Article title: The Feedback Loop Between the Demand for Voluntary Private Insurance and the

Burden of Healthcare System: An Explanatory System Dynamics Model of Hong Kong

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Supplementary file 2. Full Documentation of the Model Using SDM-Doc

Quick	<u>All</u>	Variable	Variable	Views	Groups	Units	Macros	Feedback	Exogenous	Endogenous	Link	View	View-
Links	Variables	Link	Types					Loops	Variables	Variables	Polarity	Summary	<u>Variable</u>
		Detail							Analysis	Analysis			<u>Profile</u>

Model Assessment Results

Model Information	Result
Total Number Of Variables	34 36
Total Number Of State Variables	4 (11.8%) 6 (16.7%)
Total Number Of Stocks	3 (8.8%) 3 (8.3%)
Total Number Of Exogenous Variables	23 (67.6%) 23 (63.9%)
Total Number Of Endogenous Variables	11 (32.4%) 13 (36.1%)
Total Number Of Feedback Loops No IVV (Maximum Loop Length: 5) [2, 5]	6 (1 5 0)
Total Number Of Feedback Loops With IVV (Maximum Loop Length: 5) [0, 0]	0 (0 <mark>0</mark> 0)

Total Number Of Causal Links	55 (26 15 14) 67 (36 17 14)
Total Number of Rate-to- rate Links	0
Number Of Units Used In The Model (Basic/Combined)	2/1
Total Number Of Equations Using Macros	0 (0.0%) 0 (0.0%)
Variables With Source Information	0 (0.0%) 0 (0.0%)
Dimensionless Unit Variables	0 (0.0%) 0 (0.0%)
Variables without Predefined Min or Max Values	34 (100.0%) 36 (100.0%)
Function Sensitivity Parameters	0 (0.0%) 0 (0.0%)
Data Lookup Tables	0 (0.0%) 0 (0.0%)
Time Unit	Day
Initial Time	733500
Final Time	737426
Reported Time Interval	TIME STEP
Time Step	1
Model Is Fully Formulated	Yes
Model Defined Groups	No

Warnings	Result
Number Of Undocumented Variables	37 (108.8%) 39 (108.3%)
Equations With Embedded Data	5 (14.7%) 7 (19.4%)
Variables Not In Any View	4 (11.8%) 4 (11.1%)

Nonmonotonic Lookup Functions	7 (20.6%) 7 (19.4%)
Cascading Lookup Functions	0 (0.0%) 0 (0.0%)
Non-Zero End Sloped Lookup Functions	1 (2.9%) 1 (2.8%)
Equations With If Then Else Functions	0 (0.0%) 0 (0.0%)
Equations With Min Or Max Functions	0 (0.0%) 0 (0.0%)
Equations With Step Pulse Or Related Functions	0 (0.0%) 0 (0.0%)
Equations With Unit Errors Or Warnings	26 (76.5%) 28 (77.8%)

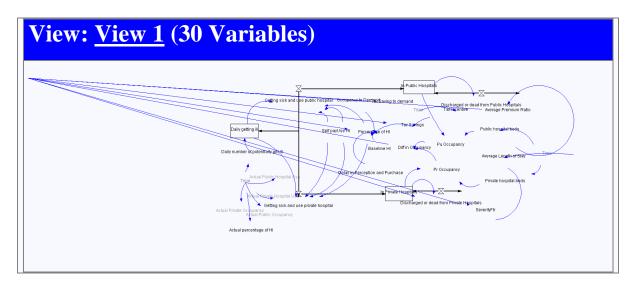
Potential Omissions	Result
<u>Unused Variables</u>	5 (14.7%) 5 (13.9%)
Supplementary Variables	0 (0.0%) 0 (0.0%)
Supplementary Variables Being Used	0 (0.0%) 0 (0.0%)
Complex Variable	3 (8.8%) 5 (13.9%)
Complex Stock	0 (0.0%) 0 (0.0%)

Variable Types

L: <u>Level</u> (3 / 3)*	SM : <u>Smooth</u> (0 / 0)*	DE : <u>Delay</u> (2 / 18)*†	LI: Level Initial (0)	I: <u>Initial</u> (0 / 0)
C: <u>Constant</u> (11 / 11)	F : <u>Flow</u> (5 / 5)	A : <u>Auxiliary</u> (20 / 22)	Sub: Subscripts (0)	D : <u>Data</u> (0 / 0)
G : <u>Game</u> (0 / 0)	T: <u>Lookup</u> (10 / 10)*††			

^{* (}State Variables/Total Stocks) † Total Stocks Do Not Include Fixed Delay Variables. †† (Lookup Tables).

Views



Groups

<u>.Control</u> (4)	Core insurance model 0331 (30)			
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Qui										J																
ck	<u>A</u>	<u>B</u>	C	D	E	<u>F</u>	G	Н	Ī		K	L	M	N	<u>O</u>	<u>P</u>	Q	R	<u>S</u>	<u>T</u>	<u>U</u>	V	W	X	Y	Z
Lin																										
ks:																										

Тор	(All	All) Variables (34 Variables)								
Group	Type	Variable Name And Description								
Core insurance	#1	Actual percentage of HI ()								
model 0331	A	= Actual percentage of HI SDMlookup(<u>Time</u>)								
		Present In 1 View:								
		• <u>View 1</u> Used By <u>Feedback Loops:</u> 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]								

Core insurance model 0331	#3 A	Actual Private Hospital Use (pt) = Actual Private Hospital Use _SDMlookup(Time)
model 0331	11	Present In 1 View:
		• <u>View 1</u>
		Used By Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#5 A	Actual Private Occupancy () = Actual Private Occupancy _SDMlookup(Time)
model 0331	Α	Present In 1 View:
		• <u>View 1</u>
		Used By Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Commission	47	
Core insurance model 0331	#7 A	Actual Public Hospital Use (pt) = Actual Public Hospital Use _SDMlookup(Time) Present In 1 View:
		• <u>View 1</u>
		Used By Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#9 A	Actual Public Occupancy () = Actual Public Occupancy SDMlookup(Time) Present In 1 View:
		• <u>View 1</u>
		Used By
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#11 A	Average Length of Stay (Day) = Average Length of Stay _SDMlookup(Time)
model 0331	A	Present In 1 View:
		• <u>View 1</u>
		Used By
		 <u>Discharged or dead from Private Hospitals</u> <u>Discharged or dead from Public Hospitals</u>
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]

Core insurance	#12	Average Premium Ratio ()
model 0331	С	= 0.85 Present In 1 View:
		• <u>View 1</u>
		Used By
		• <u>Tax Savings</u>
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#13 C	Baseline HI () = 0.222392
model 0331		Present In 1 View:
		• <u>View 1</u>
		Used By
		Percentage of HI
		1 creenage of TII
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#14 L	Daily getting ill (pt)
1110 001 0001	_	= (Daily number of potentially get ill- Getting sick and use private hospital)- Getting
		sick and use public hospital $dt + 0.0$ Present In 1 View:
		• <u>View 1</u>
		Used By
		Getting sick and use private hospital
		Getting sick and use public hospital
		Feedback Loops: 2 (33.3%) (+) 0 [0,0] (-) 2 [2,2]
Core insurance	#16	Daily number of potentially get ill ()
model 0331	F,A	= <u>Daily number of potentially get ill _SDMlookup(Time)</u> Present In 1 View:
		Tresent in T view.
		• <u>View 1</u>
		Used By
		Daily getting ill
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]

Core insurance model 0331	#17 C	Delay in Perception and Purchase (Day) = 365
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Percentage of HI
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#18	Diff in Occupancy ()
model 0331	A	= Pu Occupancy - Pr Occupancy Description: previously: PULSE(2009, 0.125)*0.055 + PULSE(2009.13, 20)*(Pu
		Occupancy-Pr Occupancy)
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Percentage of HI
		Feedback Loops: 2 (33.3%) (+) 1 [5,5] (-) 1 [5,5]
Core insurance	#19	Discharged or dead from Private Hospitals (pt/Day)
model 0331	F,A	= In Private Hospitals/(Average Length of Stay* SeverityFtr)
		Present In 1 View:
		• <u>View 1</u>
		Used By
		<u>In Private Hospitals</u>
		Feedback Loops: 1 (16.7%) (+) 0 [0,0] (-) 1 [2,2]
Core insurance	#20	Discharged or dead from Public Hospitals (pt/Day)
model 0331	F,A	= <u>In Public Hospitals</u> / <u>Average Length of Stay</u>
		Present In 1 View:
		• <u>View 1</u>
		Used By
		In Public Hospitals
		Feedback Loops: 1 (16.7%) (+) 0 [0,0] (-) 1 [2,2]
Core insurance	#22	Getting sick and use private hospital ()
model 0331	F,A	= (<u>Daily getting ill</u> * <u>Percentage of HI</u> * <u>Use HI</u> + <u>Daily getting ill</u> *(1- <u>Percentage of</u>

		HI)* Self pay)/1
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Daily getting ill
		In Private Hospitals
		<u>Feedback Loops:</u> 2 (33.3%) (+) 1 [5,5] (-) 1 [2,2]
Core insurance	#23	Getting sick and use public hospital ()
model 0331	F,A	= ((<u>Daily getting ill</u> * <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of</u>
		<u>HI</u>)*(1- <u>Self pay</u>)))/1
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Daily getting ill
		In Public Hospitals
		Feedback Loops: 2 (33.3%) (+) 0 [0,0] (-) 2 [2,5]
Core insurance	#24	In Private Hospitals (pt)
model 0331	L	
		= J Getting sick and use private hospital- Discharged or dead from Private
		Hospitals $dt + 0.0$
		Present In 1 View:
		• <u>View 1</u>
		<u> </u>
		Used By
		Discharged or dead from Private Hospitals
		Pr Occupancy
		<u> </u>
		Feedback Loops: 2 (33.3%) (+) 1 [5,5] (-) 1 [2,2]
Core insurance	#25	In Public Hospitals (pt)
model 0331	L	C C C C C C C C C C C C C C C C C C C
		= \int Getting sick and use public hospital- Discharged or dead from Public Hospitals dt +
		0.0 Procent In 1 Wierry
		Present In 1 View:
		Niem 1
		• <u>View 1</u>
		It. In.
		Used By
		Discharged or dead from Public Hospitals

		Pu Occupancy
		2.5.000pmioj
		Feedback Loops: 2 (33.3%) (+) 0 [0,0] (-) 2 [2,5]
Core insurance	#28	Occupancy to Demand ()
model 0331	C	= 0.5
		Present In 1 View:
		• View 1
		TION I
		Used By
		Percentage of HI
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#29	Percentage of HI ()
model 0331	DE,A	= <u>Baseline HI</u> +DELAY3((<u>Diff in Occupancy</u> -0.055)* <u>Occupancy to Demand</u> , <u>Delay in</u>
		Perception and Purchase)+DELAY3((<u>Tax Savings/2876</u>)* <u>Tax Saving to demand</u> , <u>Delay</u>
		in Perception and Purchase) Present In 1 View:
		Present In 1 View:
		• View 1
		Used By
		Getting sick and use private hospital Getting sick
		Getting sick and use public hospital
		Feedback Loops: 2 (33.3%) (+) 1 [5,5] (-) 1 [5,5]
Core insurance	#30	Pr Occupancy ()
model 0331	A	= <u>In Private Hospitals</u> / <u>Private hospital beds</u>
		Present In 1 View:
		• Wow 1
		• <u>View 1</u>
		Used By
		• <u>Diff in Occupancy</u> previously: PULSE(2009, 0.125)*0.055 + PULSE(2009.13,
		20)*(Pu Occupancy-Pr Occupancy)
		Feedback Loops: 1 (16.7%) (+) 1 [5,5] (-) 0 [0,0]
Core insurance	#32	Private hospital beds (pt)
model 0331	A	= Private hospital beds SDMlookup(Time)
		Present In 1 View:
		- W. 1
		• <u>View 1</u>
		Used By
	<u> </u>	

		Pr Occupancy
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#33 A	Pu Occupancy () = In Public Hospitals/ Public hospital beds Present In 1 View:
		• <u>View 1</u>
		Used By
		Diff in Occupancy previously: PULSE(2009, 0.125)*0.055 + PULSE(2009.13, 20)*(Pu Occupancy-Pr Occupancy)
		Feedback Loops: 1 (16.7%) (+) 0 [0,0] (-) 1 [5,5]
Core insurance	#35	Public hospital beds (pt)
model 0331	A	= <u>Public hospital beds _SDMlookup(Time)</u> Description: 1 bed = 1 pt
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Pu Occupancy
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#37	Self pay ()
model 0331	С	= 0.06 Present In 1 View:
		1 Tesent III 1 View.
		• <u>View 1</u>
		Used By
		 Getting sick and use private hospital Getting sick and use public hospital
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#38	SeverityFtr ()
model 0331	С	= 0.39 Present In 1 View:
		I LOCHE III I VICW.
		• <u>View 1</u>
		Used By

		Discharged or dead from Private Hospitals
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#40	Tax Incentive ()
model 0331	A	= Tax Incentive SDMlookup(Time)
		Present In 1 View:
		• <u>View 1</u>
		Used By
		• <u>Tax Savings</u>
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#41	Tax Saving to demand ()
model 0331	C	= 0.138
		Present In 1 View:
		• <u>View 1</u>
		Used Dr.
		Used By
		Percentage of HI
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#42	Tax Savings ()
model 0331	A	= Tax Incentive* Average Premium Ratio*0.06
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Percentage of HI
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#45	Use HI ()
model 0331	C	
		Present In 1 View:
		X7' 4
		• <u>View 1</u>
		Used By
		Getting sick and use private hospital
		Getting sick and use public hospital
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#45 C	= 0.57 Present In 1 View: • View 1 Used By • Getting sick and use private hospital • Getting sick and use public hospital

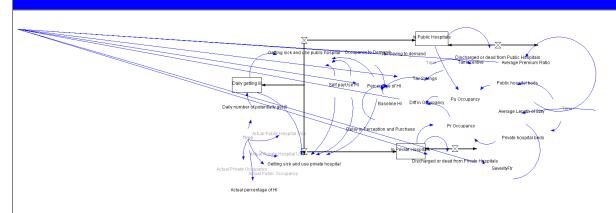
.Control	#21 C	FINAL TIME (Day) = 737426 Description: The final time for the simulation. Present In 0 Views:
		Used By
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
.Control	#26 C	INITIAL TIME (Day) = 733500
		Description: The initial time for the simulation. Present In 0 Views:
		Used By
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
.Control	#36 A	SAVEPER (Day) = TIME STEP Description: The frequency with which output is stored. Present In 0 Views:
		Used By
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
.Control	#43 C	TIME STEP (Day) = 1 Description: The time step for the simulation. Present In 0 Views:
		Used By
		<u>SAVEPER</u> The frequency with which output is stored.
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]

(View) Not in View (4 Variables)

Тор	(View) Not in View (4 Variables)		
Group	Type	Variable Name And Description	
.Control	#21	FINAL TIME (Day)	
	C	= 737426	
		Description: The final time for the simulation.	
		Present In 0 Views:	
		Used By	
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]	

		I
.Control	#26	INITIAL TIME (Day)
	C	= 733500
		Description: The initial time for the simulation.
		Present In 0 Views:
		Used By
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
.Control	#36	SAVEPER (Day)
	A	= TIME STEP
		Description: The frequency with which output is stored.
		Present In 0 Views:
		Tresent in o views.
		Used By
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
.Control	#43	TIME STEP (Day)
	C	= 1
		Description: The time step for the simulation.
		Present In 0 Views:
		Used By
		• <u>SAVEPER</u> The frequency with which output is stored.
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]

(View) View 1 (30 Variables)



Тор	(View) View 1 (30 Variables)	
Group	Type	Variable Name And Description
Core insurance model 0331	#1 A	Actual percentage of HI () = Actual percentage of HI SDMlookup(Time) Present In 1 View:

		• <u>View 1</u>
		Used By
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#3	Actual Private Hospital Use (pt)
model 0331	A	= Actual Private Hospital Use _SDMlookup(Time)
		Present In 1 View:
		• View 1
		Used By
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#5	Actual Private Occupancy ()
model 0331	A	= Actual Private Occupancy SDMlookup(Time) Present In 1 View:
		Fresent in 1 view:
		• <u>View 1</u>
		Used By Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#7	Actual Public Hospital Use (pt)
model 0331	A	= Actual Public Hospital Use SDMlookup(Time) Present In 1 View:
		Tresent in T View
		• <u>View 1</u>
		Head Dv
		Used By Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
	110	
Core insurance model 0331	#9 A	Actual Public Occupancy () = Actual Public Occupancy SDMlookup(Time)
model 0331	7.1	Present In 1 View:
		• <u>View 1</u>
		Used By
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#11	Average Length of Stay (Day)
model 0331	A	= Average Length of Stay SDMlookup(Time)
		Present In 1 View:
		• Viou 1
		• <u>View 1</u>
		Used By
		Discharged or dead from Private Hospitals

		Discharged or dead from Public Hospitals
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#12	Average Premium Ratio ()
model 0331	C	= 0.85 Present In 1 View:
		• <u>View 1</u>
		Used By
		• Tax Savings
Core insurance	#13	Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0] Baseline HI ()
model 0331	С	= 0.222392
		Present In 1 View:
		• <u>View 1</u>
		Used By
		D. Control of the
		Percentage of HI
Core insurance	ш1 л	Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
model 0331	#14 L	Daily getting ill (pt)
		= J (<u>Daily number of potentially get ill</u> - <u>Getting sick and use private hospital</u>)- <u>Getting</u>
		sick and use public hospital $dt + 0.0$ Present In 1 View:
		• <u>View 1</u>
		Used By
		Getting sick and use private hospital
		Getting sick and use public hospital
		Feedback Loops: 2 (33.3%) (+) 0 [0,0] (-) 2 [2,2]
Core insurance model 0331	#16 F,A	Daily number of potentially get ill () = Daily number of potentially get ill _SDMlookup(Time)
model 0331	ır,A	Present In 1 View:
		• <u>View 1</u>
		Used By
		Daily getting ill

		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#17	Delay in Perception and Purchase (Day)
model 0331	C	= 365
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Power CHI
		Percentage of HI
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#18	Diff in Occupancy ()
model 0331	A	= Pu Occupancy - Pr Occupancy
		Description: previously: PULSE(2009, 0.125)*0.055 + PULSE(2009.13, 20)*(Pu
		Occupancy-Pr Occupancy)
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Osca By
		Percentage of HI
		=
		Feedback Loops: 2 (33.3%) (+) 1 [5,5] (-) 1 [5,5]
Core insurance	#19	Discharged or dead from Private Hospitals (pt/Day)
model 0331	F,A	= <u>In Private Hospitals/(Average Length of Stay* SeverityFtr)</u>
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Osca By
		In Private Hospitals
		Feedback Loops: 1 (16.7%) (+) 0 [0,0] (-) 1 [2,2]
Core insurance	#20	Discharged or dead from Public Hospitals (pt/Day)
model 0331	F,A	= <u>In Public Hospitals</u> / <u>Average Length of Stay</u>
		Present In 1 View:
		777 1
		• <u>View 1</u>
		Used By
		Coca Dy
		In Public Hospitals
		Feedback Loops: 1 (16.7%) (+) 0 [0,0] (-) 1 [2,2]

Core insurance model 0331	#22 F,A	Getting sick and use private hospital () = (Daily getting ill* Percentage of HI* Use HI+ Daily getting ill*(1- Percentage of HI)* Self pay)/1 Present In 1 View: • View 1 Used By • Daily getting ill • In Private Hospitals Feedback Loops: 2 (33.3%) (+) 1 [5,5] (-) 1 [2,2]
Core insurance model 0331	#23 F,A	Getting sick and use public hospital () = ((Daily getting ill* Percentage of HI*(1- Use HI)+ Daily getting ill*(1- Percentage of HI)*(1- Self pay)))/1 Present In 1 View: • View 1 Used By • Daily getting ill • In Public Hospitals Feedback Loops: 2 (33.3%) (+) 0 [0,0] (-) 2 [2,5]
Core insurance model 0331	#24 L	In Private Hospitals (pt) = ∫ Getting sick and use private hospital- Discharged or dead from Private Hospitals dt + 0.0 Present In 1 View: • View 1 Used By • Discharged or dead from Private Hospitals • Pr Occupancy Feedback Loops: 2 (33.3%) (+) 1 [5,5] (-) 1 [2,2]
Core insurance model 0331	#25 L	In Public Hospitals (pt) = \int \text{Getting sick and use public hospital- Discharged or dead from Public Hospitals } dt + 0.0 Present In 1 View: View 1 Used By

		 <u>Discharged or dead from Public Hospitals</u> <u>Pu Occupancy</u>
		Feedback Loops: 2 (33.3%) (+) 0 [0,0] (-) 2 [2,5]
Core insurance	#28	Occupancy to Demand ()
model 0331	C	= 0.5
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Percentage of HI
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#29	Percentage of HI ()
model 0331	DE,A	= Baseline HI+DELAY3((Diff in Occupancy-0.055)* Occupancy to Demand, Delay in
		Perception and Purchase)+DELAY3((<u>Tax Savings/2876</u>)* <u>Tax Saving to demand</u> , <u>Delay</u> in Perception and Purchase)
		Present In 1 View:
		2.2000000 200 2.100000
		• <u>View 1</u>
		Used By
		Getting sick and use private hospital
		Getting sick and use public hospital
		Feedback Loops: 2 (33.3%) (+) 1 [5,5] (-) 1 [5,5]
Core insurance	#30	Pr Occupancy ()
model 0331	A	= In Private Hospitals/ Private hospital beds Present In 1 View:
		riesent in 1 view.
		• <u>View 1</u>
		Used By
		5564.23
		• <u>Diff in Occupancy</u> previously: PULSE(2009, 0.125)*0.055 + PULSE(2009.13, 20)*(Pu Occupancy-Pr Occupancy)
		Feedback Loops: 1 (16.7%) (+) 1 [5,5] (-) 0 [0,0]
Core insurance	#32	Private hospital beds (pt)
model 0331	A	= <u>Private hospital beds SDMlookup(Time)</u>
		Present In 1 View:
		• <u>View 1</u>
		Used By

		Pr Occupancy
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#33 A	Pu Occupancy () = In Public Hospitals/ Public hospital beds Present In 1 View:
		• <u>View 1</u>
		Used By
		• <u>Diff in Occupancy</u> previously: PULSE(2009, 0.125)*0.055 + PULSE(2009.13, 20)*(Pu Occupancy-Pr Occupancy)
		Feedback Loops: 1 (16.7%) (+) 0 [0,0] (-) 1 [5,5]
Core insurance	#35	Public hospital beds (pt)
model 0331	A	= <u>Public hospital beds _SDMlookup(Time)</u> Description: 1 bed = 1 pt
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Pu Occupancy
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#37	Self pay ()
model 0331	С	= 0.06 Present In 1 View:
		• <u>View 1</u>
		Used By
		 Getting sick and use private hospital Getting sick and use public hospital
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#38	SeverityFtr ()
model 0331	С	= 0.39 Present In 1 View:
		1 rescrit in 1 view.
		• <u>View 1</u>
		Used By

		• Discharged or dead from Private Hospitals Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
	" 10	
Core insurance model 0331	#40 A	Tax Incentive () = Tax Incentive SDMlookup(Time) Present In 1 View:
		• <u>View 1</u>
		Used By
		• Tax Savings
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#41	Tax Saving to demand ()
model 0331	C	= 0.138
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Percentage of HI
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#42	Tax Savings ()
model 0331	A	= <u>Tax Incentive</u> * <u>Average Premium Ratio</u> *0.06
		Present In 1 View:
		• View 1
		Used By
		Percentage of HI
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#45	Use HI ()
model 0331	C	= 0.57
	_	Present In 1 View:
		• <u>View 1</u>
		Used By
		 Getting sick and use private hospital Getting sick and use public hospital
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]

Top	(Gı	roup) .Control (4 Variables)			
Group	Туре	Variable Name And Description			
.Control	#21 C	FINAL TIME (Day) = 737426 Description: The final time for the simulation. Present In 0 Views:			
		Used By Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]			
.Control	#26 C	INITIAL TIME (Day) = 733500 Description: The initial time for the simulation. Present In 0 Views:			
		Used By Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]			
.Control	#36 A	SAVEPER (Day) = TIME STEP Description: The frequency with which output is stored. Present In 0 Views: Used By			
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]			
.Control	#43 C	TIME STEP (Day) = 1 Description: The time step for the simulation. Present In 0 Views:			
		Used By			
		• <u>SAVEPER</u> The frequency with which output is stored.			
Top		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0] (Group) Core insurance model 03		es)	
Grou	ıp	Type Variable Name And Description			
Core insurance model 0331		#1 Actual percentage of HI () A = Actual percentage of HI SDMlookup(Time) Present In 1 View:			
		• <u>View 1</u> Used By <u>Feedback Loops:</u> 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]			

Core insurance model 0331	#3 A	Actual Private Hospital Use (pt) = Actual Private Hospital Use _SDMlookup(Time) Present In 1 View: • View 1 Used By Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#5 A	Actual Private Occupancy () = Actual Private Occupancy _SDMlookup(Time) Present In 1 View: • View 1 Used By Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#7 A	Actual Public Hospital Use (pt) = Actual Public Hospital Use _SDMlookup(Time) Present In 1 View: • View 1 Used By Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#9 A	Actual Public Occupancy () = Actual Public Occupancy SDMlookup(Time) Present In 1 View: • View 1 Used By Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#11 A	Average Length of Stay (Day) = Average Length of Stay SDMlookup(Time) Present In 1 View: • View 1 Used By • Discharged or dead from Private Hospitals • Discharged or dead from Public Hospitals • Discharged or dead from Public Hospitals

Core insurance	#12	Average Premium Ratio ()
model 0331	С	= 0.85
		Present In 1 View:
		• <u>View 1</u>
		Used By
		• <u>Tax Savings</u>
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#13	Baseline HI ()
model 0331	C	= 0.222392
		Present In 1 View:
		• View 1
		Used By
		Percentage of HI
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#14	Daily getting ill (pt)
model 0331	L	
		= (Daily number of potentially get ill- Getting sick and use private hospital)- Getting
		sick and use public hospital $dt + 0.0$
		Present In 1 View:
		Tresent in 1 views
		• View 1
		<u>VICW I</u>
		Used By
		Oscu Dy
		Getting sick and use private hospital
		Getting sick and use private hospital Getting sick and use public hospital
		- Gotting sick and use paone nospital
		Feedback Loops: 2 (33.3%) (+) 0 [0,0] (-) 2 [2,2]
Core insurance	#16	Daily number of potentially get ill ()
model 0331	F,A	= Daily number of potentially get ill _SDMlookup(Time)
1110 0001	-,	Present In 1 View:
		• View 1
		Used By
		Daily getting ill
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
		= 1000 (() () () () () () () () (

Core insurance model 0331	#17 C	Delay in Perception and Purchase (Day) = 365
model 0331		Present In 1 View:
		• <u>View 1</u>
		Used By
		• Percentage of HI
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#18	Diff in Occupancy ()
model 0331	A	= <u>Pu Occupancy</u> - <u>Pr Occupancy</u> Description: previously: PULSE(2009, 0.125)*0.055 + PULSE(2009.13, 20)*(Pu
		Occupancy-Pr Occupancy)
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Percentage of HI
		Feedback Loops: 2 (33.3%) (+) 1 [5,5] (-) 1 [5,5]
Core insurance	#19	Discharged or dead from Private Hospitals (pt/Day)
model 0331	F,A	= In Private Hospitals/(Average Length of Stay* SeverityFtr)
		Present In 1 View:
		• <u>View 1</u>
		Used By
		In Private Hospitals
		in Frivate Hospitals
		Feedback Loops: 1 (16.7%) (+) 0 [0,0] (-) 1 [2,2]
Core insurance	#20	Discharged or dead from Public Hospitals (pt/Day)
model 0331	F,A	= In Public Hospitals/ Average Length of Stay
		Present In 1 View:
		• <u>View 1</u>
		Used By
		To D. 11's House's L
		In Public Hospitals
		Feedback Loops: 1 (16.7%) (+) 0 [0,0] (-) 1 [2,2]
Core insurance	#22	Getting sick and use private hospital ()
model 0331	F,A	= (<u>Daily getting ill* Percentage of HI* Use HI+ Daily getting ill*(1- Percentage of HI</u>

		HI)* Self pay)/1
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Daily getting ill
		In Private Hospitals
		Feedback Loops: 2 (33.3%) (+) 1 [5,5] (-) 1 [2,2]
Core insurance	#23	Getting sick and use public hospital ()
model 0331	F,A	= ((<u>Daily getting ill</u> * <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of</u>
		<u>HI</u>)*(1- <u>Self pay</u>)))/1
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Daily getting ill
		In Public Hospitals
		Feedback Loops: 2 (33.3%) (+) 0 [0,0] (-) 2 [2,5]
Core insurance	#24	In Private Hospitals (pt)
model 0331	L	f
		= J Getting sick and use private hospital- Discharged or dead from Private
		Hospitals $dt + 0.0$
		Present In 1 View:
		1 resent in 1 view.
		• War 1
		• <u>View 1</u>
		Head De
		Used By
		Discharged or dead from Private Hospitals
		Pr Occupancy
		Foodback Looner 2 (22 20V) (1) 1 [5 5] (1) 1 [2 2]
	#2.7	Feedback Loops: 2 (33.3%) (+) 1 [5,5] (-) 1 [2,2]
Core insurance	#25	In Public Hospitals (pt)
model 0331	L	
		= \int Getting sick and use public hospital- Discharged or dead from Public Hospitals dt +
		0.0
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Discharged or dead from Public Hospitals
		-

	I	
		Pu Occupancy
		Feedback Loops: 2 (33.3%) (+) 0 [0,0] (-) 2 [2,5]
Core insurance	#28	Occupancy to Demand ()
model 0331	C	= 0.5 Present In 1 View:
		Fresent In 1 view:
		• <u>View 1</u>
		It. I D.
		Used By
		Percentage of HI
		Fred Heads I array 0 (0.00() (1) 0.10 01 (1) 0.10 01
Core insurance	#29	Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0] Percentage of HI ()
model 0331	DE,A	= <u>Baseline HI</u> +DELAY3((<u>Diff in Occupancy</u> -0.055)* <u>Occupancy to Demand</u> , <u>Delay in</u>
		Perception and Purchase)+DELAY3((<u>Tax Savings/2876</u>)* <u>Tax Saving to demand</u> , <u>Delay</u> in Perception and Purchase)
		Present In 1 View:
		• <u>View 1</u>
		Used By
		 Getting sick and use private hospital Getting sick and use public hospital
		Getting sick and use public hospital
		Feedback Loops: 2 (33.3%) (+) 1 [5,5] (-) 1 [5,5]
Core insurance model 0331	#30 A	Pr Occupancy () = In Private Hospitals/ Private hospital beds
model 0331	11	Present In 1 View:
		• <u>View 1</u>
		Used By
		D1001 0
		• <u>Diff in Occupancy</u> previously: PULSE(2009, 0.125)*0.055 + PULSE(2009.13, 20)*(Pu Occupancy-Pr Occupancy)
Core insurance	#32	Feedback Loops: 1 (16.7%) (+) 1 [5,5] (-) 0 [0,0]
model 0331	#32 A	Private hospital beds (pt) = Private hospital beds SDMlookup(Time)
		Present In 1 View:
		• View 1
		• <u>View 1</u>
		Used By

		Pr Occupancy
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#33 A	Pu Occupancy () = In Public Hospitals/ Public hospital beds Present In 1 View:
		• <u>View 1</u>
		Used By
		• <u>Diff in Occupancy</u> previously: PULSE(2009, 0.125)*0.055 + PULSE(2009.13, 20)*(Pu Occupancy-Pr Occupancy)
		Feedback Loops: 1 (16.7%) (+) 0 [0,0] (-) 1 [5,5]
Core insurance	#35	Public hospital beds (pt)
model 0331	A	= <u>Public hospital beds _SDMlookup(Time)</u> Description: 1 bed = 1 pt
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Pu Occupancy
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#37	Self pay ()
model 0331	С	= 0.06 Present In 1 View:
		• <u>View 1</u>
		Used By
		 Getting sick and use private hospital Getting sick and use public hospital
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#38	SeverityFtr ()
model 0331	C	= 0.39 Present In 1 View:
		• <u>View 1</u>
		Used By

		• Discharged or dead from Private Hospitals Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
	" 10	
Core insurance model 0331	#40 A	Tax Incentive () = Tax Incentive SDMlookup(Time) Present In 1 View:
		• <u>View 1</u>
		Used By
		• Tax Savings
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#41	Tax Saving to demand ()
model 0331	C	= 0.138
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Percentage of HI
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#42	Tax Savings ()
model 0331	A	= <u>Tax Incentive</u> * <u>Average Premium Ratio</u> *0.06
		Present In 1 View:
		• View 1
		Used By
		Percentage of HI
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#45	Use HI ()
model 0331	C	= 0.57
	_	Present In 1 View:
		• <u>View 1</u>
		Used By
		 Getting sick and use private hospital Getting sick and use public hospital
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]

Тор	(Ty	vpe) Level (3 Variables)
Group	Type	Variable Name And Description
Core insurance model 0331	#14 L	Daily getting ill (pt) $= \int (\text{Daily number of potentially get ill-} \text{Getting sick and use private} $
		• <u>View 1</u>
		Used By
		 Getting sick and use private hospital Getting sick and use public hospital
		Feedback Loops: 2 (33.3%) (+) 0 [0,0] (-) 2 [2,2]
Core insurance model 0331	#24 L	In Private Hospitals (pt) $= \int \frac{\text{Getting sick and use private hospital}}{\text{Discharged or dead from Private}}$ $\frac{\text{Hospitals } dt + 0.0}{\text{Present In 1 View:}}$
		• <u>View 1</u> Used By
		 Discharged or dead from Private Hospitals Pr Occupancy
Core insurance	#25	Feedback Loops: 2 (33.3%) (+) 1 [5,5] (-) 1 [2,2] In Public Hospitals (pt)
model 0331	L	$= \int \frac{\text{Getting sick and use public hospital- Discharged or dead from Public}}{\text{Hospitals } dt + 0.0}$ Present In 1 View:
		• <u>View 1</u> Used By
		 Discharged or dead from Public Hospitals Pu Occupancy
		Feedback Loops: 2 (33.3%) (+) 0 [0,0] (-) 2 [2,5]
Top (TD)	G	(I (O X7 • I I) (O/O)

(Type) Smooth (0 Variables) (0/0)

Group	Type	Vario	able Name	And Description		
(Type) Delay (1 Variables) (2/18)						
Gro	up	p Type Variable Name And Description				
Core ins model						
Group	Туре	Varia	Level I	Loops: 2 (33.3%) (+) 1 [5,5] (-) 1 [5,5] initial (0 Variables) And Description (0 Variables)		
Group						
	(Type) Constant (11 Variables)					
	Group)	Туре	Variable Name And Description		
Core insurance model 0331		331 #12 C	Average Premium Ratio () = 0.85 Present In 1 View: • View 1 Used By • Tax Savings Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]			
			331 #13 C	Baseline HI () = 0.222392 Present In 1 View:		

		• <u>View 1</u>
		Used By
		Percentage of HI
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#17 C	Delay in Perception and Purchase (Day) = 365
	C	Present In 1 View:
		• <u>View 1</u>
		Used By
		Percentage of HI
G : 110001	#20	Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#28 C	Occupancy to Demand () = 0.5
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Percentage of HI
G : 1.10221	#27	Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#37 C	Self pay () = 0.06
		Present In 1 View:
		• <u>View 1</u>
		Used By
		 Getting sick and use private hospital Getting sick and use public hospital
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#38 C	SeverityFtr () = 0.39
		Present In 1 View:
		• <u>View 1</u>
		Used By

		Discharged or dead from Private Hospitals The Mark Control of the Control o
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#41 C	Tax Saving to demand () = 0.138
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Percentage of HI
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#45	Use HI ()
	C	= 0.57
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Getting sick and use private hospital
		Getting sick and use public hospital
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
.Control	#21	FINAL TIME (Day)
	C	= 737426
		Description: The final time for the simulation. Present In 0 Views:
		Used By
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Control	#26	INITIAL TIME (Day)
.Control	#26 C	INITIAL TIME (Day) = 733500
		Description: The initial time for the simulation. Present In 0 Views:
		Used By
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
.Control	#43	TIME STEP (Day)
	С	= 1 Description: The time step for the simulation. Present In 0 Views:
		Used By

		<u>SAVEPER</u> The frequency with which output is stored.
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Top	(T	pe) Flow (5 Variables)
	(1)	pc) Flow (5 variables)
Group	Type	Variable Name And Description
Core insurance model 0331	#16 F,A	Daily number of potentially get ill () = Daily number of potentially get ill SDMlookup(Time) Present In 1 View:
		• <u>View 1</u>
		Used By
		Daily getting ill
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#19	Discharged or dead from Private Hospitals (pt/Day)
model 0331	F,A	= In Private Hospitals/(Average Length of Stay* SeverityFtr)
		Present In 1 View:
		• <u>View 1</u>
		Used By
		<u>In Private Hospitals</u>
		Feedback Loops: 1 (16.7%) (+) 0 [0,0] (-) 1 [2,2]
Core insurance	#20	Discharged or dead from Public Hospitals (pt/Day)
model 0331	F,A	= <u>In Public Hospitals</u> / <u>Average Length of Stay</u>
		Present In 1 View:
		• <u>View 1</u>
		Used By
		<u>In Public Hospitals</u>
		Feedback Loops: 1 (16.7%) (+) 0 [0,0] (-) 1 [2,2]
Core insurance	#22	Getting sick and use private hospital ()
model 0331	F,A	= (<u>Daily getting ill</u> * <u>Percentage of HI</u> * <u>Use HI</u> + <u>Daily getting ill</u> *(1- <u>Percentage of</u>
		HI)* Self pay)/1
		Present In 1 View:
		• View 1
		VICW I
		Used By

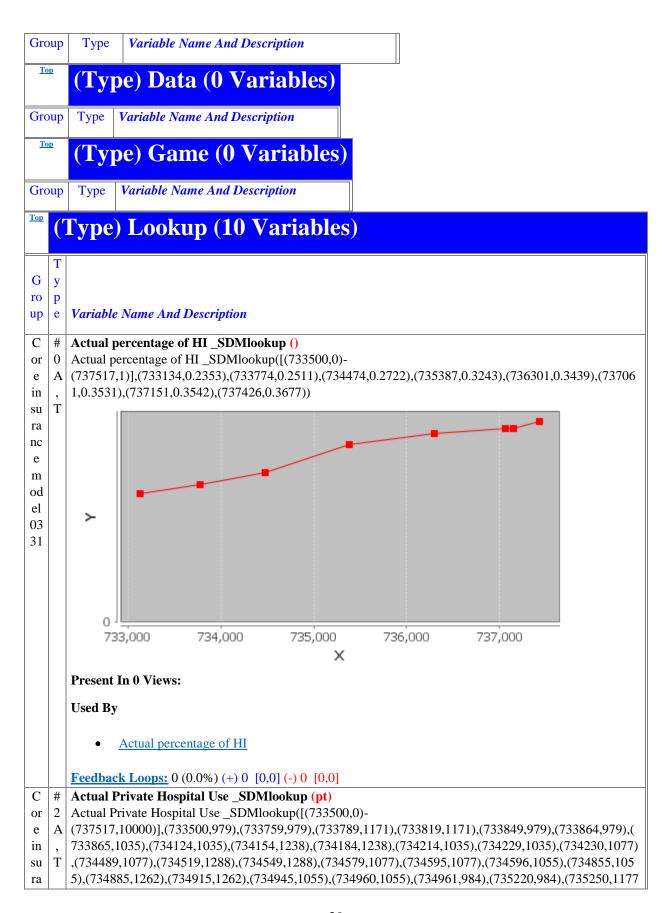
Core insuran	ce	 Daily getting ill In Private Hospitals Feedback Loops: 2 (33.3%) (+) 1 [5,5] (-) 1 [2,2] #23 Getting sick and use public hospital () 	
		F,A = ((<u>Daily getting ill</u> * <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of HI</u>)*(1- <u>Self pay</u>)))/1 Present In 1 View:	
		• View 1 Used By	
		 Daily getting ill In Public Hospitals 	
		Feedback Loops: 2 (33.3%) (+) 0 [0,0] (-) 2 [2,5]	
<u>Top</u>	(Ty	pe) Auxiliary (20 Variables)	
Group	Туре	Variable Name And Description	
Core insurance model 0331	#1 A	Actual percentage of HI () = Actual percentage of HI _SDMlookup(Time) Present In 1 View:	
		• <u>View 1</u>	
		Used By Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]	
Core insurance model 0331	#3 A	Actual Private Hospital Use (pt) = Actual Private Hospital Use _SDMlookup(Time) Present In 1 View:	
		• <u>View 1</u> Used By	
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]	
Core insurance model 0331	#5 A	Actual Private Occupancy () = Actual Private Occupancy SDMlookup(Time) Present In 1 View:	
		• <u>View 1</u>	
		Used By Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]	

Core insurance model 0331	#7 A	Actual Public Hospital Use (pt) = Actual Public Hospital Use _SDMlookup(Time) Present In 1 View: • View 1 Used By Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#9 A	Actual Public Occupancy () = Actual Public Occupancy SDMlookup(Time) Present In 1 View: • View 1 Used By Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#11 A	Average Length of Stay (Day) = Average Length of Stay SDMlookup(Time) Present In 1 View: • View 1 Used By • Discharged or dead from Private Hospitals • Discharged or dead from Public Hospitals • Discharged or dead from Public Hospitals
Core insurance model 0331	#16 F,A	Daily number of potentially get ill () = Daily number of potentially get ill SDMlookup(Time) Present In 1 View: • View 1 Used By • Daily getting ill Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#18 A	Diff in Occupancy () = Pu Occupancy - Pr Occupancy Description: previously: PULSE(2009, 0.125)*0.055 + PULSE(2009.13, 20)*(Pu Occupancy-Pr Occupancy) Present In 1 View: • View 1 Used By

		Percentage of HI
		Feedback Loops: 2 (33.3%) (+) 1 [5,5] (-) 1 [5,5]
Core insurance	#19	Discharged or dead from Private Hospitals (pt/Day)
model 0331	F,A	= In Private Hospitals/(Average Length of Stay* SeverityFtr)
		Present In 1 View:
		• <u>View 1</u>
		II. ID.
		Used By
		In Private Hospitals
		<u>Feedback Loops:</u> 1 (16.7%) (+) 0 [0,0] (-) 1 [2,2]
Core insurance	#20	Discharged or dead from Public Hospitals (pt/Day)
model 0331	F,A	= In Public Hospitals/ Average Length of Stay
		Present In 1 View:
		• View 1
		VICW I
		Used By
		•
		In Public Hospitals
		T. W. I.V. 1 (16 70) () 0 (0 0) () 1 (0 0)
Company in a second	#22	Feedback Loops: 1 (16.7%) (+) 0 [0,0] (-) 1 [2,2]
Core insurance model 0331	#22 F,A	Getting sick and use private hospital () = (Daily getting ill* Percentage of HI* Use HI+ Daily getting ill*(1- Percentage of
model 0331	1 ,A	HI)* Self pay)/1
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Daily getting ill
		In Private Hospitals
		Feedback Loops: 2 (33.3%) (+) 1 [5,5] (-) 1 [2,2]
Core insurance	#23	Getting sick and use public hospital ()
model 0331	F,A	= ((<u>Daily getting ill</u> * <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Percentage of HI</u> *(1- <u>Use HI</u>)+ <u>Daily getting ill</u> *(1- <u>Use HI</u>)+ <u>Daily g</u>
		HI)*(1- Self pay)))/1 Present In 1 View:
		11 CSCIIL III 1 Y ICW.
		• <u>View 1</u>
		Used By
		Daily getting ill

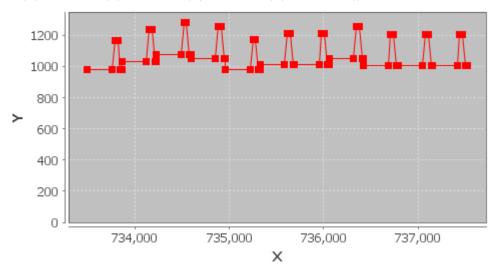
		• In Dublic Hospitals
		In Public Hospitals
		Feedback Loops: 2 (33.3%) (+) 0 [0,0] (-) 2 [2,5]
Core insurance model 0331	#29 DE,A	Percentage of HI () = Baseline HI+DELAY3((Diff in Occupancy-0.055)* Occupancy to Demand, Delay in Perception and Purchase)+DELAY3((Tax Savings/2876)* Tax Saving to demand, Delay in Perception and Purchase) Present In 1 View:
		• <u>View 1</u>
		Used By
		 Getting sick and use private hospital Getting sick and use public hospital
		Feedback Loops: 2 (33.3%) (+) 1 [5,5] (-) 1 [5,5]
Core insurance model 0331	#30 A	Pr Occupancy () = In Private Hospitals/ Private hospital beds Present In 1 View:
		• <u>View 1</u>
		Used By
		• <u>Diff in Occupancy</u> previously: PULSE(2009, 0.125)*0.055 + PULSE(2009.13, 20)*(Pu Occupancy-Pr Occupancy)
		Feedback Loops: 1 (16.7%) (+) 1 [5,5] (-) 0 [0,0]
Core insurance model 0331	#32 A	Private hospital beds (pt) = Private hospital beds SDMlookup(Time) Present In 1 View:
		• <u>View 1</u>
		Used By
		Pr Occupancy
Compileration	#22	Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance model 0331	#33 A	Pu Occupancy () = In Public Hospitals/ Public hospital beds Present In 1 View:
		• <u>View 1</u>
		Used By

		• <u>Diff in Occupancy</u> previously: PULSE(2009, 0.125)*0.055 + PULSE(2009.13, 20)*(Pu Occupancy-Pr Occupancy)
		Feedback Loops: 1 (16.7%) (+) 0 [0,0] (-) 1 [5,5]
Core insurance	#35	Public hospital beds (pt)
model 0331	A	= <u>Public hospital beds _SDMlookup(Time)</u> Description: 1 bed = 1 pt
		Present In 1 View:
		1 resent in 1 view.
		• <u>View 1</u>
		Used By
		Pu Occupancy
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#40	Tax Incentive ()
model 0331	A	= <u>Tax Incentive _SDMlookup(Time)</u>
		Present In 1 View:
		• <u>View 1</u>
		Used By
		• <u>Tax Savings</u>
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
Core insurance	#42	Tax Savings ()
model 0331	A	= <u>Tax Incentive</u> * <u>Average Premium Ratio</u> *0.06
		Present In 1 View:
		• <u>View 1</u>
		Used By
		Percentage of HI
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]
.Control	#36	SAVEPER (Day)
	A	= TIME STEP
		Description: The frequency with which output is stored. Present In 0 Views:
		Used By
		Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]



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),(735280,1177),(735310,984),(735325,984),(735326,1013),(735585,1013),(735615,1212),(735645,1212) (735675,1013),(735690,1013),(735691,1016),(735950,1016),(735980,1215),(736010,1215),(736040,1016),(735675,1013),(735690,1013),(735691,1016),(735950,1016),(735980,1215),(736010,1215),(736040,1016),(735980,1215),(736010,1215),(736040,1016),(735980,1215),(736010,1215),(736040,1016),(735980,1215),(736010,1215),(736040,1016),(735980,1215),(736010,1215),6),(736056,1016),(736057,1053),(736316,1053),(736346,1260),(736376,1260),(736406,1053),(736421,10 53),(736422,1011),(736681,1011),(736711,1209),(736741,1209),(736771,1011),(736786,1011),(736787,1 011),(737046,1011),(737076,1210),(737106,1210),(737136,1011),(737151,1011),(737152,1008),(737411)1008),(737441,1206),(737471,1206),(737501,1008),(737517,1008))



Present In 0 Views:

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Actual Private Hospital Use

Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]

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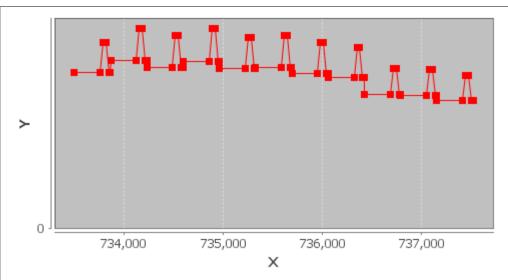
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Actual Private Occupancy _SDMlookup ()

Actual Private Occupancy _SDMlookup([(733500,0)- $A \mid (737157,2) \}, (733500,0.73), (733759,0.73), (733789,0.874), (733819,0.874), (733849,0.73), (733864,0.73), (73866,0.73), (73866,0.73), (73866,0.73), (73866,0.73), (73866,0.73), (73866,0.73), (73866,0.73), (73866$ 33865,0.787),(734124,0.787),(734154,0.941),(734184,0.941),(734214,0.787),(734229,0.787),(734230,0.7 T = 57, (734489, 0.757), (734519, 0.905), (734549, 0.905), (734579, 0.757), (734595, 0.757), (734596, 0.784), (73488, 0.757)55,0.784),(734885,0.939),(734915,0.939),(734945,0.784),(734960,0.784),(734961,0.75),(735220,0.75),(7 35250,0.898),(735280,0.898),(735310,0.75),(735325,0.75),(735326,0.757),(735585,0.757),(735615,0.906), (735645, 0.906), (735675, 0.757), (735690, 0.757), (735691, 0.729), (735950, 0.729), (735980, 0.872), (736010, 0.729)0.872),(736040,0.729),(736056,0.729),(736057,0.708),(736316,0.708),(736346,0.847),(736376,0.847)6406,0.708),(736421,0.708),(736422,0.627),(736681,0.627),(736711,0.75),(736741,0.75),(736771,0.627),(736786, 0.627), (736787, 0.625), (737046, 0.625), (737076, 0.748), (737106, 0.748), (737136, 0.625), (737151, 0.625), (737046, 0.625), (737.625),(737152,0.598),(737411,0.598),(737441,0.716),(737471,0.716),(737501,0.598),(737517,0.598))



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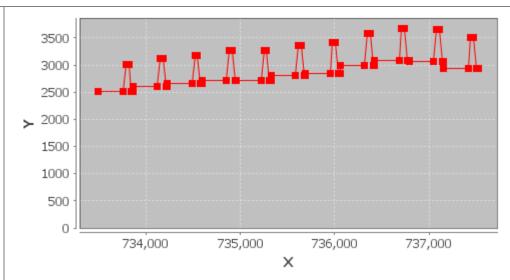
• Actual Private Occupancy

Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]

C # Actual Public Hospital Use _SDMlookup (pt)

or | 6 | Actual Public Hospital Use SDMlookup([(733500,0)-

A (737517,10000)],(733500,2517),(733759,2517),(733789,3011),(733819,3011),(733849,2517),(733864,25 , 17),(733865,2605),(734124,2605),(734154,3117),(734184,3117),(734214,2605),(734229,2605),(734230,2 , 17),(733865,2605),(734519,3181),(734549,3181),(734579,2658),(734595,2658),(734596,2726),(734885,2726),(734885,3261),(734915,3261),(734945,2726),(734960,2726),(734961,2726),(735220,2726),(73525 , 0,3261),(735280,3261),(735310,2726),(735325,2726),(735326,2806),(735585,2806),(735615,3357),(735675,2806),(735690,2806),(735691,2852),(735950,2852),(735980,3412),(736010,3412),(736040,2852),(736056,2852),(736057,2991),(736316,2991),(736346,3578),(736376,3578),(736406,2991),(736787,3062),(737046,3062),(737076,3664),(737106,3664),(737136,3062),(737151,3062),(737152,2936),(737411,2936),(737441,3513),(737471,3513),(737501,2936),(737517,2936))



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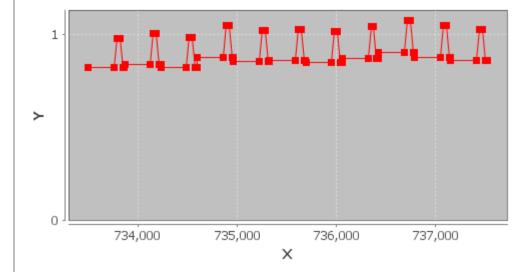
Actual Public Hospital Use

Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]

C Actual Public Occupancy SDMlookup ()

8 Actual Public Occupancy SDMlookup([(733500,0)or

 $A \mid (737157,2) \mid (733500,0.819), (733759,0.819), (733789,0.98), (733819,0.98), (733849,0.819), (733864,0.819), (73866,0$ (733865, 0.84), (734124, 0.84), (734154, 1.005), (734184, 1.005), (734214, 0.84), (734229, 0.84), (734230, 0.822)T = (734489, 0.822), (734519, 0.983), (734549, 0.983), (734579, 0.822), (734595, 0.822), (734596, 0.874), (734855, 0.822), (734596, 0.874), (734855, 0.822), (734596, 0.874), (734856, 0.874), (734860.874),(734885, 1.046),(734915, 1.046),(734945, 0.874),(734960, 0.874),(734961, 0.852),(735220, 0.852),(735220, 0.852)5250,1.019),(735280,1.019),(735310,0.852),(735325,0.852),(735326,0.857),(735585,0.857),(735615,1.02 6),(735645,1.026),(735675,0.857),(735690,0.857),(735691,0.85),(735950,0.85),(735980,1.017),(736010,1.017).017),(736040,0.85),(736056,0.85),(736057,0.871),(736316,0.871),(736346,1.042),(736376,1.042),(73640,0.871)6,0.871),(736421,0.871),(736422,0.9),(736681,0.9),(736711,1.077),(736741,1.077),(736771,0.9),(736786,0.9)0.9),(736787, 0.877),(737046, 0.877),(737076, 1.049),(737106, 1.049),(737136, 0.877),(737151, 0.877),(737151, 0.877)52,0.858),(737411,0.858),(737441,1.027),(737471,1.027),(737501,0.858),(737517,0.858))



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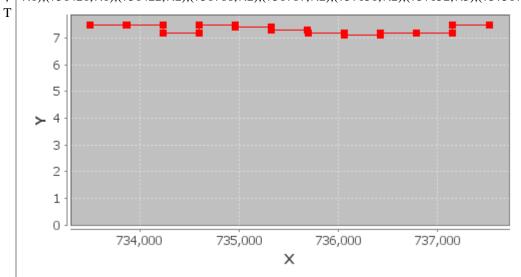
Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]

Average Length of Stay _SDMlookup (Day)

1 Average Length of Stay _SDMlookup([(733500,4)-

 $0 \mid (737517,10)], (733500,7.5), (733864,7.5), (733865,7.5), (734229,7.5), (734230,7.2), (734595,7.2), (734596,7.4), (735326,7.3), (735690,7.3), (735691,7.2), (736056,7.2), (736066,7.2), (736066,7.2), (736066,7.2), (736066,7.2), (736066,7.2), (736066,7.2), (736066,7.2), (736066,7.2), (736066,7.2), (736066,7.2), (736066,7.2), (736066,7.2), (736066,7.2), (736066,7.2), (736066,7.2), (736066,7.2), (736066,7.2), (7360666,7.2), (7360666,7.2), (7360666,7.2), (7360666,7.2), (7360666,7.2), (7360666,7.2), (7360666,7.2), (7360666,7.2), (7360666,7.2), ($

7.1),(736421,7.1),(736422,7.2),(736786,7.2),(736787,7.2),(737151,7.2),(737152,7.5),(737517,7.5))



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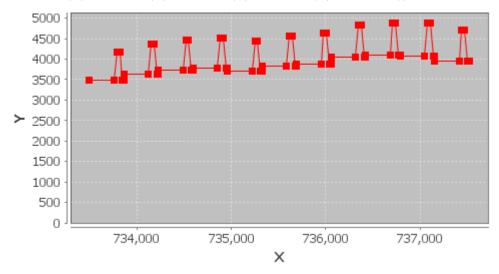
• Average Length of Stay

Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]

Daily number of potentially get ill _SDMlookup ()

Daily number of potentially get ill _SDMlookup([(733500,0)-

(737517,10000)],(733500,3496),(733759,3496),(733789,4182),(733819,4182),(733849,3496),(733864,3482) $A \mid 96$),(733865,3640),(734124,3640),(734154,4355),(734184,4355),(734214,3640),(734229,3640),(734230,3 735),(734489,3735),(734519,4469),(734549,4469),(734579,3735),(734595,3735),(734596,3780),(734855, T = 3780, (734885, 4523), (734915, 4523), (734945, 3780), (734960, 3780), (734961, 3710), (735220, 3710), (735220, 3710), (735220, 3710)0,4438),(735280,4438),(735310,3710),(735325,3710),(735326,3819),(735585,3819),(735615,4569),(7356145,4569),(735675,3819),(735690,3819),(735691,3867),(735950,3867),(735980,4627),(736010,4627),(736 040,3867),(736056,3867),(736057,4044),(736316,4044),(736346,4838),(736376,4838),(736406,4044),(73 6421,4044),(736422,4090),(736681,4090),(736711,4893),(736741,4893),(736771,4090),(736786,4090),(7336787,4074),(737046,4074),(737076,4874),(737106,4874),(737136,4074),(737151,4074),(737152,3945),(737411,3945),(737441,4720),(737471,4720),(737501,3945),(737517,3945))



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Daily number of potentially get ill

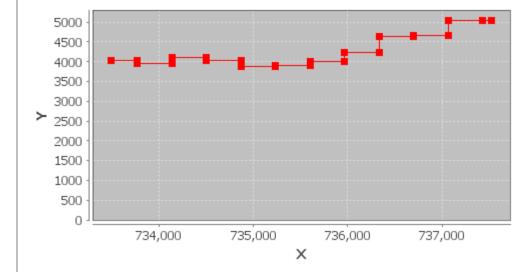
Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]

C Private hospital beds SDMlookup (pt) or

Private hospital beds _SDMlookup([(733500,0)-

(737517,10000)],(733500,4022),(733774,4022),(733775,3946),(734139,3946),(734140,4098),(734504,402) $A \mid 98), (734505, 4033), (734870, 4033), (734871, 3882), (735235, 3882), (735236, 3906), (735600, 3906), (735601, 4033), (734870, 4033), (73$ 014),(735965,4014),(735966,4226),(736331,4226),(736332,4644),(736696,4644),(736697,4657),(737061,

4657),(737062,5056),(737426,5056),(737427,5050),(737517,5050))



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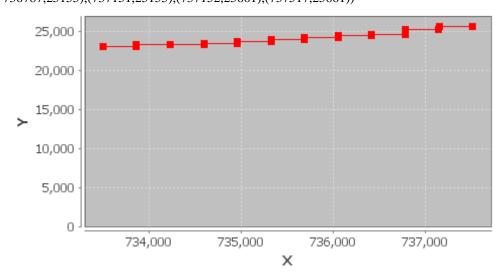
• Private hospital beds

Feedback Loops: 0 (0.0%) (+) 0 [0,0] (-) 0 [0,0]

C # Public hospital beds _SDMlookup (pt)

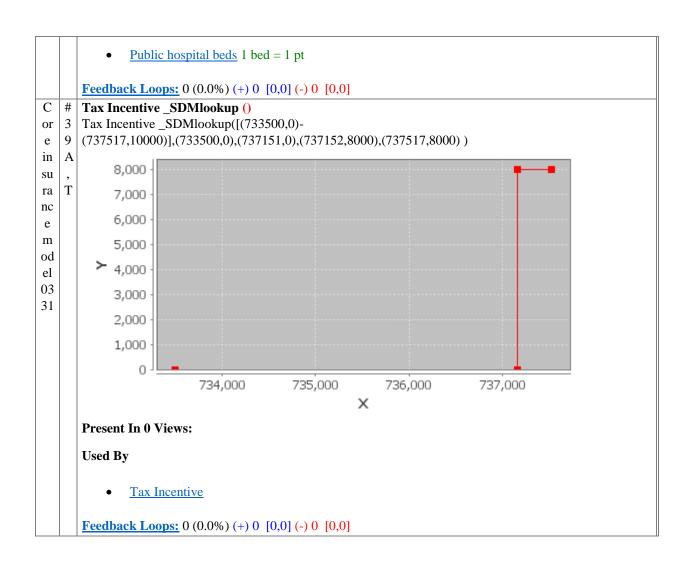
Public hospital beds _SDMlookup([(733500,0)-

4 (737517,30000)],(733500,23046),(733864,23046),(733865,23263),(734229,23263),(734230,23286),(7345 A) 95,23286),(734596,23378),(734960,23378),(734961,23686),(735325,23686),(735326,23891),(735690,23 , 891),(735691,24161),(736056,24161),(736057,24392),(736421,24392),(736422,24621),(736786,24621),(T 736787,25155),(737151,25155),(737152,25661),(737517,25661))



Description: 1 bed = 1 pt **Present In 0 Views:**

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Lin																										
ks:																										

All Variables (30 Variables + 4 Control Variables)

Group	Type	Variable
Core insurance model 0331	A	Actual percentage of HI ()
Core insurance model 0331	A	Actual Private Hospital Use (pt)
Core insurance model 0331	A	Actual Private Occupancy ()

Core insurance model 0331	A	Actual Public Hospital Use (pt)
Core insurance model 0331	A	Actual Public Occupancy ()
Core insurance model 0331	A	Average Length of Stay (Day)
Core insurance model 0331	С	Average Premium Ratio ()
Core insurance model 0331	С	Baseline HI ()
Core insurance model 0331	L	Daily getting ill (pt)
Core insurance model 0331	F,A	Daily number of potentially get ill ()
Core insurance model 0331	С	Delay in Perception and Purchase (Day)
Core insurance model 0331	A	Diff in Occupancy ()
Core insurance model 0331	F,A	Discharged or dead from Private Hospitals (pt/Day)
Core insurance model 0331	F,A	Discharged or dead from Public Hospitals (pt/Day)
Core insurance model 0331	F,A	Getting sick and use private hospital ()
Core insurance model 0331	F,A	Getting sick and use public hospital ()
Core insurance model 0331	L	In Private Hospitals (pt)
Core insurance model 0331	L	In Public Hospitals (pt)
Core insurance model 0331	С	Occupancy to Demand ()
Core insurance model 0331	DE,A	Percentage of HI ()
Core insurance model 0331	A	Pr Occupancy ()
Core insurance model 0331	A	Private hospital beds (pt)
Core insurance model 0331	A	Pu Occupancy ()
Core insurance model 0331	A	Public hospital beds (pt)
Core insurance model 0331	С	Self pay ()
Core insurance model 0331	С	SeverityFtr ()
Core insurance model 0331	A	Tax Incentive ()
Core insurance model 0331	С	Tax Saving to demand ()
Core insurance model 0331	A	Tax Savings ()
Core insurance model 0331	С	Use HI ()
.Control	С	FINAL TIME (Day)
.Control	С	INITIAL TIME (Day)
.Control	A	SAVEPER (Day)
Core insurance model 0331 .Control .Control	A C C A C C C	Public hospital beds (pt) Self pay () SeverityFtr () Tax Incentive () Tax Saving to demand () Tax Savings () Use HI () FINAL TIME (Day) INITIAL TIME (Day)

.Control	C	TIME STEP (Day)

Variable Link Detail (30 Variables + 4 Control Variables)

Group	Туре	Variable	In/Out Counts	In/Out Ratio	In Links By Polarity	Out Links By Polarity
Core insurance model 0331	InOutLinks	Percentage of HI ()	6 2	3.00	5 1 0	0 2 0
Core insurance model 0331	InOutLinks	Getting sick and use public hospital ()	4 2	2.00	1 3 0	1 1 0
Core insurance model 0331	InOutLinks	Getting sick and use private hospital ()	4 2	2.00	3 1 0	1 1 0
Core insurance model 0331	InOutLinks	Daily getting ill (pt)	3 2	1.50	1 2 0	2 0 0
Core insurance model 0331	InOutLinks	In Public Hospitals (pt)	2 2	1.00	1 1 0	2 0 0
Core insurance model 0331	InOutLinks	In Private Hospitals (pt)	2 2	1.00	1 1 0	2 0 0
Core insurance model 0331	InOutLinks	Discharged or dead from Private Hospitals (pt/Day)	3 1	3.00	1 2 0	0 1 0
Core insurance model 0331	InOutLinks	Average Length of Stay (Day)	2 2	1.00	0 0 2	0 2 0
Core insurance model 0331	InOutLinks	Tax Savings ()	2 1	2.00	2 0 0	1 0 0
Core insurance model 0331	InOutLinks	Tax Incentive ()	2 1	2.00	2 0 0	1 0 0
Core insurance model 0331	InOutLinks	Public hospital beds (pt)	2 1	2.00	2 0 0	0 1 0
Core insurance model 0331	InOutLinks	Pu Occupancy ()	2 1	2.00	1 1 0	1 0 0
Core insurance model 0331	InOutLinks	Private hospital beds (pt)	2 1	2.00	0 0 2	0 1 0
Core insurance model 0331	InOutLinks	Pr Occupancy ()	2 1	2.00	1 1 0	0 1 0

Core insurance model 0331	InOutLinks	Discharged or dead from Public Hospitals (pt/Day)	2 1	2.00	1 1 0	0 1 0
Core insurance model 0331	InOutLinks	Diff in Occupancy ()	2 1	2.00	1 1 0	1 0 0
Core insurance model 0331	InOutLinks	Daily number of potentially get ill ()	2 1	2.00	0 0 2	1 0 0
Core insurance model 0331	InOutLinks	Use HI ()	0 2	0.00	0 0 0	1 1 0
Core insurance model 0331	InOutLinks	Self pay ()	0 2	0.00	0 0 0	1 1 0
Core insurance model 0331	InOutLinks	Actual Public Occupancy ()	2 0	Infinite	0 0 2	0 0 0
Core insurance model 0331	InOutLinks	Actual Public Hospital Use (pt)	2 0	Infinite	0 0 2	0 0 0
Core insurance model 0331	InOutLinks	Actual Private Occupancy ()	2 0	Infinite	0 0 2	0 0 0
Core insurance model 0331	InOutLinks	Actual Private Hospital Use (pt)	2 0	Infinite	0 0 2	0 0 0
Core insurance model 0331	InOutLinks	Actual percentage of HI ()	2 0	Infinite	2 0 0	0 0 0
Core insurance model 0331	InOutLinks	Tax Saving to demand ()	0 1	0.00	0 0 0	1 0 0
Core insurance model 0331	InOutLinks	SeverityFtr ()	0 1	0.00	0 0 0	0 1 0
Core insurance model 0331	InOutLinks	Occupancy to Demand ()	0 1	0.00	0 0 0	0 1 0
Core insurance model 0331	InOutLinks	Delay in Perception and Purchase (Day)	0 1	0.00	0 0 0	1 0 0
Core insurance model 0331	InOutLinks	Baseline HI ()	0 1	0.00	0 0 0	1 0 0
Core insurance model 0331	InOutLinks	Average Premium Ratio ()	0 1	0.00	0 0 0	1 0 0
.Control	InOutLinks	TIME STEP (Day)	0 1	0.00	0 0 0	1 0 0
.Control	InOutLinks	SAVEPER (Day)	1 0	Infinite	1 0 0	0 0 0
.Control	InOutLinks	INITIAL TIME (Day)	(0 0)	Infinite	0 0 0	0 0 0
.Control	InOutLinks	FINAL TIME (Day)	(0 0)	Infinite	0 0 0	0 0 0

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Undocumented Variables (37 Variables + 0 Control Variables)

Group	Type	Variable
Core insurance model 0331	A	Actual percentage of HI ()
Core insurance model 0331	A,T	Actual percentage of HI_SDMlookup ()
Core insurance model 0331	A	Actual Private Hospital Use (pt)
Core insurance model 0331	A,T	Actual Private Hospital Use _SDMlookup (pt)
Core insurance model 0331	A	Actual Private Occupancy ()
Core insurance model 0331	A,T	Actual Private Occupancy SDMlookup ()
Core insurance model 0331	A	Actual Public Hospital Use (pt)
Core insurance model 0331	A,T	Actual Public Hospital Use SDMlookup (pt)
Core insurance model 0331	A	Actual Public Occupancy ()
Core insurance model 0331	A,T	Actual Public Occupancy SDMlookup ()
Core insurance model 0331	A	Average Length of Stay (Day)
Core insurance model 0331	A,T	Average Length of Stay _SDMlookup (Day)
Core insurance model 0331	С	Average Premium Ratio ()
Core insurance model 0331	С	Baseline HI ()
Core insurance model 0331	L	Daily getting ill (pt)
Core insurance model 0331	F,A	Daily number of potentially get ill ()
Core insurance model 0331	A,T	Daily number of potentially get ill SDMlookup ()
Core insurance model 0331	С	Delay in Perception and Purchase (Day)
Core insurance model 0331	F,A	Discharged or dead from Private Hospitals (pt/Day)
Core insurance model 0331	F,A	Discharged or dead from Public Hospitals (pt/Day)
Core insurance model 0331	F,A	Getting sick and use private hospital ()

Core insurance model 0331	F,A	Getting sick and use public hospital ()
Core insurance model 0331	L	In Private Hospitals (pt)
Core insurance model 0331	L	In Public Hospitals (pt)
Core insurance model 0331	С	Occupancy to Demand ()
Core insurance model 0331	DE,A	Percentage of HI ()
Core insurance model 0331	A	Pr Occupancy ()
Core insurance model 0331	A	Private hospital beds (pt)
Core insurance model 0331	A,T	Private hospital beds _SDMlookup (pt)
Core insurance model 0331	A	Pu Occupancy ()
Core insurance model 0331	С	Self pay ()
Core insurance model 0331	С	SeverityFtr ()
Core insurance model 0331	A	Tax Incentive ()
Core insurance model 0331	A,T	Tax Incentive SDMlookup ()
Core insurance model 0331	С	Tax Saving to demand ()
Core insurance model 0331	A	Tax Savings ()
Core insurance model 0331	С	Use HI ()

$Supplementary\ Variables\ (0\ Variables + 0\ Control\ Variables)$

Group	Type	Variable

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Supplementary Variables Being Used (0 Variables + 0 Control Variables)

Group	Type	Variable
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Quic		В	C		Е	F			I	J		L				P		R	S	T						Z
k	<u>A</u>			D			G	Н			K		M	N	О		Q				U	V	W	X	Y	
Link																										
s:																										

Unused Variables (5 Variables + 0 Control Variables)

Group	Type	Variable
Core insurance model 0331	A	Actual percentage of HI ()
Core insurance model 0331	A	Actual Private Hospital Use (pt)
Core insurance model 0331	A	Actual Private Occupancy ()
Core insurance model 0331	A	Actual Public Hospital Use (pt)
Core insurance model 0331	A	Actual Public Occupancy ()

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Quic		В	С		Е	F			Ī	J		L				P		R	S	T						Z
k	Α			<u>D</u>			G	Н			K		M	N	О		Q				U	V	W	X	Y	
Link																										
s:																										

Stock Variables (3 Variables + 0 Control Variables)

Group	Type	Variable
Core insurance model 0331	L	Daily getting ill (pt)
Core insurance model 0331	L	In Private Hospitals (pt)
Core insurance model 0331	L	In Public Hospitals (pt)

Quic					Е	F			Ī	J		L							S							Z
k	Α	В	C	D			G	Н			K		M	N	О	<u>P</u>	Q	R		<u>T</u>	U	V	W	X	Y	1
Link																										1
s:																										
																										1

Equations With Embedded Data (5 Variables + 0 Control Variables)

Group	Type	Variable
Core insurance model 0331	L	Daily getting ill (pt)
Core insurance model 0331	L	In Private Hospitals (pt)
Core insurance model 0331	L	In Public Hospitals (pt)
Core insurance model 0331	DE,A	Percentage of HI ()
Core insurance model 0331	A	Tax Savings ()

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Quic					Е	F			I	J		L							S	T						Z
k	<u>A</u>	В	C	D			G	Н			K		M	N	О	<u>P</u>	Q	R			U	V	W	X	Y	
Link																										
s:																										

Nonmonotonic Lookup Functions (7 Variables + 0 Control Variables)

Group	Type	Variable
Core insurance model 0331	A,T	Actual Private Hospital Use SDMlookup (pt)
Core insurance model 0331	A,T	Actual Private Occupancy _SDMlookup ()
Core insurance model 0331	A,T	Actual Public Hospital Use SDMlookup (pt)

Core insurance model 0331	A,T	Actual Public Occupancy SDMlookup ()
Core insurance model 0331	A,T	Average Length of Stay SDMlookup (Day)
Core insurance model 0331	A,T	Daily number of potentially get ill SDMlookup ()
Core insurance model 0331	A,T	Private hospital beds _SDMlookup (pt)

Non-Zero End Sloped Lookup Functions (1 Variables + 0 Control Variables)

Group	Type	Variable	Non-Zero
Core insurance model 0331	Non-Zero	Actual percentage of HI _SDMlookup ()	Both

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Cascading Lookup Functions (0 Variables + 0 Control Variables)

Group Type Variabl

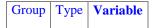
Top

Equations With Step Pulse Or Related Functions (0 Variables + 0 Control Variables)

Group	Type	Variable

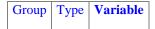
Top

Equations With If Then Else Functions (0 Variables + 0 Control Variables)



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Equations With Min Or Max Functions (0 Variables + 0 Control Variables)



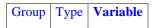
Top

Complex Variable (Richardson's Rule Threshold = 3) (3 Variables + 0 Control Variables)

Group	Type	Variable	Complexity
Core insurance model 0331	Complexity	Getting sick and use private hospital ()	4
Core insurance model 0331	Complexity	Getting sick and use public hospital ()	4
Core insurance model 0331	Complexity	Percentage of HI ()	6

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Complex Stock (0 Variables + 0 Control Variables)



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k	Α	В	C	D			G	Н			K		M	N	О	<u>P</u>	Q	R			U	V	W	X	Y	
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State Variables (4 Variables + 0 Control Variables)

Group	Type	Variable
Core insurance model 0331	L	Daily getting ill (pt)
Core insurance model 0331	L	In Private Hospitals (pt)
Core insurance model 0331	L	In Public Hospitals (pt)
Core insurance model 0331	DE,A	Percentage of HI ()

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Variables With Source Information (0 Variables + 0 Control Variables)

Group	Type	Variable	Sources

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Variables With Dimensionless Units (0 Variables + 0 Control Variables)

Group	Type	Variable

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Qui ck Lin ks:	<u>A</u>	<u>B</u>	С	D	Е	F	G	Н	Ī	J	K	L	M	N	<u>O</u>	<u>P</u>	Q	R	<u>S</u>	T	U	V	W	X	Y	Z

Variables without Predefined Min or Max Values (30 Variables + 4 Control Variables)

Group	Type	Variable
Core insurance model 0331	A	Actual percentage of HI ()
Core insurance model 0331	A	Actual Private Hospital Use (pt)
Core insurance model 0331	A	Actual Private Occupancy ()
Core insurance model 0331	A	Actual Public Hospital Use (pt)
Core insurance model 0331	A	Actual Public Occupancy ()
Core insurance model 0331	A	Average Length of Stay (Day)
Core insurance model 0331	С	Average Premium Ratio ()
Core insurance model 0331	С	Baseline HI ()
Core insurance model 0331	L	Daily getting ill (pt)
Core insurance model 0331	F,A	Daily number of potentially get ill ()
Core insurance model 0331	С	Delay in Perception and Purchase (Day)
Core insurance model 0331	A	Diff in Occupancy ()
Core insurance model 0331	F,A	Discharged or dead from Private Hospitals (pt/Day)
Core insurance model 0331	F,A	Discharged or dead from Public Hospitals (pt/Day)
Core insurance model 0331	F,A	Getting sick and use private hospital ()
Core insurance model 0331	F,A	Getting sick and use public hospital ()
Core insurance model 0331	L	In Private Hospitals (pt)
Core insurance model 0331	L	In Public Hospitals (pt)
Core insurance model 0331	С	Occupancy to Demand ()
Core insurance model 0331	DE,A	Percentage of HI ()
Core insurance model 0331	A	Pr Occupancy ()
Core insurance model 0331	A	Private hospital beds (pt)
Core insurance model 0331	A	Pu Occupancy ()

Core insurance model 0331	A	Public hospital beds (pt)
Core insurance model 0331	С	Self pay ()
Core insurance model 0331	С	SeverityFtr ()
Core insurance model 0331	A	Tax Incentive ()
Core insurance model 0331	С	Tax Saving to demand ()
Core insurance model 0331	A	Tax Savings ()
Core insurance model 0331	С	Use HI ()
.Control	С	FINAL TIME (Day)
.Control	С	INITIAL TIME (Day)
.Control	A	SAVEPER (Day)
.Control	С	TIME STEP (Day)

Function Sensitivity Parameters (0 Variables + 0 Control Variables)

Group	Type	Variable

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Data Lookup Tables (0 Variables + 0 Control Variables)

Group	Type	Variable
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Variables Using Macros (0 Variables + 0 Control Variables)

Group	Type	Variable

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Link																										1
s:																										
																										i l

Variables Not In Any View (0 Variables + 4 Control Variables)

Group	Type	Variable
.Control	С	FINAL TIME (Day)
.Control	С	INITIAL TIME (Day)
.Control	A	SAVEPER (Day)
.Control	С	TIME STEP (Day)

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Equations With Unit Errors Or Warnings (26 Variables + 0 Control Variables)

Group	Type	Variable	Units
Core insurance model 0331	Units	Actual percentage of HI ()	Lhs Units: None Specified
Core insurance model 0331	Units	Actual Private Hospital Use (pt)	Lhs Units: (pt) Rhs Units: LOOKUP Used With Dimensioned Argument < (Day) > Complete Rhs Units: LOOKUP (pt , Day)
Core insurance model 0331	Units	Actual Private Occupancy ()	Lhs Units: None Specified

Core insurance model 0331	Units	Actual Public Hospital Use (pt)	Lhs Units: (pt) Rhs Units: LOOKUP Used With Dimensioned
			Argument < (Day) > Complete Rhs Units: LOOKUP (pt , Day)
Core insurance model 0331	Units	Actual Public Occupancy ()	Lhs Units: None Specified
Core insurance model 0331	Units	Average Length of Stay (Day)	Lhs Units: (Day) Rhs Units: LOOKUP Used With Dimensioned Argument < (Day) > Complete Rhs Units: LOOKUP (Day , Day)
Core insurance model 0331	Units	Average Premium Ratio ()	Lhs Units: None Specified
Core insurance model 0331	Units	Baseline HI ()	Lhs Units: None Specified
Core insurance model 0331	Units	Daily number of potentially get ill ()	Lhs Units: None Specified
Core insurance model 0331	Units	Diff in Occupancy ()	Lhs Units: None Specified
Core insurance model 0331	Units	Getting sick and use private hospital ()	Lhs Units: None Specified
Core insurance model 0331	Units	Getting sick and use public hospital ()	Lhs Units: None Specified
Core insurance model 0331	Units	In Private Hospitals (pt)	Lhs Units: (pt) Rhs Units: INTEG ((Error >>> (Dmnl) - (pt/Day) <
Core insurance model 0331	Units	In Public Hospitals (pt)	Lhs Units: (pt) Rhs Units: INTEG ((Error >>> (Dmnl) - (pt/Day) <<< Error) , (constant)) Complete Rhs Units: INTEG ((Dmnl - pt/Day) , 0.0)
Core insurance model 0331	Units	Occupancy to Demand ()	Lhs Units: None Specified
Core insurance model 0331	Units	Percentage of HI ()	Lhs Units: None Specified
Core insurance model 0331	Units	Pr Occupancy ()	Lhs Units: None Specified
Core insurance model 0331	Units	Private hospital beds (pt)	Lhs Units: (pt) Rhs Units: LOOKUP Used With Dimensioned

			Argument < (Day) > Complete Rhs Units: LOOKUP (pt , Day)
Core insurance model 0331	Units	Pu Occupancy ()	Lhs Units: None Specified
Core insurance model 0331	Units	Public hospital beds (pt)	Lhs Units: (pt) Rhs Units: LOOKUP Used With Dimensioned Argument < (Day) > Complete Rhs Units: LOOKUP (pt , Day)
Core insurance model 0331	Units	Self pay ()	Lhs Units: None Specified
Core insurance model 0331	Units	SeverityFtr ()	Lhs Units: None Specified
Core insurance model 0331	Units	Tax Incentive ()	Lhs Units: None Specified
Core insurance model 0331	Units	Tax Saving to demand ()	Lhs Units: None Specified
Core insurance model 0331	Units	Tax Savings ()	Lhs Units: None Specified
Core insurance model 0331	Units	Use HI ()	Lhs Units: None Specified

Units (2/1)

Units	Type	Alternates
Day	Basic	
pt	Basic	
pt/Day	Combined	

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Feedback Loops (6|0 Loops) Maximum Loop Length: $5\ [2,5]\ |\ [0,0]$

Gro up	Туре	Variabl e	Loops	+	-	+/ - Rat io	?	Loop s (IVV)	+	-	+ /- Ra ti o	?
Cor e insu ranc e mod el 033	Feed back.	Daily getting ill (pt)	2 (33.3%)	0 [0, 0]	2 [2, 2]	0.0	0 [0, 0	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	9 [0, 0]
Cor e insu ranc e mod el 033	Feed back.	Diff in Occupa ncy ()	2 (33.3%)	1 [5, 5]	1 [5, 5]	1.0	0 [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	9 [0, 0
Cor e insu ranc e mod el 033	Feed back.	Getting sick and use private hospital	2 (33.3%)	1 [5, 5	1 [2, 2]	1.0	0 [0, 0	0 (0 %)	0 [0, 0	0 [0, 0]	NA	9 [0, 0
Cor e insu ranc e mod el 033	l	Getting sick and use public hospital ()	2 (33.3%)	0 [0, 0]	2 [2, 5]	0.0	0 [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	9 [0, 0
Cor e insu ranc e mod el	Feed back.	In Private Hospital s (pt)	2 (33.3%)	1 [5, 5]	1 [2, 2]	1.0	Ø [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	9 [0, 0]

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Cor e insu ranc e mod el 033	Feed back.	In Public Hospital s (pt)	2 (33.3%)	0 [0, 0]	2 [2, 5]	0.0	9 [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	9 [0, 0
Cor e insu ranc e mod el 033	Feed back.	Percenta ge of HI ()	2 (33.3%)	1 [5, 5]	1 [5, 5]	1.0	0 [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	9 [0, 0
Cor e insu ranc e mod el 033	Feed back.	Dischar ged or dead from Private Hospital s (pt/Da y)	1 (16.7%)	0 [0, 0]	1 [2, 2]	0.0	0 [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	9 [0, 0
Cor e insu ranc e mod el 033	Feed back.	Dischar ged or dead from Public Hospital s (pt/Da y)	1 (16.7%)	0 [0, 0]	1 [2, 2]	0.0	0 [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	9 [0, 0
Cor e insu ranc e mod el 033	Feed back.	Pr Occupa ncy ()	1 (16.7%)	1 [5, 5]	0 [0, 0]	Inf ini te	0 [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	9 [0, 0

Cor e insu ranc e mod el 033	Feed back.	Pu Occupa ncy ()	1 (16.7%)	0 [0, 0	1 [5, 5]	0.0	9 [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	9 [0, 0
Cor e insu ranc e mod el 033	Feed back. 	Actual percenta ge of HI ()	0 (0%)	0 [0, 0	0 [0, 0]	NA	0 [0, 0	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	9 [0, 0
Cor e insu ranc e mod el 033	Feed back.	Actual Private Hospital Use (pt)	0 (0%)	0 [0, 0	0 [0, 0]	NA	0 [0, 0	0 (0 %)	0 [0, 0	0 [0, 0]	NA	9 [0, 0
Cor e insu ranc e mod el 033	Feed back.	Actual Private Occupa ncy ()	0 (0%)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0]
Cor e insu ranc e mod el 033	Feed back.		Ø (Ø%)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0]

Cor e insu ranc e mod el 033	Feed back.	Actual Public Occupa ncy ()	9 (9%)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	9 [0, 0]
Cor e insu ranc e mod el 033	Feed back.	Average Length of Stay (D ay)	0 (0%)	0 [0, 0]	0 [0, 0	NA	0 [0, 0	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	9 [0, 0
Cor e insu ranc e mod el 033	Feed back.	Average Premiu m Ratio ()	0 (0%)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	9 [0, 0]
Cor e insu ranc e mod el 033	Feed back.	Baseline HI ()	9 (9%)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0
Cor e insu ranc e mod el 033	Feed back.	Daily number of potential ly get ill ()	0 (0%)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0

Cor e insu ranc e mod el 033	Feed back.	Delay in Percepti on and Purchas e (Day)	9 (9%)	0 [0, 0]	0 [0, 0]	NA	Ø [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0]
Cor e insu ranc e mod el 033	Feed back.	Occupa ncy to Demand	0 (0%)	0 [0, 0]	0 [0, 0	NA	Ø [Ø , Ø]	0 (0 %)	0 [0, 0]	0 [0, 0	NA	0 [0, 0
Cor e insu ranc e mod el 033	Feed back.	Private hospital beds (pt)	0 (0%)	0 [0, 0	0 [0, 0	NA	0 [0, 0	0 (0 %)	0 [0, 0	0 [0, 0	NA	0 [0, 0
Cor e insu ranc e mod el 033	Feed back.	Public hospital beds (pt	0 (0%)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0
Cor e insu ranc e mod el 033	Feed back.		0 (0%)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0]

Cor e insu ranc e mod el 033	Feed back.	Severity Ftr ()	Ø (Ø%)	0 [0, 0	0 [0, 0]	NA	0 [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0]
Cor e insu ranc e mod el 033	Feed back.	Tax Incentiv e ()	0 (0%)	0 [0, 0	0 [0, 0]	NA	0 [0, 0	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	9 [0, 0
Cor e insu ranc e mod el 033	Feed back.	Tax Saving to demand ()	0 (0%)	0 [0, 0	0 [0, 0]	NA	0 [0, 0	0 (0 %)	0 [0, 0	0 [0, 0]	NA	0 [0, 0]
Cor e insu ranc e mod el 033	Feed back.	Tax Savings ()	0 (0%)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0]
Cor e insu ranc e mod el 033	Feed back.		0 (0%)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0]	0 (0 %)	0 [0, 0]	0 [0, 0]	NA	0 [0, 0

.Co	Feed	FINAL	0 (0 [0 [NA	9 [0	0 [0 [NA	9 [
ntro	back.	TIME (0%)	0, 0	0, 0		0, 0	(0	0, 0	0, 0		0, 0
1		Day)]]]	%)]]]
.Co	Feed	<u>INITIA</u>	0 (0 [0 [NA	0 [0	0 [0 [NA	9 [
ntro	back.	<u>L</u>	0%)	0, 0	0, 0		0, 0	(0	0, 0	0, 0		0, 0
1		TIME (]]]	%)]]]]
		Day)										
.Co	Feed	SAVEP	0 (0 [0 [NA	0 [0	0 [0 [NA	0 [
ntro	back.	ER (Da	0%)	0, 0	0, 0		0, 0	(0	0, 0	0, 0		0, 0
1		y)]]]	%)]]]
.Co	Feed	TIME	0 (0 [0 [NA	0 [0	0 [0 [NA	0 [
ntro	back.	STEP (0%)	0, 0	0, 0		0, 0	(0	0, 0	0, 0		0, 0
1		Day)]]]	%)]]]

<u>Top</u> **Exogenous Variables Analysis (19 Variables + 4 Control Variables)**

Group	Type	Variable	Variable Number	Data Source
Core insurance model 0331	Exogenous	Actual percentage of HI ()	1	1 Exogenous
Core insurance model 0331	Exogenous	Actual Private Hospital Use (pt)	2	1 Exogenous
Core insurance model 0331	Exogenous	Actual Private Occupancy ()	3	1 Exogenous
Core insurance model 0331	Exogenous	Actual Public Hospital Use (pt)	4	1 Exogenous
Core insurance model 0331	Exogenous	Actual Public Occupancy ()	5	1 Exogenous
Core insurance model 0331	Exogenous	Average Length of Stay (Day)	6	1 Exogenous
Core insurance model 0331	Exogenous	Average Premium Ratio ()	7	Hardcoded
Core insurance model 0331	Exogenous	Baseline HI ()	8	Hardcoded
Core insurance model 0331	Exogenous	Daily number of potentially get ill ()	9	1 Exogenous

Core insurance model 0331	Exogenous	Delay in Perception and Purchase (Day)	10	Hardcoded
Core insurance model 0331	Exogenous	Occupancy to Demand ()	11	Hardcoded
Core insurance model 0331	Exogenous	Private hospital beds (pt)	12	1 Exogenous
Core insurance model 0331	Exogenous	Public hospital beds (pt)	13	1 Exogenous
Core insurance model 0331	Exogenous	Self pay ()	14	Hardcoded
Core insurance model 0331	Exogenous	SeverityFtr ()	15	Hardcoded
Core insurance model 0331	Exogenous	Tax Incentive ()	16	1 Exogenous
Core insurance model 0331	Exogenous	Tax Saving to demand ()	17	Hardcoded
Core insurance model 0331	Exogenous	Tax Savings ()	18	2 Exogenous
Core insurance model 0331	Exogenous	Use HI ()	19	Hardcoded
.Control	Exogenous	FINAL TIME (Day)	20	Hardcoded
.Control	Exogenous	INITIAL TIME (Day)	21	Hardcoded
.Control	Exogenous	SAVEPER (Day)	22	1 Exogenous
.Control	Exogenous	TIME STEP (Day)	23	Hardcoded

Endogenous Variables Analysis (11 Variables + 0 Control Variables) (Maximum Endogenous Path Length: 5)

				In pu									
			Vari				l	Indir	Indi	Indi	Indir	Exogen	Exoge
			able	Li	Direct	nt	ct	ect	rect	rect	ect	ous	nous
Grou			Num	nk	Exoge	Exoge	Exoge	Mini	Mea	Med	Maxi	Uncon	Conn
p	Type	Variable	ber	S	nous	nous	nous	mum	n	ian	mum	nected	ected

Core insur ance mode 1 0331	Endog enous	Percentag e of HI ()	1	6	5	83.3	4	2	4.25	5.00	5	<u>16</u>	9
Core insur ance mode 1 0331	Endog enous	Discharge d or dead from Private Hospitals (pt/Day)	2	3	2	66.7	7	3	3.86	4.00	5	<u>16</u>	9
Core insur ance mode 1 0331	Endog enous	Discharge d or dead from Public Hospitals (pt/Day)	3	2	1	50.0	7	3	3.86	4.00	5	<u>17</u>	8
Core insur ance mode 1 0331	Endog enous	Getting sick and use private hospital ()	4	4	2	50.0	5	2	2.20	2.00	3	<u>18</u>	7
Core insur ance mode 1 0331	Endog enous	Getting sick and use public hospital ()	5	4	2	50.0	5	2	2.20	2.00	3	<u>18</u>	7
Core insur ance mode 1 0331	Endog enous	Pr Occupanc y ()	6	2	1	50.0	8	3	3.75	4.00	5	<u>16</u>	9
Core insur ance mode 1 0331	Endog enous	Pu Occupanc y ()	7	2	1	50.0	7	3	3.86	4.00	5	<u>17</u>	8
Core insur ance mode	Endog enous	Daily getting ill (pt)	8	3	1	33.3	7	2	2.86	3.00	4	<u>17</u>	8

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Core insur ance mode 1 0331	Endog enous	Diff in Occupanc y()	9	2	0	0.0	7	4	4.57	5.00	5	<u>18</u>	7
Core insur ance mode 1 0331	Endog enous	In Private Hospitals (pt)	10	2	0	0.0	8	2	2.75	3.00	4	<u>17</u>	<u>8</u>
Core insur ance mode 1 0331	Endog enous	In Public Hospitals (pt)	11	2	0	0.0	7	2	2.86	3.00	4	<u>18</u>	7

Macros (0 Variables)

Name Macro Definition	Expanded Macro Definition
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k	<u>A</u>	<u>B</u>	C	D	Е	F	<u>G</u>	Н	I		K	L	M	N	0	<u>P</u>	Q	R	<u>S</u>	<u>T</u>	<u>U</u>	V	W	X	Y	z
Link																										
s:																										

Positive Polarity Causal Links (26 Variables)

Cause	Effect	Polarity
Actual percentage of HI SDMlookup	Actual percentage of HI	+
Average Premium Ratio	<u>Tax Savings</u>	+
Baseline HI	Percentage of HI	+
Daily getting ill	Getting sick and use private hospital	+
Daily getting ill	Getting sick and use public hospital	+
Daily number of potentially get ill	Daily getting ill	+
Delay in Perception and Purchase	Percentage of HI	+
Diff in Occupancy	Percentage of HI	+
Getting sick and use private hospital	In Private Hospitals	+
Getting sick and use public hospital	In Public Hospitals	+
In Private Hospitals	Discharged or dead from Private Hospitals	+
In Private Hospitals	Pr Occupancy	+
In Public Hospitals	Discharged or dead from Public Hospitals	+
In Public Hospitals	Pu Occupancy	+
Pu Occupancy	Diff in Occupancy	+
Public hospital beds _SDMlookup	Public hospital beds	+
Self pay	Getting sick and use private hospital	+
Tax Incentive	Tax Savings	+
Tax Incentive _SDMlookup	<u>Tax Incentive</u>	+
Tax Saving to demand	Percentage of HI	+
Tax Savings	Percentage of HI	+
<u>Time</u>	Actual percentage of HI	+
<u>Time</u>	Public hospital beds	+
<u>Time</u>	Tax Incentive	+
TIME STEP	SAVEPER	+
<u>Use HI</u>	Getting sick and use private hospital	+

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k	<u>A</u>	В	C	<u>D</u>	Е	F	<u>G</u>	Н			K	L	M	N	<u>O</u>	<u>P</u>	Q	R	<u>S</u>	T	<u>U</u>	V	W	X	Y	Z
Link																										
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Negative Polarity Causal Links (15 Variables)

Cause	Effect	Polarity
Average Length of Stay	Discharged or dead from Private Hospitals	-
Average Length of Stay	Discharged or dead from Public Hospitals	-
Discharged or dead from Private Hospitals	In Private Hospitals	-
Discharged or dead from Public Hospitals	In Public Hospitals	-
Getting sick and use private hospital	Daily getting ill	-
Getting sick and use public hospital	Daily getting ill	-
Occupancy to Demand	Percentage of HI	-
Percentage of HI	Getting sick and use private hospital	-
Percentage of HI	Getting sick and use public hospital	-
Pr Occupancy	Diff in Occupancy	-
Private hospital beds	Pr Occupancy	-
Public hospital beds	Pu Occupancy	-
<u>Self pay</u>	Getting sick and use public hospital	-
<u>SeverityFtr</u>	Discharged or dead from Private Hospitals	-
<u>Use HI</u>	Getting sick and use public hospital	-

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k	<u>A</u>	В	C	<u>D</u>			G	Н			K		M	N	О	<u>P</u>	Q	R		<u>T</u>	U	V	W	X	Y	
Link																										
s:																										

Function-based Polarity Causal Links (14 Variables)

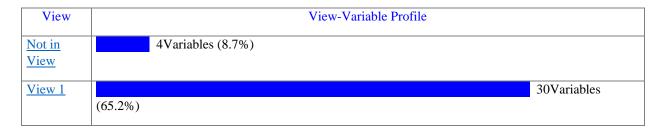
Cause	Effect	Polarity
Actual Private Hospital Use _SDMlookup	Actual Private Hospital Use	Lookup Inconsistent
Actual Private Occupancy _SDMlookup	Actual Private Occupancy	Lookup Inconsistent
Actual Public Hospital Use SDMlookup	Actual Public Hospital Use	Lookup Inconsistent
Actual Public Occupancy _SDMlookup	Actual Public Occupancy	Lookup Inconsistent
Average Length of Stay SDMlookup	Average Length of Stay	Lookup Inconsistent
Daily number of potentially get ill _SDMlookup	Daily number of potentially get ill	Lookup Inconsistent
Private hospital beds SDMlookup	Private hospital beds	Lookup Inconsistent
<u>Time</u>	Actual Private Hospital Use	Lookup Inconsistent
<u>Time</u>	Actual Private Occupancy	Lookup Inconsistent
<u>Time</u>	Actual Public Hospital Use	Lookup Inconsistent
<u>Time</u>	Actual Public Occupancy	Lookup Inconsistent
<u>Time</u>	Average Length of Stay	Lookup Inconsistent
<u>Time</u>	Daily number of potentially get ill	Lookup Inconsistent
<u>Time</u>	Private hospital beds	Lookup Inconsistent

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Rate-to-rate Links (0 Variables)

	Ticc4
Cause	Effect

View-Variable Profile



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List Of 2 views and their 34 Variables

	Not in	View	
	View	1	
Total:	4	30	Total:
SeverityFtr (In 1 View)			SeverityFtr (In 1 View)
Discharged or dead from Private			Discharged or dead from Private
Hospitals (In 1 View)			Hospitals (In 1 View)
Getting sick and use private hospital (In 1			Getting sick and use private hospital (In 1
View)			View)
Getting sick and use public hospital (In 1 View)			Getting sick and use public hospital (In 1 View)
Pu Occupancy (In 1 View)			Pu Occupancy (In 1 View)
<u>Pr Occupancy</u> (In 1 View)			<u>Pr Occupancy</u> (In 1 View)
In Private Hospitals (In 1 View)			In Private Hospitals (In 1 View)
<u>In Public Hospitals</u> (In 1 View)			In Public Hospitals (In 1 View)
Discharged or dead from Public Hospitals (In			Discharged or dead from Public Hospitals (In
1 View)			1 View)
Daily number of potentially get ill (In 1 View)			Daily number of potentially get ill (In 1 View)
Percentage of HI (In 1 View)			Percentage of HI (In 1 View)
Daily getting ill (In 1 View)			Daily getting ill (In 1 View)
Actual percentage of HI (In 1 View)			Actual percentage of HI (In 1 View)
Tax Savings (In 1 View)			Tax Savings (In 1 View)

<u>Tax Incentive</u> (In 1 View)			<u>Tax Incentive</u> (In 1 View)
<u>Use HI</u> (In 1 View)			<u>Use HI</u> (In 1 View)
Tax Saving to demand (In 1 View)			Tax Saving to demand (In 1 View)
Average Premium Ratio (In 1 View)			Average Premium Ratio (In 1 View)
Occupancy to Demand (In 1 View)			Occupancy to Demand (In 1 View)
Actual Private Hospital Use (In 1 View)			Actual Private Hospital Use (In 1 View)
Actual Private Occupancy (In 1 View)			Actual Private Occupancy (In 1 View)
Actual Public Hospital Use (In 1 View)			Actual Public Hospital Use (In 1 View)
Actual Public Occupancy (In 1 View)			Actual Public Occupancy (In 1 View)
Baseline HI (In 1 View)			Baseline HI (In 1 View)
Self pay (In 1 View)			Self pay (In 1 View)
Average Length of Stay (In 1 View)			Average Length of Stay (In 1 View)
Delay in Perception and Purchase (In 1			Delay in Perception and Purchase (In 1
View)			View)
<u>Diff in Occupancy</u> (In 1 View)			<u>Diff in Occupancy</u> (In 1 View)
<u>Private hospital beds</u> (In 1 View)			Private hospital beds (In 1 View)
Public hospital beds (In 1 View)			Public hospital beds (In 1 View)
<u>FINAL TIME</u> (In 1 View)			FINAL TIME (In 1 View)
<u>INITIAL TIME</u> (In 1 View)			<u>INITIAL TIME</u> (In 1 View)
SAVEPER (In 1 View)			SAVEPER (In 1 View)
TIME STEP (In 1 View)			TIME STEP (In 1 View)
Total:	4	30	Total:
	Not in	View	
	View	1	

Source File: C:\Users\chenj297\Downloads\Core insurance model 0331.mdl (Sat Apr 02 16:45:29 CST 2022)

Report Created On Sat Apr 02 16:46:02 CST 2022

<u>SDM-Doc Tool</u> Version 1.4.7

<u>Global Security Sciences Division</u>

<u>Argonne National Laboratory</u>