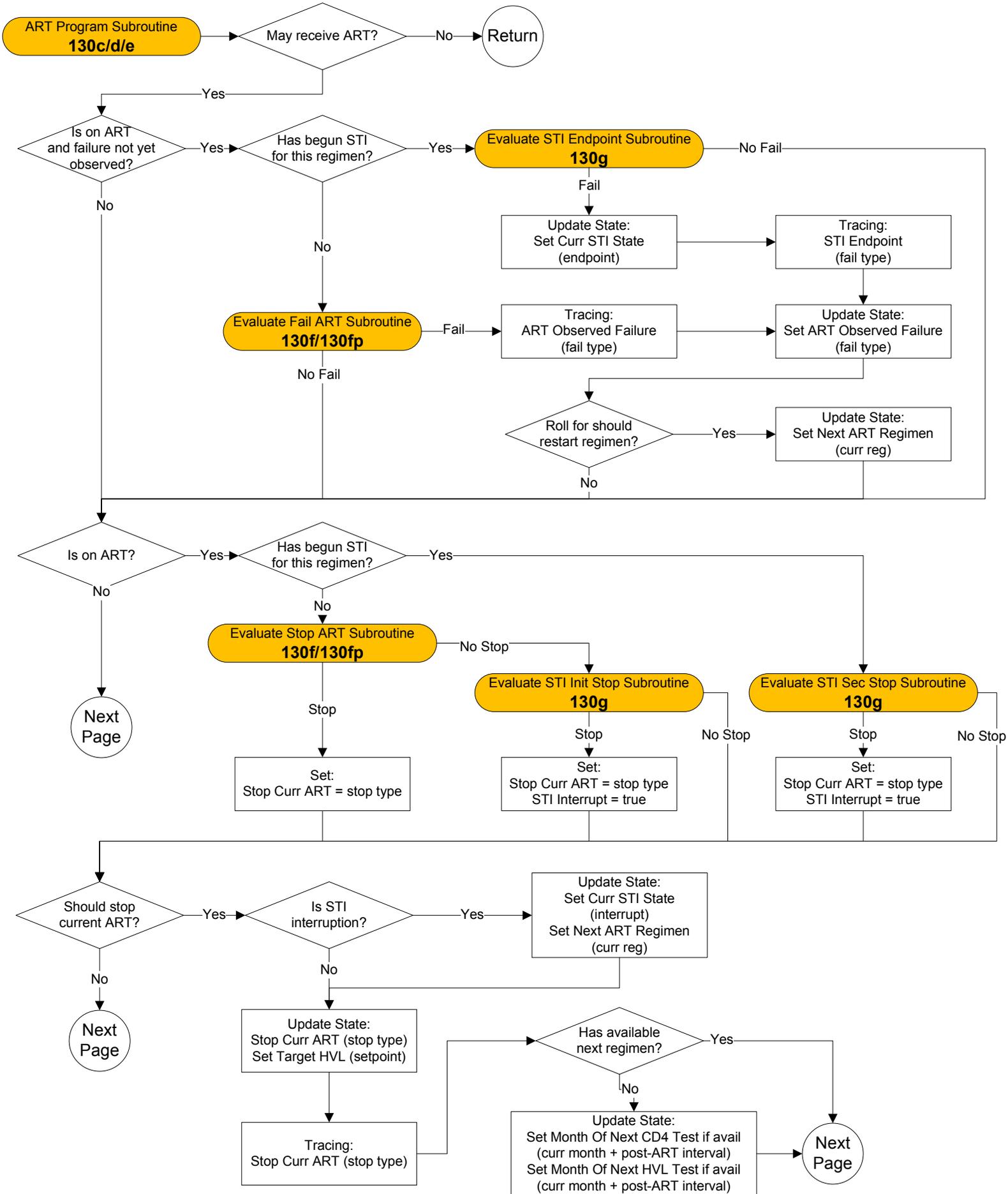
Reset Clinic Visit State
(had visit, num Ols, etc.)



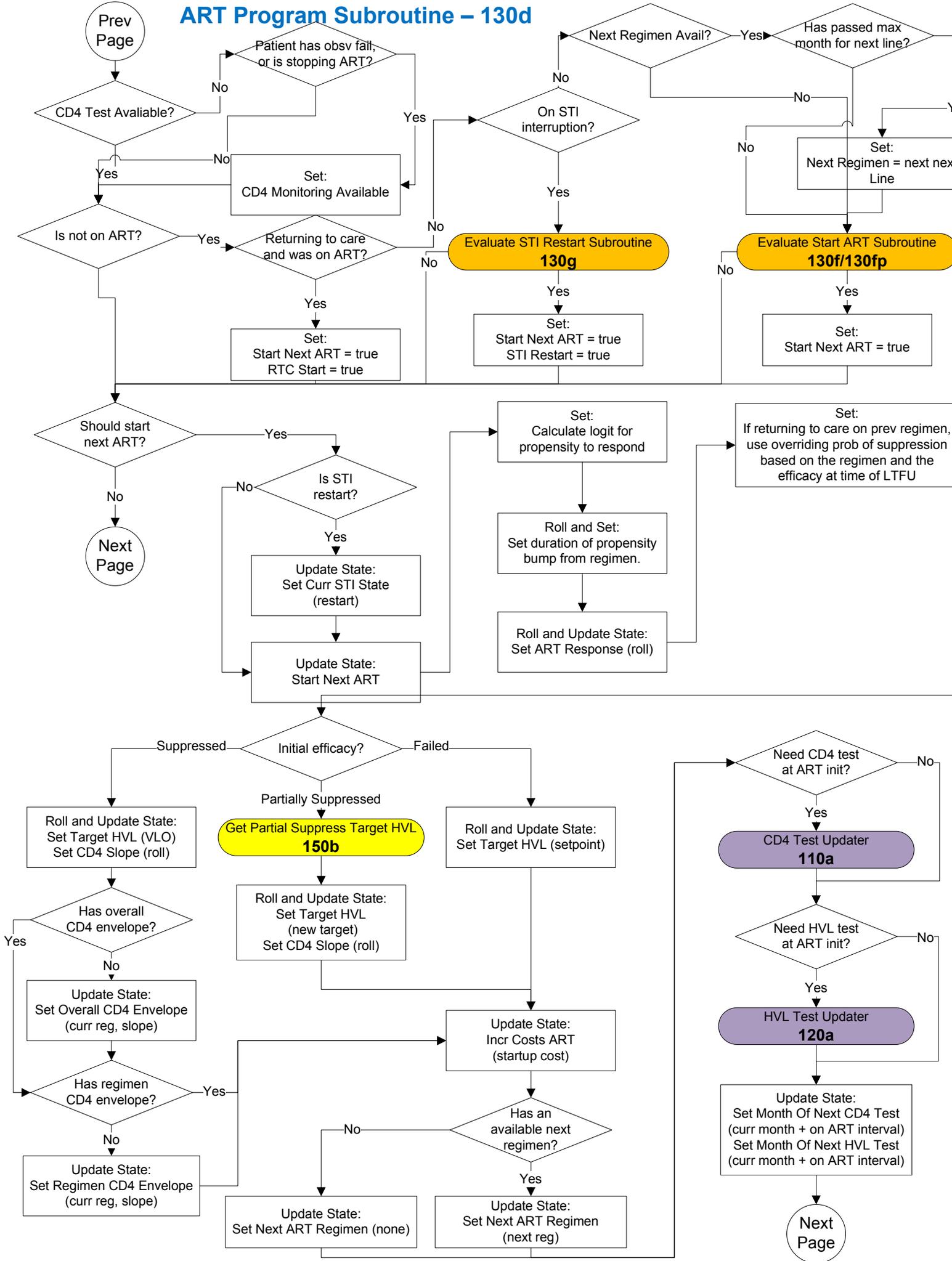
OI Detection Subroutine – 130b

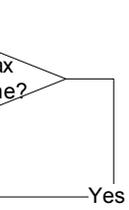


ART Program Subroutine – 130c



ART Program Subroutine – 130d





= next next

routine

ue

y regimen,
pression
and the
TFU

Set:
Calculate prob of suppression:
multiply prob by (1 - resist) for each
month on each prev unsuccessful
ART and HVL strata

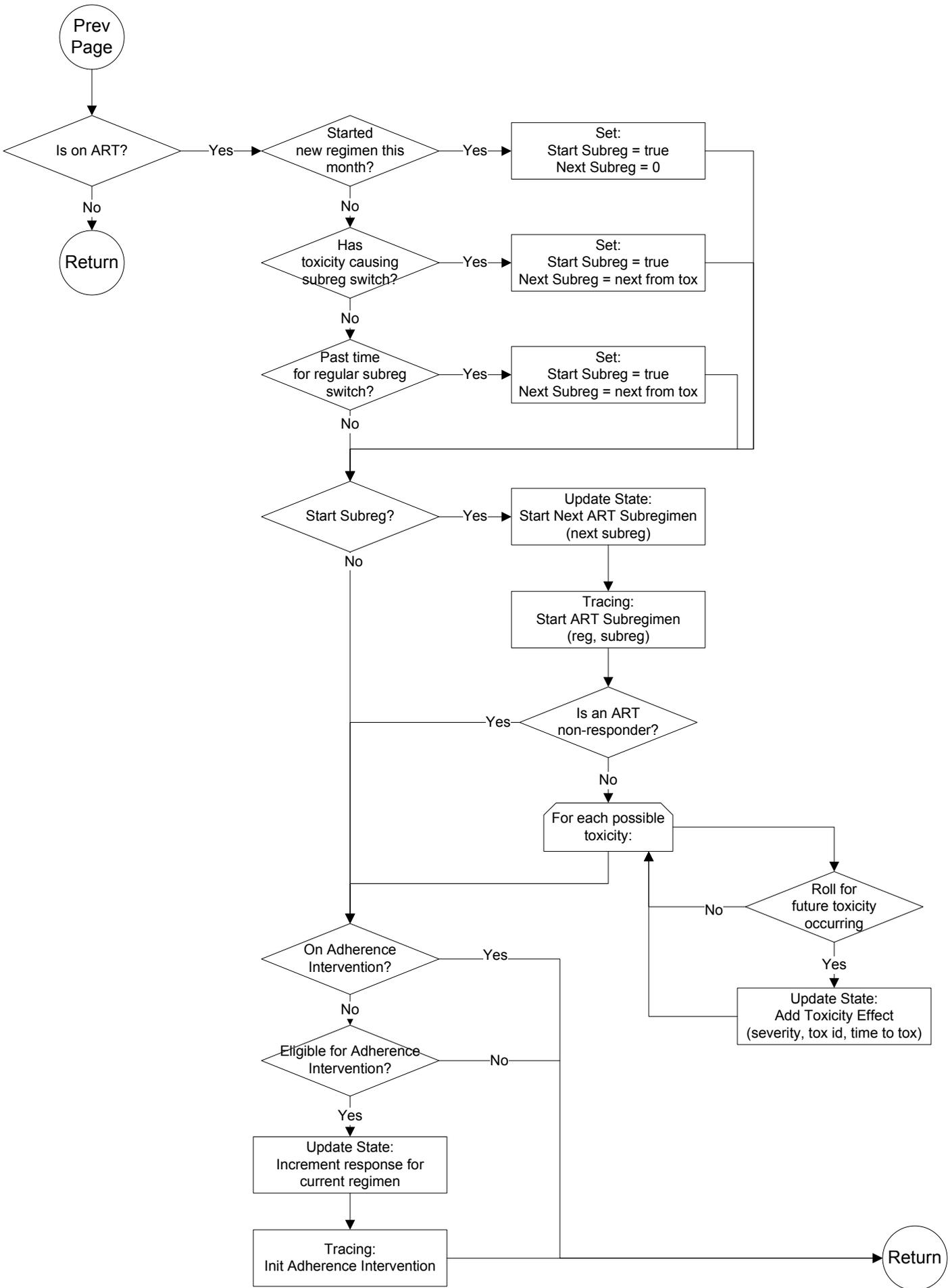
Roll and Update State:
Set ART Efficacy (roll)

Tracing:
Start Next ART (reg, cost)
Initial ART Efficacy



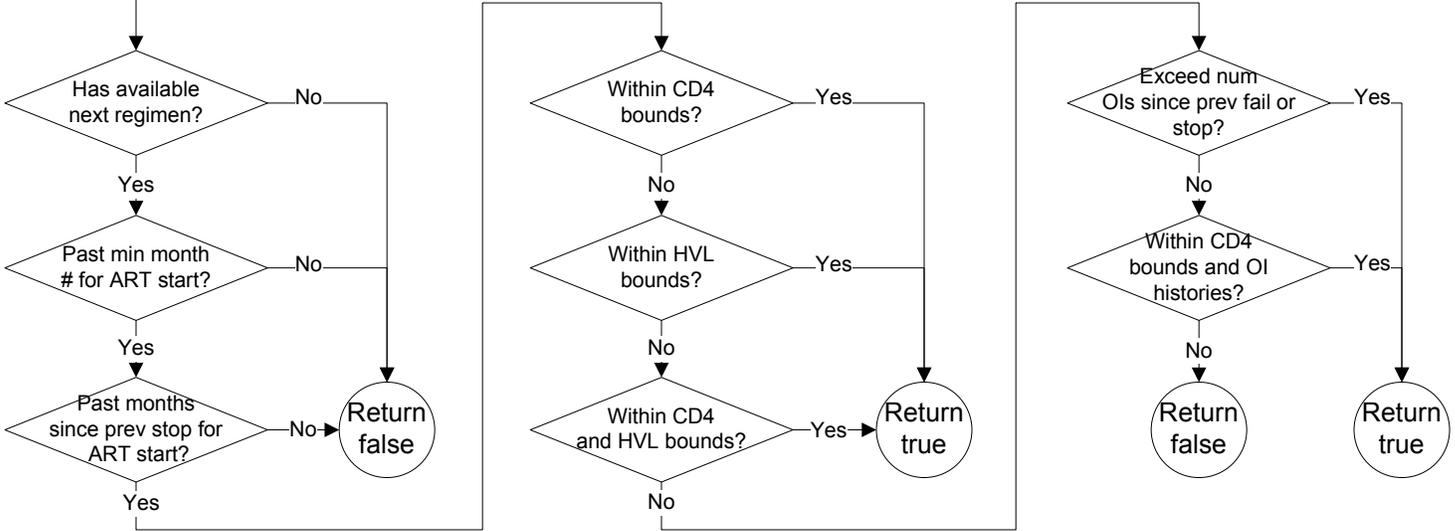
st
(al)
st
(al)

ART Program Subroutine – 130e

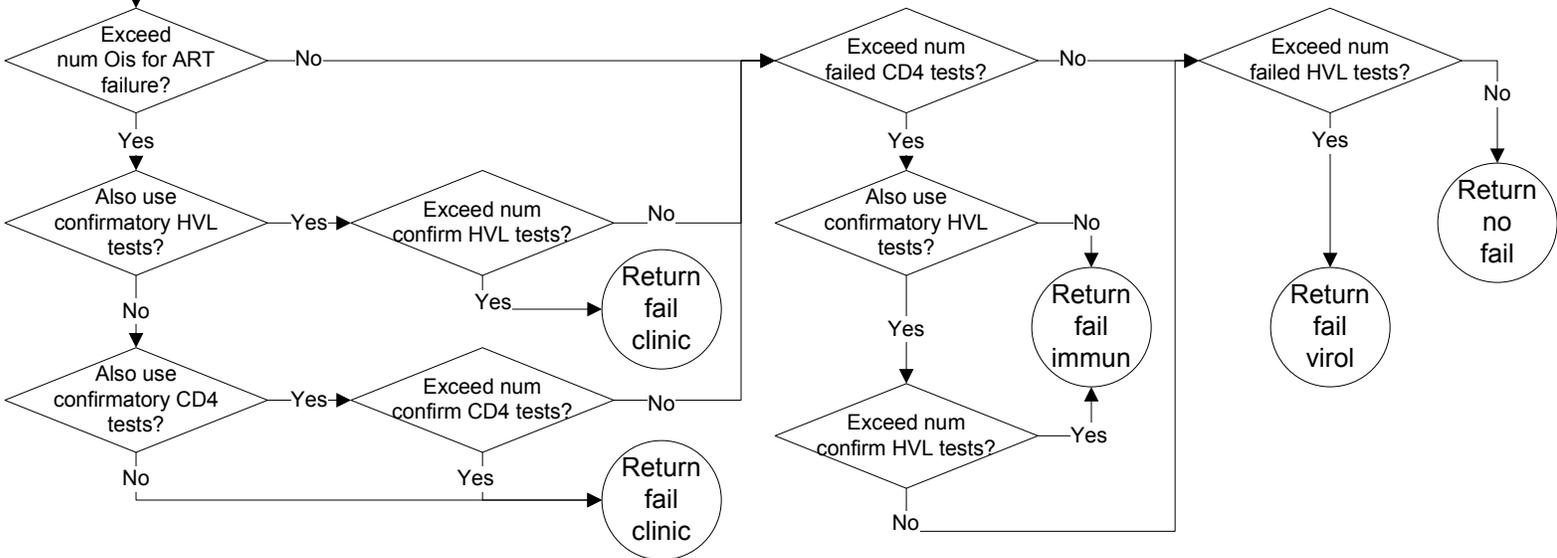


Evaluate Start ART Subroutine and Evaluate Fail ART Subroutine and Evaluate Stop ART Subroutine – 130f

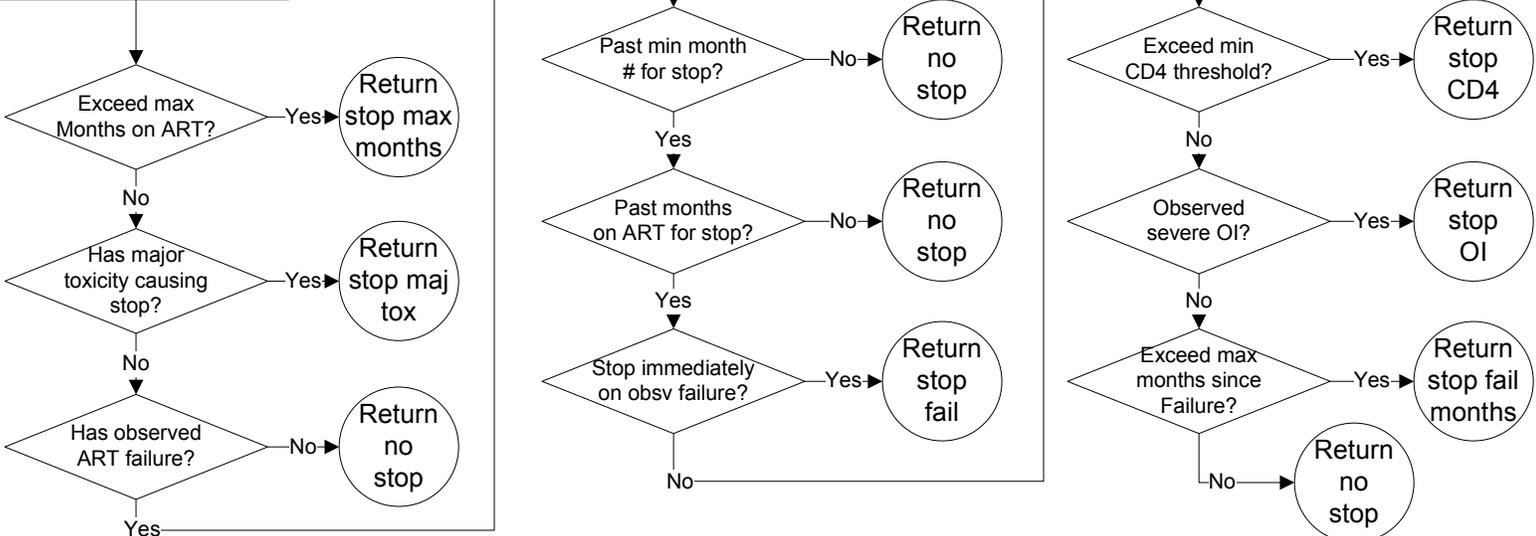
Evaluate Start ART Subroutine 130f



Evaluate Fail ART Subroutine 130f

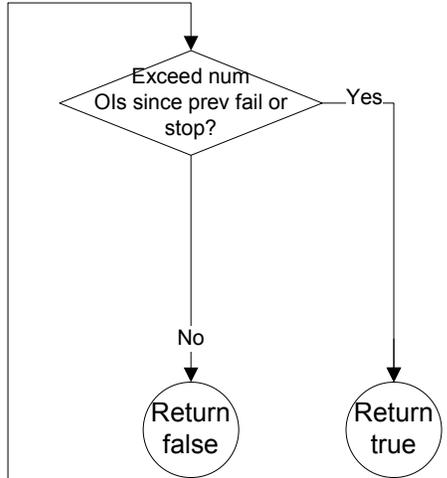
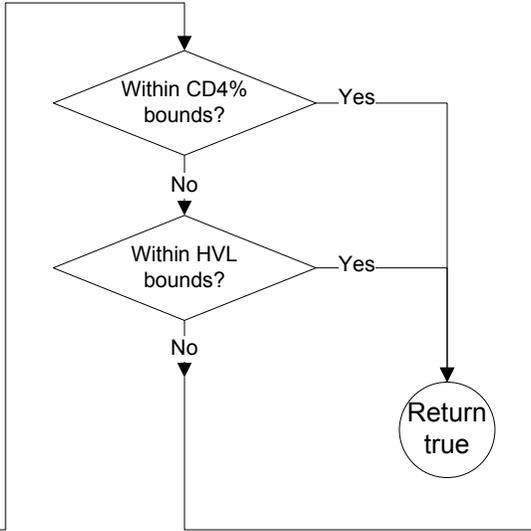
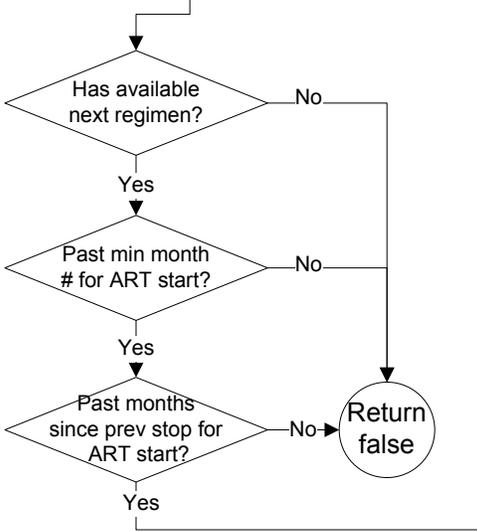


Evaluate Stop ART Subroutine 130f

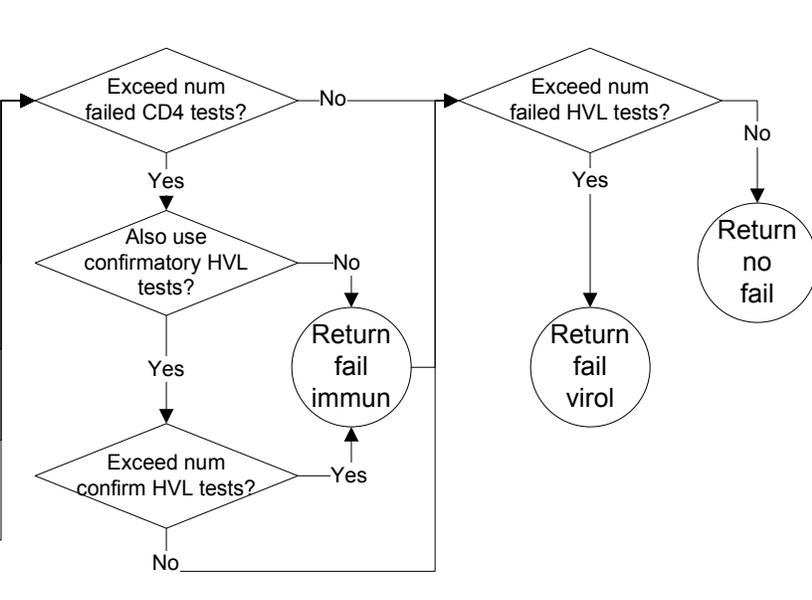
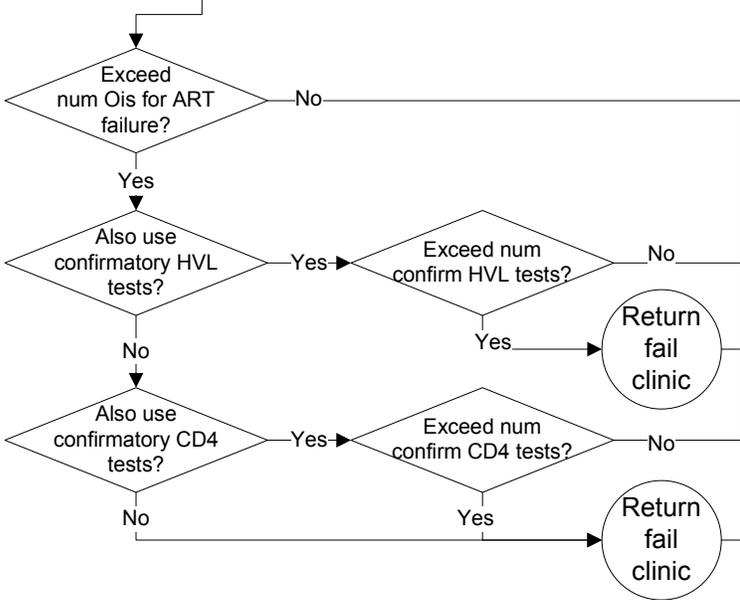


Evaluate Peds Start ART Subroutine and Evaluate Peds Fail ART Subroutine and Evaluate Peds Stop ART Subroutine – 130fp

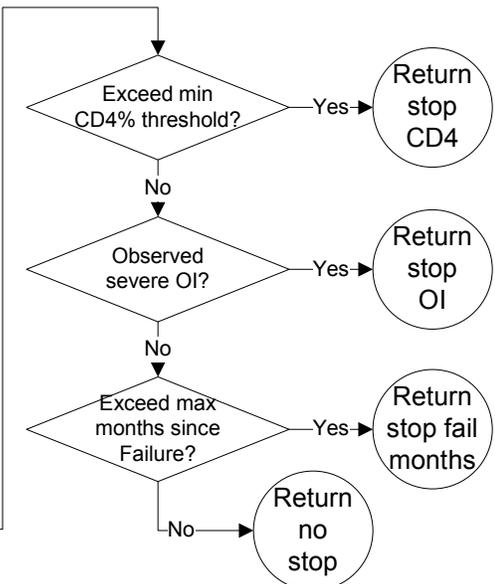
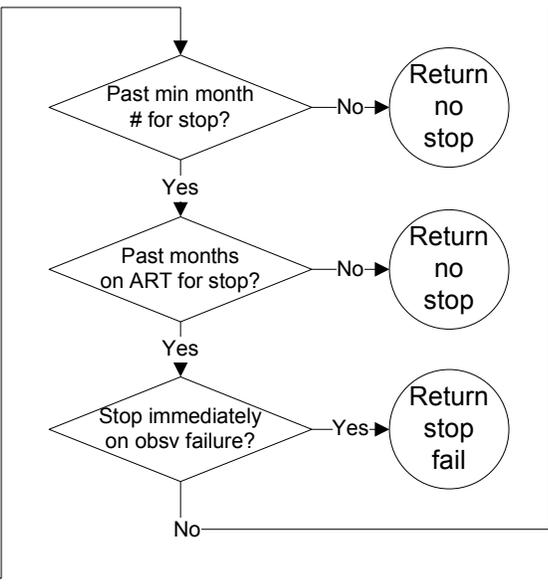
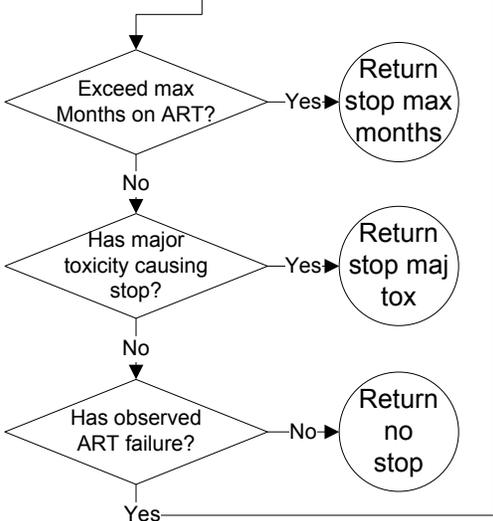
Evaluate Peds Start ART Subroutine 130fp



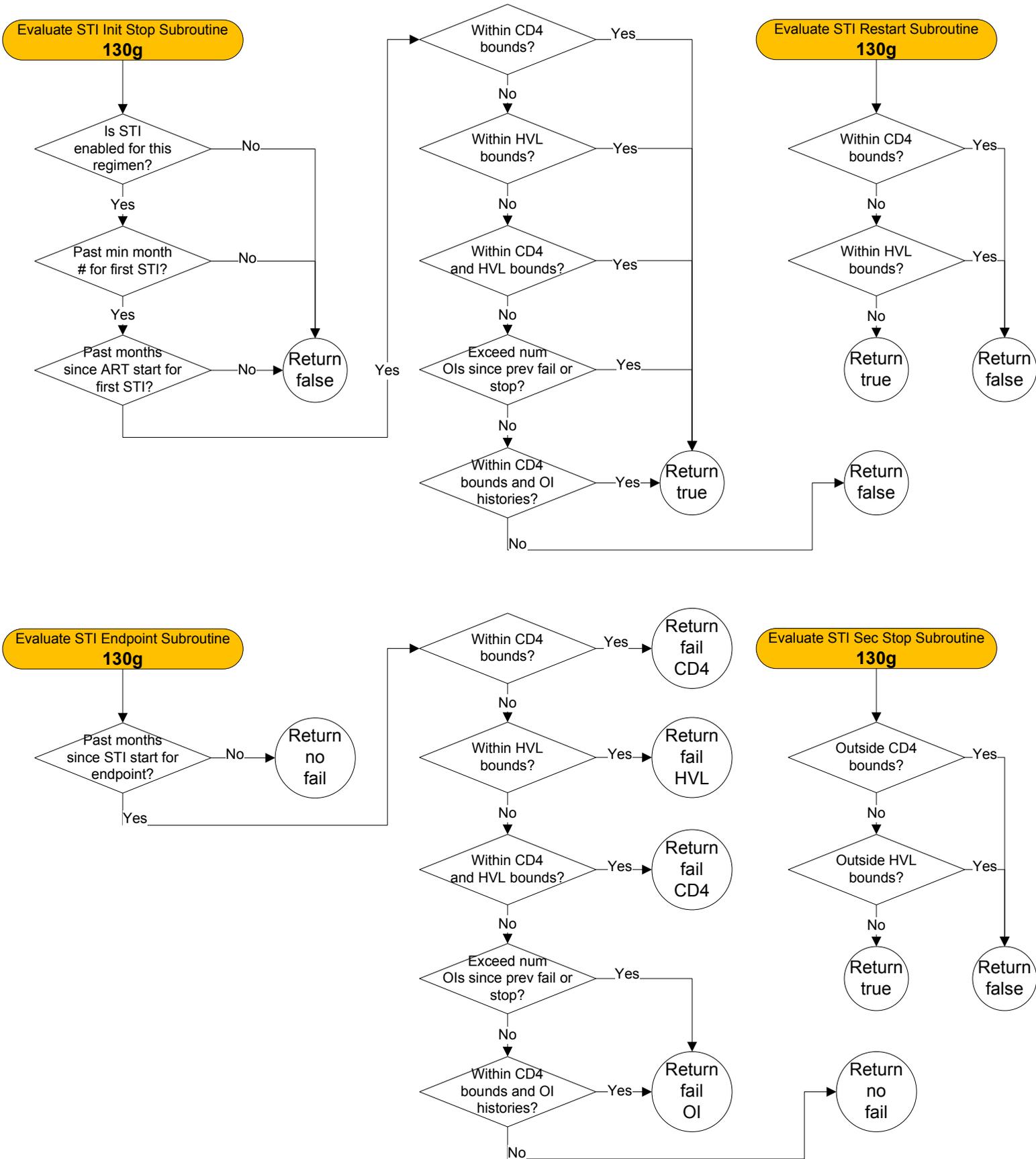
Evaluate Peds Fail ART Subroutine 130fp



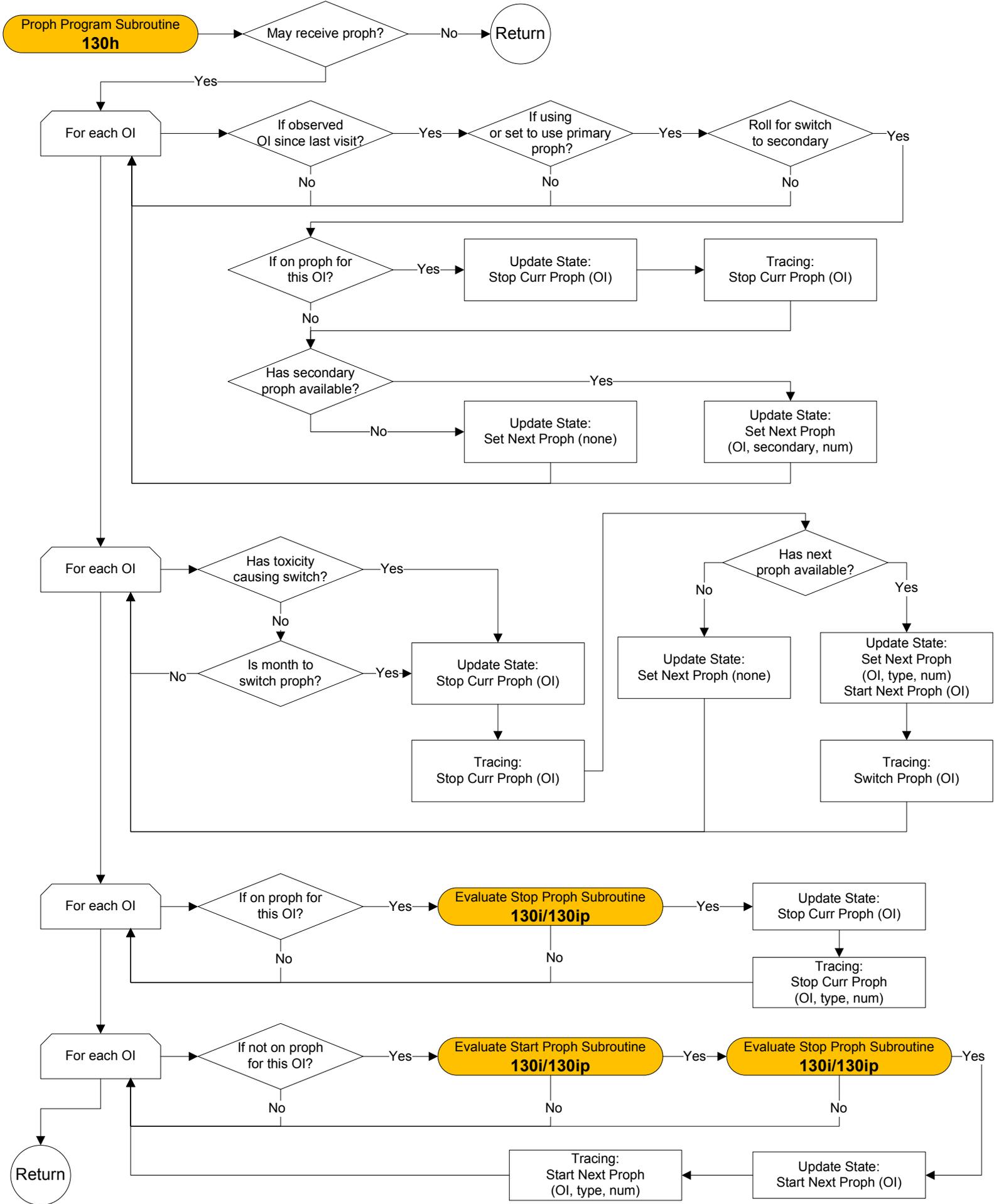
Evaluate Peds Stop ART Subroutine 130fp



Evaluate STI Init Stop Subroutine and Evaluate STI Restart Subroutine and Evaluate STI Sec Stop Subroutine and Evaluate STI Endpoint Subroutine– 130g

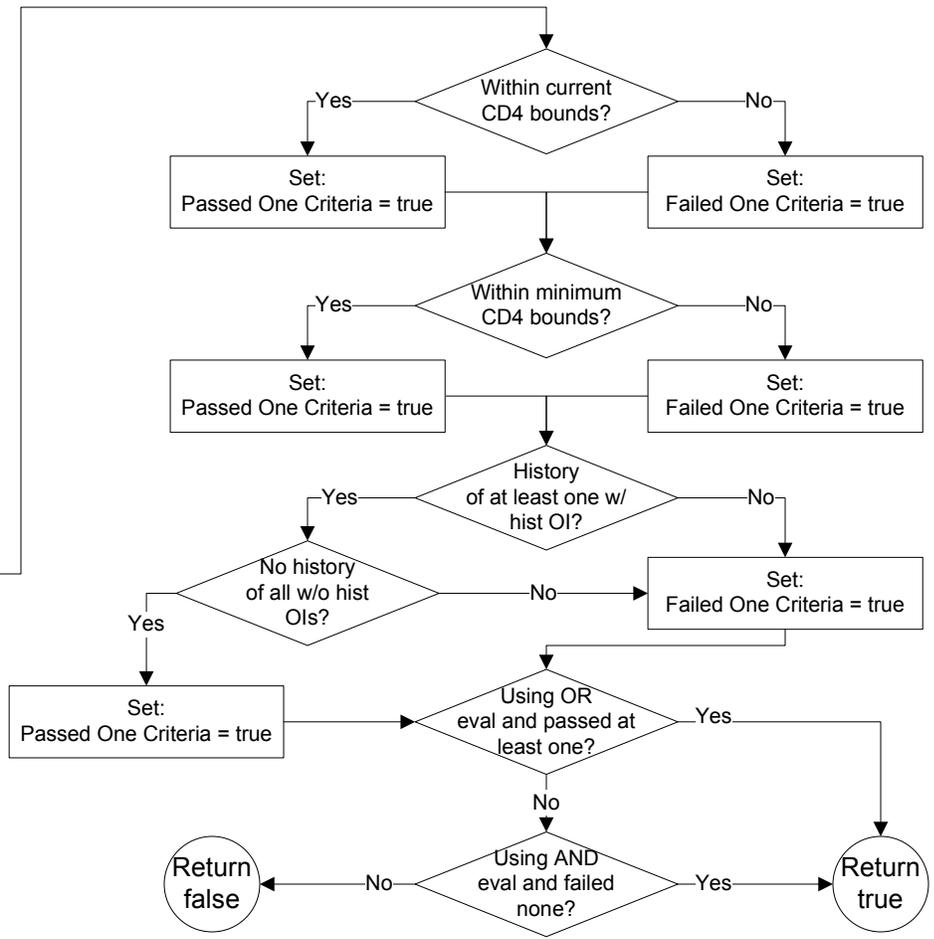
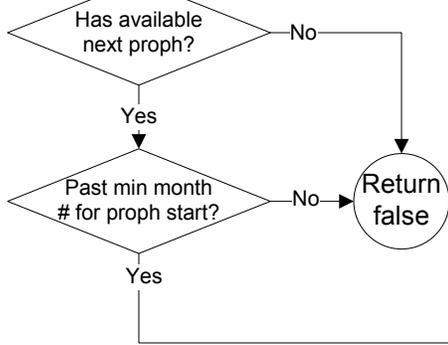


Proph Program Subroutine – 130h

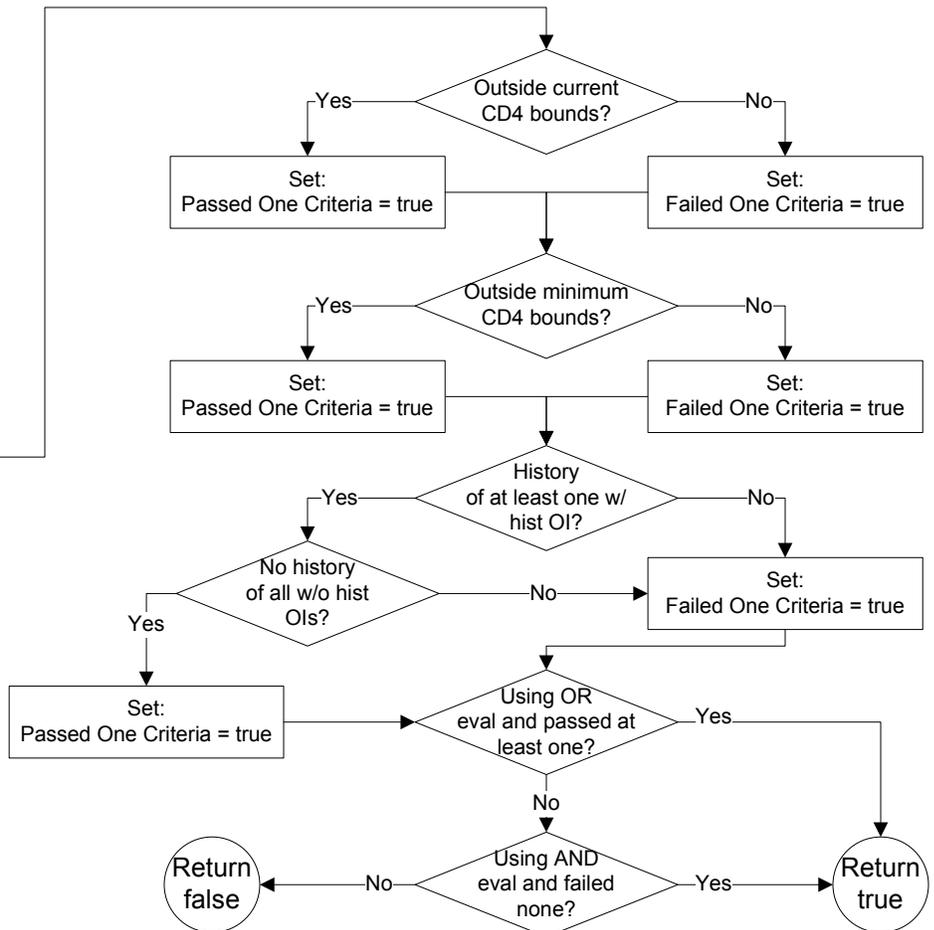
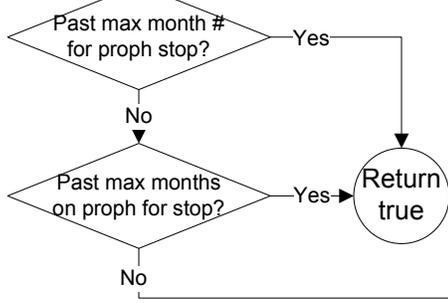


Evaluate Start Proph Subroutine and Evaluate Stop Proph Subroutine – 130i

Evaluate Start Proph Subroutine 130i

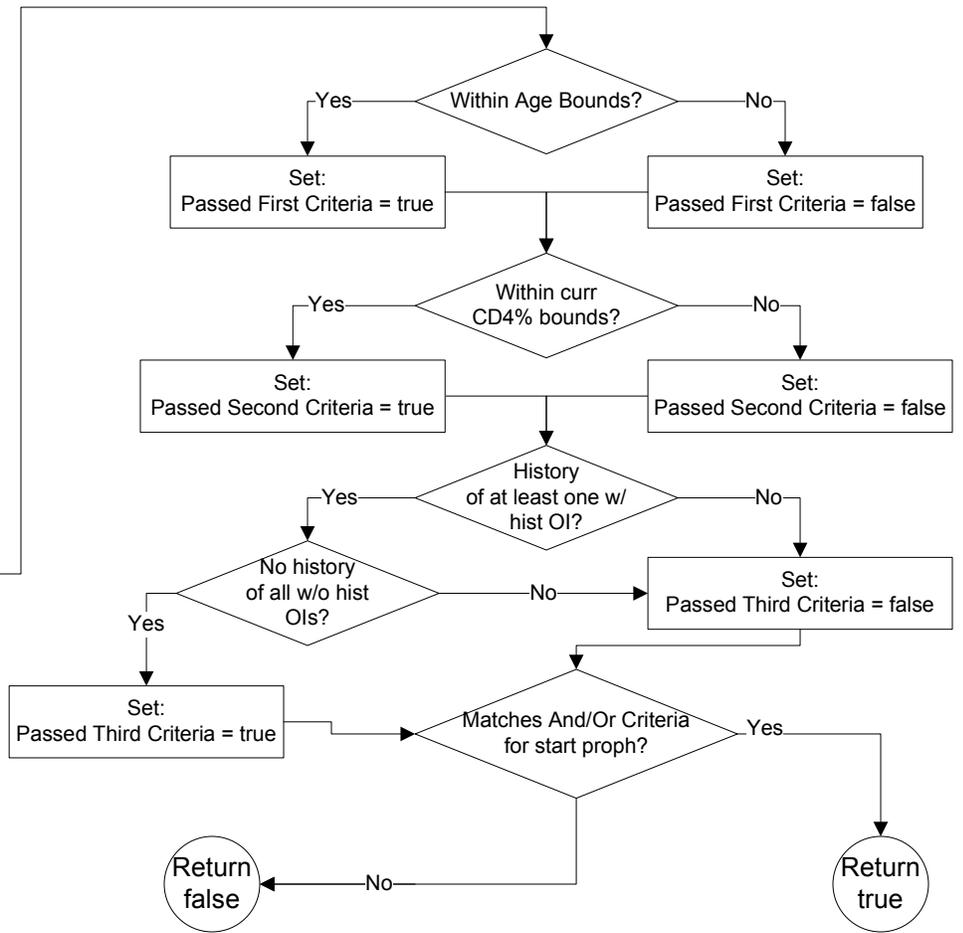
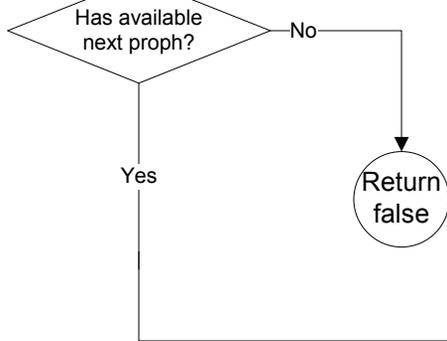


Evaluate Stop Proph Subroutine 130i

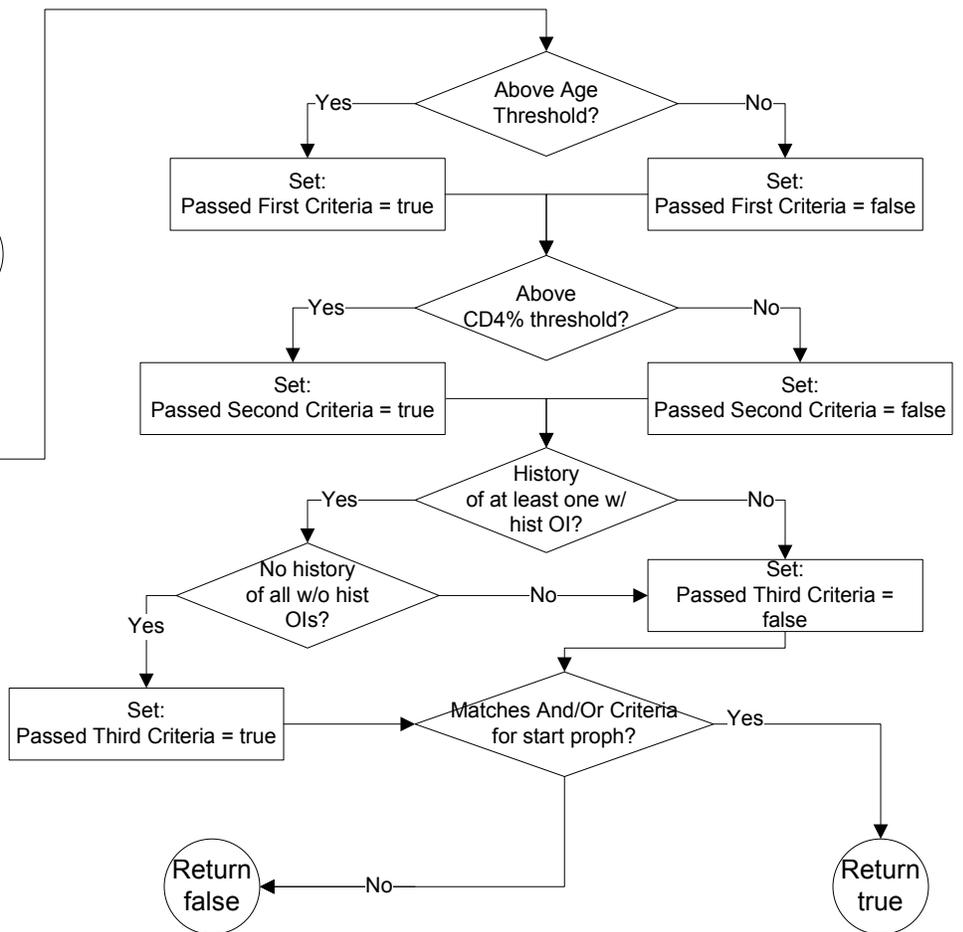
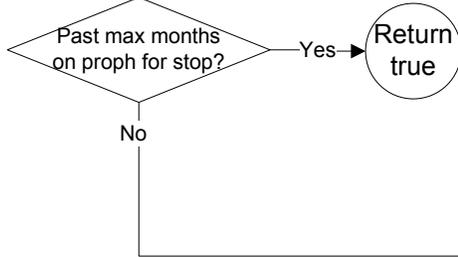


Evaluate Peds Start Proph Subroutine and Evaluate Peds Stop Proph Subroutine – 130ip

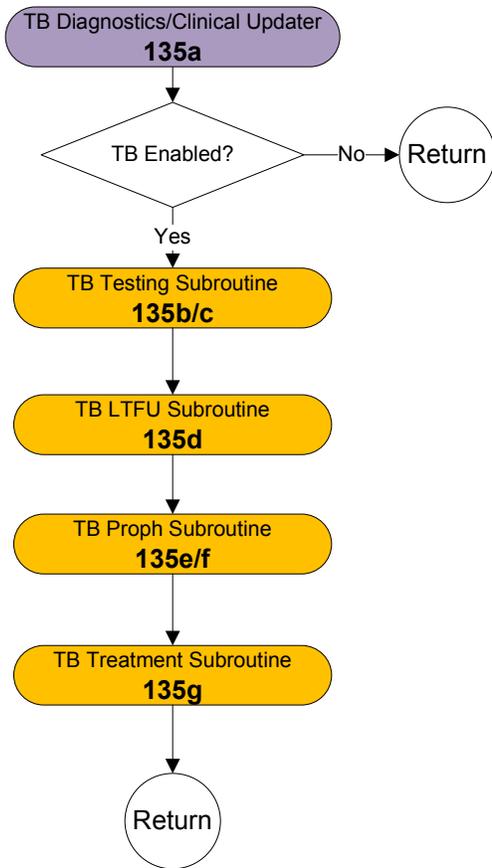
Evaluate Peds Start Proph Subroutine 130ip



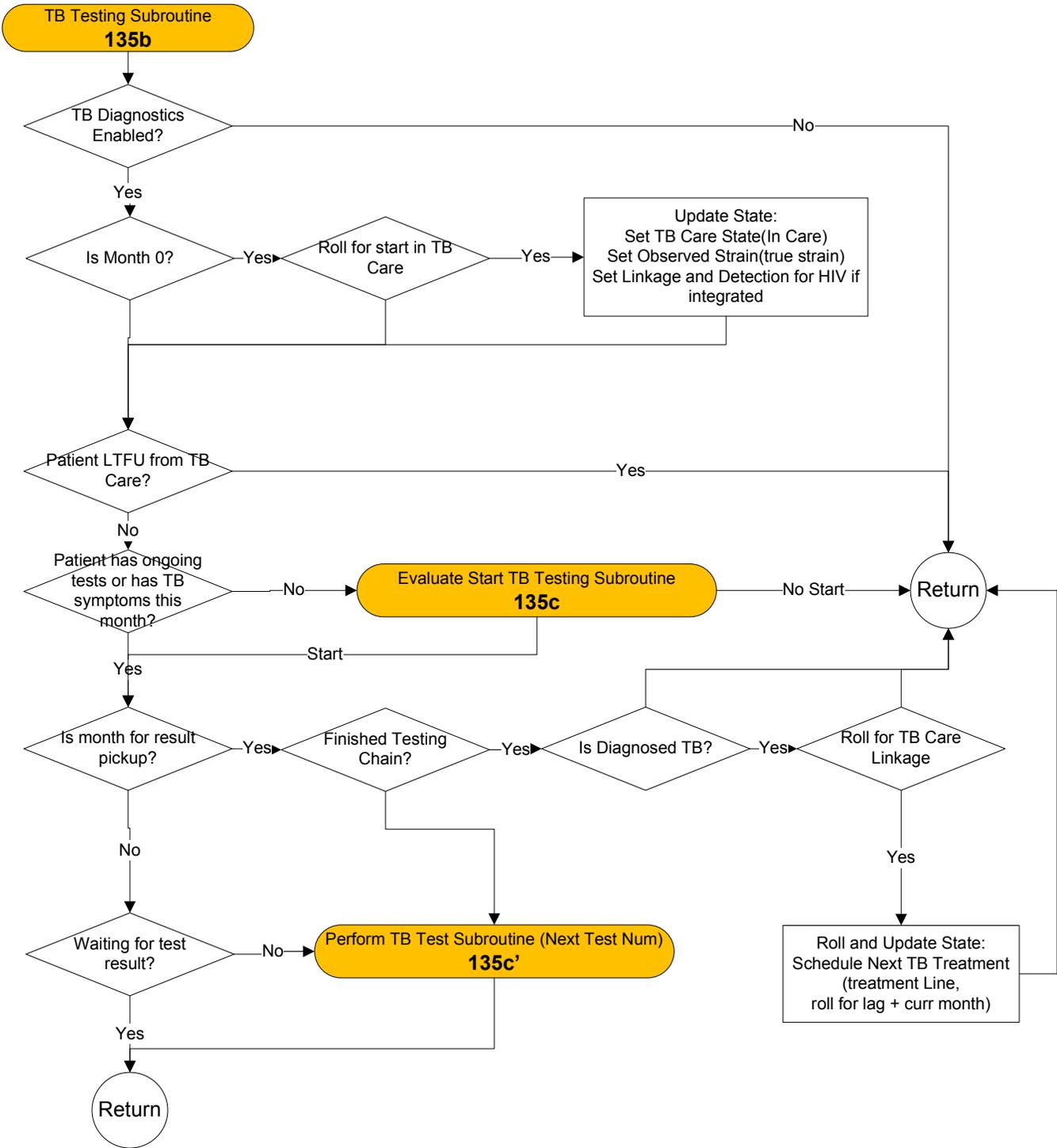
Evaluate Peds Stop Proph Subroutine 130ip



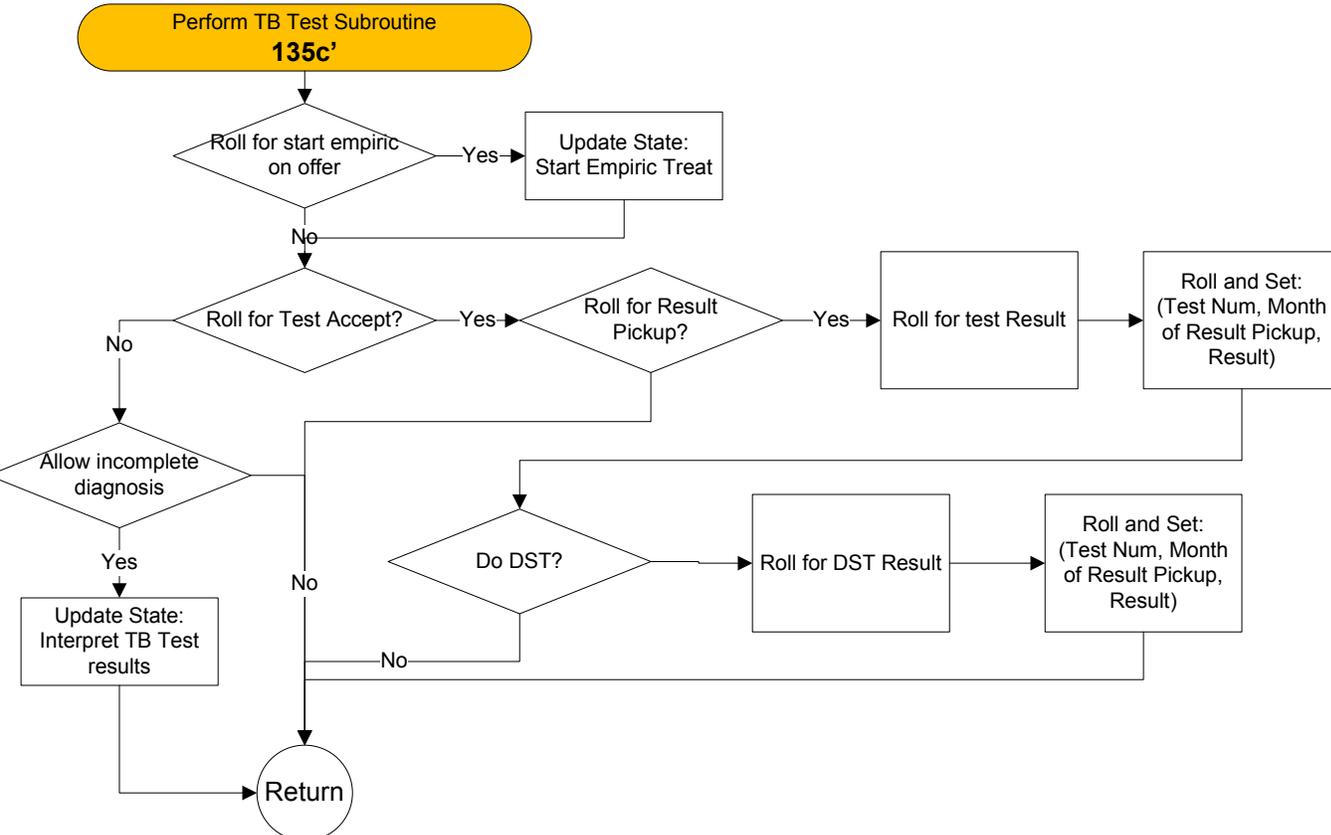
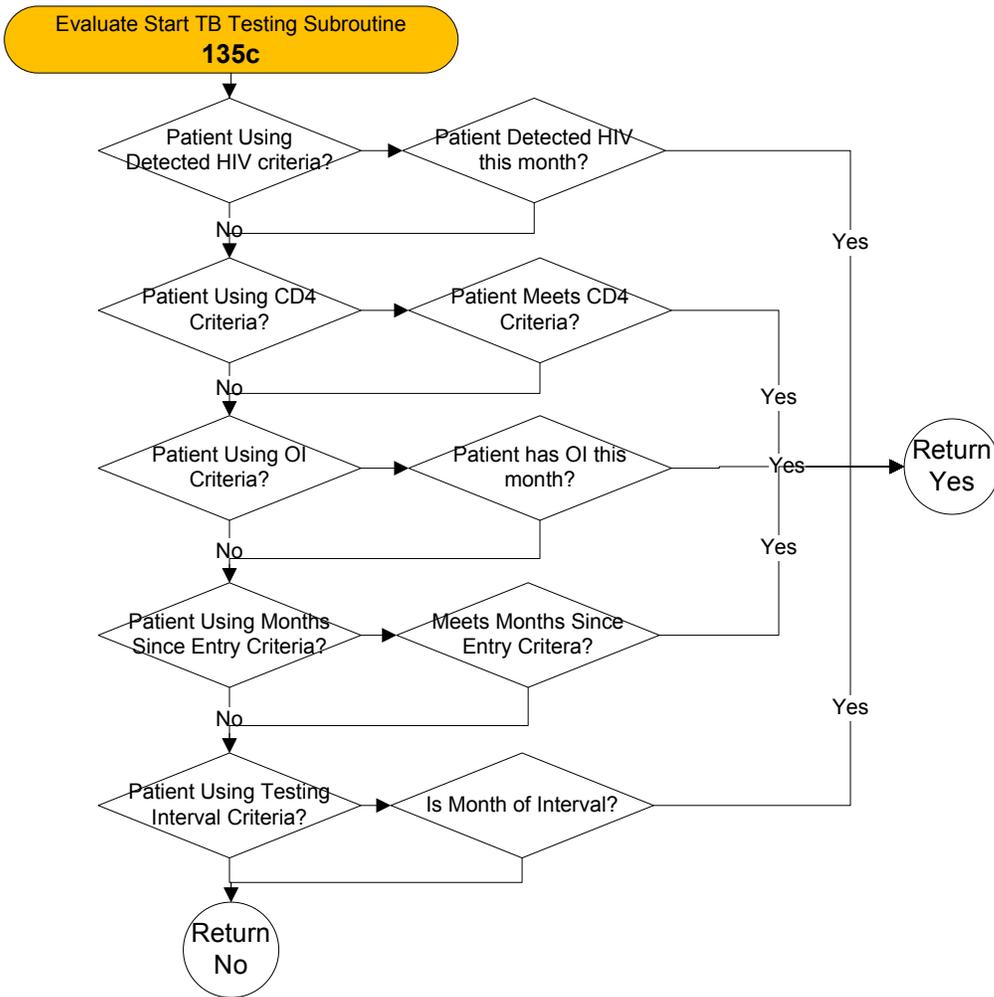
TB Diagnostics/Clinical Updater – 135a



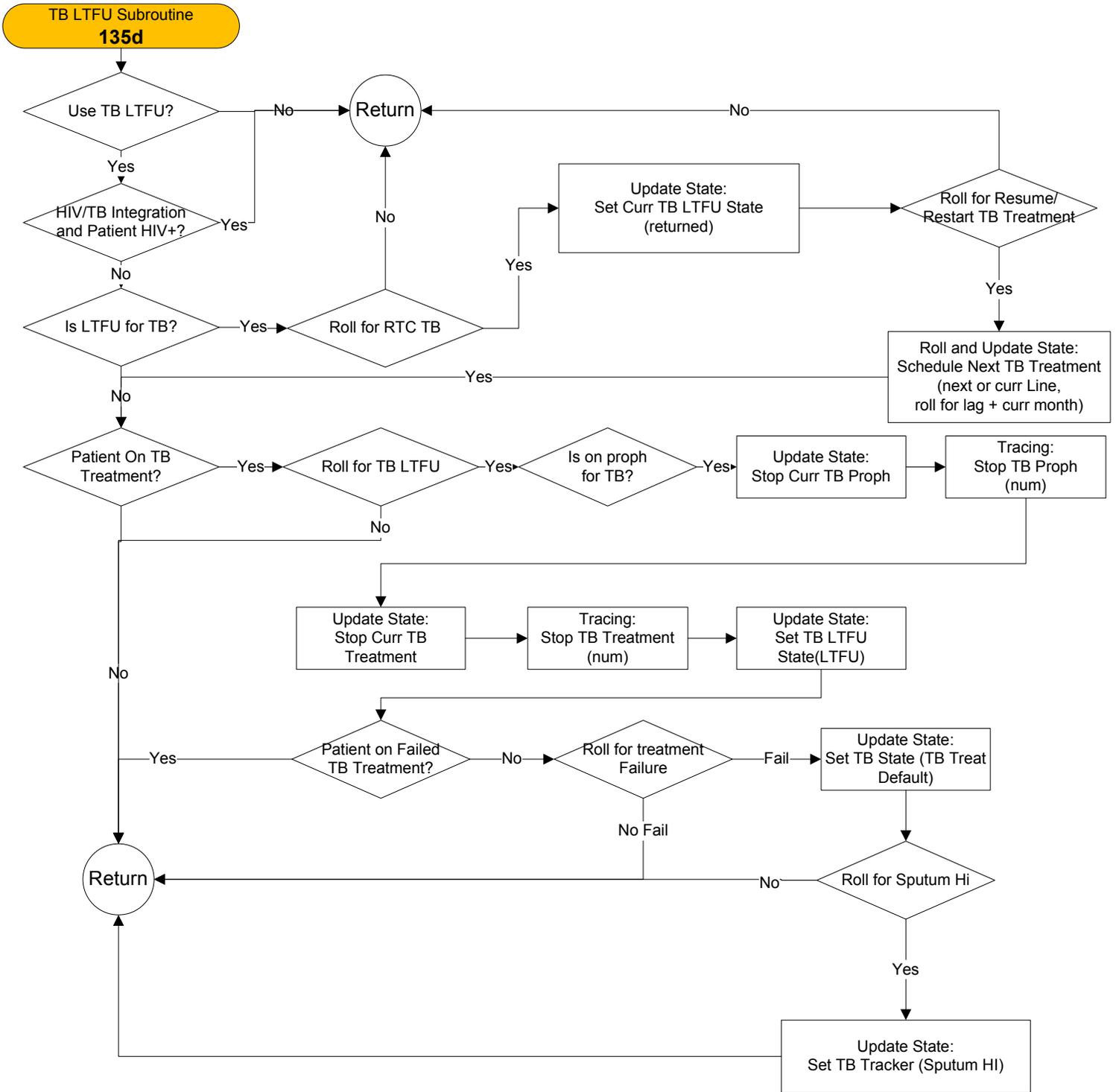
TB Testing Subroutine – 135b



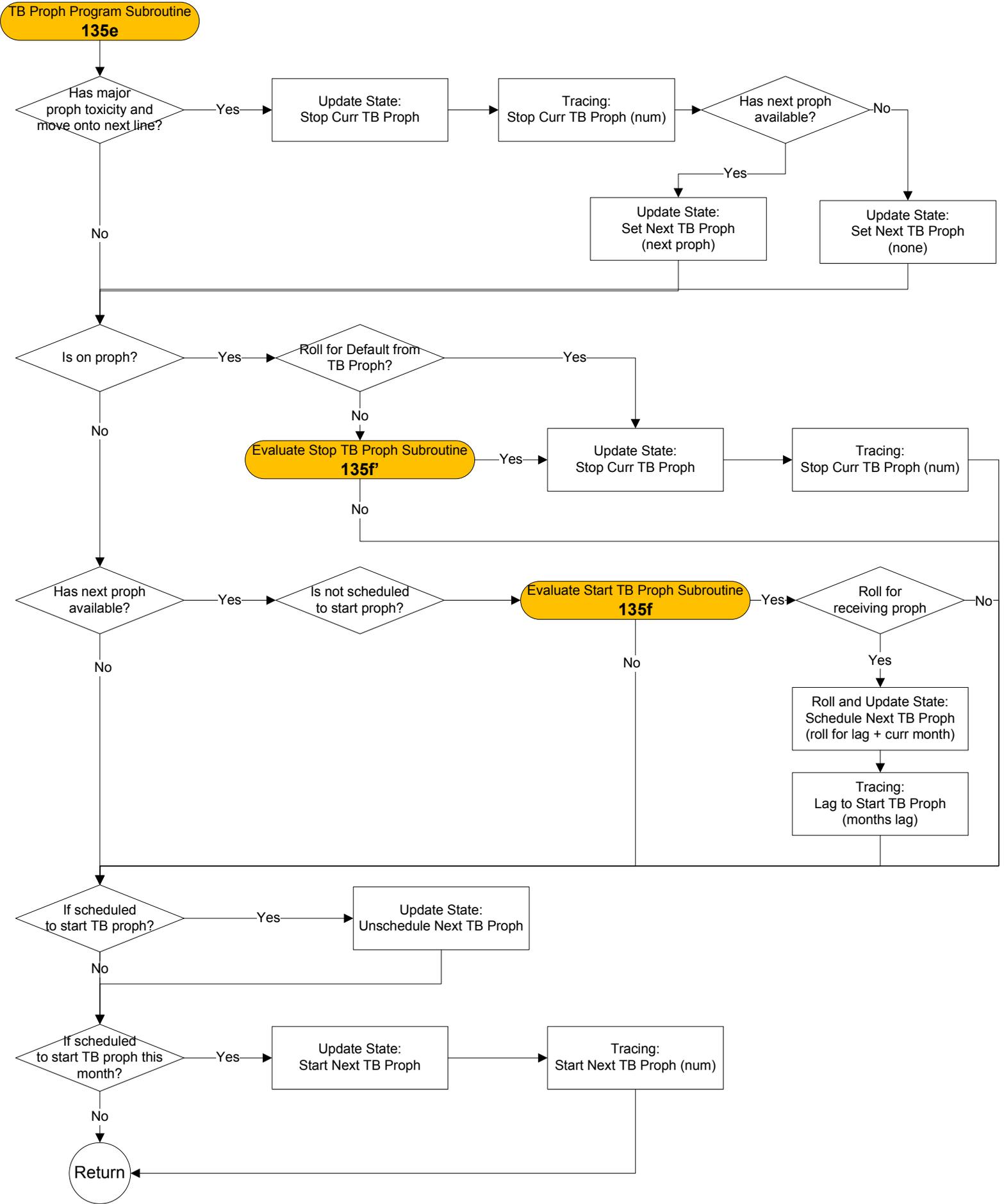
TB Testing Subroutine – 135c



TB LTFU Subroutine – 135d

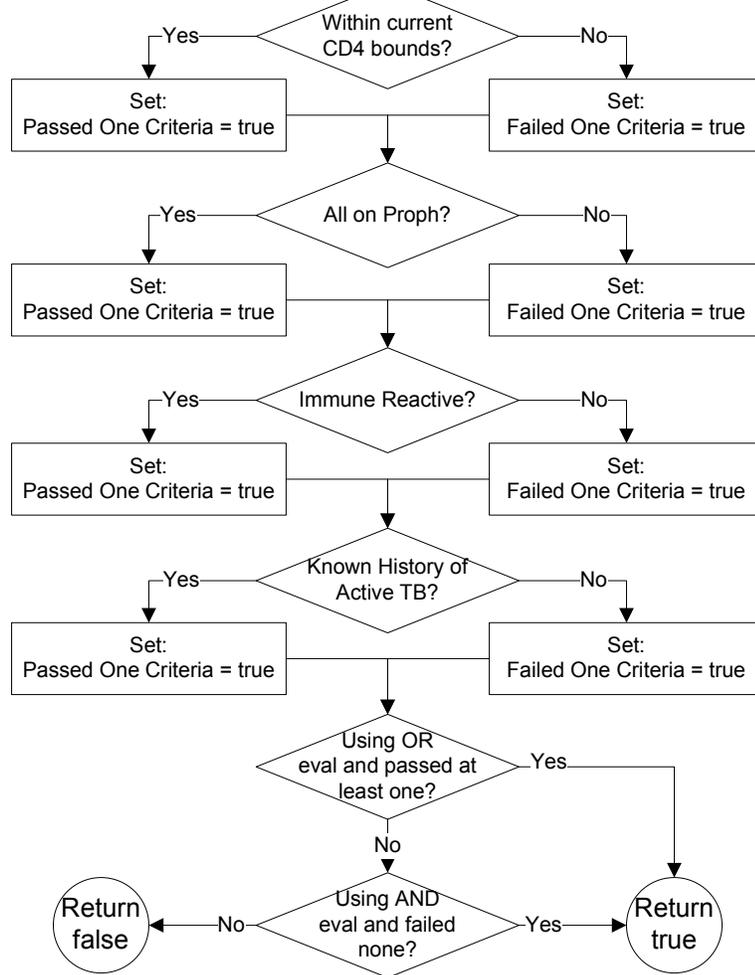
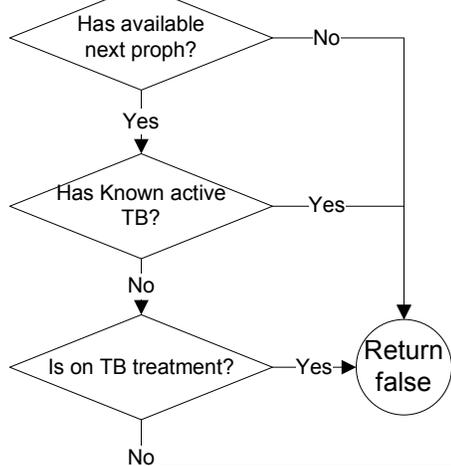


TB Proph Program Subroutine – 135e

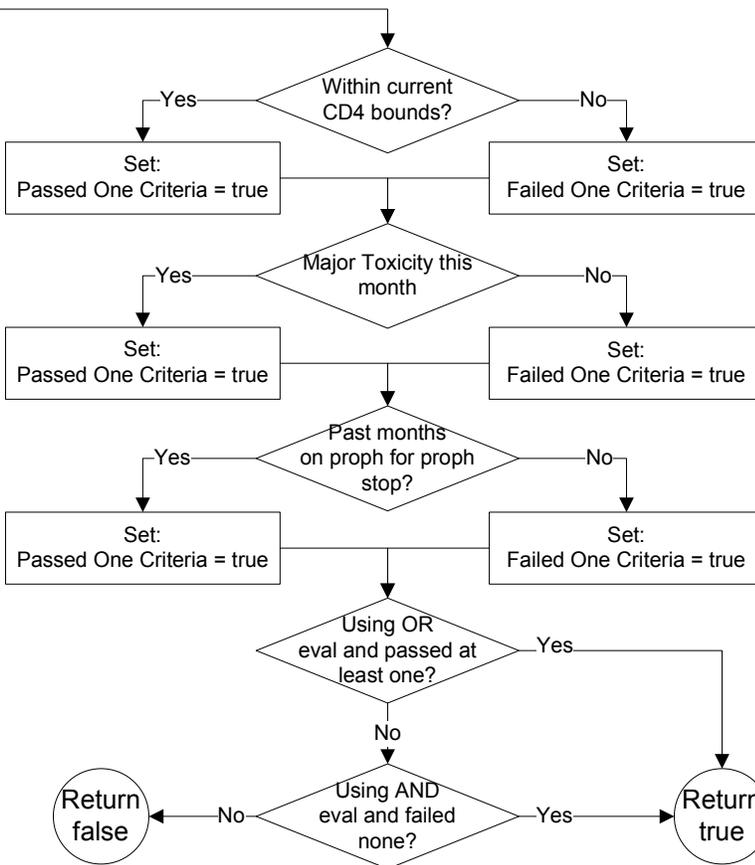
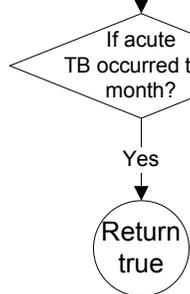


Evaluate Start TB Proph Subroutine and Evaluate Stop TB Proph Subroutine – 135f

Evaluate Start TB Proph Subroutine 135f

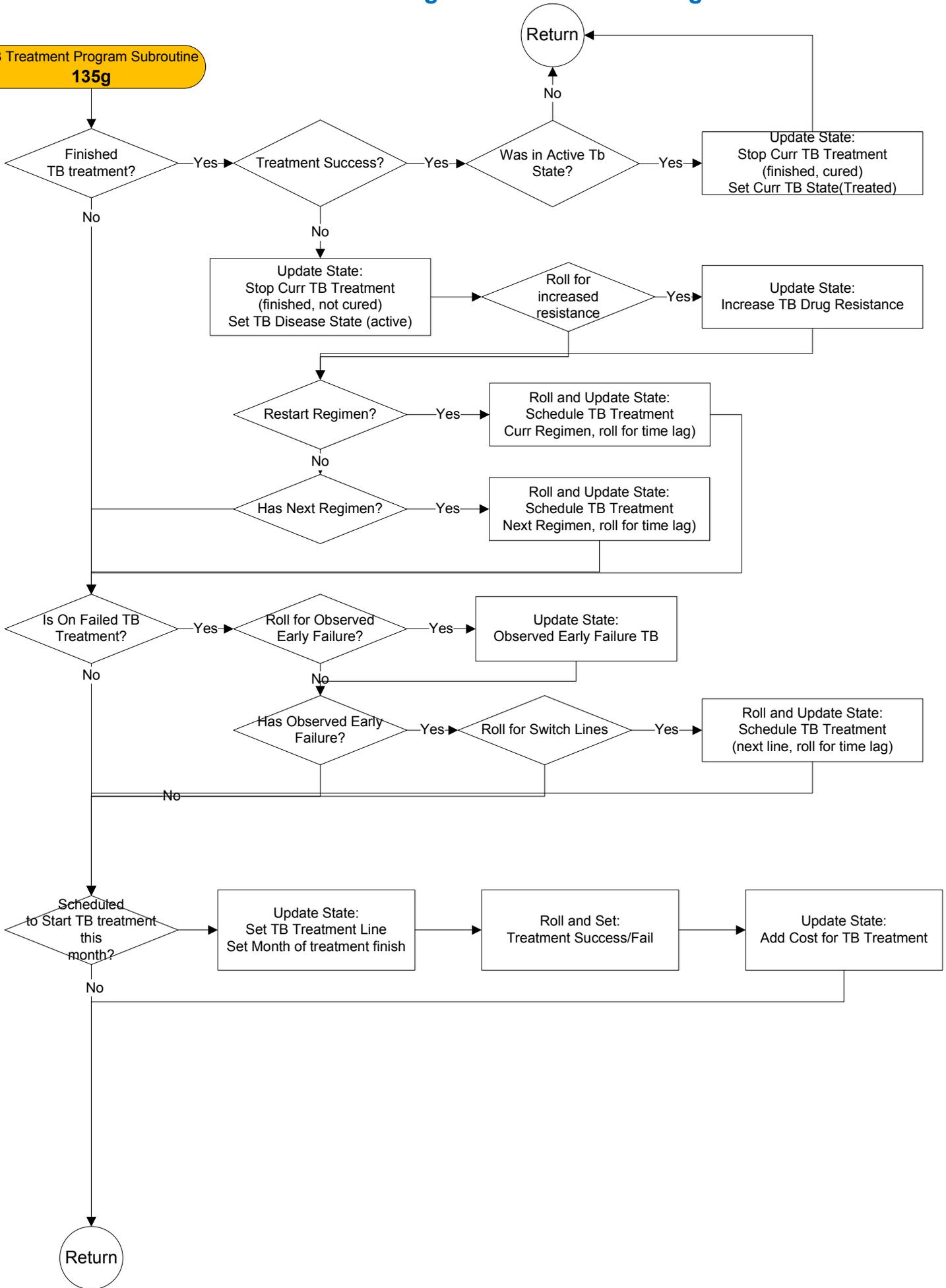


Evaluate Stop TB Proph Subroutine 135f

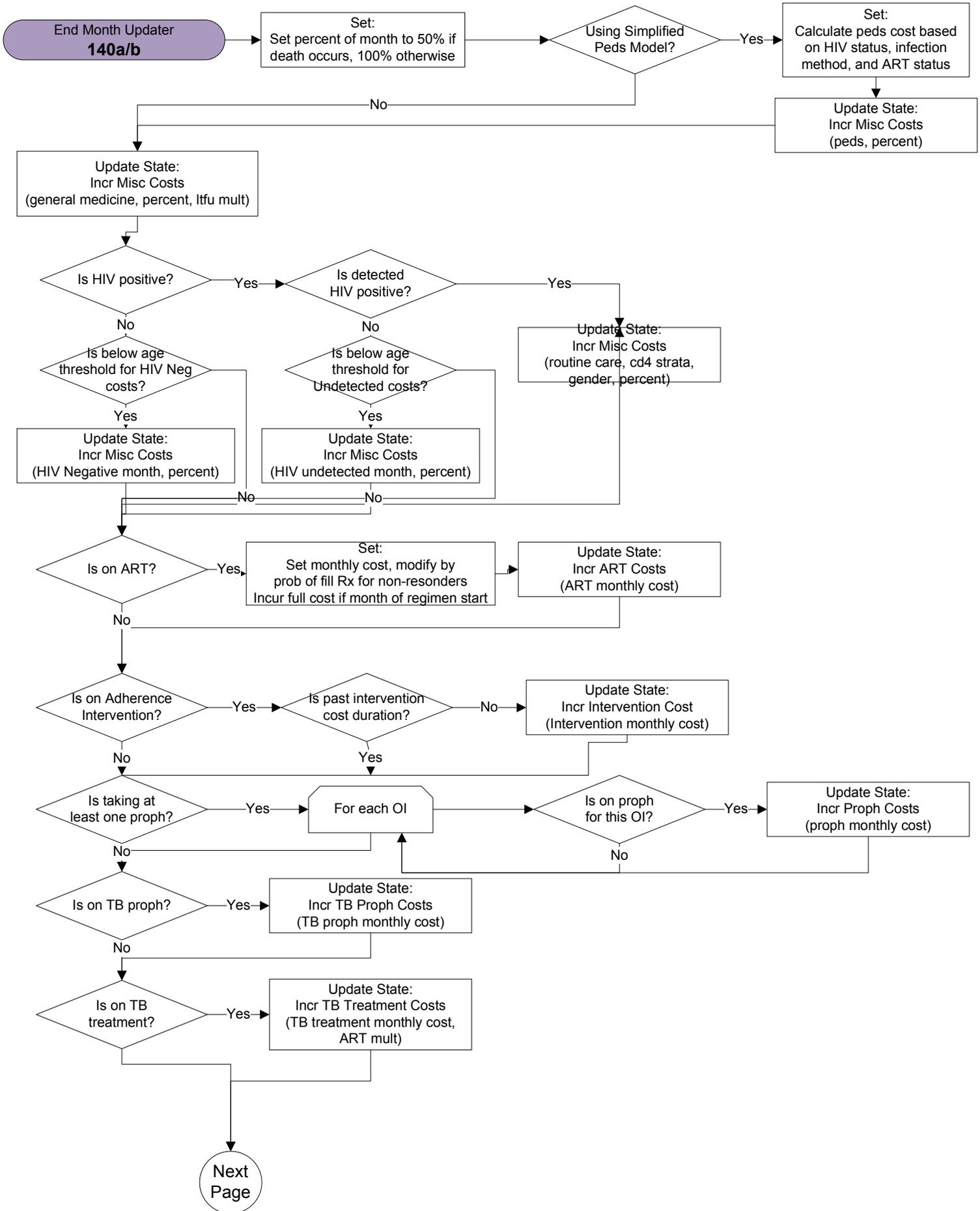


TB Treatment Program Subroutine – 135g

**TB Treatment Program Subroutine
135g**

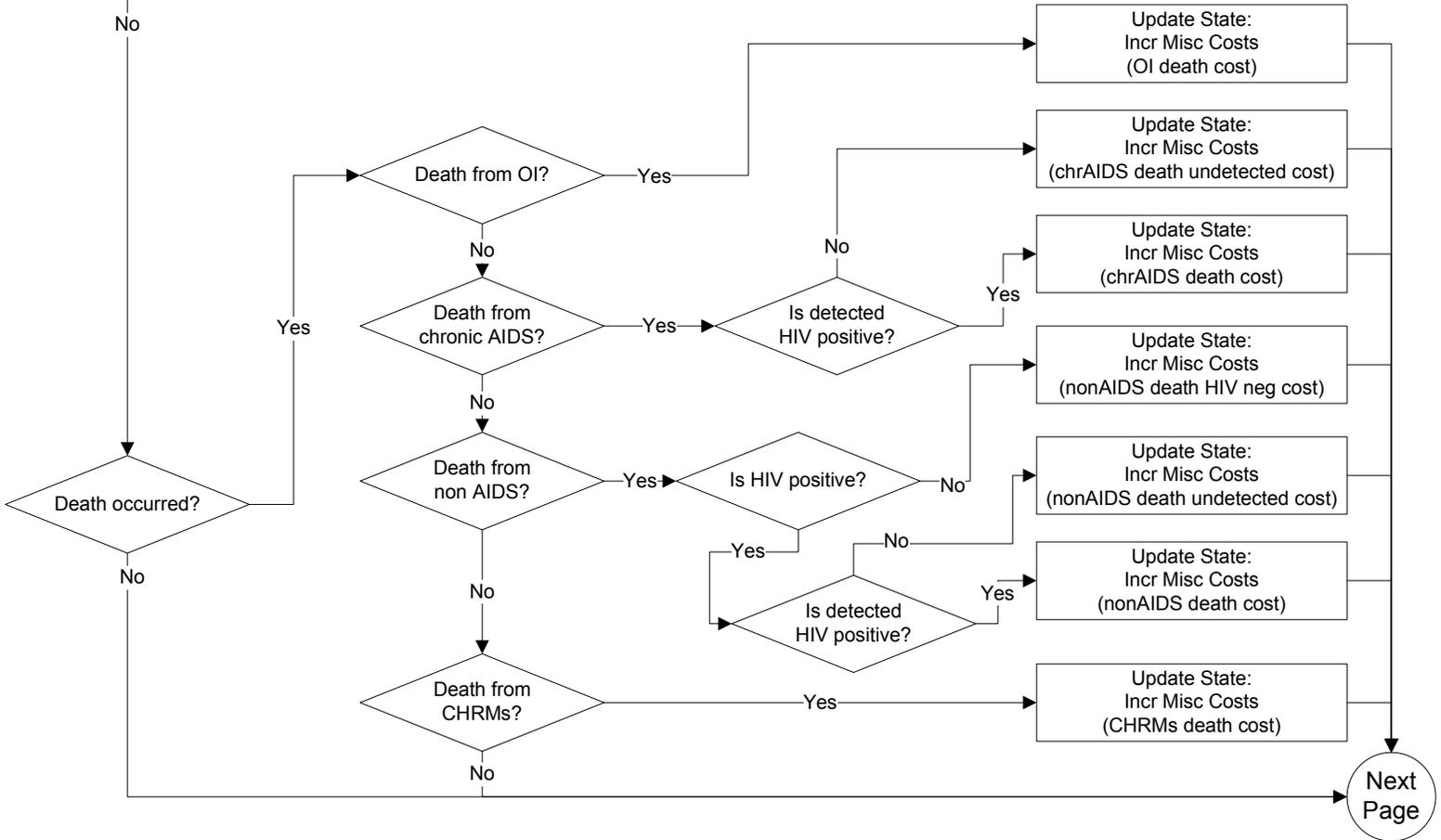


End Month Updater – 140a



End Month Updater – 140b

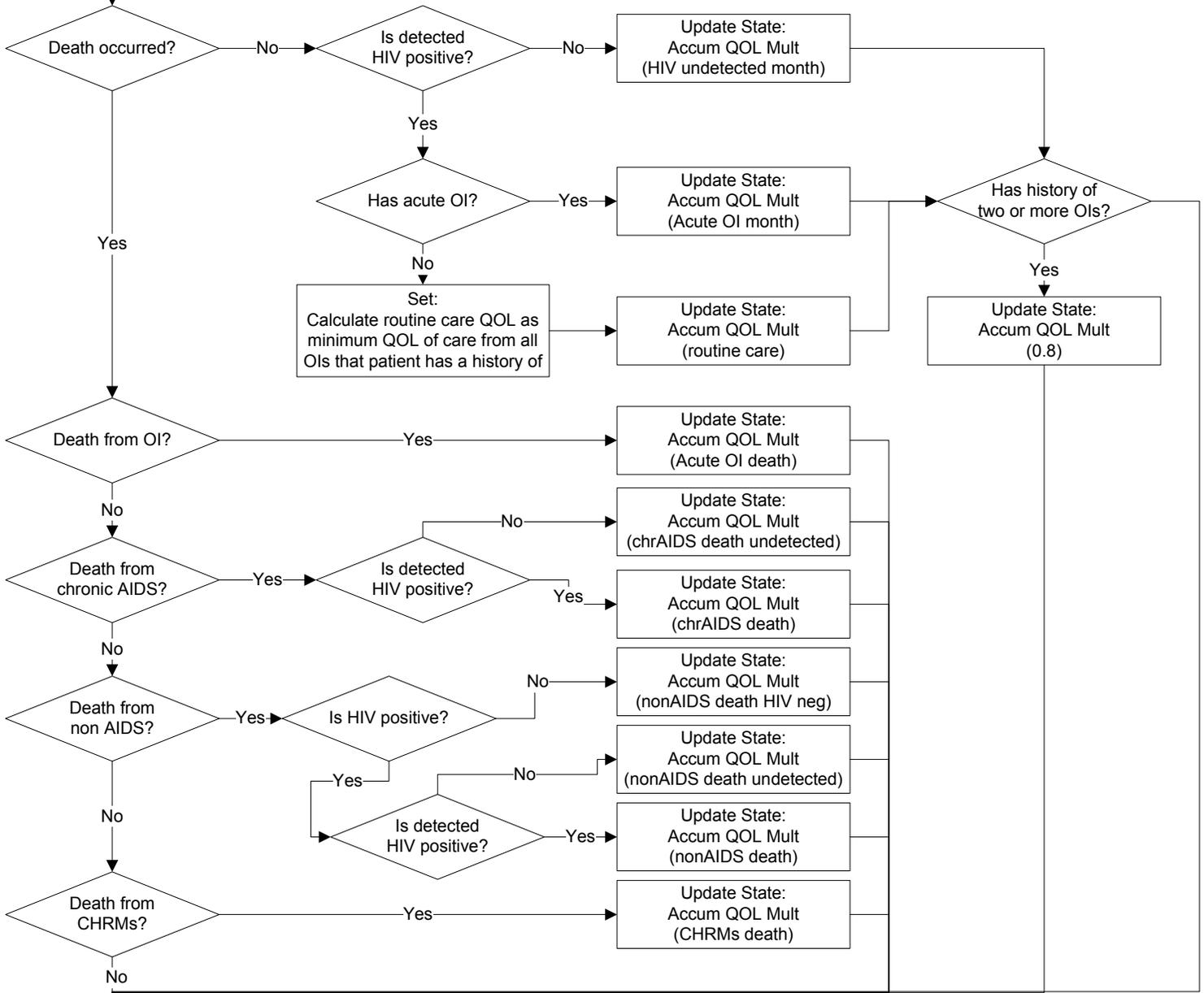
Prev Page



End Month Updater – 140c

Prev Page

Update State:
Accum QOL Mult
(age/gender base QOL)



Update State:
Update Patient Survival (percent)
Update Overall Survival (percent)
Update Longitudinal Survival

Update State:
Set OI History
Update OI History Logging
Update ART Efficacy Stats

Tracing:
Patient Health (CD4, HVL)
Patient Stats (LM, QALM, cost)

Update State:
Increment Month
Increment Discount Factor

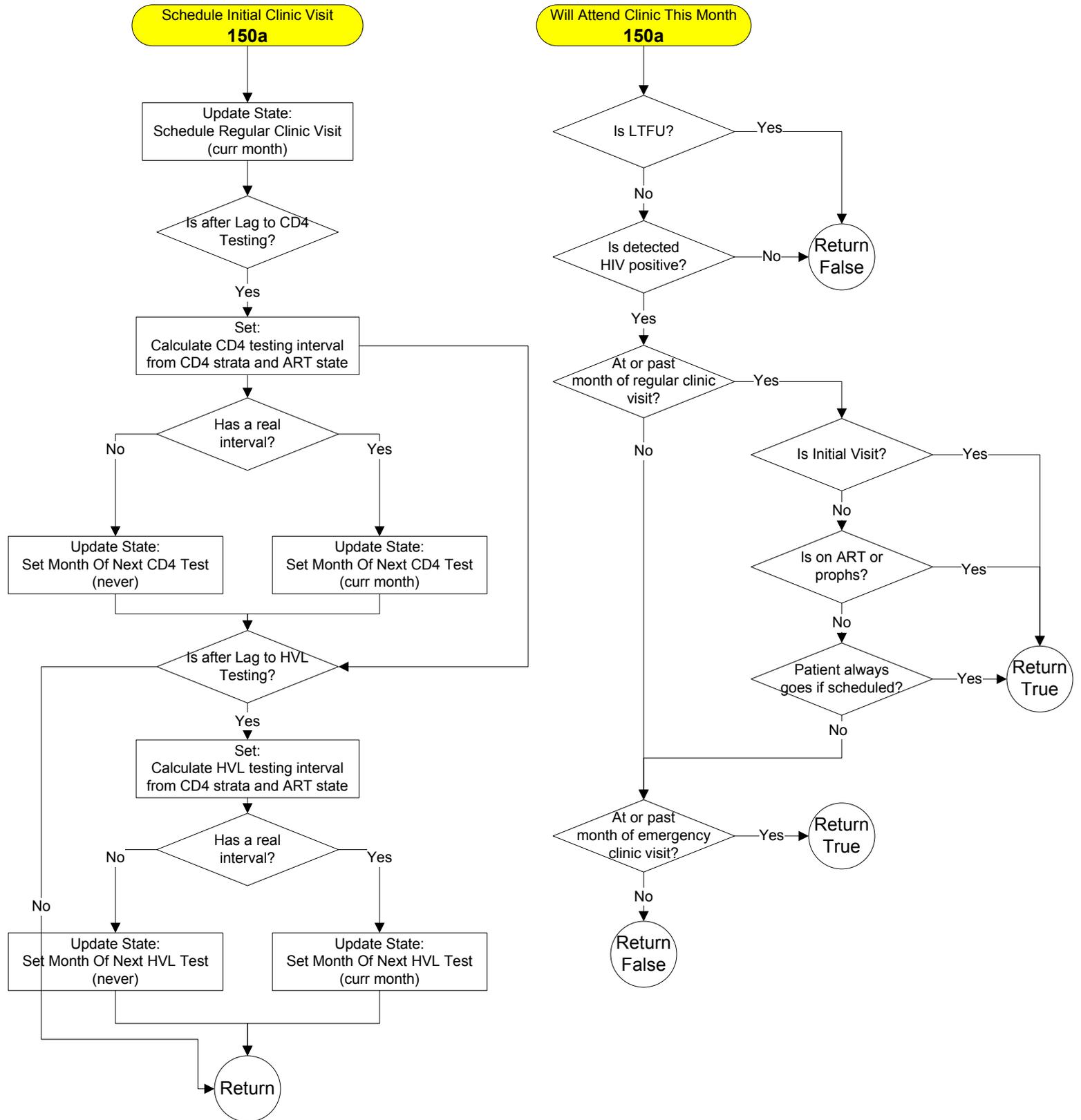
Update State:
Update Patient Survival (percent)
Update Overall Survival (percent)

Update State:
Update Population Stats
Add Patient Summary

Tracing:
Patient Death (cause)
Patient Stats (LM, QALM, cost)

Return

Set Month Of Initial Clinic Visit and Will Attend Clinic This Month – 150a



Get Partial Suppress Target HVL – 150b

