Copy the following into a Stata do file.

1. Data management for adult data

****NOTE: Replace all file names/pathways with appropriate ones as per your own directories/files**** *insheet using "R:\HPIRG\Flu-CATs\Weekly data\adults_20140804.txt", clear

***Converting dates from YMD to MDY
tostring submit_date, gen(submit_date2)
gen submit_date3= date(submit_date2, "YMD")
format submit_date3 %td
drop submit_date2 submit_date
rename submit_date3 submit_date

gen frddate2=date(frddate, "DMY") drop frddate rename frddate2 frddate format frddate %td

gen regdate2=date(regdate, "DMY") drop regdate rename regdate2 regdate format regdate %td

gen utsdate2=date(utsdate, "DMY") drop utsdate rename utsdate2 utsdate format utsdate %td

gen lcdate2=date(lcdate, "DMY") drop lcdate rename lcdate2 lcdate format lcdate %td

gen todate2=date(todate, "DMY") drop todate rename todate2 todate format todate %td

gen deathdate2=date(deathdate, "DMY") drop deathdate rename deathdate2 deathdate format deathdate %td

**Keeping only unique consultations (dropping duplicates)
bys patid submit_date: gen new=_n
keep if new==1
drop new
count

data management loops
measured/not measured variables
label define measurements 0 "Not measured" 1 "Measured"
local varlist " temperature respiratoryrate peripheraloxygensaturation heartrate bloodpressure"
foreach varname of local varlist {
 encode `varname', gen(`varname'2)
 drop `varname'
 rename `varname'2 `varname'
 recode `varname' 2=0
 label values `varname' measurements

}

measurement values

local varlist "temperaturevalue respiratoryratevalue peripheraloxygensaturationvalue heartratevalue bloodpressuresystolic bloodpressurediastolic"

```
foreach varname of local varlist {
replace `varname'=" " if `varname'== "-"
destring `varname', replace
```

}

binary categorical (yes/no)
label define binary_categorical 0 "No" 1 "Yes"
local varlist "patientonoxygen severerespiratorydistress respiratoryexhaustion severedehydration causingotherclinicalconcern
treatwithantivirals treatwithantibiotics refertohospital"

foreach varname of local varlist { encode `varname', gen(`varname'2) drop `varname' rename `varname'2 `varname' recode `varname' 1=0 recode `varname' 2=1 label values `varname' binary_categorical }

capillary refill time: code normal as "0" and refill time>2 secs as "1"
encode capillaryrefilltime, gen(capillaryrefilltime2)
drop capillaryrefilltime
rename capillaryrefilltime2 capillaryrefilltime
recode capillaryrefilltime 1=0
recode capillaryrefilltime 2=1
label define capillaryrefilltime 0 "Grossly normal" 1 "sternal capillary refill>2 secs"
label values capillaryrefilltime capillaryrefilltime

patientoxygenvalue: this will show as blank if the previous field 'patientoxygen' was answered as "no" encode patientonoxygenvalue, gen(patientonoxygenvalue2) drop patientonoxygenvalue2 patientonoxygenvalue **check these recode values carefully in new files as current file does not have any 'yes'** recode patientonoxygenvalue 1=9 recode patientonoxygenvalue 2=0 recode patientonoxygenvalue 3=1 label define patientoxygenvalue 9 "Not applicable" 0 "No" 1 "Yes", replace label values patientonoxygenvalue patientoxygenvalue

**newalteredconsciouslevel **
encode newalteredconsciouslevel , gen(newalteredconsciouslevel2)
drop newalteredconsciouslevel
rename newalteredconsciouslevel2 newalteredconsciouslevel
**Check coding before doing below
recode newalteredconsciouslevel 2=0
label define newalteredconsciousness 0 "No, patient alert" 1 "Confused/agitated" 2 "Responsive to voice only" 3 "Responsive to pain
only/unconscious", replace
label values newalteredconsciouslevel newalteredconsciousness

socialisolation
encode socialisolation, gen(socialisolation2)
drop socialisolation
rename socialisolation2 socialisolation
check codes in new files
recode socialisolation 1=0
recode socialisolation 3=1
keep 'unknown' as "2"
label define socialisolation 0 "No" 1 "Yes" 2 "Unknown"
label values socialisolation socialisolation

performance status
encode performancestatus, gen(performancestatus2)
drop performancestatus
rename performancestatus2 performancestatus
check codes in new file

derivation of values based CATs criteria
gen CAT_triage_A= severerespiratorydistress
label variable CAT_triage_A `"CAT triage criteria A- severe respiratory distress (yes/no)"'
label values CAT_triage_A binary_categorical

gen CAT_triage_B= . replace CAT_triage_B= 1 if respiratoryratevalue>30 & respiratoryratevalue !=. replace CAT_triage_B=0 if respiratoryratevalue<=30 label variable CAT_triage_B `"CAT triage criteria B (resp rate>30 breaths/min)- yes/no"" label values CAT_triage_B binary_categorical

gen CAT_triage_C=. replace CAT_triage_C=1 if peripheraloxygensaturationvalue<=92 & peripheraloxygensaturationvalue !=. replace CAT_triage_C=0 if peripheraloxygensaturationvalue>92 label variable CAT_triage_C `"CAT triage criteria C (peripheral oxygen <=92%)- yes/no"' label values CAT_triage_C binary_categorical

gen CAT_triage_D=respiratoryexhaustion label variable CAT_triage_D `"CAT triage criteria D- respiratory exhaustion (yes/no)"' label values CAT_triage_D binary_categorical

gen CAT_triage_E=.
replace CAT_triage_E=1 if capillaryrefilltime==1
replace CAT_triage_E=1 if bloodpressuresystolic<90
replace CAT_triage_E=1 if bloodpressurediastolic<60
replace CAT_triage_E=1 if severedehydration==1
recode CAT_triage_E .=0
label variable CAT_triage_E `"CAT triage criteria E (severe clinical dehydration)- yes/no"'
label values CAT_triage_E binary_categorical</pre>

gen CAT_triage_F=. replace CAT_triage_F=0 if newalteredconsciouslevel==0 recode CAT_triage_F .=1 label variable CAT_triage_F `"CAT triage criteria E (new altered conscious level)- yes/no"' label values CAT_triage_F binary_categorical

gen CAT_triage_G= causingotherclinicalconcern label variable CAT_triage_G `"CAT triage criteria G, causing other clinical concern (yes/no)"' label values CAT_triage_G binary_categorical

*create variable labels** label variable patid `"unique patient identifier"' label variable pracid `"practice id"' label variable submit date `"presentation date"" label variable temperature `"temperature measurement (measured/not measured)"' label variable temperaturevalue `"temperature value in celsius; range allowed (35.0-42.0)"' label variable severerespiratory distress "CAT triage criteria A- severe respiratory distress (yes/no)" label variable respiratoryexhaustion `"CAT triage criteria D- respiratory exhaustion (yes/no)" label variable respiratoryrate `"respiratory rate (measured/not measured)" label variable respiratoryratevalue `"respiratory rate- breaths per minute; range allowed (15-120)"' label variable patientonoxygen `"patient on oxygen (yes/no)"' label variable patientonoxygenvalue `"new oxygen need (yes/no)"' label variable peripheraloxygensaturation `"peripheral oxygen value (measured/not measured)"' label variable peripheraloxygensaturationvalue `"peripheral oxygen saturation (%); range allowed (70-100)"' label variable heartrate `"heart rate (measured/not measured)" label variable heartratevalue `"heart rate value (beats per minute); range allowed (40-200)"' label variable bloodpressure `"blood pressure (measured/not measured)"' label variable bloodpressuresystolic `"systolic blood pressure (mmHg); range allowed (70-250)"' label variable bloodpressurediastolic `"diastolic blood pressure (mmHg); range allowed (40-150)"' label variable capillaryrefilltime `"sternal capillary refill time: 1 if >2 seconds; 0= grossly normal"' label variable severedehydration `"severe dehydration (yes/no)"' label variable newalteredconsciouslevel `"new altered consciousness level (alert; confused/agitated; voice; pain/unconscious)"' label variable socialisolation `"lives alone or no fixed abode (yes/no/unknown)"" label variable treatwithantivirals "decision to treat with antivirals (yes/no)"

label variable treatwithantibiotics `"decision to treat with antibiotics (yes/no)" label variable performancestatus `"activity and ability to self care (categorical variable)" label variable causing other clinical concern "CAT triage criteria G, causing other clinical concern (yes/no)" label variable causingotherclinicalconcernvalue `"nature of clinical concern, free text" label variable refertohospital `"decision to refer to hospital (yes/no)"" order patid pracid formid gender birthyear submit_date temperature temperaturevalue severerespiratorydistress respiratoryexhaustion respiratoryrate respiratoryratevalue patientonoxygen patientonoxygenvalue peripheraloxygensaturation peripheraloxygensaturationvalue heartrate heartratevalue bloodpressure bloodpressuresystolic bloodpressurediastolic capillaryrefilltime severedehydration newalteredconsciouslevel socialisolation performancestatus causingotherclinicalconcern causingotherclinicalconcernvalue treatwithantivirals treatwithantibiotics refertohospital CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G ******** **descriptive analysis** local varlist "temperature respiratoryrate peripheraloxygensaturation heartrate bloodpressure" foreach varname of local varlist { tab `varname' } local varlist "temperaturevalue respiratoryratevalue peripheraloxygensaturationvalue heartratevalue bloodpressuresystolic bloodpressurediastolic" foreach varname of local varlist { summ 'varname', detail } local varlist "patientonoxygen severerespiratorydistress severedehydration causingotherclinicalconcern treatwithantivirals treatwithantibiotics refertohospital" foreach varname of local varlist { tab `varname' } tab CAT triage A, m tab CAT_triage_B, m tab CAT_triage_C, m tab CAT_triage_D, m tab CAT_triage_E, m tab CAT_triage_F, m tab CAT triage G, m tab capillaryrefilltime, m tab patientonoxygenvalue tab newalteredconsciouslevel tab socialisolation tab performancestatus **association between CATs criteria and treatment/referral decisions** local varlist " CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G" foreach varname of local varlist { tab `varname' treatwithantivirals, col chi logit treatwithantivirals `varname', or }

logit treatwithantivirals CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G, or

local varlist " CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G" foreach varname of local varlist { tab`varname' treatwithantibiotics, col chi logit treatwithantibiotics CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G, or

```
local varlist " CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G"
foreach varname of local varlist {
    tab `varname' refertohospital, col chi
    logit refertohospital `varname', or
```

}

}

logit refertohospital CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G, or

2. Data management for children's data

****NOTE: Replace all file names/pathways with appropriate ones as per your own directories/files****
*insheet using "R:\HPIRG\Flu-CATs\Weekly data\child_20140804.txt", clear

tostring submit_date, gen(submit_date2)
gen submit_date3= date(submit_date2, "YMD")
format submit_date3 %td
drop submit_date2 submit_date
rename submit_date3 submit_date

gen frddate2=date(frddate, "DMY") drop frddate rename frddate2 frddate format frddate %td

gen regdate2=date(regdate, "DMY") drop regdate rename regdate2 regdate format regdate %td

gen utsdate2=date(utsdate, "DMY") drop utsdate rename utsdate2 utsdate format utsdate %td

gen lcdate2=date(lcdate, "DMY") drop lcdate rename lcdate2 lcdate format lcdate %td

gen todate2=date(todate, "DMY") drop todate rename todate2 todate format todate %td

gen deathdate2=date(deathdate, "DMY") drop deathdate rename deathdate2 deathdate format deathdate %td

set more off

**Keeping only unique consultations (dropping duplicates)
bys patid submit_date: gen new=_n
keep if new==1
drop new
count

**gender labelling label define gender 1 "Male" 2 "Female" label values gender gender

> drop `varname' rename `varname'2 `varname' recode `varname' 2=0 label values `varname' measurements

}

measurement values local varlist "temperaturevalue respiratoryratevalue peripheraloxygensaturationvalue heartratevalue"

foreach varname of local varlist { replace `varname'=" " if `varname'== "-" destring `varname', replace

}

binary categorical (yes/no)
label define binary_categorical 0 "No" 1 "Yes"
local varlist "patientonoxygen severerespiratorydistress respiratoryexhaustion severedehydration causingotherclinicalconcern
treatwithantivirals treatwithantibiotics refertohospital"

foreach varname of local varlist { encode `varname', gen(`varname'2) drop `varname' rename `varname'2 `varname' recode `varname' 1=0 recode `varname' 2=1 label values `varname' binary_categorical }

capillary refill time: code normal as "0" and refill time>2 secs as "1" encode capillaryrefilltime, gen(capillaryrefilltime2) drop capillaryrefilltime rename capillaryrefilltime2 capillaryrefilltime recode capillaryrefilltime 1=0 recode capillaryrefilltime 2=1 label define capillaryrefilltime 0 "Grossly normal" 1 "sternal capillary refill>2 secs" label values capillaryrefilltime capillaryrefilltime

patientoxygenvalue: this will show as blank if the previous field 'patientoxygen' was answered as "no" encode patientonoxygenvalue, gen(patientonoxygenvalue2) drop patientonoxygenvalue rename patientonoxygenvalue2 patientonoxygenvalue **check these recode values carefully in new files as current file does not have any 'yes'** recode patientonoxygenvalue 1=9 recode patientonoxygenvalue 2=0 recode patientonoxygenvalue 3=1 label define patientoxygenvalue 9 "Not applicable" 0 "No" 1 "Yes", replace label values patientonoxygenvalue patientoxygenvalue

newalteredconsciouslevel ** encode newalteredconsciouslevel , gen(newalteredconsciouslevel2) drop newalteredconsciouslevel rename newalteredconsciouslevel2 newalteredconsciouslevel **check these recode values carefully in new files as current file does not have any values other than 'no' recode newalteredconsciouslevel 1=0 label define newalteredconsciousness 0 "No" 1 "Strikingly agitated, irritable, new seizures or floppy infant" label values newalteredconsciouslevel newalteredconsciousness

derivation of values based CATs criteria
gen CAT_triage_A= severerespiratorydistress
label variable CAT_triage_A `"CAT triage criteria A- severe respiratory distress (yes/no)""
label values CAT_triage_A binary_categorical

gen CAT_triage_B= . replace CAT_triage_B= 1 if respiratoryratevalue>=40 & respiratoryratevalue !=. replace CAT_triage_B=0 if respiratoryratevalue<40 label variable CAT_triage_B `"CAT triage criteria B (increased resp rate)- yes/no"' label values CAT_triage_B binary_categorical

note: need child's age to work out criteria B; the codes above only represent children aged 1 year and above; for children younger than a year, use threshold of >=50 to indicate presence of criteria **replace CAT triage B=0 if respiratoryratevalue<=50 & age<1**</p>

gen CAT_triage_C=. replace CAT_triage_C=1 if peripheraloxygensaturationvalue<=92 & peripheraloxygensaturationvalue !=. replace CAT_triage_C=0 if peripheraloxygensaturationvalue>92 label variable CAT_triage_C `"CAT triage criteria C (peripheral oxygen <=92%)- yes/no"'' label values CAT_triage_C binary_categorical

gen CAT_triage_D=respiratoryexhaustion label variable CAT_triage_D `"CAT triage criteria D- respiratory exhaustion (yes/no)"' label values CAT_triage_D binary_categorical

gen CAT_triage_E=. replace CAT_triage_E=1 if capillaryrefilltime==1 replace CAT_triage_E=1 if severedehydration==1 recode CAT_triage_E .=0 label variable CAT_triage_E `"CAT triage criteria E (severe clinical dehydration)- yes/no"' label values CAT_triage_E binary_categorical

gen CAT_triage_F=. replace CAT_triage_F=1 if newalteredconsciouslevel==1 recode CAT_triage_F .=0 label variable CAT_triage_F `"CAT triage criteria E (new altered conscious level)- yes/no"' label values CAT_triage_F binary_categorical

gen CAT_triage_G= causingotherclinicalconcern label variable CAT_triage_G `"CAT triage criteria G, causing other clinical concern (yes/no)"' label values CAT_triage_G binary_categorical

*create variable labels** label variable patid `"unique patient identifier"' label variable pracid `"practice id"" label variable submit_date `"presentation date"" label variable temperature `"temperature measurement (measured/not measured)"' label variable temperaturevalue `"temperature value in celsius; range allowed (35.0-42.0)"' label variable severerespiratorydistress `"CAT triage criteria A- severe respiratory distress (yes/no)"' label variable respiratoryexhaustion `"CAT triage criteria D- respiratory exhaustion (yes/no)" label variable respiratoryrate `"respiratory rate (measured/not measured)"' label variable respiratoryratevalue `"respiratory rate- breaths per minute; range allowed (10-100)"' label variable patientonoxygen `"patient on oxygen (yes/no)"' label variable patientonoxygenvalue `"new oxygen need (yes/no)"' label variable peripheraloxygensaturation `"peripheral oxygen value (measured/not measured)"' label variable peripheraloxygensaturationvalue `"peripheral oxygen saturation (%); range allowed (70-100)"' label variable heartrate `"heart rate (measured/not measured)"' label variable heartratevalue `"heart rate value (beats per minute); range allowed (50-200)"' label variable capillaryrefilltime `"sternal capillary refill time: 1 if >2 seconds; 0= grossly normal"' label variable severedehydration `"severe dehydration (yes/no)"' label variable newalteredconsciouslevel `"new altered consciousness level (yes/no)" label variable treatwithantivirals `"decision to treat with antivirals (yes/no)" label variable treatwithantibiotics `"decision to treat with antibiotics (yes/no)" label variable causingotherclinicalconcern "CAT triage criteria G, causing other clinical concern (yes/no)" label variable causingotherclinicalconcernvalue `"nature of clinical concern, free text" label variable refertohospital `"decision to refer to hospital (yes/no)"'

order patid pracid formid gender birthyear submit_date temperature temperaturevalue severerespiratorydistress respiratoryexhaustion respiratoryrate respiratoryratevalue patientonoxygen patientonoxygenvalue peripheraloxygensaturation peripheraloxygensaturationvalue heartrate heartratevalue capillaryrefilltime severedehydration newalteredconsciouslevel causingotherclinicalconcern causingotherclinicalconcernvalue treatwithantivirals treatwithantibiotics refertohospital CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_G

local varlist " temperature respiratoryrate peripheraloxygensaturation heartrate" foreach varname of local varlist { tab `varname'

}

```
local varlist "temperaturevalue respiratoryratevalue peripheraloxygensaturationvalue heartratevalue "
```

```
foreach varname of local varlist {
summ `varname', detail
```

}

local varlist "patientonoxygen severerespiratorydistress severedehydration causingotherclinicalconcern treatwithantivirals treatwithantibiotics refertohospital"

foreach varname of local varlist { tab `varname'

}

```
tab CAT_triage_A, m
tab CAT_triage_B, m
tab CAT_triage_C, m
tab CAT_triage_D, m
tab CAT_triage_E, m
tab CAT_triage_F, m
tab CAT_triage_G, m
tab capillaryrefilltime, m
tab patientonoxygenvalue
tab newalteredconsciouslevel
```

association between CATs criteria and treatment/referral decisions

local varlist " CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G"

```
foreach varname of local varlist {
tab `varname' treatwithantivirals, col chi
logit treatwithantivirals `varname', or
```

}

logit treatwithantivirals CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G, or

```
local varlist " CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G"
foreach varname of local varlist {
    tab `varname' treatwithantibiotics, col chi
    logit treatwithantibiotics `varname', or
}
```

```
logit treatwithantibiotics CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G, or
```

```
local varlist " CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G"
foreach varname of local varlist {
    tab `varname' refertohospital, col chi
    logit refertohospital `varname', or
```

```
}
```

```
logit refertohospital CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G, or
```

3. Weekly reports for adult data

```
clear
*** NOTE: Ensure that the directory mentioned below is the directory containing the CLEANED weekly adult/children data files.
//The results spreadsheet will be saved within this directory.
global path = "R:\HPIRG\Flu-CATs\Last Tranche\Weekly\"
cd "Spath"
use adults_20150413_clean.dta //
//NOTE: The name of the source file may need to be modified. The source file will need to be a cleaned version of the weekly data file.
//This do-file will have to be run separately for adult and for children data.
*********
** EXPORTING FREQUENCIES OF EACH CATS CRITERION INTO EXCEL
**labelling missing values in CAT_triage_B as 9 so that they may be displayed in the spreadsheet
recode CAT_triage_B .=9
label define yesnomissing 0 "No" 1 "Yes" 9 "Missing"
label value CAT_triage_B yesnomissing
putexcel A1=("NIHR Flu-CATs Weekly Report: dd/mm/YYYY") using results, sheet("CATs criteria") replace //Insert the correct date in place
of "dd/mm/YYYY"
putexcel G1=("Data Source: Clinical Practice Research Datalink- Participating GP Practices") using results, sheet("CATs criteria") modify
putexcel A3=("This spreadsheet contains three worksheets- 'CATs criteria' (frequencies of each of the 7 CATs criteria), 'Clinical data' (other
clinical data collected through the LEPIS form)") using results, sheet("CATs criteria") modify
putexcel A4=("and 'Analyses' (results of logistic regression analyses).") using results, sheet("CATs criteria") modify
tabulate CAT_triage_A, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 7
local cum_percent = 0
***CATs criterion A
tabulate CAT triage A, m matcell(freq) matrow(names)
putexcel A6=("CATs A") B6=("Freq.") C6=("Percent") D6=("Cum.") using results, sheet("CATs criteria") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val lab : label (CAT triage A) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
         D'row'=('cum_percent') using results, sheet("CATs criteria") modify
    local row = `row' + 1
}
putexcel A`row'=("Total") B`row'=(r(N)) C`row'=(100.00) using results, sheet("CATs criteria") modify
***CATs criterion B
tabulate CAT_triage_B, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 12
local cum_percent = 0
tabulate CAT_triage_B, matcell(freq) matrow(names)
putexcel A11=("CATs B") B11=("Freq.") C11=("Percent") D11=("Cum.") using results, sheet("CATs criteria") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (CAT_triage_B) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
         D'row'=('cum_percent') using results, sheet("CATs criteria") modify
    local row = `row' + 1
}
```

putexcel A`row'=("Total") B`row'=(r(N)) C`row'=(100.00) using results, sheet("CATs criteria") modify

***CATs criterion C
tabulate CAT_triage_C, matcell(freq) matrow(names)
local rows = rowsof(names)

```
local row = 18
local cum percent = 0
tabulate CAT_triage_C, matcell(freq) matrow(names)
putexcel A17=("CATs C") B17=("Freq.") C17=("Percent") D17=("Cum.") using results, sheet("CATs criteria") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (CAT_triage_B) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
         D'row'=('cum_percent') using results, sheet("CATs criteria") modify
    local row = `row' + 1
}
putexcel A`row'=("Total") B`row'=(r(N)) C`row'=(100.00) using results, sheet("CATs criteria") modify
***CATs criterion D
tabulate CAT_triage_D, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 23
local cum_percent = 0
tabulate CAT_triage_D, matcell(freq) matrow(names)
putexcel A22=("CATs D") B22=("Freq.") C22=("Percent") D22=("Cum.") using results, sheet("CATs criteria") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (CAT_triage_B) `val'
    local freq val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent val : display %9.2f `percent val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
         D'row'=('cum_percent') using results, sheet("CATs criteria") modify
    local row = `row' + 1
}
putexcel A'row'=("Total") B'row'=(r(N)) C'row'=(100.00) using results, sheet("CATs criteria") modify
***CATs criterion E
tabulate CAT_triage_E, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 28
local cum_percent = 0
tabulate CAT_triage_E, matcell(freq) matrow(names)
putexcel A26=("CATs E") B26=("Freq.") C26=("Percent") D26=("Cum.") using results, sheet("CATs criteria") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (CAT_triage_B) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
         D'row'=('cum_percent') using results, sheet("CATs criteria") modify
    local row = row' + 1
}
putexcel A'row'=("Total") B'row'=(r(N)) C'row'=(100.00) using results, sheet("CATs criteria") modify
***CATs criterion F
tabulate CAT_triage_F, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 33
local cum percent = 0
tabulate CAT_triage_F, matcell(freq) matrow(names)
putexcel A32=("CATs F") B32=("Freq.") C32=("Percent") D32=("Cum.") using results, sheet("CATs criteria") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (CAT_triage_B) `val'
```

```
local freq_val = freq[`i',1]
```

```
local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
        D'row'=('cum_percent') using results, sheet("CATs criteria") modify
    local row = row' + 1
}
putexcel A`row'=("Total") B`row'=(r(N)) C`row'=(100.00) using results, sheet("CATs criteria") modify
***CATs criterion G
tabulate CAT_triage_G, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 38
local cum percent = 0
tabulate CAT triage G, matcell(freq) matrow(names)
putexcel A37=("CATs G") B37=("Freq.") C37=("Percent") D37=("Cum.") using results, sheet("CATs criteria") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val lab : label (CAT triage B) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
        D'row'=('cum_percent') using results, sheet("CATs criteria") modify
    local row = `row' + 1
}
```

putexcel A'row'=("Total") B'row'=(r(N)) C'row'=(100.00) using results, sheet("CATs criteria") modify

**EXPORTING "Measure/Not measured" STATUS OF DIFFERENT CLINICAL MEASURES ON THE LEPIS FORM putexcel A1=("'Clinical data' (other clinical data collected through the LEPIS form)") using results, sheet("Clinical data") modify

```
**recoding errors in coding temperature
recode temperature 3=0 4=0
***Temperature
tabulate temperature, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 5
local cum_percent = 0
tabulate temperature, matcell(freq) matrow(names)
putexcel A4=("Temperature") B4=("Freq.") C4=("Percent") D4=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (temperature) `val'
    local freq val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent val : display %9.2f `percent val'
    local cum percent : display %9.2f (`cum percent' + `percent val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
        D'row'=('cum percent') using results, sheet("Clinical data") modify
    local row = `row' + 1
}
```

putexcel A`row'=("Total") B`row'=(r(N)) C`row'=(100.00) using results, sheet("Clinical data") modify

```
**recoding errors in coding respiratoryrate
recode respiratoryrate 3=0 4=0
***Respiratory rate
tabulate respiratoryrate, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 10
local cum_percent = 0
tabulate respiratoryrate, matcell(freq) matrow(names)
putexcel A9=("Respiratory rate") B9=("Freq.") C9=("Percent") D9=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (respiratoryrate) `val'
```

```
local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
         D'row'=('cum_percent') using results, sheet("Clinical data") modify
    local row = `row' + 1
}
putexcel A`row'=("Total") B`row'=(r(N)) C`row'=(100.00) using results, sheet("Clinical data") modify
**recoding errors in coding peripheraloxygensaturation
recode peripheraloxygensaturation 3=0 4=0
***Peripheral Oxygen Saturation
tabulate peripheraloxygensaturation, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 15
local cum_percent = 0
tabulate peripheraloxygensaturation, matcell(freq) matrow(names)
putexcel A14=("Peripheral Oxygen Saturation") B14=("Freq.") C14=("Percent") D14=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (peripheraloxygensaturation) `val'
    local freq val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent val : display %9.2f `percent val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
         D'row'=('cum percent') using results, sheet("Clinical data") modify
    local row = row' + 1
}
putexcel A'row'=("Total") B'row'=(r(N)) C'row'=(100.00) using results, sheet("Clinical data") modify
**recoding errors in coding heartrate
recode heartrate 3=0 4=0
***Heart Rate
tabulate heartrate, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 20
local cum_percent = 0
tabulate heartrate, matcell(freq) matrow(names)
putexcel A19=("Heart Rate") B19=("Freq.") C19=("Percent") D19=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (heartrate) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A'row'=("'val_lab'") B'row'=('freq_val') C'row'=('percent_val') ///
         D'row'=('cum_percent') using results, sheet("Clinical data") modify
    local row = `row' + 1
}
putexcel A'row'=("Total") B'row'=(r(N)) C'row'=(100.00) using results, sheet("Clinical data") modify
**recoding errors in coding bloodpressure
recode bloodpressure 3=0 4=0
***Blood Pressure
tabulate bloodpressure, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 25
local cum percent = 0
tabulate bloodpressure, matcell(freq) matrow(names)
putexcel A24=("Blood Pressure") B24=("Freq.") C24=("Percent") D24=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (bloodpressure) `val'
    local freq val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
```

```
local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
         D`row'=(`cum_percent') using results, sheet("Clinical data") modify
    local row = `row' + 1
}
putexcel A`row'=("Total") B`row'=(r(N)) C`row'=(100.00) using results, sheet("Clinical data") modify
**recoding errors in coding severedehydration
recode severedehydration 3=0 4=0
***Severe Dehydration
tabulate severedehydration, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 30
local cum_percent = 0
tabulate severedehydration, matcell(freq) matrow(names)
putexcel A29=("Severe Dehydration") B29=("Freq.") C29=("Percent") D29=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val lab : label (severedehydration) 'val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
        D'row'=('cum_percent') using results, sheet("Clinical data") modify
    local row = row' + 1
}
putexcel A'row'=("Total") B'row'=(r(N)) C'row'=(100.00) using results, sheet("Clinical data") modify
***New altered conscious level
tabulate newalteredconsciouslevel, matcell(freg) matrow(names)
local rows = rowsof(names)
local row = 35
local cum percent = 0
tabulate newalteredconsciouslevel, matcell(freq) matrow(names)
putexcel A34=("New altered consciousness level") B34=("Freq.") C34=("Percent") D34=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (newalteredconsciouslevel) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
        D'row'=('cum_percent') using results, sheet("Clinical data") modify
    local row = `row' + 1
}
putexcel A`row'=("Total") B`row'=(r(N)) C`row'=(100.00) using results, sheet("Clinical data") modify
***Social Isolation
tabulate socialisolation, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 40
local cum_percent = 0
tabulate socialisolation, matcell(freq) matrow(names)
putexcel A39=("Social Isolation") B39=("Freq.") C39=("Percent") D39=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (socialisolation) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
        D'row'=('cum_percent') using results, sheet("Clinical data") modify
```

```
local row = `row' + 1
```

putexcel A'row'=("Total") B'row'=(r(N)) C'row'=(100.00) using results, sheet("Clinical data") modify

```
***Ability to self-care
tabulate performancestatus, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 46
local cum_percent = 0
tabulate performancestatus, matcell(freq) matrow(names)
putexcel A45=("Ability to self-care") B45=("Freq.") C45=("Percent") D45=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (performancestatus) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
         D'row'=('cum_percent') using results, sheet("Clinical data") modify
    local row = `row' + 1
}
putexcel A'row'=("Total") B'row'=(r(N)) C'row'=(100.00) using results, sheet("Clinical data") modify
***Treatment with antivirals
tabulate treatwithantivirals, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 55
local cum percent = 0
tabulate treatwithantivirals, matcell(freq) matrow(names)
putexcel A54=("Treatment with antivirals") B54=("Freq.") C54=("Percent") D54=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val lab : label (treatwithantivirals) `val'
    local freq val = freq[`i',1]
    local percent val = `freq val'/`r(N)'*100
    local percent val : display %9.2f `percent val'
    local cum percent : display %9.2f (`cum percent' + `percent val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
         D'row'=('cum_percent') using results, sheet("Clinical data") modify
    local row = `row' + 1
}
putexcel A'row'=("Total") B'row'=(r(N)) C'row'=(100.00) using results, sheet("Clinical data") modify
***Treatment with antibiotics
tabulate treatwithantibiotics, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 60
local cum_percent = 0
tabulate treatwithantibiotics, matcell(freq) matrow(names)
putexcel A59=("Treatment with antibiotics") B59=("Freq.") C59=("Percent") D59=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (treatwithantibiotics) `val'
    local freq_val = freq[`i',1]
    local percent val = `freq val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
         D'row'=('cum_percent') using results, sheet("Clinical data") modify
    local row = `row' + 1
}
putexcel A`row'=("Total") B`row'=(r(N)) C`row'=(100.00) using results, sheet("Clinical data") modify
***Refer to hospital
```

```
tabulate refertohospital, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 65
local cum_percent = 0
```

```
tabulate refertohospital, matcell(freq) matrow(names)
putexcel A64=("Refer to hospital") B64=("Freq.") C64=("Percent") D64=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (refertohospital) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
        D'row'=('cum_percent') using results, sheet("Clinical data") modify
    local row = row' + 1
}
putexcel A'row'=("Total") B'row'=(r(N)) C'row'=(100.00) using results, sheet("Clinical data") modify
******ANALYSES******
***Unadiusted***
**Outcome#1: Decision to treat with antivirals
*CATs A
putexcel A1=("Regression Results contains results from unadjusted and adjusted logistic regression results for outcomes of interest") using
results, sheet("Regression results") modify
logit treatwithantivirals CAT_triage_A
putexcel A3=("Unadjusted analyses") using results, sheet("Regression results") modify
putexcel A4=("1. Outcome: Decision to treat with antivirals") using results, sheet("Regression results") modify
putexcel B5=("n") C5=("OR") D5=("Lower 95% CI") E5=("Upper 95% CI") F5=("p-value") using results, sheet("Regression results") modify
putexcel A6=("CATs A") B6=(e(N)) C6=(exp(_b[CAT_triage_A])) D6=(exp(_b[CAT_triage_A]-(1.96*_se[CAT_triage_A])))
E6=(exp(_b[CAT_triage_A]+(1.96*_se[CAT_triage_A]))) F6=(2*normal(-abs(_b[CAT_triage_A]/_se[CAT_triage_A]))) using results,
sheet("Regression results") modify
*CATs B
logit treatwithantivirals CAT_triage_B
putexcel A7=("CATs B") B7=(e(N)) C7=(exp(_b[CAT_triage_B])) D7=(exp(_b[CAT_triage_B]-(1.96*_se[CAT_triage_B])))
E7=(exp(_b[CAT_triage_B]+(1.96*_se[CAT_triage_B]))) F7=(2*normal(-abs(_b[CAT_triage_B]/_se[CAT_triage_B]))) using results,
sheet("Regression results") modify
*CATs C
logit treatwithantivirals CAT triage C
putexcel A8=("CATs C") B8=(e(N)) C8=(exp(_b[CAT_triage_C])) D8=(exp(_b[CAT_triage_C]-(1.96*_se[CAT_triage_C])))
E8=(exp(_b[CAT_triage_C]+(1.96*_se[CAT_triage_C]))) F8=(2*normal(-abs(_b[CAT_triage_C]/_se[CAT_triage_C]))) using results,
sheet("Regression results") modify
*CATs D
logit treatwithantivirals CAT_triage_D
putexcel A9=("CATs D") B9=(e(N)) C9=(exp(_b[CAT_triage_D])) D9=(exp(_b[CAT_triage_D]-(1.96*_se[CAT_triage_D])))
E9=(exp(_b[CAT_triage_D]+(1.96*_se[CAT_triage_D]))) F9=(2*normal(-abs(_b[CAT_triage_D]/_se[CAT_triage_D]))) using results,
sheet("Regression results") modify
*CATs E
logit treatwithantivirals CAT_triage_E
putexcel A10=("CATs E") B10=(e(N)) C10=(exp(_b[CAT_triage_E])) D10=(exp(_b[CAT_triage_E]-(1.96*_se[CAT_triage_E])))
E10=(exp(_b[CAT_triage_E]+(1.96*_se[CAT_triage_E]))) F10=(2*normal(-abs(_b[CAT_triage_E]/_se[CAT_triage_E]))) using results,
sheet("Regression results") modify
*CATs F
logit treatwithantivirals CAT triage F
putexcel A11=("CATs F") B11=(e(N)) C11=(exp(_b[CAT_triage_F])) D11=(exp(_b[CAT_triage_F]-(1.96*_se[CAT_triage_F])))
E11=(exp(_b[CAT_triage_F]+(1.96*_se[CAT_triage_F]))) F11=(2*normal(-abs(_b[CAT_triage_F]/_se[CAT_triage_F]))) using results,
sheet("Regression results") modify
*CATs G
logit treatwithantivirals CAT triage G
putexcel A12=("CATs G") B12=(e(N)) C12=(exp(_b[CAT_triage_G])) D12=(exp(_b[CAT_triage_G]-(1.96*_se[CAT_triage_G])))
E12=(exp(_b[CAT_triage_G]+(1.96*_se[CAT_triage_G]))) F12=(2*normal(-abs(_b[CAT_triage_G]/_se[CAT_triage_G]))) using results,
sheet("Regression results") modify
**Outcome#2: Decision to treat with antibiotics
*CATs A
logit treatwithantibiotics CAT_triage_A
putexcel A14=("2. Outcome: Decision to treat with antibiotics") using results, sheet("Regression results") modify
putexcel B15=("n") C15=("OR") D15=("Lower 95% CI") E15=("Upper 95% CI") F15=("p-value") using results, sheet("Regression results")
modify
putexcel A16=("CATs A") B16=(e(N)) C16=(exp(_b[CAT_triage_A])) D16=(exp(_b[CAT_triage_A]-(1.96*_se[CAT_triage_A])))
E16=(exp(_b[CAT_triage_A]+(1.96*_se[CAT_triage_A]))) F16=(2*normal(-abs(_b[CAT_triage_A]/_se[CAT_triage_A]))) using results,
sheet("Regression results") modify
*CATs B
logit treatwithantibiotics CAT_triage_B
```

putexcel A17=("CATs B") B17=(e(N)) C17=(exp(_b[CAT_triage_B])) D17=(exp(_b[CAT_triage_B]-(1.96*_se[CAT_triage_B]))) E17=(exp(_b[CAT_triage_B]+(1.96*_se[CAT_triage_B]))) F17=(2*normal(-abs(_b[CAT_triage_B]/_se[CAT_triage_B]))) using results, sheet("Regression results") modify *CATs C logit treatwithantibiotics CAT_triage_C putexcel A18=("CATs C") B18=(e(N)) C18=(exp(_b[CAT_triage_C])) D18=(exp(_b[CAT_triage_C]-(1.96*_se[CAT_triage_C]))) E18=(exp(_b[CAT_triage_C]+(1.96*_se[CAT_triage_C]))) F18=(2*normal(-abs(_b[CAT_triage_C]/_se[CAT_triage_C]))) using results, sheet("Regression results") modify *CATs D logit treatwithantibiotics CAT_triage_D putexcel A19=("CATs D") B19=(e(N)) C19=(exp(_b[CAT_triage_D])) D19=(exp(_b[CAT_triage_D]-(1.96*_se[CAT_triage_D]))) E19=(exp(_b[CAT_triage_D]+(1.96*_se[CAT_triage_D]))) F19=(2*normal(-abs(_b[CAT_triage_D]/_se[CAT_triage_D]))) using results, sheet("Regression results") modify *CATs E logit treatwithantibiotics CAT triage E putexcel A20=("CATs E") B20=(e(N)) C20=(exp(_b[CAT_triage_E])) D20=(exp(_b[CAT_triage_E]-(1.96*_se[CAT_triage_E]))) E20=(exp(_b[CAT_triage_E]+(1.96*_se[CAT_triage_E]))) F20=(2*normal(-abs(_b[CAT_triage_E]/_se[CAT_triage_E]))) using results, sheet("Regression results") modify *CATs F logit treatwithantibiotics CAT triage F putexcel A21=("CATs F") B21=(e(N)) C21=(exp(_b[CAT_triage_F])) D21=(exp(_b[CAT_triage_F]-(1.96*_se[CAT_triage_F]))) E21=(exp(_b[CAT_triage_F]+(1.96*_se[CAT_triage_F]))) F21=(2*normal(-abs(_b[CAT_triage_F]/_se[CAT_triage_F]))) using results, sheet("Regression results") modify *CATs G logit treatwithantibiotics CAT triage G putexcel A22=("CATs G") B22=(e(N)) C22=(exp(_b[CAT_triage_G])) D22=(exp(_b[CAT_triage_G]-(1.96*_se[CAT_triage_G]))) E22=(exp(_b[CAT_triage_G]+(1.96*_se[CAT_triage_G]))) F22=(2*normal(-abs(_b[CAT_triage_G]/_se[CAT_triage_G]))) using results, sheet("Regression results") modify **Outcome#3: Decision to refer to hospital *CATs A logit refertohospital CAT triage A putexcel A24=("3. Outcome: Decision to refer to hospital") using results, sheet("Regression results") modify putexcel B25=("n") C25=("OR") D25=("Lower 95% CI") E25=("Upper 95% CI") F25=("p-value") using results, sheet("Regression results") modify putexcel A26=("CATs A") B26=(e(N)) C26=(exp(b[CAT triage A])) D26=(exp(b[CAT triage A]-(1.96* se[CAT triage A]))) E26=(exp(_b[CAT_triage_A]+(1.96*_se[CAT_triage_A]))) F26=(2*normal(-abs(_b[CAT_triage_A]/_se[CAT_triage_A]))) using results, sheet("Regression results") modify *CATs B logit refertohospital CAT_triage_B putexcel A27=("CATs B") B27=(e(N)) C27=(exp(_b[CAT_triage_B])) D27=(exp(_b[CAT_triage_B]-(1.96*_se[CAT_triage_B]))) E27=(exp(_b[CAT_triage_B]+(1.96*_se[CAT_triage_B]))) F27=(2*normal(-abs(_b[CAT_triage_B]/_se[CAT_triage_B]))) using results, sheet("Regression results") modify *CATs C logit refertohospital CAT_triage_C putexcel A28=("CATs C") B28=(e(N)) C28=(exp(_b[CAT_triage_C])) D28=(exp(_b[CAT_triage_C]-(1.96*_se[CAT_triage_C]))) E28=(exp(_b[CAT_triage_C]+(1.96*_se[CAT_triage_C]))) F28=(2*normal(-abs(_b[CAT_triage_C]/_se[CAT_triage_C]))) using results, sheet("Regression results") modify *CATs D logit refertohospital CAT_triage_D putexcel A29=("CATs D") B29=(e(N)) C29=(exp(b[CAT triage D])) D29=(exp(b[CAT triage D]-(1.96* se[CAT triage D]))) E29=(exp(_b[CAT_triage_D]+(1.96*_se[CAT_triage_D]))) F29=(2*normal(-abs(_b[CAT_triage_D]/_se[CAT_triage_D]))) using results, sheet("Regression results") modify *CATs E logit refertohospital CAT_triage_E putexcel A30=("CATs E") B30=(e(N)) C30=(exp(b[CAT triage E])) D30=(exp(b[CAT triage E]-(1.96* se[CAT triage E]))) E30=(exp(_b[CAT_triage_E]+(1.96*_se[CAT_triage_E]))) F30=(2*normal(-abs(_b[CAT_triage_E]/_se[CAT_triage_E]))) using results, sheet("Regression results") modify *CATs F logit refertohospital CAT_triage_F putexcel A31=("CATs F") B31=(e(N)) C31=(exp(_b[CAT_triage_F])) D31=(exp(_b[CAT_triage_F]-(1.96*_se[CAT_triage_F]))) E31=(exp(_b[CAT_triage_F]+(1.96*_se[CAT_triage_F]))) F31=(2*normal(-abs(_b[CAT_triage_F]/_se[CAT_triage_F]))) using results, sheet("Regression results") modify *CATs G logit refertohospital CAT_triage_G putexcel A32=("CATs G") B32=(e(N)) C32=(exp(_b[CAT_triage_G])) D32=(exp(_b[CAT_triage_G]-(1.96*_se[CAT_triage_G]))) E32=(exp(_b[CAT_triage_G]+(1.96*_se[CAT_triage_G]))) F32=(2*normal(-abs(_b[CAT_triage_G]/_se[CAT_triage_G]))) using results, sheet("Regression results") modify

Adjusted

**Outcome#1: Decision to treat with antivirals

*CATs A

logit treatwithantivirals CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G, or putexcel I3=("Adjusted analyses") using results, sheet("Regression results") modify putexcel I4=("1. Outcome: Decision to treat with antivirals") using results, sheet("Regression results") modify putexcel J5=("n") K5=("OR") L5=("Lower 95% CI") M5=("Upper 95% CI") N5=("p-value") using results, sheet("Regression results") modify putexcel I6=("CATs A") J6=(e(N)) K6=(exp(_b[CAT_triage_A])) L6=(exp(_b[CAT_triage_A]-(1.96*_se[CAT_triage_A]))) M6=(exp(_b[CAT_triage_A]+(1.96*_se[CAT_triage_A]))) N6=(2*normal(-abs(_b[CAT_triage_A]/_se[CAT_triage_A]))) using results, sheet("Regression results") modify putexcel I7=("CATs B") J7=(e(N)) K7=(exp(_b[CAT_triage_B])) L7=(exp(_b[CAT_triage_B]-(1.96*_se[CAT_triage_B]))) M7=(exp(_b[CAT_triage_B]+(1.96*_se[CAT_triage_B]))) N7=(2*normal(-abs(_b[CAT_triage_B]/_se[CAT_triage_B]))) using results, sheet("Regression results") modify putexcel I8=("CATs C") J8=(e(N)) K8=(exp(_b[CAT_triage_C])) L8=(exp(_b[CAT_triage_C]-(1.96*_se[CAT_triage_C]))) M8=(exp(_b[CAT_triage_C]+(1.96*_se[CAT_triage_C]))) N8=(2*normal(-abs(_b[CAT_triage_C]/_se[CAT_triage_C]))) using results, sheet("Regression results") modify putexcel I9=("CATs D") J9=(e(N)) K9=(exp(_b[CAT_triage_D])) L9=(exp(_b[CAT_triage_D]-(1.96*_se[CAT_triage_D]))) M9=(exp(_b[CAT_triage_D]+(1.96*_se[CAT_triage_D]))) N9=(2*normal(-abs(_b[CAT_triage_D]/_se[CAT_triage_D]))) using results, sheet("Regression results") modify putexcel I10=("CATs E") J10=(e(N)) K10=(exp(_b[CAT_triage_E])) L10=(exp(_b[CAT_triage_E]-(1.96*_se[CAT_triage_E]))) M10=(exp(_b[CAT_triage_E]+(1.96*_se[CAT_triage_E]))) N10=(2*normal(-abs(_b[CAT_triage_E]/_se[CAT_triage_E]))) using results, sheet("Regression results") modify putexcel I11=("CATs F") J11=(e(N)) K11=(exp(_b[CAT_triage_F])) L11=(exp(_b[CAT_triage_F]-(1.96*_se[CAT_triage_F]))) M11=(exp(_b[CAT_triage_F]+(1.96*_se[CAT_triage_F]))) N11=(2*normal(-abs(_b[CAT_triage_F]/_se[CAT_triage_F]))) using results, sheet("Regression results") modify putexcel I12=("CATs G") J12=(e(N)) K12=(exp(_b[CAT_triage_G])) L12=(exp(_b[CAT_triage_G]-(1.96*_se[CAT_triage_G]))) M12=(exp(_b[CAT_triage_G]+(1.96*_se[CAT_triage_G]))) N12=(2*normal(-abs(_b[CAT_triage_G]/_se[CAT_triage_G]))) using results, sheet("Regression results") modify **Outcome#2: Decision to treat with antibiotics logit treatwithantibiotics CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G, or putexcel I14=("2. Outcome: Decision to treat with antibiotics") using results, sheet("Regression results") modify putexcel J15=("n") K15=("OR") L15=("Lower 95% CI") M15=("Upper 95% CI") N15=("p-value") using results, sheet("Regression results") modify putexcel I16=("CATs A") J16=(e(N)) K16=(exp(_b[CAT_triage_A])) L16=(exp(_b[CAT_triage_A]-(1.96*_se[CAT_triage_A]))) M16=(exp(_b[CAT_triage_A]+(1.96*_se[CAT_triage_A]))) N16=(2*normal(-abs(_b[CAT_triage_A]/_se[CAT_triage_A]))) using results, sheet("Regression results") modify putexcel I17=("CATs B") J17=(e(N)) K17=(exp(_b[CAT_triage_B])) L17=(exp(_b[CAT_triage_B]-(1.96*_se[CAT_triage_B]))) M17=(exp(_b[CAT_triage_B]+(1.96*_se[CAT_triage_B]))) N17=(2*normal(-abs(_b[CAT_triage_B]/_se[CAT_triage_B]))) using results, sheet("Regression results") modify putexcel I18=("CATs C") J18=(e(N)) K18=(exp(_b[CAT_triage_C])) L18=(exp(_b[CAT_triage_C]-(1.96*_se[CAT_triage_C]))) M18=(exp(_b[CAT_triage_C]+(1.96*_se[CAT_triage_C]))) N18=(2*normal(-abs(_b[CAT_triage_C]/_se[CAT_triage_C]))) using results, sheet("Regression results") modify putexcel I19=("CATs D") J19=(e(N)) K19=(exp(_b[CAT_triage_D])) L19=(exp(_b[CAT_triage_D]-(1.96*_se[CAT_triage_D]))) M19=(exp(_b[CAT_triage_D]+(1.96*_se[CAT_triage_D]))) N19=(2*normal(-abs(_b[CAT_triage_D]/_se[CAT_triage_D]))) using results, sheet("Regression results") modify putexcel I20=("CATs E") J20=(e(N)) K20=(exp(_b[CAT_triage_E])) L20=(exp(_b[CAT_triage_E]-(1.96*_se[CAT_triage_E]))) M20=(exp(_b[CAT_triage_E]+(1.96*_se[CAT_triage_E]))) N20=(2*normal(-abs(_b[CAT_triage_E]/_se[CAT_triage_E]))) using results, sheet("Regression results") modify putexcel I21=("CATs F") J21=(e(N)) K21=(exp(_b[CAT_triage_F])) L21=(exp(_b[CAT_triage_F]-(1.96*_se[CAT_triage_F]))) M21=(exp(_b[CAT_triage_F]+(1.96*_se[CAT_triage_F]))) N21=(2*normal(-abs(_b[CAT_triage_F]/_se[CAT_triage_F]))) using results, sheet("Regression results") modify putexcel I22=("CATs G") J22=(e(N)) K22=(exp(_b[CAT_triage_G])) L22=(exp(_b[CAT_triage_G]-(1.96*_se[CAT_triage_G]))) M22=(exp(_b[CAT_triage_G]+(1.96*_se[CAT_triage_G]))) N22=(2*normal(-abs(_b[CAT_triage_G]/_se[CAT_triage_G]))) using results, sheet("Regression results") modify **Outcome#3: Decision to refer to hospital logit refertohospital CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G, or putexcel I24=("3. Outcome: Decision to refer to hospital") using results, sheet("Regression results") modify putexcel J25=("n") K25=("OR") L25=("Lower 95% CI") M25=("Upper 95% CI") N25=("p-value") using results, sheet("Regression results") modify putexcel I26=("CATs A") J26=(e(N)) K26=(exp(_b[CAT_triage_A])) L26=(exp(_b[CAT_triage_A]-(1.96*_se[CAT_triage_A]))) M26=(exp(_b[CAT_triage_A]+(1.96*_se[CAT_triage_A]))) N26=(2*normal(-abs(_b[CAT_triage_A]/_se[CAT_triage_A]))) using results, sheet("Regression results") modify putexcel I27=("CATs B") J27=(e(N)) K27=(exp(_b[CAT_triage_B])) L27=(exp(_b[CAT_triage_B]-(1.96*_se[CAT_triage_B]))) M27=(exp(_b[CAT_triage_B]+(1.96*_se[CAT_triage_B]))) N7=(2*normal(-abs(_b[CAT_triage_B]/_se[CAT_triage_B]))) using results, sheet("Regression results") modify putexcel I28=("CATs C") J28=(e(N)) K28=(exp(_b[CAT_triage_C])) L28=(exp(_b[CAT_triage_C]-(1.96*_se[CAT_triage_C]))) M28=(exp(_b[CAT_triage_C]+(1.96*_se[CAT_triage_C]))) N28=(2*normal(-abs(_b[CAT_triage_C]/_se[CAT_triage_C]))) using results, sheet("Regression results") modify putexcel I29=("CATs D") J29=(e(N)) K29=(exp(_b[CAT_triage_D])) L29=(exp(_b[CAT_triage_D]-(1.96*_se[CAT_triage_D]))) M29=(exp(_b[CAT_triage_D]+(1.96*_se[CAT_triage_D]))) N29=(2*normal(-abs(_b[CAT_triage_D]/_se[CAT_triage_D]))) using results, sheet("Regression results") modify

putexcel I30=("CATs E") J30=(e(N)) K30=(exp(_b[CAT_triage_E])) L30=(exp(_b[CAT_triage_E]-(1.96*_se[CAT_triage_E]))) M30=(exp(_b[CAT_triage_E]+(1.96*_se[CAT_triage_E]))) N30=(2*normal(-abs(_b[CAT_triage_E]/_se[CAT_triage_E]))) using results, sheet("Regression results") modify

putexcel I31=("CATs F") J31=(e(N)) K31=(exp(_b[CAT_triage_F])) L31=(exp(_b[CAT_triage_F]-(1.96*_se[CAT_triage_F]))) M31=(exp(_b[CAT_triage_F]+(1.96*_se[CAT_triage_F]))) N31=(2*normal(-abs(_b[CAT_triage_F]/_se[CAT_triage_F]))) using results, sheet("Regression results") modify

putexcel I32=("CATs G") I32=(e(N)) K32=(exp(_b[CAT_triage_G])) L32=(exp(_b[CAT_triage_G]-(1.96*_se[CAT_triage_G]))) M32=(exp(_b[CAT_triage_G]+(1.96*_se[CAT_triage_G]))) N32=(2*normal(-abs(_b[CAT_triage_G]/_se[CAT_triage_G]))) using results, sheet("Regression results") modify

4. Weekly reports for children's data

clear

*** NOTE: Ensure that the directory mentioned below is the directory containing the CLEANED weekly adult/children data files. //The results spreadsheet will be saved within this directory.

global path = "R:\HPIRG\Flu-CATs\Last Tranche\Weekly\"

cd "\$path"

use child_20150413_clean.dta //

//NOTE: The name of the source file may need to be modified. The source file will need to be a cleaned version of the weekly data file. //This do-file will have to be run separately for adult and for children data.

** EXPORTING FREQUENCIES OF EACH CATs CRITERION INTO EXCEL
**labelling missing values in CAT_triage_B as 9 so that they may be displayed in the spreadsheet recode CAT_triage_B .=9
label define yesnomissing 0 "No" 1 "Yes" 9 "Missing"
label value CAT_triage_B yesnomissing

putexcel A1=("NIHR Flu-CATs Weekly Report: dd/mm/YYYY") using results, sheet("CATs criteria") replace //Insert the correct date in place of "dd/mm/YYYY"

putexcel G1=("Data Source: Clinical Practice Research Datalink- Participating GP Practices") using results, sheet("CATs criteria") modify putexcel A3=("This spreadsheet contains three worksheets- 'CATs criteria' (frequencies of each of the 7 CATs criteria), 'Clinical data' (other clinical data collected through the LEPIS form)") using results, sheet("CATs criteria") modify putexcel A4=("and 'Analyses' (results of logistic regression analyses) ") using results, sheet("CATs criteria") modify

putexcel A4=("and 'Analyses' (results of logistic regression analyses).") using results, sheet("CATs criteria") modify tabulate CAT_triage_A, matcell(freq) matrow(names)

```
local rows = rowsof(names)
local row = 7
local cum percent = 0
***CATs criterion A
tabulate CAT triage A, m matcell(freq) matrow(names)
putexcel A6=("CATs A") B6=("Freq.") C6=("Percent") D6=("Cum.") using results, sheet("CATs criteria") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (CAT_triage_A) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
         D'row'=('cum_percent') using results, sheet("CATs criteria") modify
    local row = `row' + 1
}
putexcel A`row'=("Total") B`row'=(r(N)) C`row'=(100.00) using results, sheet("CATs criteria") modify
```

```
***CATs criterion B
tabulate CAT_triage_B, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 12
local cum_percent = 0
tabulate CAT_triage_B, matcell(freq) matrow(names)
putexcel A11=("CATs B") B11=("Freq.") C11=("Percent") D11=("Cum.") using results, sheet("CATs criteria") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (CAT_triage_B) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
```

```
putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
D`row'=(`cum_percent') using results, sheet("CATs criteria") modify
local row = `row' + 1
}
```

```
putexcel A`row'=("Total") B`row'=(r(N)) C`row'=(100.00) using results, sheet("CATs criteria") modify
```

```
***CATs criterion C
tabulate CAT_triage_C, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 18
local cum_percent = 0
tabulate CAT_triage_C, matcell(freq) matrow(names)
putexcel A17=("CATs C") B17=("Freq.") C17=("Percent") D17=("Cum.") using results, sheet("CATs criteria") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (CAT_triage_B) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
        D'row'=('cum_percent') using results, sheet("CATs criteria") modify
    local row = row' + 1
}
```

putexcel A'row'=("Total") B'row'=(r(N)) C'row'=(100.00) using results, sheet("CATs criteria") modify

```
***CATs criterion D
tabulate CAT_triage_D, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 23
local cum_percent = 0
tabulate CAT_triage_D, matcell(freq) matrow(names)
putexcel A22=("CATs D") B22=("Freq.") C22=("Percent") D22=("Cum.") using results, sheet("CATs criteria") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (CAT_triage_B) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
        D'row'=('cum_percent') using results, sheet("CATs criteria") modify
    local row = row' + 1
}
```

```
putexcel A'row'=("Total") B'row'=(r(N)) C'row'=(100.00) using results, sheet("CATs criteria") modify
```

```
***CATs criterion E
tabulate CAT triage E, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 28
local cum percent = 0
tabulate CAT triage E, matcell(freq) matrow(names)
putexcel A26=("CATs E") B26=("Freq.") C26=("Percent") D26=("Cum.") using results, sheet("CATs criteria") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (CAT_triage_B) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
         D'row'=('cum_percent') using results, sheet("CATs criteria") modify
    local row = `row' + 1
}
```

```
putexcel A`row'=("Total") B`row'=(r(N)) C`row'=(100.00) using results, sheet("CATs criteria") modify
```

```
tabulate CAT_triage_F, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 33
local cum_percent = 0
tabulate CAT_triage_F, matcell(freq) matrow(names)
putexcel A32=("CATs F") B32=("Freq.") C32=("Percent") D32=("Cum.") using results, sheet("CATs criteria") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (CAT_triage_B) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
        D'row'=('cum percent') using results, sheet("CATs criteria") modify
    local row = row' + 1
}
putexcel A'row'=("Total") B'row'=(r(N)) C'row'=(100.00) using results, sheet("CATs criteria") modify
***CATs criterion G
tabulate CAT_triage_G, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 38
local cum percent = 0
tabulate CAT triage G, matcell(freq) matrow(names)
putexcel A37=("CATs G") B37=("Freq.") C37=("Percent") D37=("Cum.") using results, sheet("CATs criteria") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val lab : label (CAT triage B) `val'
    local freq val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent val : display %9.2f `percent val'
    local cum percent : display %9.2f (`cum percent' + `percent val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
        D'row'=('cum percent') using results, sheet("CATs criteria") modify
    local row = `row' + 1
}
putexcel A`row'=("Total") B`row'=(r(N)) C`row'=(100.00) using results, sheet("CATs criteria") modify
*****
**EXPORTING "Measure/Not measured" STATUS OF DIFFERENT CLINICAL MEASURES ON THE LEPIS FORM
putexcel A1=("'Clinical data' (other clinical data collected through the LEPIS form)") using results, sheet("Clinical data") modify
**recoding errors in coding temperature
recode temperature 3=0 4=0
***Temperature
tabulate temperature, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 5
local cum_percent = 0
tabulate temperature, matcell(freq) matrow(names)
putexcel A4=("Temperature") B4=("Freq.") C4=("Percent") D4=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (temperature) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
        D'row'=('cum_percent') using results, sheet("Clinical data") modify
    local row = row' + 1
```

```
}
```

putexcel A`row'=("Total") B`row'=(r(N)) C`row'=(100.00) using results, sheet("Clinical data") modify

```
***Respiratory rate
tabulate respiratoryrate, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 10
local cum_percent = 0
tabulate respiratoryrate, matcell(freq) matrow(names)
putexcel A9=("Respiratory rate") B9=("Freq.") C9=("Percent") D9=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (respiratoryrate) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
         D'row'=('cum_percent') using results, sheet("Clinical data") modify
    local row = `row' + 1
}
putexcel A'row'=("Total") B'row'=(r(N)) C'row'=(100.00) using results, sheet("Clinical data") modify
**recoding errors in coding peripheraloxygensaturation
recode peripheraloxygensaturation 3=0 4=0
***Peripheral Oxygen Saturation
tabulate peripheraloxygensaturation, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 15
local cum percent = 0
tabulate peripheraloxygensaturation, matcell(freq) matrow(names)
putexcel A14=("Peripheral Oxygen Saturation") B14=("Freq.") C14=("Percent") D14=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val lab : label (peripheraloxygensaturation) `val'
    local freq val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent val : display %9.2f `percent val'
    local cum percent : display %9.2f (`cum percent' + `percent val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
         D'row'=('cum_percent') using results, sheet("Clinical data") modify
    local row = `row' + 1
}
putexcel A`row'=("Total") B`row'=(r(N)) C`row'=(100.00) using results, sheet("Clinical data") modify
**recoding errors in coding heartrate
recode heartrate 3=0 4=0
***Heart Rate
tabulate heartrate, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 20
local cum percent = 0
tabulate heartrate, matcell(freq) matrow(names)
putexcel A19=("Heart Rate") B19=("Freq.") C19=("Percent") D19=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val lab : label (heartrate) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
         D'row'=('cum_percent') using results, sheet("Clinical data") modify
    local row = row' + 1
}
```

putexcel A'row'=("Total") B'row'=(r(N)) C'row'=(100.00) using results, sheet("Clinical data") modify

```
tabulate severedehydration, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 30
local cum_percent = 0
tabulate severedehydration, matcell(freq) matrow(names)
putexcel A29=("Severe Dehydration") B29=("Freq.") C29=("Percent") D29=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (severedehydration) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
        D'row'=('cum_percent') using results, sheet("Clinical data") modify
    local row = row' + 1
}
putexcel A'row'=("Total") B'row'=(r(N)) C'row'=(100.00) using results, sheet("Clinical data") modify
***New altered conscious level
tabulate newalteredconsciouslevel, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 35
local cum percent = 0
tabulate newalteredconsciouslevel, matcell(freq) matrow(names)
putexcel A34=("New altered consciousness level") B34=("Freq.") C34=("Percent") D34=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val lab : label (newalteredconsciouslevel) `val'
    local freq val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent val : display %9.2f `percent val'
    local cum percent : display %9.2f (`cum percent' + `percent val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
        D'row'=('cum percent') using results, sheet("Clinical data") modify
    local row = row' + 1
}
putexcel A`row'=("Total") B`row'=(r(N)) C`row'=(100.00) using results, sheet("Clinical data") modify
***Treatment with antivirals
tabulate treatwithantivirals, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 55
local cum_percent = 0
tabulate treatwithantivirals, matcell(freq) matrow(names)
putexcel A54=("Treatment with antivirals") B54=("Freq.") C54=("Percent") D54=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (treatwithantivirals) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum percent : display %9.2f (`cum percent' + `percent val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
        D'row'=('cum_percent') using results, sheet("Clinical data") modify
    local row = `row' + 1
}
putexcel A`row'=("Total") B`row'=(r(N)) C`row'=(100.00) using results, sheet("Clinical data") modify
***Treatment with antibiotics
tabulate treatwithantibiotics, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 60
local cum percent = 0
```

putexcel A59=("Treatment with antibiotics") B59=("Freq.") C59=("Percent") D59=("Cum.") using results, sheet("Clinical data") modify

tabulate treatwithantibiotics, matcell(freq) matrow(names)

forvalues i = 1/`rows' {

```
local val = names[`i',1]
    local val_lab : label (treatwithantibiotics) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
         D'row'=('cum_percent') using results, sheet("Clinical data") modify
    local row = row' + 1
}
putexcel A'row'=("Total") B'row'=(r(N)) C'row'=(100.00) using results, sheet("Clinical data") modify
***Refer to hospital
tabulate refertohospital, matcell(freq) matrow(names)
local rows = rowsof(names)
local row = 65
local cum_percent = 0
tabulate refertohospital, matcell(freq) matrow(names)
putexcel A64=("Refer to hospital") B64=("Freq.") C64=("Percent") D64=("Cum.") using results, sheet("Clinical data") modify
forvalues i = 1/`rows' {
    local val = names[`i',1]
    local val_lab : label (refertohospital) `val'
    local freq_val = freq[`i',1]
    local percent_val = `freq_val'/`r(N)'*100
    local percent_val : display %9.2f `percent_val'
    local cum_percent : display %9.2f (`cum_percent' + `percent_val')
    putexcel A`row'=("`val_lab'") B`row'=(`freq_val') C`row'=(`percent_val') ///
         D'row'=('cum_percent') using results, sheet("Clinical data") modify
    local row = `row' + 1
}
```

putexcel A'row'=("Total") B'row'=(r(N)) C'row'=(100.00) using results, sheet("Clinical data") modify

```
******ANALYSES*****
***Unadjusted***
**Outcome#1: Decision to treat with antivirals
*CATs A
putexcel A1=("Regression Results contains results from unadjusted and adjusted logistic regression results for outcomes of interest") using
results, sheet("Regression results") modify
logit treatwithantivirals CAT_triage_A
putexcel A3=("Unadjusted analyses") using results, sheet("Regression results") modify
putexcel A4=("1. Outcome: Decision to treat with antivirals") using results, sheet("Regression results") modify
putexcel B5=("n") C5=("OR") D5=("Lower 95% CI") E5=("Upper 95% CI") F5=("p-value") using results, sheet("Regression results") modify
putexcel A6=("CATs A") B6=(e(N)) C6=(exp(_b[CAT_triage_A])) D6=(exp(_b[CAT_triage_A]-(1.96*_se[CAT_triage_A])))
E6=(exp(_b[CAT_triage_A]+(1.96*_se[CAT_triage_A]))) F6=(2*normal(-abs(_b[CAT_triage_A]/_se[CAT_triage_A]))) using results,
sheet("Regression results") modify
*CATs B
logit treatwithantivirals CAT_triage_B
putexcel A7=("CATs B") B7=(e(N)) C7=(exp(_b[CAT_triage_B])) D7=(exp(_b[CAT_triage_B]-(1.96*_se[CAT_triage_B])))
E7=(exp(_b[CAT_triage_B]+(1.96*_se[CAT_triage_B]))) F7=(2*normal(-abs(_b[CAT_triage_B]/_se[CAT_triage_B]))) using results,
sheet("Regression results") modify
*CATs C
logit treatwithantivirals CAT triage C
putexcel A8=("CATs C") B8=(e(N)) C8=(exp(_b[CAT_triage_C])) D8=(exp(_b[CAT_triage_C]-(1.96*_se[CAT_triage_C])))
E8=(exp(_b[CAT_triage_C]+(1.96*_se[CAT_triage_C]))) F8=(2*normal(-abs(_b[CAT_triage_C]/_se[CAT_triage_C]))) using results,
sheet("Regression results") modify
*CATs D
logit treatwithantivirals CAT_triage_D
putexcel A9=("CATs D") B9=(e(N)) C9=(exp(_b[CAT_triage_D])) D9=(exp(_b[CAT_triage_D]-(1.96*_se[CAT_triage_D])))
E9=(exp(_b[CAT_triage_D]+(1.96*_se[CAT_triage_D]))) F9=(2*normal(-abs(_b[CAT_triage_D]/_se[CAT_triage_D]))) using results,
sheet("Regression results") modify
*CATs E
logit treatwithantivirals CAT_triage_E
putexcel A10=("CATs E") B10=(e(N)) C10=(exp(_b[CAT_triage_E])) D10=(exp(_b[CAT_triage_E]-(1.96*_se[CAT_triage_E])))
E10=(exp(_b[CAT_triage_E]+(1.96*_se[CAT_triage_E]))) F10=(2*normal(-abs(_b[CAT_triage_E]/_se[CAT_triage_E]))) using results,
sheet("Regression results") modify
*CATs F
logit treatwithantivirals CAT_triage_F
```

putexcel A11=("CATs F") B11=(e(N)) C11=(exp(_b[CAT_triage_F])) D11=(exp(_b[CAT_triage_F]-(1.96*_se[CAT_triage_F]))) E11=(exp(_b[CAT_triage_F]+(1.96*_se[CAT_triage_F]))) F11=(2*normal(-abs(_b[CAT_triage_F]/_se[CAT_triage_F]))) using results, sheet("Regression results") modify *CATs G logit treatwithantivirals CAT_triage_G putexcel A12=("CATs G") B12=(e(N)) C12=(exp(_b[CAT_triage_G])) D12=(exp(_b[CAT_triage_G]-(1.96*_se[CAT_triage_G]))) E12=(exp(_b[CAT_triage_G]+(1.96*_se[CAT_triage_G]))) F12=(2*normal(-abs(_b[CAT_triage_G]/_se[CAT_triage_G]))) using results, sheet("Regression results") modify **Outcome#2: Decision to treat with antibiotics *CATs A logit treatwithantibiotics CAT_triage_A putexcel A14=("2. Outcome: Decision to treat with antibiotics") using results, sheet("Regression results") modify putexcel B15=("n") C15=("OR") D15=("Lower 95% CI") E15=("Upper 95% CI") F15=("p-value") using results, sheet("Regression results") modify putexcel A16=("CATs A") B16=(e(N)) C16=(exp(_b[CAT_triage_A])) D16=(exp(_b[CAT_triage_A]-(1.96*_se[CAT_triage_A]))) E16=(exp(_b[CAT_triage_A]+(1.96*_se[CAT_triage_A]))) F16=(2*normal(-abs(_b[CAT_triage_A]/_se[CAT_triage_A]))) using results, sheet("Regression results") modify *CATs B logit treatwithantibiotics CAT triage B putexcel A17=("CATs B") B17=(e(N)) C17=(exp(_b[CAT_triage_B])) D17=(exp(_b[CAT_triage_B]-(1.96*_se[CAT_triage_B]))) E17=(exp(_b[CAT_triage_B]+(1.96*_se[CAT_triage_B]))) F17=(2*normal(-abs(_b[CAT_triage_B]/_se[CAT_triage_B]))) using results, sheet("Regression results") modify *CATs C logit treatwithantibiotics CAT triage C putexcel A18=("CATs C") B18=(e(N)) C18=(exp(_b[CAT_triage_C])) D18=(exp(_b[CAT_triage_C]-(1.96*_se[CAT_triage_C]))) E18=(exp(_b[CAT_triage_C]+(1.96*_se[CAT_triage_C]))) F18=(2*normal(-abs(_b[CAT_triage_C]/_se[CAT_triage_C]))) using results, sheet("Regression results") modify *CATs D logit treatwithantibiotics CAT triage D putexcel A19=("CATs D") B19=(e(N)) C19=(exp(_b[CAT_triage_D])) D19=(exp(_b[CAT_triage_D]-(1.96*_se[CAT_triage_D]))) E19=(exp(_b[CAT_triage_D]+(1.96*_se[CAT_triage_D]))) F19=(2*normal(-abs(_b[CAT_triage_D]/_se[CAT_triage_D]))) using results, sheet("Regression results") modify *CATs E logit treatwithantibiotics CAT triage E putexcel A20=("CATs E") B20=(e(N)) C20=(exp(_b[CAT_triage_E])) D20=(exp(_b[CAT_triage_E]-(1.96*_se[CAT_triage_E]))) E20=(exp(_b[CAT_triage_E]+(1.96*_se[CAT_triage_E]))) F20=(2*normal(-abs(_b[CAT_triage_E]/_se[CAT_triage_E]))) using results, sheet("Regression results") modify *CATs F logit treatwithantibiotics CAT_triage_F putexcel A21=("CATs F") B21=(e(N)) C21=(exp(_b[CAT_triage_F])) D21=(exp(_b[CAT_triage_F]-(1.96*_se[CAT_triage_F]))) E21=(exp(_b[CAT_triage_F]+(1.96*_se[CAT_triage_F]))) F21=(2*normal(-abs(_b[CAT_triage_F]/_se[CAT_triage_F]))) using results, sheet("Regression results") modify *CATs G logit treatwithantibiotics CAT_triage_G putexcel A22=("CATs G") B22=(e(N)) C22=(exp(_b[CAT_triage_G])) D22=(exp(_b[CAT_triage_G]-(1.96*_se[CAT_triage_G]))) E22=(exp(_b[CAT_triage_G]+(1.96*_se[CAT_triage_G]))) F22=(2*normal(-abs(_b[CAT_triage_G]/_se[CAT_triage_G]))) using results, sheet("Regression results") modify **Outcome#3: Decision to refer to hospital *CATs A logit refertohospital CAT_triage_A putexcel A24=("3. Outcome: Decision to refer to hospital") using results, sheet("Regression results") modify putexcel B25=("n") C25=("OR") D25=("Lower 95% CI") E25=("Upper 95% CI") F25=("p-value") using results, sheet("Regression results") modify putexcel A26=("CATs A") B26=(e(N)) C26=(exp(b[CAT triage A])) D26=(exp(b[CAT triage A]-(1.96* se[CAT triage A]))) E26=(exp(_b[CAT_triage_A]+(1.96*_se[CAT_triage_A]))) F26=(2*normal(-abs(_b[CAT_triage_A]/_se[CAT_triage_A]))) using results, sheet("Regression results") modify *CATs B logit refertohospital CAT_triage_B putexcel A27=("CATs B") B27=(e(N)) C27=(exp(_b[CAT_triage_B])) D27=(exp(_b[CAT_triage_B]-(1.96*_se[CAT_triage_B]))) E27=(exp(_b[CAT_triage_B]+(1.96*_se[CAT_triage_B]))) F27=(2*normal(-abs(_b[CAT_triage_B]/_se[CAT_triage_B]))) using results, sheet("Regression results") modify *CATs C logit refertohospital CAT_triage_C putexcel A28=("CATs C") B28=(e(N)) C28=(exp(_b[CAT_triage_C])) D28=(exp(_b[CAT_triage_C]-(1.96*_se[CAT_triage_C]))) E28=(exp(_b[CAT_triage_C]+(1.96*_se[CAT_triage_C]))) F28=(2*normal(-abs(_b[CAT_triage_C]/_se[CAT_triage_C]))) using results, sheet("Regression results") modify *CATs D logit refertohospital CAT_triage_D

putexcel A29=("CATs D") B29=(e(N)) C29=(exp(_b[CAT_triage_D])) D29=(exp(_b[CAT_triage_D]-(1.96*_se[CAT_triage_D]))) E29=(exp(_b[CAT_triage_D]+(1.96*_se[CAT_triage_D]))) F29=(2*normal(-abs(_b[CAT_triage_D]/_se[CAT_triage_D]))) using results, sheet("Regression results") modify
*CATs E logit refertohospital CAT_triage_E putexcel A30=("CATs E") B30=(e(N)) C30=(exp(_b[CAT_triage_E])) D30=(exp(_b[CAT_triage_E]-(1.96*_se[CAT_triage_E]))) E30=(exp(_b[CAT_triage_E]+(1.96*_se[CAT_triage_E]))) F30=(2*normal(-abs(_b[CAT_triage_E]/_se[CAT_triage_E]))) using results, sheet("Regression results") modify *CATs F
logit refertohospital CAT_triage_F putexcel A31=("CATs F") B31=(e(N)) C31=(exp(_b[CAT_triage_F])) D31=(exp(_b[CAT_triage_F]-(1.96*_se[CAT_triage_F]))) E31=(exp(_b[CAT_triage_F]+(1.96*_se[CAT_triage_F]))) F31=(2*normal(-abs(_b[CAT_triage_F]/_se[CAT_triage_F]))) using results, sheet("Regression results") modify *CATs G
logit refertohospital CAT_triage_G putexcel A32=("CATs G") B32=(e(N)) C32=(exp(_b[CAT_triage_G])) D32=(exp(_b[CAT_triage_G]-(1.96*_se[CAT_triage_G]))) E32=(exp(_b[CAT_triage_G]+(1.96*_se[CAT_triage_G]))) F32=(2*normal(-abs(_b[CAT_triage_G]/_se[CAT_triage_G]))) using results, sheet("Regression results") modify
Adjusted **Outcome#1: Decision to treat with antivirals *CATs A
logit treatwithantivirals CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G, or putexcel I3=("Adjusted analyses") using results, sheet("Regression results") modify
putexcel I4=("1. Outcome: Decision to treat with antivirals") using results, sheet("Regression results") modify putexcel J5=("n") K5=("OR") L5=("Lower 95% CI") M5=("Upper 95% CI") N5=("p-value") using results, sheet("Regression results") modify putexcel I6=("CATs A") J6=(e(N)) K6=(exp(_b[CAT_triage_A])) L6=(exp(_b[CAT_triage_A]-(1.96*_se[CAT_triage_A]))) M6=(exp(_b[CAT_triage_A]+(1.96*_se[CAT_triage_A]))) N6=(2*normal(-abs(_b[CAT_triage_A]/_se[CAT_triage_A]))) using results, sheet("Regression results") modify
putexcel I7=("CATs B") J7=(e(N)) K7=(exp(_b[CAT_triage_B])) L7=(exp(_b[CAT_triage_B]-(1.96*_se[CAT_triage_B]))) M7=(exp(_b[CAT_triage_B]+(1.96*_se[CAT_triage_B]))) N7=(2*normal(-abs(_b[CAT_triage_B]/_se[CAT_triage_B]))) using results, sheet("Regression results") modify
putexcel I8=("CATs C") J8=(e(N)) K8=(exp(_b[CAT_triage_C])) L8=(exp(_b[CAT_triage_C]-(1.96*_se[CAT_triage_C]))) M8=(exp(_b[CAT_triage_C]+(1.96*_se[CAT_triage_C]))) N8=(2*normal(-abs(_b[CAT_triage_C]/_se[CAT_triage_C]))) using results, sheet("Regression results") modify
putexcel I9=("CATs D") J9=(e(N)) K9=(exp(_b[CAT_triage_D])) L9=(exp(_b[CAT_triage_D]-(1.96*_se[CAT_triage_D]))) M9=(exp(_b[CAT_triage_D]+(1.96*_se[CAT_triage_D]))) N9=(2*normal(-abs(_b[CAT_triage_D]/_se[CAT_triage_D]))) using results, sheet("Regression results") modify
putexcel I10=("CATs E") J10=(e(N)) K10=(exp(_b[CAT_triage_E])) L10=(exp(_b[CAT_triage_E]-(1.96*_se[CAT_triage_E]))) M10=(exp(_b[CAT_triage_E]+(1.96*_se[CAT_triage_E]))) N10=(2*normal(-abs(_b[CAT_triage_E]/_se[CAT_triage_E]))) using results, sheet("Regression results") modify
putexcel I11=("CATs F") J11=(e(N)) K11=(exp(_b[CAT_triage_F])) L11=(exp(_b[CAT_triage_F]-(1.96*_se[CAT_triage_F]))) M11=(exp(_b[CAT_triage_F]+(1.96*_se[CAT_triage_F]))) N11=(2*normal(-abs(_b[CAT_triage_F]/_se[CAT_triage_F]))) using results, sheet("Regression results") modify
putexcel I12=("CATs G") J12=(e(N)) K12=(exp(_b[CAT_triage_G])) L12=(exp(_b[CAT_triage_G]-(1.96*_se[CAT_triage_G]))) M12=(exp(_b[CAT_triage_G]+(1.96*_se[CAT_triage_G]))) N12=(2*normal(-abs(_b[CAT_triage_G]/_se[CAT_triage_G]))) using results, sheet("Regression results") modify
**Outcome#2: Decision to treat with antibiotics logit treatwithantibiotics CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G, or putexcel I14=("2. Outcome: Decision to treat with antibiotics") using results, sheet("Regression results") modify putexcel J15=("n") K15=("OR") L15=("Lower 95% CI") M15=("Upper 95% CI") N15=("p-value") using results, sheet("Regression results")
modify putexcel I16=("CATs A") J16=(e(N)) K16=(exp(_b[CAT_triage_A])) L16=(exp(_b[CAT_triage_A]-(1.96*_se[CAT_triage_A]))) M16=(exp(_b[CAT_triage_A]+(1.96*_se[CAT_triage_A]))) N16=(2*normal(-abs(_b[CAT_triage_A]/_se[CAT_triage_A]))) using results, sheet("Regression results") modify
putexcel I17=("CATs B") J17=(e(N)) K17=(exp(_b[CAT_triage_B])) L17=(exp(_b[CAT_triage_B]-(1.96*_se[CAT_triage_B]))) M17=(exp(_b[CAT_triage_B]+(1.96*_se[CAT_triage_B]))) N17=(2*normal(-abs(_b[CAT_triage_B]/_se[CAT_triage_B]))) using results, sheet("Regression results") modify
putexcel 118=("CATs C") J18=(e(N)) K18=(exp(_b[CAT_triage_C])) L18=(exp(_b[CAT_triage_C]-(1.96*_se[CAT_triage_C]))) M18=(exp(_b[CAT_triage_C]+(1.96*_se[CAT_triage_C])) N18=(2*normal(-abs(_b[CAT_triage_C]/_se[CAT_triage_C])) using results, sheet("Regression results") modify
putexcel I19=("CATs D") J19=(e(N)) K19=(exp(_b[CAT_triage_D])) L19=(exp(_b[CAT_triage_D]-(1.96*_se[CAT_triage_D]))) M19=(exp(_b[CAT_triage_D]+(1.96*_se[CAT_triage_D]))) N19=(2*normal(-abs(_b[CAT_triage_D]/_se[CAT_triage_D]))) using results, sheet("Regression results") modify
putexcel I20=("CATs E") J20=(e(N)) K20=(exp(_b[CAT_triage_E])) L20=(exp(_b[CAT_triage_E]-(1.96*_se[CAT_triage_E]))) M20=(exp(_b[CAT_triage_E]+(1.96*_se[CAT_triage_E]))) N20=(2*normal(-abs(_b[CAT_triage_E]/_se[CAT_triage_E]))) using results, sheet("Regression results") modify
putexcel I21=("CATs F") J21=(e(N)) K21=(exp(_b[CAT_triage_F])) L21=(exp(_b[CAT_triage_F]-(1.96*_se[CAT_triage_F]))) M21=(exp(_b[CAT_triage_F]+(1.96*_se[CAT_triage_F]))) N21=(2*normal(-abs(_b[CAT_triage_F]/_se[CAT_triage_F]))) using results, sheet("Regression results") modify

putexcel I22=("CATs G") J22=(e(N)) K22=(exp(b[CAT triage G])) L22=(exp(b[CAT triage G]-(1.96* se[CAT triage G]))) M22=(exp(_b[CAT_triage_G]+(1.96*_se[CAT_triage_G]))) N22=(2*normal(-abs(_b[CAT_triage_G]/_se[CAT_triage_G]))) using results, sheet("Regression results") modify

**Outcome#3: Decision to refer to hospital

logit refertohospital CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_D CAT_triage_E CAT_triage_F CAT_triage_G, or putexcel I24=("3. Outcome: Decision to refer to hospital") using results, sheet("Regression results") modify putexcel J25=("n") K25=("OR") L25=("Lower 95% CI") M25=("Upper 95% CI") N25=("p-value") using results, sheet("Regression results") modify

putexcel I26=("CATs A") J26=(e(N)) K26=(exp(_b[CAT_triage_A])) L26=(exp(_b[CAT_triage_A]-(1.96*_se[CAT_triage_A]))) M26=(exp(_b[CAT_triage_A]+(1.96*_se[CAT_triage_A]))) N26=(2*normal(-abs(_b[CAT_triage_A]/_se[CAT_triage_A]))) using results, sheet("Regression results") modify

putexcel I27=("CATs B") J27=(e(N)) K27=(exp(_b[CAT_triage_B])) L27=(exp(_b[CAT_triage_B]-(1.96*_se[CAT_triage_B]))) M27=(exp(_b[CAT_triage_B]+(1.96*_se[CAT_triage_B]))) N27=(2*normal(-abs(_b[CAT_triage_B]/_se[CAT_triage_B]))) using results, sheet("Regression results") modify

putexcel I28=("CATs C") J28=(e(N)) K28=(exp(_b[CAT_triage_C])) L28=(exp(_b[CAT_triage_C]-(1.96*_se[CAT_triage_C]))) M28=(exp(_b[CAT_triage_C]+(1.96*_se[CAT_triage_C]))) N28=(2*normal(-abs(_b[CAT_triage_C]/_se[CAT_triage_C]))) using results, sheet("Regression results") modify

putexcel I29=("CATs D") J29=(e(N)) K29=(exp(b[CAT triage D])) L29=(exp(b[CAT triage D]-(1.96* se[CAT triage D]))) M29=(exp(b[CAT triage D]+(1.96* se[CAT triage D]))) N29=(2*normal(-abs(b[CAT triage D]/ se[CAT triage D]))) using results, sheet("Regression results") modify

putexcel I30=("CATs E") J30=(e(N)) K30=(exp(_b[CAT_triage_E])) L30=(exp(_b[CAT_triage_E]-(1.96*_se[CAT_triage_E]))) M30=(exp(_b[CAT_triage_E]+(1.96*_se[CAT_triage_E]))) N30=(2*normal(-abs(_b[CAT_triage_E]/_se[CAT_triage_E]))) using results, sheet("Regression results") modify

putexcel I31=("CATs F") J31=(e(N)) K31=(exp(_b[CAT_triage_F])) L31=(exp(_b[CAT_triage_F]-(1.96*_se[CAT_triage_F]))) M31=(exp(_b[CAT_triage_F]+(1.96*_se[CAT_triage_F]))) N31=(2*normal(-abs(_b[CAT_triage_F]/_se[CAT_triage_F]))) using results, sheet("Regression results") modify

putexcel I32=("CATs G") J32=(e(N)) K32=(exp(b[CAT triage G])) L32=(exp(b[CAT triage G]-(1.96* se[CAT triage G]))) M32=(exp(_b[CAT_triage_G]+(1.96*_se[CAT_triage_G]))) N32=(2*normal(-abs(_b[CAT_triage_G]/_se[CAT_triage_G]))) using results, sheet("Regression results") modify

5. Monthly report

clear

*** NOTE: Ensure that the directory mentioned below is the directory containing the CLEANED weekly adult/children data files. //The results document ("my doc1") will be saved within this directory. global path = "R:\HPIRG\Flu-CATs\Last tranche\Monthly\"

cd "\$path"

use masterfile 2015 04.dta merge n:n patid using patient 2015 04.dta //

///NOTE: The names of the master file and the patient file may need to be modified. These files are .dta Stata data files downloaded from Dropbox.

//This do-file will have to be run separately for adult and for children data.

keep if m==3

drop_m

**Keeping only unique consultations (dropping duplicates) bys patid submit_date: gen new=_n keep if new==1 drop new count //*(note number)

gen category=1 if cat=="adult" replace category=2 if cat=="child" label define adultchild 1 "Adults" 2 "Children" label value category adultchild label define gender 1 "Male" 2 "Female" label value gender gender

**Adult-Children graph pie, over(category) plabel(_all percent) graph export "`sf'myplot1.eps", replace **Male-Female graph pie, over(gender) plabel(_all percent) graph export "`sf'myplot2.eps", replace **Comorbidities local comorbidities "cardiovascular liver neurological renal respiratory diabetes immune supression" foreach comor of local comorbidities { gen _`comor'=1 if `comor==1' }

graph bar (count) _cardiovascular _liver _neurological _renal _respiratory _diabetes _immune_supression graph export "`sf'myplot3.eps", replace **Medication local medication "statin antibiotic antiviral flu_vaccination hib inhaled_steroids oral_steroids pneumococcal_vaccine" foreach med of local medication { gen _`med'=1 if `med'==1 } graph bar (count) _statin _antibiotic _antiviral _flu_vaccination _hib _inhaled_steroids _oral_steroids _pneumococcal_vaccine graph export "`sf'myplot4.eps", replace tempname handle2 *** //RTFUTIL rtfopen `handle2' using "`sf'mydoc1.rtf", replace file write `handle2' _n _tab "{\pard\b Flu-CATs Monthly report: April, 2015 \par}" _tab _n //Insert the current month and year file write `handle2' _n "{\pard\b Data Source: GP practices participating in the CPRD-Flu-CATs Study. \line}" file write `handle2' _n "{\line}" // Figure1 file write `handle2' "{\pard\b FIGURE 1: Proportion of adults and children\par}" n /* */ "{\pard A far greater proportion of patients are adults (81.46%) when compared to children (18.54%). \line}" n rtflink `handle2' using "`sf'myplot1.eps" // Figure2 file write `handle2' _n "{\page}" _n file write `handle2' _n "{\line}" file write `handle2' "{\pard\b FIGURE 2: Proportion of males and females\par}" _n /* */ "{\pard A slightly higher proportion of patients are female (55.37%) when compared to male (44.63). \line}" n rtflink `handle2' using "`sf'myplot2.eps" // Figure3 file write `handle2' _n "{\page}" _n file write `handle2' _n "{\line}" file write `handle2' "{\pard\b FIGURE 3: Distribution of comorbidities\par}" n /* */ "{\pard Respiratory disease is the most commonly observed comorbidity, followed by diabetes mellitus, renal disease, cardiovascular disease, neurological disease and liver disease. \line}" n rtflink `handle2' using "`sf'myplot3.eps" // Figure4 file write `handle2' _n "{\page}" _n file write `handle2' _n "{\line}" file write `handle2' "{\pard\b FIGURE 4: Distribution of medications/treatments\par}" _n /* */ "{\pard The graph below shows the different medications and treatments that patients in the dataset were on. \line}" _n rtflink `handle2' using "`sf'myplot4.eps" // Table1 gen death_n=1 if death !=. recode death_n (.=0) file write `handle2' _n "{\page}" _n /* */ "{\pard A total of 8 deaths were observed. \line}" _n file write `handle2' _n "{\line}" file write `handle2' "{\pard\b Table 1\par}" _n rtfrstyle category gender death_n death, cwidths(1500 1440 1440 1440) local(b d e) listtex category gender death_n death if death_n==1, /* */ handle(`handle2') begin("`b'") delim("`d'") end("`e'") /* */ head("`b'\ql{\i Category}`d'\ql{\i Gender}`d'\ql{\i Death }`d'\ql{\i Date of death }`e'") file write `handle2' _n "{\line}" file write `handle2' _n _tab(2) /* */ "{\pard\b [Any additional notes]\par}" _n _n //Insert any additional notes. ** rtfclose `handle2'

*-----END CODE

6. PMEWS & CATs data analysis for comparisons

Calculating the PMEWS score- use for adults only (we don't have BP measurements for children) once initial data management has been carried out

**While the physiological data (MEWS) component can be carried out using the weekly data downloads corresponding to the FLUCATs web-based data collection form//

//to score the patient data, merging with the monthly data downloads from CPRD will be required as comorbidity data are needed***

//As monthly data will be used for the PMEWS, the monthly form data (containing clinical measurements) will have to be combined with the monthly//

// masterfile (containing comorbidity data) and the monthly patient file (containing patient age)

**Cleaning the monthly adult form data//

//Note: the directory below (and all subsequent file directories) will need to be modified as approriate by the user. use "R:\HPIRG\Flu-CATs\Last tranche\Monthly\form_adults_2015_04.dta"

***Converting dates from YMD to MDY
tostring submit_date, gen(submit_date2)
gen submit_date3= date(submit_date2, "YMD")
format submit_date3 %td
drop submit_date2 submit_date
rename submit_date3 submit_date

**Keeping only unique consultations (dropping duplicates)
bys patid submit_date: gen new=_n
keep if new==1
drop new
count

drop `varname' rename `varname'2 `varname' recode `varname' 2=0 label values `varname' measurements

}

measurement values local varlist "temperaturevalue respiratoryratevalue peripheraloxygensaturationvalue heartratevalue bloodpressuresystolic bloodpressurediastolic"

foreach varname of local varlist { replace `varname'=" " if `varname'== "-" destring `varname', replace

}

binary categorical (yes/no) label define binary_categorical 0 "No" 1 "Yes" local varlist "patientonoxygen severerespiratorydistress respiratoryexhaustion severedehydration causingotherclinicalconcern treatwithantivirals treatwithantibiotics refertohospital"

foreach varname of local varlist {
 encode `varname', gen(`varname'2)
 drop `varname'
 rename `varname'2 `varname'
 recode `varname' 1=0
 recode `varname' 2=1
 label values `varname' binary_categorical
}

capillary refill time: code normal as "0" and refill time>2 secs as "1" encode capillaryrefilltime, gen(capillaryrefilltime2) drop capillaryrefilltime rename capillaryrefilltime2 capillaryrefilltime recode capillaryrefilltime 1=0 recode capillaryrefilltime 2=1 label define capillaryrefilltime 0 "Grossly normal" 1 "sternal capillary refill>2 secs" label values capillaryrefilltime capillaryrefilltime **patientoxygenvalue: this will show as blank if the previous field 'patientoxygen' was answered as "no"** encode patientonoxygenvalue, gen(patientonoxygenvalue2) drop patientonoxygenvalue rename patientonoxygenvalue2 patientonoxygenvalue **check these recode values carefully in new files as current file does not have any 'yes'** recode patientonoxygenvalue 1=9 recode patientonoxygenvalue 2=0 recode patientonoxygenvalue 3=1 label define patientoxygenvalue 9 "Not applicable" 0 "No" 1 "Yes", replace label values patientonoxygenvalue patientoxygenvalue

**newalteredconsciouslevel ** encode newalteredconsciouslevel , gen(newalteredconsciouslevel2) drop newalteredconsciouslevel rename newalteredconsciouslevel2 newalteredconsciouslevel **Check coding before doing below recode newalteredconsciouslevel 2=0 label define newalteredconsciousness 0 "No, patient alert" 1 "Confused/agitated" 2 "Responsive to voice only" 3 "Responsive to pain only/unconscious", replace label values newalteredconsciouslevel newalteredconsciousness

socialisolation
encode socialisolation, gen(socialisolation2)
drop socialisolation
rename socialisolation2 socialisolation
check codes in new files
recode socialisolation 1=0
recode socialisolation 3=1
keep 'unknown' as "2"
label define socialisolation 0 "No" 1 "Yes" 2 "Unknown"
label values socialisolation socialisolation

performance status
encode performancestatus, gen(performancestatus2)
drop performancestatus
rename performancestatus2 performancestatus
check codes in new file

derivation of values based CATs criteria
gen CAT_triage_A= severerespiratorydistress
label variable CAT_triage_A `"CAT triage criteria A- severe respiratory distress (yes/no)"'
label values CAT_triage_A binary_categorical

gen CAT_triage_B= . replace CAT_triage_B= 1 if respiratoryratevalue>30 & respiratoryratevalue !=. replace CAT_triage_B=0 if respiratoryratevalue<=30 label variable CAT_triage_B `"CAT triage criteria B (resp rate>30 breaths/min)- yes/no"' label values CAT_triage_B binary_categorical

gen CAT_triage_C=. replace CAT_triage_C=1 if peripheraloxygensaturationvalue<=92 & peripheraloxygensaturationvalue !=. replace CAT_triage_C=0 if peripheraloxygensaturationvalue>92 label variable CAT_triage_C `"CAT triage criteria C (peripheral oxygen <=92%)- yes/no"' label values CAT_triage_C binary_categorical

gen CAT_triage_D=respiratoryexhaustion label variable CAT_triage_D `"CAT triage criteria D- respiratory exhaustion (yes/no)" label values CAT_triage_D binary_categorical

gen CAT_triage_E=. replace CAT_triage_E=1 if capillaryrefilltime==1 replace CAT_triage_E=1 if bloodpressuresystolic<90 replace CAT_triage_E=1 if bloodpressurediastolic<60 replace CAT_triage_E=1 if severedehydration==1 recode CAT_triage_E .=0 label variable CAT_triage_E `"CAT triage criteria E (severe clinical dehydration)- yes/no"' label values CAT_triage_E binary_categorical gen CAT_triage_F=. replace CAT_triage_F=0 if newalteredconsciouslevel==0 recode CAT_triage_F .=1 label variable CAT_triage_F `"CAT triage criteria E (new altered conscious level)- yes/no"' label values CAT_triage_F binary_categorical

gen CAT_triage_G= causingotherclinicalconcern label variable CAT_triage_G `"CAT triage criteria G, causing other clinical concern (yes/no)"' label values CAT_triage_G binary_categorical

*create variable labels** label variable patid `"unique patient identifier"' label variable pracid `"practice id"' label variable submit date `"presentation date"' label variable temperature `"temperature measurement (measured/not measured)"' label variable temperaturevalue `"temperature value in celsius; range allowed (35.0-42.0)"' label variable severerespiratory distress "CAT triage criteria A- severe respiratory distress (yes/no)" label variable respiratoryexhaustion `"CAT triage criteria D- respiratory exhaustion (yes/no)"' label variable respiratoryrate `"respiratory rate (measured/not measured)"' label variable respiratoryratevalue `"respiratory rate- breaths per minute; range allowed (15-120)"' label variable patientonoxygen `"patient on oxygen (yes/no)"' label variable patientonoxygenvalue `"new oxygen need (yes/no)"' label variable peripheraloxygensaturation `"peripheral oxygen value (measured/not measured)" label variable peripheraloxygensaturationvalue `"peripheral oxygen saturation (%); range allowed (70-100)"' label variable heartrate `"heart rate (measured/not measured)"' label variable heartratevalue `"heart rate value (beats per minute); range allowed (40-200)"' label variable bloodpressure `"blood pressure (measured/not measured)"' label variable bloodpressuresystolic `"systolic blood pressure (mmHg); range allowed (70-250)"' label variable bloodpressurediastolic `"diastolic blood pressure (mmHg); range allowed (40-150)"' label variable capillaryrefilltime `"sternal capillary refill time: 1 if >2 seconds; 0= grossly normal"" label variable severedehydration `"severe dehydration (yes/no)"' label variable newalteredconsciouslevel `"new altered consciousness level (alert; confused/agitated; voice; pain/unconscious)" label variable socialisolation `"lives alone or no fixed abode (yes/no/unknown)" label variable treatwithantivirals "decision to treat with antivirals (yes/no)" label variable treatwithantibiotics "decision to treat with antibiotics (yes/no)" label variable performancestatus "activity and ability to self care (categorical variable)" label variable causingotherclinical concern "CAT triage criteria G, causing other clinical concern (yes/no)" label variable causingotherclinicalconcernvalue `"nature of clinical concern, free text"' label variable refertohospital "decision to refer to hospital (yes/no)"

order patid pracid formid submit_date temperature temperaturevalue severerespiratorydistress respiratoryexhaustion respiratoryrate respiratoryratevalue patientonoxygen patientonoxygenvalue peripheraloxygensaturation peripheraloxygensaturationvalue heartrate heartratevalue bloodpressure bloodpressuresystolic bloodpressurediastolic capillaryrefilltime severedehydration newalteredconsciouslevel socialisolation performancestatus causingotherclinicalconcern causingotherclinicalconcernvalue treatwithantivirals treatwithantibiotics refertohospital CAT_triage_A CAT_triage_B CAT_triage_C CAT_triage_E CAT_triage_G

***Merging clean monthly adult form file with masterfile to obtain comorbidity data
merge n:n patid using "R:\HPIRG\Flu-CATs\Last tranche\Monthly\masterfile_2015_04.dta"
**Dropping children data
drop if cat=="child"
tab _m
//the number of observations with _m==3 must match the total number of adults in the masterfile
drop m

***Merging with monthly patient file to obtain age data
merge n:n patid using "R:\HPIRG\Flu-CATs\Last tranche\Monthly\patient_2015_04.dta"
drop if cat=="child"
**Keeping only unique consultations (dropping duplicates)
bys patid submit_date: gen new=_n
tab new
keep if new==1
count // this must equal the total number of adults in the clean monthly form file
drop _m

***Calculating the PMEWS
gen pmews_rr =.
order pmews_rr, after(respiratoryratevalue)
replace pmews_rr=3 if (respiratoryratevalue <=8 | respiratoryratevalue >=30) & (respiratoryratevalue != .)
replace pmews_rr=0 if (respiratoryratevalue >8 & respiratoryratevalue <19) &(respiratoryratevalue != .)</pre>

replace pmews_rr=1 if (respiratoryratevalue >18 & respiratoryratevalue <26) &(respiratoryratevalue != .) replace pmews_rr=2 if (respiratoryratevalue >25 & respiratoryratevalue <30) &(respiratoryratevalue != .)

gen pmews_o2=.

order pmews_o2 pmews_rr, after(peripheraloxygensaturationvalue)

replace pmews_02=3 if (peripheraloxygensaturationvalue <89) & (peripheraloxygensaturationvalue !=.) replace pmews_02=2 if (peripheraloxygensaturationvalue >88 & peripheraloxygensaturationvalue <94) & (peripheraloxygensaturationvalue !=.)

replace pmews_o2=1 if (peripheraloxygensaturationvalue >93 & peripheraloxygensaturationvalue <97) & (peripheraloxygensaturationvalue !=.)

replace pmews_o2=0 if (peripheraloxygensaturationvalue >96) & (peripheraloxygensaturationvalue !=.)

gen pmews_hr=.

order pmews_hr, after(heartratevalue)

replace pmews_hr=3 if (heartratevalue <=40 | heartratevalue >= 130) & (heartratevalue !=.) replace pmews_hr=2 if (heartratevalue >40 & heartratevalue <51) & (heartratevalue !=.) replace pmews_hr=2 if (heartratevalue >110 & heartratevalue <130) & (heartratevalue !=.) replace pmews_hr=1 if (heartratevalue >100 & heartratevalue <111) & (heartratevalue !=.) replace pmews_hr=0 if (heartratevalue >50 & heartratevalue <101) & (heartratevalue !=.)

gen pmews_sysbp=.

order pmews_sysbp, after(bloodpressuresystolic)

replace pmews_sysbp=3 if (bloodpressuresystolic <=70) & (bloodpressuresystolic !=.) replace pmews_sysbp=2 if (bloodpressuresystolic >70 & bloodpressuresystolic <91) & (bloodpressuresystolic !=.) replace pmews_sysbp=1 if (bloodpressuresystolic >90 & bloodpressuresystolic <101) & (bloodpressuresystolic !=.) replace pmews_sysbp=0 if (bloodpressuresystolic >100) & (bloodpressuresystolic !=.)

gen pmews_temp=.

order pmews_temp, after(temperaturevalue)

replace pmews_temp=2 if (temperaturevalue <=35 | temperaturevalue >=39) & (temperaturevalue !=.) replace pmews_temp=1 if (temperaturevalue >35 & temperaturevalue <36.1) & (temperaturevalue !=.) replace pmews_temp=1 if (temperaturevalue >=38 & temperaturevalue <39) & (temperaturevalue !=.) replace pmews_temp=0 if (temperaturevalue >36 & temperaturevalue <38) & (temperaturevalue !=.)

gen pmews_neuro=.

order pmews_neuro, after(newalteredconsciouslevel) replace pmews_neuro=0 if newalteredconsciouslevel== 0 replace pmews_neuro=1 if newalteredconsciouslevel== 1 replace pmews_neuro=2 if newalteredconsciouslevel== 2 replace pmews_neuro=3 if newalteredconsciouslevel== 3

gen year_of_consultation=year(submit_date) gen age_at_consultation=year_of_consultation-year gen pmews_age65=1 if age_at_consultation>=65 & age_at_consultation !=. replace pmews_age65=0 if age_at_consultation<65 & age_at_consultation !=.

gen pmews_living=1 if socialisolation==1 replace pmews_living=0 if socialisolation==0

gen pmews_chronic=1 if cardiovascular==1| liver==1| neurological==1| renal==1| respiratory==1| diabetes==1| immune_supression==1 replace pmews_chronic=0 if cardiovascular==0| liver==0| neurological==0| renal==0| respiratory==0| diabetes==0| immune_supression==0

gen pmews_performance=1 if performancestatus==5 replace pmews_performance=2 if performancestatus==4 replace pmews_performance=3 if performancestatus==3 replace pmews_performance=4 if performancestatus==2 replace pmews_performance=5 if performancestatus==1

gen

 $total_pmews=pmews_rr+pmews_o2+pmews_hr+pmews_sysbp+pmews_temp+pmews_neuro+pmews_age65+pmews_living+pmews_chronic+pmews_performance$

gen pmews2=1 if total_pmews>=2 & total_pmews !=. replace pmews2=0 if total_pmews<2 & total_pmews !=.

gen total_cats=CAT_triage_A+CAT_triage_B+CAT_triage_C+CAT_triage_D+CAT_triage_E+CAT_triage_F+CAT_triage_G gen cats3=1 if total_cats>=3 & total_cats !=. replace cats3=0 if total_cats<3 & total_cats !=.

//The CATs and the PMEWS score can now be compared.