Appendix I STROBE Statement—Checklist of items that should be included in reports of cohort studies

	Item No	Recommendation
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found
Introduction		
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported
Objectives	3	State specific objectives, including any prespecified hypotheses
Methods		
Study design	4	Present key elements of study design early in the paper
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection
Participants	6	(*a*) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up
		(*b*) For matched studies, give matching criteria and number of exposed and unexposed
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group
Bias	9	Describe any efforts to address potential sources of bias
Study size	10	Explain how the study size was arrived at
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe

		which groupings were chosen and why
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding
		(*b*) Describe any methods used to examine subgroups and interactions
		(*c*) Explain how missing data were addressed
		(*d*) If applicable, explain how loss to follow-up was addressed
		(*e*) Describe any sensitivity analyses
Results		
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed
		(b) Give reasons for non-participation at each stage
		(c) Consider use of a flow diagram
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders
		(b) Indicate number of participants with missing data for each variable of interest
		(c) Summarise follow-up time (eg, average and total amount)
Outcome data	15*	Report numbers of outcome events or summary measures over time
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included
		(*b*) Report category boundaries when continuous variables were categorized
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses
Discussion		

Key results	18	Summarise key results with reference to study objectives
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence
Generalisability	21	Discuss the generalisability (external validity) of the study results
Other information		
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based

*Give information separately for exposed and unexposed groups.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLOS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at http://www.strobe-statement.org.

Appendix II Five types of surgeries

Category number	Medical Procedure Name	Billing code
K046-00	Open reduction of fracture (thigh)	150019210
K073-00	Open reduction of intra-articular fracture (hip)	150042710
K073-02	Arthroscopic open reduction of intra-articular fracture (hip)	150353310
K081-00	Artificial femoral head replacement (hip)	150049510
K082-00	Total hip replacement (hip)	150050410

These types of surgeries were identified based on a single national list of official medical fees based on standard disease codes or medical procedure codes in the Ministry of Health, Labour and Welfare. The list can refer to the website: https://shinryohoshu.mhlw.go.jp/shinryohoshu/paMenu/doPaDetailSpNext&100

Appendix III

1. Quantile and multiple linear regression R code

1.1 Data preprocessing R code

```
```{r setup}
options(knitr.kable.NA = '', digits = 3)
knitr::opts_chunk$set(warning = FALSE)
setwd(dirname(rstudioapi::getActiveDocumentContext()[["path"]]))
getwd()
rm(list=ls())

library(kableExtra)
library(knitr)
library(multcomp)
dat=read.csv('分位数 LOS six months after.csv',fileEncoding = 'GBK')
colnames(dat)[14]='y'
dat[,2:13]=scale(dat[,2:13])
dat[,14]=log(1+dat[,14])

star=function(x){
  if(x<=0.001){return('***')
  }else if(x<=0.01){return('**')
  }else if(x<=0.05){return('*.')
  }else{return('')}
}

tau=c(0.25,0.5,0.75,0.9)
library(quantreg)
```
```

1.2 R code of constructing quantile regression analysis model

```{r warning=FALSE}
dat1=dat
dat1$Sex=as.factor(dat1$Sex)
main=c('Sex',"Age","Antidementia prescriptions",'LOS  before','Outpatient service before',
       'Anti-osteoporosis agents before','Antibacterial agents before',
       'Antihypertensive agents before','Diabetes mellitus agents before',
       'Constipation agents before','Indwelling urinary catheter before',
       'Drip injections before','Severe pressure ulcer treatments before'
)


plist=array(NA,c(length(tau),length(main),7))
Scheffe_Sig <- matrix(",length(main)+1,length(tau))
k=1
for(ttt in tau){
  rq1=rq(y~.,data=dat1,tau=ttt)
  s=summary(rq1,se = 'iid')
  coefficients_iid <- s$coefficients
  alpha <- 0.05
  z_critical <- qnorm(1 - alpha/2)
  lower_ci <- coefficients_iid[-1, 1] - z_critical * coefficients_iid[-1, 2]
  upper_ci <- coefficients_iid[-1, 1] + z_critical * coefficients_iid[-1, 2]
  plist[k,,c(1,4,5)]=coefficients_iid[-1,c(1,2,4)]
  plist[k,,2]=lower_ci
  plist[k,,3]=upper_ci

  plist[k,,6]=p.adjust(plist[k,,5], method = "holm")
  plist[k,,7]=p.adjust(plist[k,,5], method = "BH")
  k=k+1
}
```

1.3 R code of constructing linear regression analysis model

```{r}
lm=lm(y~.,data=dat1)
summary_lm=summary(lm)
conf_int <- summary_lm$coefficients[1, "Pr(>|t|)"]
conf_level <- 0.95  # 置信水平，默认为 95%
t_critical <- qt(1 - conf_level, df = summary_lm$df[2])
conf_interval <- c(
  summary_lm$coefficients[1, "Estimate"] - t_critical * summary_lm$coefficients[1, "Std. Error"],
  summary_lm$coefficients[1, "Estimate"] + t_critical * summary_lm$coefficients[1, "Std. Error"]
)
co=summary_lm$coefficients
co=cbind(co[,1],confint(lm),co[,-1])
co=data.frame(co,Sig=sapply(co[,'Pr(>|t|)'], star));
co$p_holm <- c(0,p.adjust(co$Pr...t..[-1], method = "holm"))
co$sig_holm=sapply(co$p_holm, star)
co$p_bh <- c(0,p.adjust(co$Pr...t..[-1], method = "BH"))
co$sig_bh=sapply(co$p_bh, star)
kable(co)%>%kable_styling(full_width=F,position='left')
```

1.4 Result output R code

```{r warning=FALSE}
i=1

table=plist[,i,]
rownames(table)=c(0.25,0.5,0.75,0.9)
colnames(table) = c('value','2.5%','97.5%','Std. Error','p-value',"p_holm","p_bh")
```

```
table=data.frame(table)
table$Sig=sapply(table[,'p.value'],star)
table$sig_holm=sapply(table$p_holm, star)
table$sig_bh=sapply(table$p_bh, star)
kable(table,caption = main[i])%>%kable_styling(full_width=F,position='left')
i=i+1

table=plist[,i,]
rownames(table)=c(0.25,0.5,0.75,0.9)
colnames(table) = c('value','2.5%','97.5%','Std. Error','p-value',"p_holm","p_bh")
table=data.frame(table)
table$Sig=sapply(table[,'p.value'],star)
table$sig_holm=sapply(table$p_holm, star)
table$sig_bh=sapply(table$p_bh, star)
kable(table,caption = main[i])%>%kable_styling(full_width=F,position='left')
i=i+1

table=plist[,i,]
rownames(table)=c(0.25,0.5,0.75,0.9)
colnames(table) = c('value','2.5%','97.5%','Std. Error','p-value',"p_holm","p_bh")
table=data.frame(table)
table$Sig=sapply(table[,'p.value'],star)
table$sig_holm=sapply(table$p_holm, star)
table$sig_bh=sapply(table$p_bh, star)
kable(table,caption = main[i])%>%kable_styling(full_width=F,position='left')
i=i+1

table=plist[,i,]
rownames(table)=c(0.25,0.5,0.75,0.9)
colnames(table) = c('value','2.5%','97.5%','Std. Error','p-value',"p_holm","p_bh")
table=data.frame(table)
table$Sig=sapply(table[,'p.value'],star)
```

```
table$sig_holm=sapply(table$p_holm, star)
table$sig_bh=sapply(table$p_bh, star)
kable(table,caption = main[i])%>%kable_styling(full_width=F,position='left')
i=i+1

table=plist[,i,]
rownames(table)=c(0.25,0.5,0.75,0.9)
colnames(table) = c('value','2.5%','97.5%','Std. Error','p-value',"p_holm","p_bh")
table=data.frame(table)
table$Sig=sapply(table[,'p.value'],star)
table$sig_holm=sapply(table$p_holm, star)
table$sig_bh=sapply(table$p_bh, star)
kable(table,caption = main[i])%>%kable_styling(full_width=F,position='left')
i=i+1

table=plist[,i,]
rownames(table)=c(0.25,0.5,0.75,0.9)
colnames(table) = c('value','2.5%','97.5%','Std. Error','p-value',"p_holm","p_bh")
table=data.frame(table)
table$Sig=sapply(table[,'p.value'],star)
table$sig_holm=sapply(table$p_holm, star)
table$sig_bh=sapply(table$p_bh, star)
kable(table,caption = main[i])%>%kable_styling(full_width=F,position='left')
i=i+1

table=plist[,i,]
rownames(table)=c(0.25,0.5,0.75,0.9)
colnames(table) = c('value','2.5%','97.5%','Std. Error','p-value',"p_holm","p_bh")
table=data.frame(table)
table$Sig=sapply(table[,'p.value'],star)
table$sig_holm=sapply(table$p_holm, star)
table$sig_bh=sapply(table$p_bh, star)
```

```
kable(table,caption = main[i])%>%kable_styling(full_width=F,position='left')
i=i+1

table=plist[,i,]
rownames(table)=c(0.25,0.5,0.75,0.9)
colnames(table) = c('value','2.5%','97.5%','Std. Error','p-value',"p_holm","p_bh")
table=data.frame(table)
table$Sig=sapply(table[,'p.value'],star)
table$sig_holm=sapply(table$p_holm, star)
table$sig_bh=sapply(table$p_bh, star)
kable(table,caption = main[i])%>%kable_styling(full_width=F,position='left')
i=i+1

table=plist[,i,]
rownames(table)=c(0.25,0.5,0.75,0.9)
colnames(table) = c('value','2.5%','97.5%','Std. Error','p-value',"p_holm","p_bh")
table=data.frame(table)
table$Sig=sapply(table[,'p.value'],star)
table$sig_holm=sapply(table$p_holm, star)
table$sig_bh=sapply(table$p_bh, star)
kable(table,caption = main[i])%>%kable_styling(full_width=F,position='left')
i=i+1

table=plist[,i,]
rownames(table)=c(0.25,0.5,0.75,0.9)
colnames(table) = c('value','2.5%','97.5%','Std. Error','p-value',"p_holm","p_bh")
table=data.frame(table)
table$Sig=sapply(table[,'p.value'],star)
table$sig_holm=sapply(table$p_holm, star)
table$sig_bh=sapply(table$p_bh, star)
kable(table,caption = main[i])%>%kable_styling(full_width=F,position='left')
i=i+1
```

```
table=plist[,i,]
rownames(table)=c(0.25,0.5,0.75,0.9)
colnames(table) = c('value','2.5%','97.5%','Std. Error','p-value',"p_holm","p_bh")
table=data.frame(table)
table$Sig=sapply(table[,'p.value'],star)
table$sig_holm=sapply(table$p_holm, star)
table$sig_bh=sapply(table$p_bh, star)
kable(table,caption = main[i])%>%kable_styling(full_width=F,position='left')
i=i+1

table=plist[,i,]
rownames(table)=c(0.25,0.5,0.75,0.9)
colnames(table) = c('value','2.5%','97.5%','Std. Error','p-value',"p_holm","p_bh")
table=data.frame(table)
table$Sig=sapply(table[,'p.value'],star)
table$sig_holm=sapply(table$p_holm, star)
table$sig_bh=sapply(table$p_bh, star)
kable(table,caption = main[i])%>%kable_styling(full_width=F,position='left')
i=i+1

table=plist[,i,]
rownames(table)=c(0.25,0.5,0.75,0.9)
colnames(table) = c('value','2.5%','97.5%','Std. Error','p-value',"p_holm","p_bh")
table=data.frame(table)
table$Sig=sapply(table[,'p.value'],star)
table$sig_holm=sapply(table$p_holm, star)
table$sig_bh=sapply(table$p_bh, star)
kable(table,caption = main[i])%>%kable_styling(full_width=F,position='left')
i=i+1
```

2. Ordinal regression R code

2.1 Data preprocessing R code

```
```{r setup}
options(knitr.kable.NA = '', digits = 3)
knitr::opts_chunk$set(warning = FALSE)
setwd(dirname(rstudioapi::getActiveDocumentContext()[["path"]]))
getwd()
rm(list=ls())

library(kableExtra)
library(knitr)
dat=read.csv('序数 20241001.csv',fileEncoding = 'GBK')
young_id=which(dat$Age<=80&dat$Age>=65)
mid_id=which(dat$Age<=90&dat$Age>=81)
old_id=which(dat$Age>=91)
dat$Sex=as.factor(dat$Sex)
dat[,2:13]=scale(dat[,2:13])

star=function(x){
  if(x<=0.001){return('***')
  }else if(x<=0.01){return('**')
  }else if(x<=0.05){return('*.')
  }else{return('')}
}
```
```

2.2 R code of constructing ordinal regression analysis model

```
j=18
r=foreach(i=j:26,.errorhandling="pass",.packages = c('MASS','brant')) %dopar% {
  dat_polr=dat[,c(1:13,i)]
  g0=which(dat_polr[,14]==0)
```

```
g1=which(dat_polr[,14]<=max(dat_polr[,14])/2&dat_polr[,14]>0)
g2=which(dat_polr[,14]>max(dat_polr[,14])/2)

dat_polr[g0,14]=0
dat_polr[g1,14]=1
dat_polr[g2,14]=2
dat_polr[,14]=as.factor(dat_polr[,14])

colnames(dat_polr)[14]='Y'

if(i==21||i==27){dat_polr=dat_polr[,-13]}
po=polr(Y~., data = dat_polr)
br=brant(po)

if(br[1,3]<0.05){
   while(br[1,3]<0.05){
   dat_polr=dat_polr[,-which.min(br[-1,3])]
   po=polr(Y~., data = dat_polr,Hess = T)
   br=brant(po)
   }
}

if(br[1,3]>=0.05){
      ctable <- coef(summary(po))
      p <- pnorm(abs(ctable[, "t value"]), lower.tail = FALSE) * 2
      ctable <- cbind(ctable, "p value" = p)

      conf=confint(po)
      ctable=data.frame(ctable,'star'=sapply(ctable[,4],star),rbind(conf,c(0,0),c(0,0)))

      ctable[,-5]=round(ctable[,-5],5)
```

```
        po0=polr(Y~1, data = dat_polr)
        model_p=1-pchisq(po0$deviance-po$deviance,df=po0$df.residual-po$df.residual)
      }
      list(round(br,5),ctable,round(model_p,5))}
```

```{r polr2, include=FALSE}
for(i in c(25)){
  dat_polr=dat[,c(1:13,i)]
  g0=which(dat_polr[,14]==0)
  g1=which(dat_polr[,14]<=max(dat_polr[,14])/2&dat_polr[,14]>0)
  g2=which(dat_polr[,14]>max(dat_polr[,14])/2)

  dat_polr[g0,14]=0
  dat_polr[g1,14]=1
  dat_polr[g2,14]=2
  dat_polr[,14]=as.factor(dat_polr[,14])

  colnames(dat_polr)[14]='Y'

  if(i==21){dat_polr=dat_polr[,-13]}
  po=polr(Y~., data = dat_polr)
  br=brant(po)

  if(br[1,3]<0.05){
    while(br[1,3]<0.05){
    dat_polr=dat_polr[,-which.min(br[-1,3])]
    po=polr(Y~., data = dat_polr,Hess = T)
    br=brant(po)
    }
  }
```

```
    if(br[1,3]>=0.05){
      ctable <- coef(summary(po))
      p <- pnorm(abs(ctable[, "t value"]), lower.tail = FALSE) * 2
      ctable <- cbind(ctable, "p value" = p)

      conf=confint(po)
      ctable=data.frame(ctable,'Sig'=sapply(ctable[,4],star),rbind(conf,c(0,0),c(0,0)))

      ctable[,-5]=round(ctable[,-5],5)

      po0=polr(Y~1, data = dat_polr)
      model_p=1-pchisq(po0$deviance-po$deviance,df=po0$df.residual-po$df.residual)
    }
    r[[i-17]]=list(round(br,5),ctable,round(model_p,5),po0)}

  i=17
  ```
```

### 2.3 Result output R code

```
  ##
  ```{r}
  i=i+1
  co=r[[i-17]][[1]];  co=data.frame(co,Sig=sapply(co[,'probability'], star));
kable(co)%>%kable_styling(full_width=F,position='left');
  ```

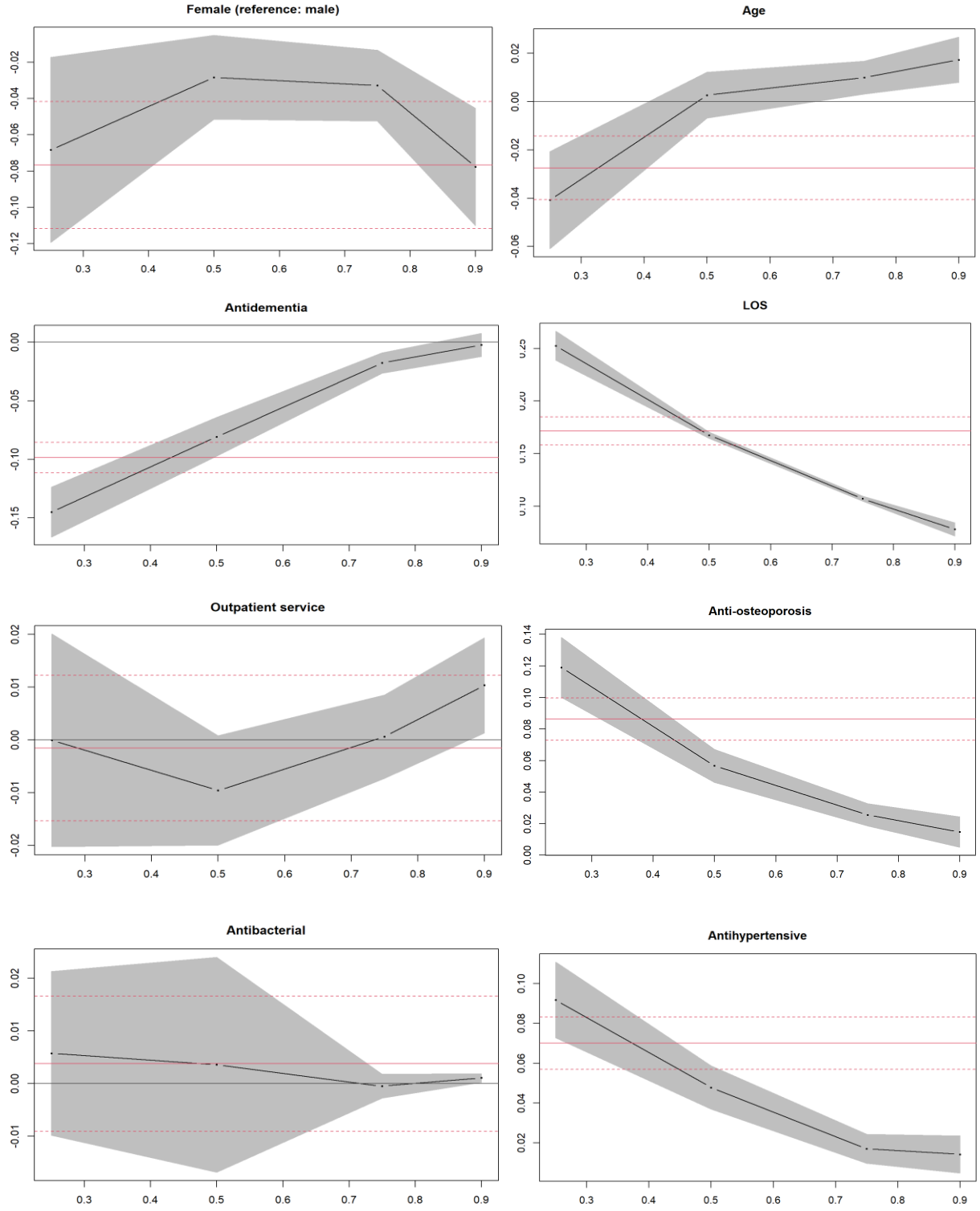
  ##
  ```{r}
  table=r[[i-17]][[2]]

  coefficients_iid=as.data.frame(table)
```

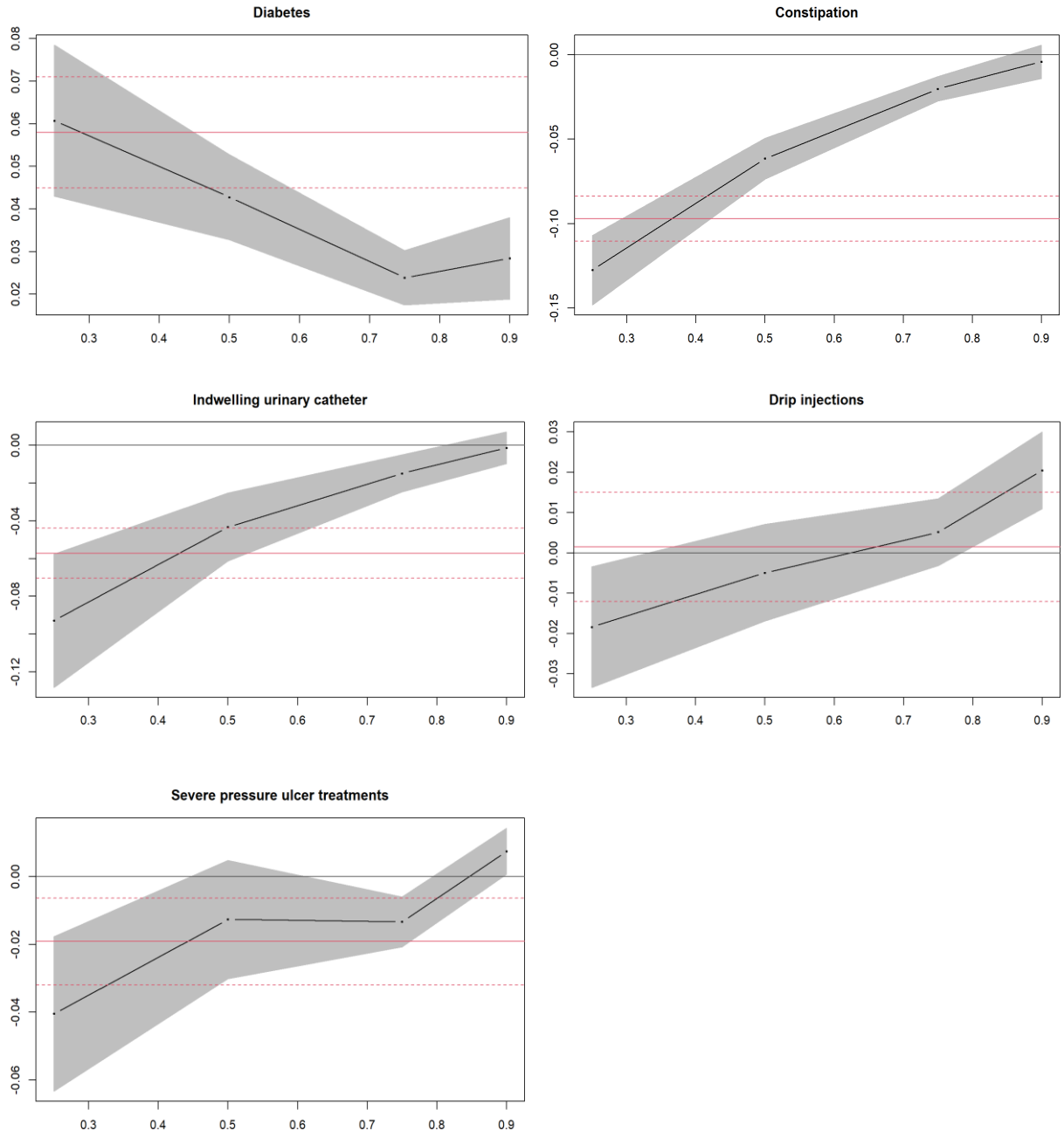
```
coefficients_iid=coefficients_iid[,c(1,2,3,6,7,4,5)]
l=nrow(coefficients_iid)-2
coefficients_iid$p_holm <- c(p.adjust(coefficients_iid$p.value[1:l], method = "holm"),0,0)
coefficients_iid$sig_holm=sapply(coefficients_iid$p_holm, star)
coefficients_iid$p_bh <- c(p.adjust(coefficients_iid$p.value[1:l], method = "BH"),0,0)
coefficients_iid$sig_bh=sapply(coefficients_iid$p_bh, star)
kable(coefficients_iid)%>%kable_styling(full_width=F,position='left')

bar=table[1:(nrow(table)-2),1]
par(las=1,xpd=T)
barplot(bar,width=20,horiz=T,cex.names=0.7,names.arg
=substring(rownames(table)[1:length(bar)],1,10))
```

```
##
```

```{r}
r[[i-17]][[3]]
```

Appendix IV Figure 1 Preoperative factors associated with LOS within first postoperative half-year in Linear regressions and the regressions for each quantile





Note: The x-axis represents each percentile point of the dependent variable (LOS), and the results for each independent variable are shown starting from the 25th percentile (0.25). The solid red line represents the standardized regression coefficient or dummy variable's regression coefficient for multiple linear regressions; red dashed lines show their 95% CIs. The black lines represent the standardized regression coefficient or dummy variable's regression coefficient for quantile regressions, while gray areas indicate 95% CIs. LOS: Preoperative one-year LOS (days). Outpatient service: Preoperative one-year days of outpatient utilization. Antidementia: Preoperative one-year number of months with physician orders for antidementia prescriptions. Anti-osteoporosis:

Preoperative one-year number of months with physician orders for anti-osteoporosis prescriptions. Antibacterial: Preoperative one-year number of months with physician orders for antibacterial agents. Antihypertensive: Preoperative one-year number of months with physician orders for antihypertensive agents. Diabetes: Preoperative one-year number of months with physician orders for agents for diabetes mellitus. Constipation: Preoperative one-year number of months with physician orders for constipation prescriptions. Indwelling urinary catheter: Preoperative one-year number of months with physician orders for indwelling urinary catheters. Drip injections: Preoperative one-year number of months with physician orders for drip injections. Severe pressure ulcer treatments: Preoperative one-year number of months with physician orders for severe pressure ulcer treatments.

Appendix V Preferred reporting items for systematic reviews and meta-analyses extension for scoping reviews checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	1
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	1
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	2-3
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	4
METHODS			

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	6
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	4-6
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	6
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	43
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	7
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done	7-8

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
		independently or in duplicate) and any processes for obtaining and confirming data from investigators.	
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	8
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	Click here to enter text.
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	8
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	38
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	29-31
Critical appraisal within	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
sources of evidence			
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	32-37
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	8-15
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	15-17
Limitations	20	Discuss the limitations of the scoping review process.	17-18
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	18
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review.	Click here to enter text.

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
		Describe the role of the funders of the scoping review.	

Appendix VI Search strategy

1.MEDLINE (OvidSP)

#	Searches	Results
1	exp Dementia/	204,376
2	Cognitive Dysfunction/	35,531
3	(dement* or alzheimer* or pick* or ftd or ftld or "fronto-temporal" or "cognitive impairment" or mci).mp.	387,541
4	or/1-3	414,054
5	Emergency Service, Hospital/	87,007
6	Emergency Medical Services/	48,517
7	Emergency Services, Psychiatric/	2,555
8	emergency.mp.	395,287
9	or/5-8	395,287
10	4 and 9	3,028

11 Residential Facilities/ or Assisted Living Facilities/ or Group Homes/ or Homes for the Aged/

2

2,531

12 Hospitals, Rehabilitation/

129

13 ("nursing home*" or "group home*" or "home for the aged" or "homes for the aged").mp.

60,042

14 (("skilled nursing" or "long-term" or subacute or hospice or convalescent) adj2 (fascilit* or home*)).mp.

4,253

15 ("rehabilitation hospital*" or "geriatric hospital*").mp.

4,141

16 or/11-15

73,212

17 10 and 16

259

18 remove duplicates from 17

259

2. CINAHL (EBSCOhost)

Search ID# Search Terms

Results

S1 (MH "Dementia+") OR (MH "Mild Cognitive Impairment") OR (dement* or alzheimer* or pick* or ftd or ftld or "fronto-temporal" or "cognitive impairment" or mci)

154,282

S2 (MH "Emergency Service") OR (MH "Emergency Services, Psychiatric") OR (MH "Emergency Medical Services") OR emergency

231,542

S3 S1 AND S2

2,235

S4 (MH "Residential Facilities+") OR ("nursing home*" or "group home*" or "home for the aged" or "homes for the aged") OR (("skilled nursing" or "long-term" or subacute or hospice or convalescent) n1 (fascilit* or home*)) OR ("rehabilitation hospital*" or "geriatric hospital*")

63,688

S5 S3 AND S4

223

3.Embase (embase.com)

No. Query

Results

#15 #8 AND #14

793

#14 #9 OR #10 OR #11 OR #12 OR #13

108226

#13 'rehabilitation hospital*' OR 'geriatric hospital*'

28933

#12 ('skilled nursing' OR 'long-term' OR subacute OR hospice OR convalescent) NEAR/2 (fascilit* OR home*)

7616

#11 'nursing home'/de

63847

#10 'assisted living facility'/de

3157

#9 'residential home'/de

8240

#8 #4 AND #7

12332

#7 #5 OR #6

888678

#6 emergency

886475

#5 'emergency health service'/exp

321725

#4 #1 OR #2 OR #3

708641

#3 dement* OR alzheimer* OR pick* OR ftd OR ftld OR 'fronto-temporal' OR 'cognitive impairment' OR mci

649148

#2 'mild cognitive impairment'/de

36343

#1 'dementia'/exp

441

4. Cochrane Library (Wiley)

ID Search

Hits

#1 MeSH descriptor: [Dementia] explode all trees

9215

#2 MeSH descriptor: [Cognitive Dysfunction] this term only

2940

#3 (dement* or alzheimer* or pick* or ftd or ftld or "fronto-temporal" or "cognitive impairment" or mci):ti,ab,kw

34755

#4 #1 or #2 or #3

35907

#5 MeSH descriptor: [Emergency Service, Hospital] this term only

3116

#6 MeSH descriptor: [Emergency Medical Services] this term only

1306

#7 MeSH descriptor: [Emergency Services, Psychiatric] this term only

56

#8 emergency:ti,ab,kw

32143

#9 #5 or #6 or #7 or #8

32143

#10 #4 and #9

524

#11 MeSH descriptor: [Residential Facilities] explode all trees

2312

#12 MeSH descriptor: [Hospitals, Rehabilitation] this term only

7

#13 ("nursing home*" or "group home*" or "home for the aged" or "homes for the aged"):ti,ab,kw

4740

#14 (("skilled nursing" or "long-term" or subacute or hospice or convalescent) N1 (fascilit* or home*)):ti,ab,kw

5

#15 ("rehabilitation hospital*" or "geriatric hospital*"):ti,ab,kw

945

#16 #11 or #12 or #13 or #14 or #15

6292

#17 #10 and #16

56

5. JBI (OvidSP)

#	Searches	Results
1	(dement* or alzheimer* or pick* or ftd or ftld or "fronto-temporal" or "cognitive impairment" or mci).mp.	844
2	emergency.mp.	1,461
3	1 and 2	183
4	("nursing home*" or "group home*" or "home for the aged" or "homes for the aged").mp.	523
5	(("skilled nursing" or "long-term" or subacute or hospice or convalescent) adj2 (fascilit* or home*)).mp.	105
6	("rehabilitation hospital*" or "geriatric hospital*").mp.	45
7	or/4-6	582
8	3 and 7	79