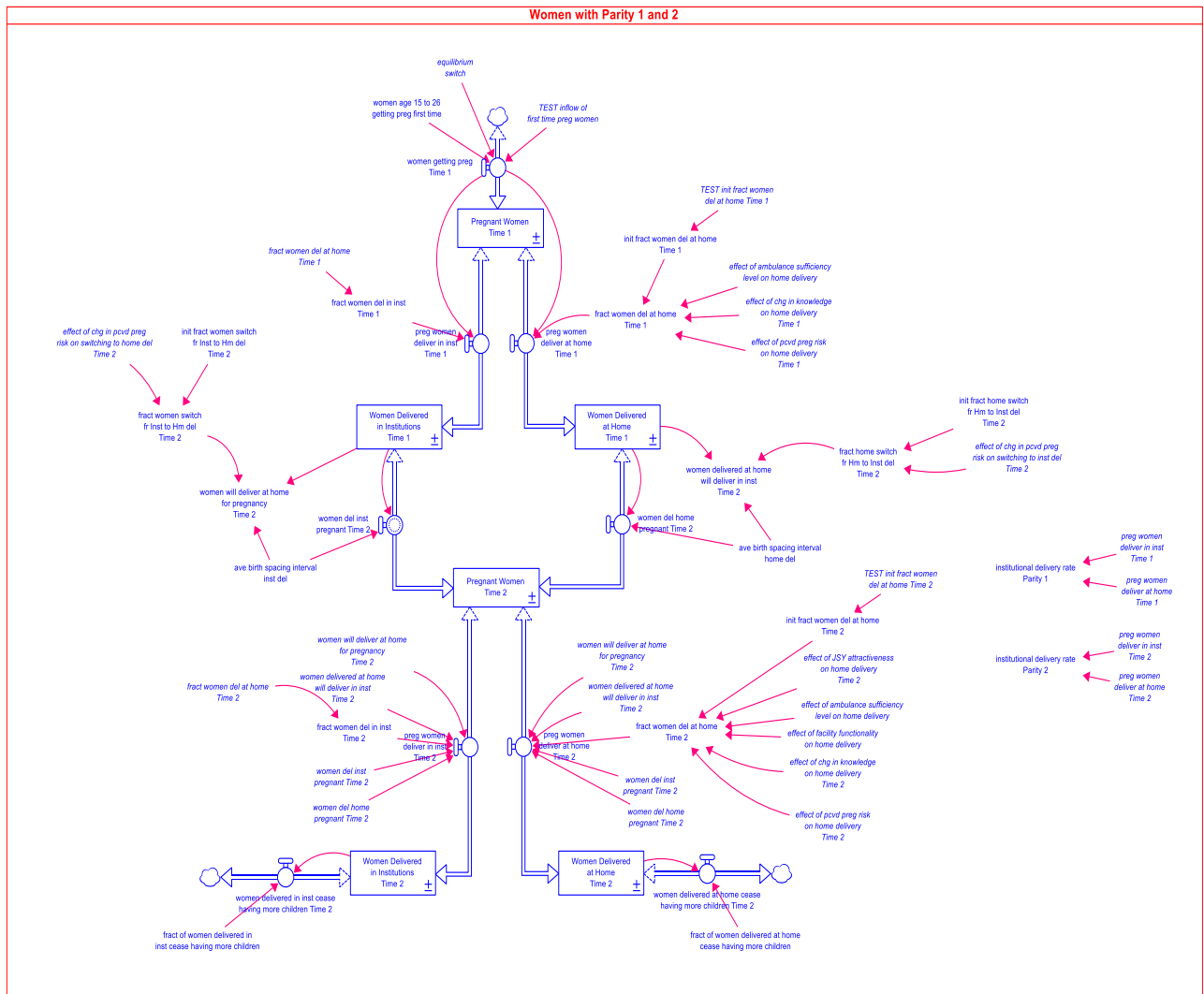
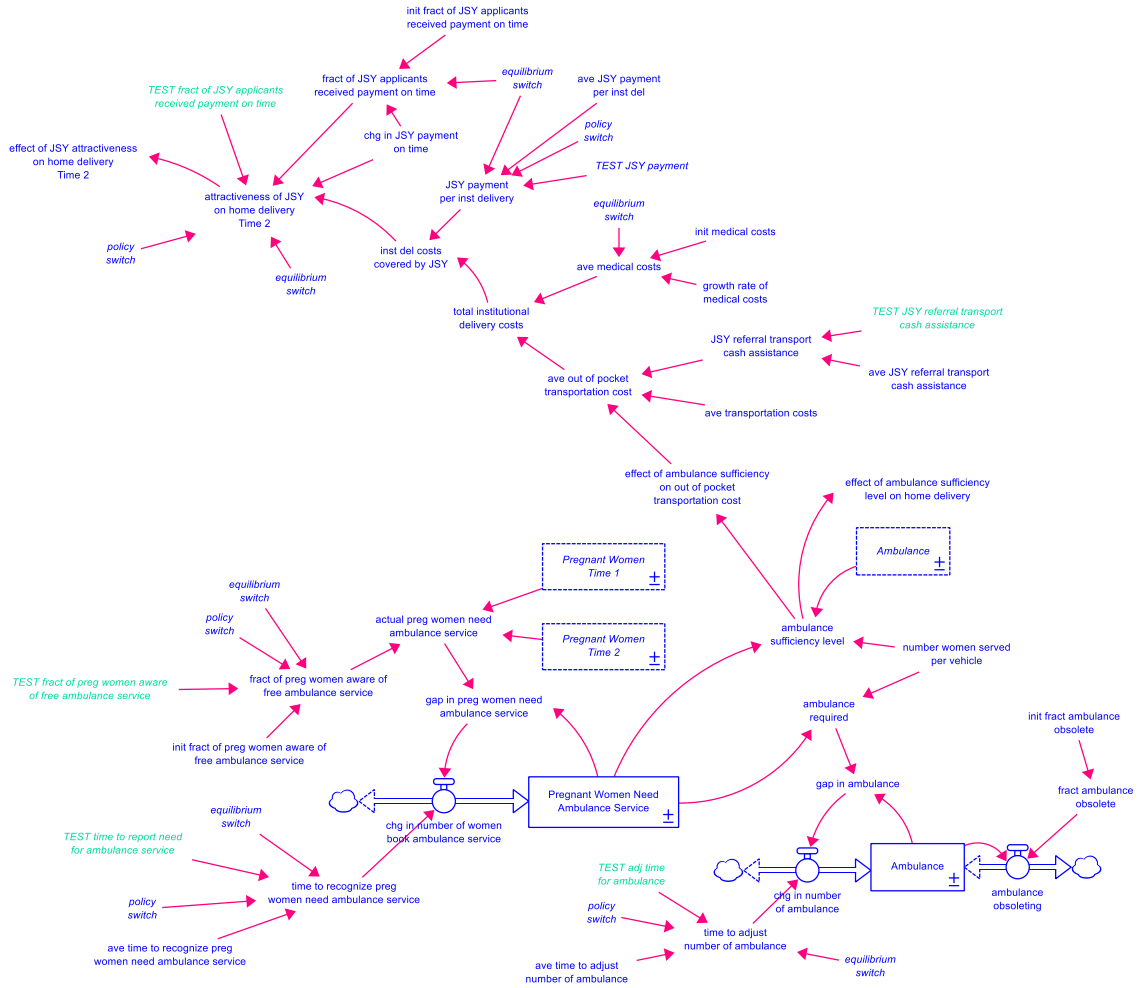


## Appendix A

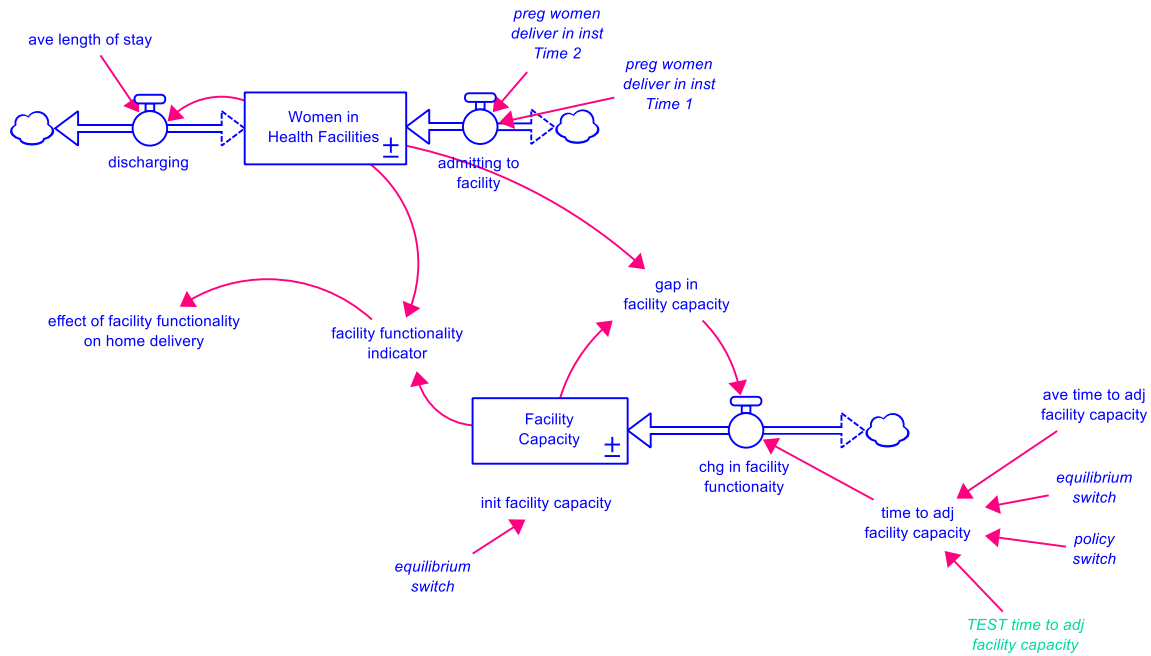
### Stock and Flow Diagram and Model Documentation



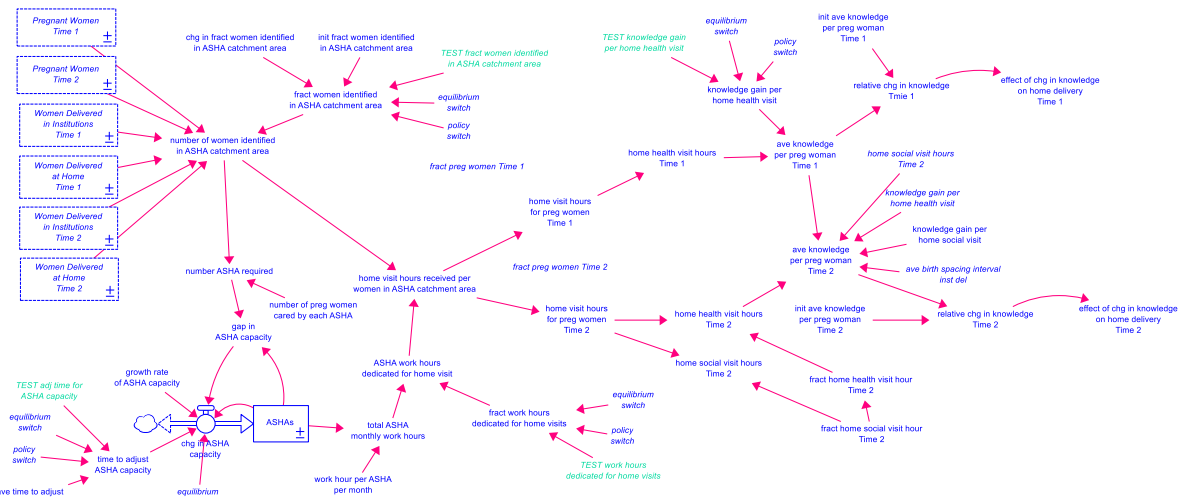
## JSY Attractiveness and Ambulance Sector



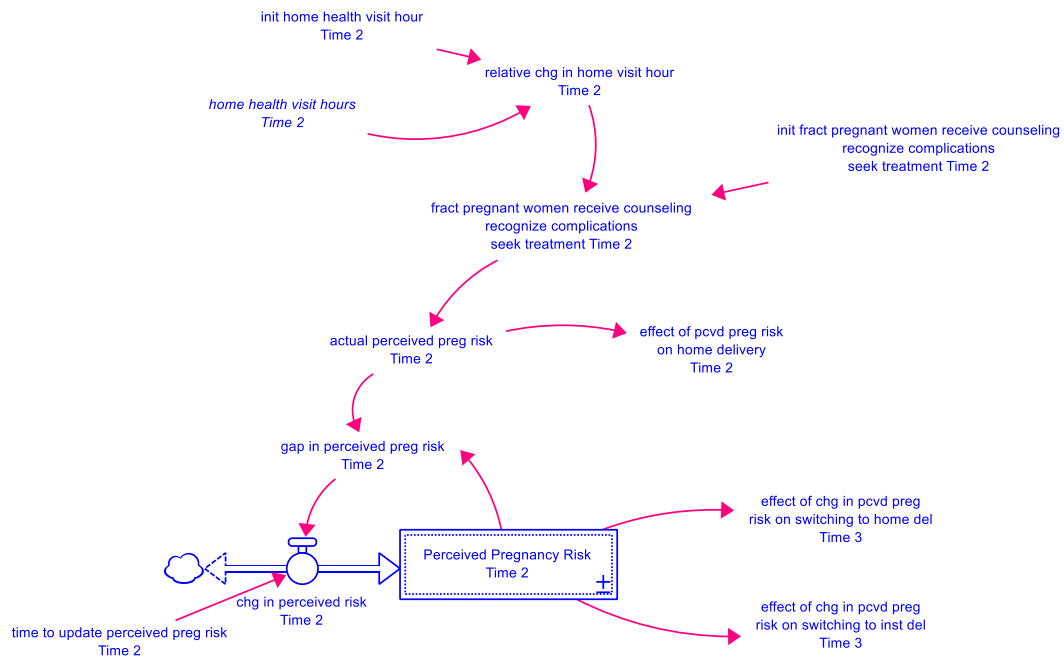
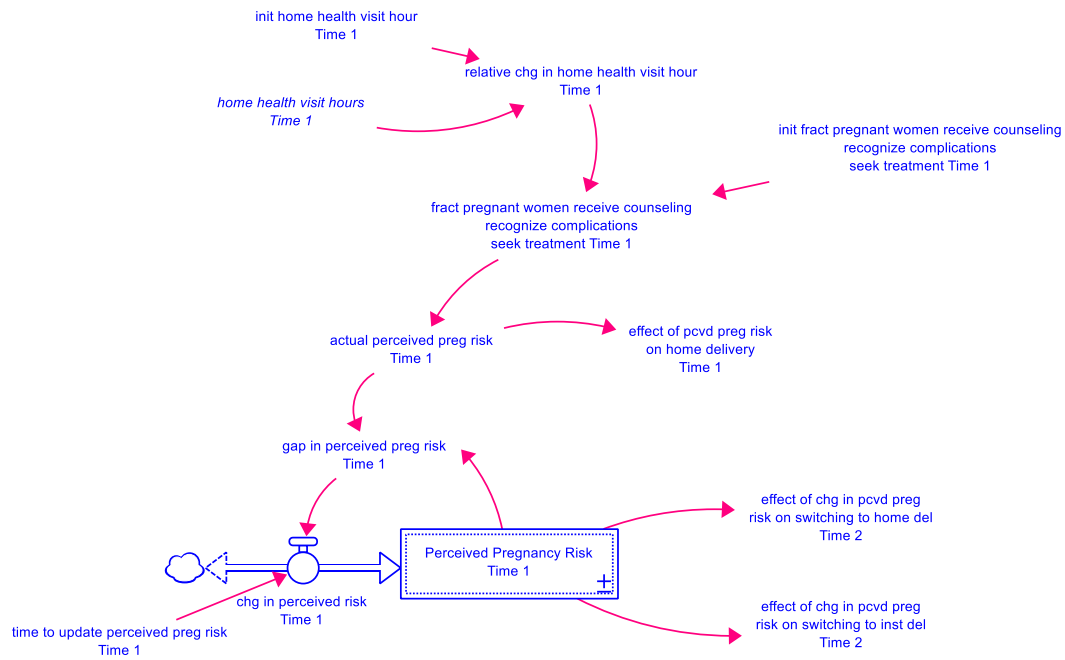
## Facility Functionality Sector



## ASHA Home Visit and Institutional Delivery Knowledge Sector



## Perceived Pregnancy Risks



## Model Documentation

	Equation	Properties	Units	Documentation
Top-Level Model:				
Ambulance(t)	$Ambulance(t - dt) + (chg\_in\_number\_of\_ambulance - ambulance\_obsoleting) * dt$	INIT Ambulance = IF equilibrium_switch = 1 THEN ambulance_required/(fract_ambulance_obsolete*time_to_adjust_number_of_ambulance + 1) ELSE 0.1	vehicle	
ASHAs(t)	$ASHAs(t - dt) + (chg\_in\_ASHA\_capacity) * dt$	INIT ASHAs = IF equilibrium_switch=1 THEN 962 ELSE 245	ASHA	<p>"FLW Numbers_20170925_Training dashboard.xlsx"</p> <p>Total number of ASHAs in West Champaran in 2012 was 2,941 or 245 person/month. (ASHA Workers Performance and Incentives Portal <a href="http://ashwin.bih.nic.in/Ashwin/PublicReports/AshaFacilitatorConsolidatedActivityStatusRpt.aspx">http://ashwin.bih.nic.in/Ashwin/PublicReports/AshaFacilitatorConsolidatedActivityStatusRpt.aspx</a>)</p> <p>"Details of ASHAs.xlsx" from CARE shows the number of ASHAs in West Champaran in 2021 was 3,230 or 269 person/month.</p> <p><math>(3230-2914) / (2020-2012) = 316/10 = 31.6</math> person/year</p> <p>growth rate of ASHAs is 1.08% per year or 0.09% per month</p>
Facility_Capacity(t)	$Facility\_Capacity(t - dt) + (chg\_in\_facility\_functionaity) * dt$	INIT Facility_Capacity = init_facility_capacity	person	
Perceived_Pregnancy_Risk_Time_1(t)	$Perceived\_Pregnancy\_Risk\_Time\_1(t - dt) + (chg\_in\_perceived\_risk\_Time\_1) * dt$	INIT Perceived_Pregnancy_Risk_Time_1 = IF equilibrium_switch THEN 0.657 ELSE 0.456	unitless	
Perceived_Pregnancy_Risk_Time_2(t)	$Perceived\_Pregnancy\_Risk\_Time\_2(t - dt) + (chg\_in\_perceived\_risk\_Time\_2) * dt$	INIT Perceived_Pregnancy_Risk_Time_2	unitless	

		= IF equilibrium_switch=1 THEN 0.592 ELSE 0.305		
Pregnant_Women_Need_Ambulance_Service(t)	Pregnant_Women_Need_Ambulance_Service(t - dt) + (chg_in_number_of_women_book_ambulance_service) * dt	INIT Pregnant_Women_Need_Ambulance_Service = IF equilibrium_switch = 1 THEN 657*0+739*0+2050 ELSE 76.5	person	
Pregnant_Women_Time_1(t)	Pregnant_Women_Time_1(t - dt) + (women_getting_preg_Time_1 - preg_women_deliver_in_inst_Time_1 - preg_women_deliver_at_home_Time_1) * dt	INIT Pregnant_Women_Time_1 = IF equilibrium_switch=1 THEN 523.2688*0+523*0+524.217+1183 ELSE 541	person	
Pregnant_Women_Time_2(t)	Pregnant_Women_Time_2(t - dt) + (women_del_inst_pregnant_Time_2 + women_del_home_pregnant_Time_2 - preg_women_deliver_in_inst_Time_2 - preg_women_deliver_at_home_Time_2) * dt	INIT Pregnant_Women_Time_2 = IF equilibrium_switch=1 THEN 1680 ELSE 541	person	
Women_Delivered_at_Home_Time_1(t)	Women_Delivered_at_Home_Time_1(t - dt) + (preg_women_deliver_at_home_Time_1 - women_del_home_pregnant_Time_2) * dt	INIT Women_Delivered_at_Home_Time_1 = IF equilibrium_switch=1 THEN 435 ELSE 78	person	
Women_Delivered_at_Home_Time_2(t)	Women_Delivered_at_Home_Time_2(t - dt) + (preg_women_deliver_at_home_Time_2 - women_delivered_at_home_cease_having_more_children_Time_2) * dt	INIT Women_Delivered_at_Home_Time_2 = IF equilibrium_switch = 1 THEN 867 ELSE 78	person	
Women_Delivered_in_Institutions_Time_1(t)	Women_Delivered_in_Institutions_Time_1(t - dt) + (preg_women_deliver_in_inst_Time_1 - women_del_inst_pregnant_Time_2) * dt	INIT Women_Delivered_in_Institutions_Time_1 = IF equilibrium_switch=1 THEN 1610 ELSE 451	person	
Women_Delivered_in_Institutions_Time_2(t)	Women_Delivered_in_Institutions_Time_2(t - dt) + (preg_women_deliver_in_inst_Time_2 - women_delivered_in_inst_cease_having_more_children_Time_2) * dt	INIT Women_Delivered_in_Institutions_Time_2 = IF equilibrium_switch = 1 THEN 1200 ELSE 451	person	

Women_in_Health_Facilities(t)	Women_in_Health_Facilities(t - dt) + (admitting_to_facility - discharging) * dt	INIT Women_in_Health_Facilities = IF equilibrium_switch=1 THEN 267 ELSE 170	person	
admitting_to_facility	preg_women_deliver_in_inst_Time_1 + preg_women_deliver_in_inst_Time_2		person/m onth	
ambulance_obsoleting	Ambulance * fract_ambulance_obsolete		vehicle/ Months	
chg_in_ASHA_capacity	IF equilibrium_switch=1 THEN gap_in_ASHA_capacity/time_to_adjust_ ASHA_capacity ELSE (ASHAs * growth_rate_of_ASHA_capacity) + (gap_in_ASHA_capacity/time_to_adjust_ _ASHA_capacity)		ASHA/ Months	
chg_in_facility_functionaity	gap_in_facility_capacity / time_to_adj_facility_capacity		person/m onth	
chg_in_number_of_ambulance	gap_in_ambulance / time_to_adjust_number_of_ambulance		vehicle/ Months	
chg_in_number_of_women_book_ambulance_service	gap_in_preg_women_need_ambulance_s ervice / time_to_recognize_preg_women_need_a mbulance_service		person/m onth	
chg_in_perceived_risk_Time_1	gap_in_perceived_preg_risk_Time_1 / time_to_update_perceived_preg_risk_Ti me_1		1/month	
chg_in_perceived_risk_Time_2	gap_in_perceived_preg_risk_Time_2 / time_to_update_perceived_preg_risk_Ti me_2		1/month	
discharging	Women_in_Health_Facilities / ave_length_of_stay		person/m onth	
preg_women_deliver_at_home_Time_1	DELAYN(women_getting_preg_Time_1 * fract_women_del_at_home_Time_1, 9 , 1)		person/m onth	
preg_women_deliver_at_home_Time_2	(DELAYN((women_del_inst_pregnant_ Time_2 + women_del_home_pregnant_Time_2 - women_will_deliver_at_home_for_pregn ancy_Time_2 -		person/m onth	

	$\begin{aligned} & \text{women\_delivered\_at\_home\_will\_deliver\_in\_inst\_Time\_2}) * \\ & \text{fract\_women\_del\_at\_home\_Time\_2, 9, 1) +} \\ & \text{DELAYN(women\_will\_deliver\_at\_home\_for\_pregnancy\_Time\_2, 9, 1)) * 1 +} \\ & (\text{DELAYN}((\text{women\_del\_inst\_pregnant\_Time\_2 +} \\ & \text{women\_del\_home\_pregnant\_Time\_2}) * \\ & \text{fract\_women\_del\_at\_home\_Time\_2, 9, 1) +} \\ & \text{DELAYN(women\_will\_deliver\_at\_home\_for\_pregnancy\_Time\_2, 9, 1)) * 0} \end{aligned}$			
preg_women_deliver_in_inst_Time_1	$\text{DELAYN(women\_getting\_preg\_Time\_1 * fract\_women\_del\_in\_inst\_Time\_1, 9, 1)}$		person/month	
preg_women_deliver_in_inst_Time_2	$\begin{aligned} & (\text{DELAYN}((\text{women\_del\_inst\_pregnant\_Time\_2 +} \\ & \text{women\_del\_home\_pregnant\_Time\_2 -} \\ & \text{women\_will\_deliver\_at\_home\_for\_pregnancy\_Time\_2 -} \\ & \text{women\_delivered\_at\_home\_will\_deliver\_in\_inst\_Time\_2}) * \\ & \text{fract\_women\_del\_in\_inst\_Time\_2, 9, 1}) \\ & + \\ & \text{DELAYN(women\_delivered\_at\_home\_will\_deliver\_in\_inst\_Time\_2, 9, 1)) * 1} \\ & + \\ & (\text{DELAYN}((\text{women\_del\_inst\_pregnant\_Time\_2 +} \\ & \text{women\_del\_home\_pregnant\_Time\_2}) * \\ & \text{fract\_women\_del\_in\_inst\_Time\_2, 9, 1}) \\ & + \\ & \text{DELAYN(women\_delivered\_at\_home\_will\_deliver\_in\_inst\_Time\_2, 9, 1)) * 0} \end{aligned}$		person/month	
women_del_home_pregnant_Time_2	$\text{Women\_Delivered\_at\_Home\_Time\_1 / ave\_birth\_spacing\_interval\_home\_del}$		person/month	
women_del_inst_pregnant_Time_2	$\text{Women\_Delivered\_in\_Institutions\_Time\_1 / ave\_birth\_spacing\_interval\_inst\_del}$		person/month	



women_delivered_at_home_cease_having_more_children_Time_2	Women_Delivered_at_Home_Time_2 * fract_of_women_delivered_at_home_cease_having_more_children		person/month	
women_delivered_in_inst_cease_having_more_children_Time_2	Women_Delivered_in_Institutions_Time_2 * fract_of_women_delivered_in_inst_cease_having_more_children		person/month	
women_getting_preg_Time_1	IF equilibrium_switch = 1 THEN INIT(women_age_15_to_26_getting_preg_first_time) * TEST_inflow_of_first_time_pregnant_women ELSE women_age_15_to_26_getting_preg_first_time		person/month	
actual_perceived_preg_risk_Time_1	MIN (fract_pregnant_women_receive_counseling_recognize_complications_seek_treatment_Time_1, 1)		unitless	
actual_perceived_preg_risk_Time_2	MIN (fract_pregnant_women_receive_counseling_recognize_complications_seek_treatment_Time_2, 1)		unitless	
actual_preg_women_need_ambulance_service	(Pregnant_Women_Time_1 + Pregnant_Women_Time_2) * fract_of_preg_women_aware_of_free_ambulance_service		person	
ambulance_required	Pregnant_Women_Need_Ambulance_Service / number_women_served_per_vehicle		vehicle	
ambulance_sufficiency_level	number_women_served_per_vehicle * Ambulance/ Pregnant_Women_Need_Ambulance_Service		unitless	
ASHA_work_hours_dedicated_for_home_visit	total_ASHA_monthly_work_hours * fract_work_hours_dedicated_for_home_visits		hour/month	
attractiveness_of_JSY_on_home_delivery_Time_2	IF equilibrium_switch = 1 THEN SMTH1		unitless	

	( inst_del_costs_covered_by_JSY * fract_of_JSY_applicants_received_paym ent_on_time * TEST_fract_of_JSY_applicants_received _payment_on_time , 24) ELSE (1 - policy_switch) * SMTH1((chg_in_JSY_payment_on_time * inst_del_costs_covered_by_JSY), 24) + policy_switch * SMTH1((chg_in_JSY_payment_on_time * inst_del_costs_covered_by_JSY * TEST_fract_of_JSY_applicants_received _payment_on_time), 24)			
ave_birth_spacing_interval_home_del	10		month	CMWRA 2016 & 2018 and CHS R6 - R11
ave_birth_spacing_interval_inst_del	11		month	CMWRA 2016 & 2018 and CHS R6 - R11
ave_JSY_payment_per_inst_del	1400		rupee	
ave_JSY_referral_transport_cash_assista nce	250		rupee	
ave_knowledge_gain_per_home_health_ visit	1		1 / (hour/mo nth/perso n)	
ave_knowledge_per_preg_woman_Time _1	SMTH1 (home_health_visit_hours_Time_1 * knowledge_gain_per_home_health_visit, 5)		unitless	
ave_knowledge_per_preg_woman_Time _2	SMTH1 ((home_health_visit_hours_Time_2 * knowledge_gain_per_home_health_visit) + (home_social_visit_hours_Time_2 * knowledge_gain_per_home_social_visit) + DELAYN(ave_knowledge_per_preg_wo man_Time_1, 9 + ave_birth_spacing_interval_inst_del, 1), 5)		unitless	
ave_length_of_stay	1		month	

ave_medical_costs	IF equilibrium_switch = 1 THEN init_medical_costs ELSE init_medical_costs * growth_rate_of_medical_costs		rupee	
ave_out_of_pocket_transportation_cost	MAX (ave_transportation_costs - JSY_referral_transport_cash_assistance, 0) * effect_of_ambulance_sufficiency_on_out _of_pocket_transportation_cost		rupee	
ave_time_to_adj_facility_capacity	60		month	
ave_time_to_adjust_ASHA_capacity	60		month	
ave_time_to_adjust_number_of_ambulan ce	72		month	
ave_time_to_recognize_preg_women_ne ed_ambulance_service	72		month	
ave_transportation_costs	362		rupee	
chg_in_fract_women_identified_in_ASH A_catchment_area	GRAPH(TIME) Points: (13.00, 0.9993), (13.4636871508, 0.9993), (13.9273743017, 0.9993), (14.3910614525, 0.9992), (14.8547486034, 0.9992), (15.3184357542, 0.9991), (15.782122905, 0.9991), (16.2458100559, 0.999), (16.7094972067, 0.999), (17.1731843575, 0.9989), (17.6368715084, 0.9988), (18.1005586592, 0.9988), (18.5642458101, 0.9987), (19.0279329609, 0.9986), (19.4916201117, 0.9985), (19.9553072626, 0.9985), (20.4189944134, 0.9984), (20.8826815642, 0.9983), (21.3463687151, 0.9982), (21.8100558659, 0.9981), (22.2737430168, 0.998), (22.7374301676, 0.9979), (23.2011173184, 0.9977), (23.6648044693, 0.9976),		unitless	

	(24.1284916201, 0.9975), (24.5921787709, 0.9973), (25.0558659218, 0.9972), (25.5195530726, 0.997), (25.9832402235, 0.9969), (26.4469273743, 0.9967), (26.9106145251, 0.9965), (27.374301676, 0.9963), (27.8379888268, 0.9961), (28.3016759777, 0.9959), (28.7653631285, 0.9957), (29.2290502793, 0.9955), (29.6927374302, 0.9952), (30.156424581, 0.9949), (30.6201117318, 0.9947), (31.0837988827, 0.9944), (31.5474860335, 0.9941), (32.0111731844, 0.9938), (32.4748603352, 0.9934), (32.938547486, 0.9931), (33.4022346369, 0.9927), (33.8659217877, 0.9923), (34.3296089385, 0.9919), (34.7932960894, 0.9915), (35.2569832402, 0.991), (35.7206703911, 0.9906), (36.1843575419, 0.9901), (36.6480446927, 0.9896), (37.1117318436, 0.989), (37.5754189944, 0.9885), (38.0391061453, 0.9879), (38.5027932961, 0.9873), (38.9664804469, 0.9867), (39.4301675978, 0.986), (39.8938547486, 0.9853), (40.3575418994, 0.9846), (40.8212290503, 0.9839), (41.2849162011, 0.9831), (41.748603352, 0.9823), (42.2122905028, 0.9815), (42.6759776536, 0.9806), (43.1396648045, 0.9797), (43.6033519553, 0.9788), (44.0670391061, 0.9779),			
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	(44.530726257, 0.9769), (44.9944134078, 0.9759), (45.4581005587, 0.9748), (45.9217877095, 0.9738), (46.3854748603, 0.9727), (46.8491620112, 0.9715), (47.312849162, 0.9704), (47.7765363128, 0.9692), (48.2402234637, 0.968), (48.7039106145, 0.9668), (49.1675977654, 0.9655), (49.6312849162, 0.9643), (50.094972067, 0.963), (50.5586592179, 0.9617), (51.0223463687, 0.9603), (51.4860335196, 0.959), (51.9497206704, 0.9576), (52.4134078212, 0.9563), (52.8770949721, 0.9549), (53.3407821229, 0.9535), (53.8044692737, 0.9521), (54.2681564246, 0.9507), (54.7318435754, 0.9493), (55.1955307263, 0.9479), (55.6592178771, 0.9465), (56.1229050279, 0.9451), (56.5865921788, 0.9437), (57.0502793296, 0.9424), (57.5139664804, 0.941), (57.9776536313, 0.9397), (58.4413407821, 0.9383), (58.905027933, 0.937), (59.3687150838, 0.9357), (59.8324022346, 0.9345), (60.2960893855, 0.9332), (60.7597765363, 0.932), (61.2234636872, 0.9308), (61.687150838, 0.9296), (62.1508379888, 0.9285), (62.6145251397, 0.9273), (63.0782122905, 0.9262), (63.5418994413, 0.9252), (64.0055865922, 0.9241), (64.469273743, 0.9231), (64.9329608939, 0.9221), (65.3966480447, 0.9212),			
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	(65.8603351955, 0.9203), (66.3240223464, 0.9194), (66.7877094972, 0.9185), (67.251396648, 0.9177), (67.7150837989, 0.9169), (68.1787709497, 0.9161), (68.6424581006, 0.9154), (69.1061452514, 0.9147), (69.5698324022, 0.914), (70.0335195531, 0.9133), (70.4972067039, 0.9127), (70.9608938547, 0.9121), (71.4245810056, 0.9115), (71.8882681564, 0.911), (72.3519553073, 0.9104), (72.8156424581, 0.9099), (73.2793296089, 0.9094), (73.7430167598, 0.909), (74.2067039106, 0.9085), (74.6703910615, 0.9081), (75.1340782123, 0.9077), (75.5977653631, 0.9073), (76.061452514, 0.9069), (76.5251396648, 0.9066), (76.9888268156, 0.9062), (77.4525139665, 0.9059), (77.9162011173, 0.9056), (78.3798882682, 0.9053), (78.843575419, 0.9051), (79.3072625698, 0.9048), (79.7709497207, 0.9045), (80.2346368715, 0.9043), (80.6983240223, 0.9041), (81.1620111732, 0.9039), (81.625698324, 0.9037), (82.0893854749, 0.9035), (82.5530726257, 0.9033), (83.0167597765, 0.9031), (83.4804469274, 0.903), (83.9441340782, 0.9028), (84.4078212291, 0.9027), (84.8715083799, 0.9025), (85.3351955307, 0.9024), (85.7988826816, 0.9023),			
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	(86.2625698324, 0.9021), (86.7262569832, 0.902), (87.1899441341, 0.9019), (87.6536312849, 0.9018), (88.1173184358, 0.9017), (88.5810055866, 0.9016), (89.0446927374, 0.9015), (89.5083798883, 0.9015), (89.9720670391, 0.9014), (90.4357541899, 0.9013), (90.8994413408, 0.9012), (91.3631284916, 0.9012), (91.8268156425, 0.9011), (92.2905027933, 0.901), (92.7541899441, 0.901), (93.217877095, 0.9009), (93.6815642458, 0.9009), (94.1452513966, 0.9008), (94.6089385475, 0.9008), (95.0726256983, 0.9007), (95.5363128492, 0.9007), (96.00, 0.9007)			
chg_in_JSY_payment_on_time	GRAPH(TIME) Points: (1.00, 1), (11.5555555556, 0.9786), (22.1111111111, 0.96187), (32.6666666667, 0.94669), (43.2222222222, 0.93541), (53.7777777778, 0.92451), (64.3333333333, 0.91751), (74.8888888889, 0.91051), (85.4444444444, 0.90545), (96.00, 0.90117)		unitless	
effect_of_ambulance_sufficiency_level_ on_home_delivery	GRAPH(ambulance_sufficiency_level) Points: (0.000, 1.1000), (0.0526315789474, 1.0790), (0.105263157895, 1.0451), (0.157894736842, 1.0000), (0.210526315789, 0.9459), (0.263157894737, 0.9086), (0.315789473684, 0.8875), (0.368421052632, 0.8735), (0.421052631579, 0.8607), (0.473684210526, 0.8514), (0.526315789474, 0.8409),		unitless	

	(0.578947368421, 0.8339), (0.631578947368, 0.8280), (0.684210526316, 0.8222), (0.736842105263, 0.8175), (0.789473684211, 0.8140), (0.842105263158, 0.808368111455), (0.894736842105, 0.804668421053), (0.947368421053, 0.802510526316), (1.000, 0.8013)			
effect_of_ambulance_sufficiency_on_out_of_pocket_transportation_cost	GRAPH(ambulance_sufficiency_level) Points: (0.000, 1.000), (0.100, 0.900), (0.200, 0.800), (0.300, 0.700), (0.400, 0.600), (0.500, 0.500), (0.600, 0.400), (0.700, 0.300), (0.800, 0.200), (0.900, 0.100), (1.000, 0.000)		unitless	
effect_of_chg_in_knowledge_on_home_delivery_Time_1	GRAPH(relative_chg_in_knowledge_Time_1) Points: (0.800, 1.1969), (1.000, 1.0000), (1.200, 0.8942), (1.400, 0.8381), (1.600, 0.8031), (1.800, 0.7821), (2.000, 0.7634), (2.200, 0.7471), (2.400, 0.7284), (2.600, 0.7144), (2.800, 0.7004), (3.000, 0.6817), (3.200, 0.6724), (3.400, 0.6630), (3.600, 0.6537), (3.800, 0.6397), (4.000, 0.6304), (4.200, 0.6257), (4.400, 0.6187), (4.600, 0.6117), (4.800, 0.6070), (5.000, 0.6000)		unitless	
effect_of_chg_in_knowledge_on_home_delivery_Time_2	GRAPH(relative_chg_in_knowledge_Time_2) Points: (0.700, 1.2977), (0.800, 1.2253), (0.900, 1.1249), (1.000, 1.0000), (1.100, 0.9451), (1.200, 0.9148), (1.300, 0.8844), (1.400, 0.8588), (1.500, 0.8377), (1.600, 0.8144), (1.700, 0.7957), (1.800, 0.7770), (1.900, 0.7654), (2.000, 0.7537), (2.100, 0.7420), (2.200, 0.7327), (2.300, 0.7257), (2.400, 0.7210), (2.500, 0.7163), (2.600, 0.7140), (2.700, 0.7093), (2.800, 0.7093), (2.900, 0.7070), (3.000, 0.7023)		unitless	
effect_of_chg_in_pcvd_preg_risk_on_switching_to_home_del_Time_2	GRAPH(Perceived_Pregnancy_Risk_Time_1) Points: (0.5000, 0.8012), (0.5500, 0.8234), (0.6000, 0.8504), (0.6500, 0.8750), (0.7000, 0.9008), (0.7500, 0.9328), (0.8000, 0.9697), (0.8500,		unitless	



	1.0066), (0.9000, 1.0643), (0.9500, 1.0926), (1.0000, 1.1000)			
effect_of_chg_in_pcvd_preg_risk_on_switching_to_home_del_Time_3	GRAPH(Perceived_Pregnancy_Risk_Time_2) Points: (0.5000, 0.8012), (0.5500, 0.8234), (0.6000, 0.8504), (0.6500, 0.8750), (0.7000, 0.9008), (0.7500, 0.9328), (0.8000, 0.9697), (0.8500, 1.0066), (0.9000, 1.0643), (0.9500, 1.0926), (1.0000, 1.1000)		unitless	
effect_of_chg_in_pcvd_preg_risk_on_switching_to_inst_del_Time_2	GRAPH(Perceived_Pregnancy_Risk_Time_1) Points: (0.5000, 1.0500), (0.5500, 1.0475), (0.6000, 1.0434), (0.6500, 1.0393), (0.7000, 1.0344), (0.7500, 1.0270), (0.8000, 1.0156), (0.8500, 1.0000), (0.9000, 0.9639), (0.9500, 0.9107), (1.0000, 0.8500)		unitless	
effect_of_chg_in_pcvd_preg_risk_on_switching_to_inst_del_Time_3	GRAPH(Perceived_Pregnancy_Risk_Time_2) Points: (0.5000, 1.0500), (0.5500, 1.0475), (0.6000, 1.0434), (0.6500, 1.0393), (0.7000, 1.0344), (0.7500, 1.0270), (0.8000, 1.0156), (0.8500, 1.0000), (0.9000, 0.9639), (0.9500, 0.9107), (1.0000, 0.8500)		unitless	
effect_of_facility_functionality_on_home_delivery	GRAPH(facility_functionality_indicator) Points: (0.500, 0.8500), (0.666666666667, 0.8745), (0.833333333333, 0.9183), (1.000, 1.0000), (1.166666666667, 1.0881), (1.333333333333, 1.1704), (1.500, 1.2290), (1.666666666667, 1.2740), (1.833333333333, 1.2910), (2.000, 1.2970)		unitless	
effect_of_JSY_attractiveness_on_home_delivery_Time_2	GRAPH(attractiveness_of_JSY_on_home_delivery_Time_2) Points: (0.000, 1.1980), (0.0588235294118, 1.1930), (0.117647058824, 1.1883), (0.176470588235, 1.1813), (0.235294117647, 1.1696), (0.294117647059, 1.1510), (0.352941176471, 1.1300), (0.411764705882, 1.0938),		unitless	

	(0.470588235294, 1.0412), (0.529411764706, 1.0000), (0.588235294118, 0.9665), (0.647058823529, 0.9479), (0.705882352941, 0.9339), (0.764705882353, 0.923497527683), (0.823529411765, 0.913334182258), (0.882352941176, 0.907283007093), (0.941176470588, 0.903896153401), (1.000, 0.9020)			
effect_of_pcvd_preg_risk_on_home_delivery_Time_1	GRAPH(SMTH1(actual_perceived_preg_risk_Time_1, 1)) Points: (0.000, 0.8016), (0.100, 0.8078), (0.200, 0.8233), (0.300, 0.8498), (0.400, 0.8981), (0.500, 1.0000), (0.600, 1.0903), (0.700, 1.1346), (0.800, 1.1650), (0.900, 1.1872), (1.000, 1.2000)		unitless	
effect_of_pcvd_preg_risk_on_home_delivery_Time_2	GRAPH(SMTH1(actual_perceived_preg_risk_Time_2, 1)) Points: (0.000, 0.9000), (0.100, 0.9070), (0.200, 0.9152), (0.300, 0.9304), (0.400, 0.9549), (0.500, 1.0000), (0.600, 1.0903), (0.700, 1.1346), (0.800, 1.1650), (0.900, 1.1872), (1.000, 1.2000)		unitless	
equilibrium_switch	1		unitless	
facility_functionality_indicator	Women_in_Health_Facilities / Facility_Capacity		unitless	
fract_ambulance_obsolete	init_fract_ambulance_obsolete		1/month	
fract_home_health_visit_hour_Time_2	1 - fract_home_social_visit_hour_Time_2		unitless	
fract_home_social_visit_hour_Time_2	0.5		unitless	
fract_home_switch_fr_Hm_to_Inst_del_Time_2	init_fract_home_switch_fr_Hm_to_Inst_del_Time_2 * effect_of_chg_in_pcvd_preg_risk_on_switching_to_inst_del_Time_2		1/month	
fract_of_JSY_applicants_received_payment_on_time	IF equilibrium_switch = 1 THEN init_fract_of_JSY_applicants_received_payment_on_time ELSE		unitless	

	init_fract_of_JSY_applicants_received_payment_on_time * chg_in_JSY_payment_on_time			
fract_of_preg_women_aware_of_free_ambulance_service	IF equilibrium_switch = 1 THEN init_fract_of_preg_women_aware_of_free_ambulance_service * TEST_fract_of_preg_women_aware_of_free_ambulance_service ELSE (1 - policy_switch) * init_fract_of_preg_women_aware_of_free_ambulance_service + policy_switch * (init_fract_of_preg_women_aware_of_free_ambulance_service * TEST_fract_of_preg_women_aware_of_free_ambulance_service)		unitless	
fract_of_women_delivered_at_home_cause_having_more_children	0.08		1/month	
fract_of_women_delivered_in_inst_cause_having_more_children	0.1		1/month	
fract_preg_women_Time_1	(Pregnant_Women_Time_1*1) / (total_women * 1)		unitless	
fract_preg_women_Time_2	Pregnant_Women_Time_2 / total_women		unitless	
fract_pregnant_women_receive_counseling_recognize_complications_seek_treatment_Time_1	init_fract_pregnant_women_receive_counseling_recognize_complications_seek_treatment_Time_1 * relative_chg_in_home_health_visit_hour_Time_1		unitless	Percentage of Women with Pregnant Complications Who Received Advice and Sought Treatment by Parity CHS R6-R11  svy, subpop(YMarg): tab Q231_AnyTmnt if ChildAge=="0to2" & Q262B_Any==1 & LivingChild==1-4  Par1 - 50.79% Par2 - 45.76% Par3 - 48.17% Par4 - 44.95%
fract_pregnant_women_receive_counseling_recognize_complications_seek_treatment_Time_2	init_fract_pregnant_women_receive_counseling_recognize_complications_seek_treatment_Time_2 *		unitless	Percentage of Women with Pregnant Complications Who Received Advice and Sought Treatment by Parity

	relative_chg_in_home_visit_hour_Time_2			CHS R6-R11  svy, subpop(YMarg): tab Q231_AnyTmnt if ChildAge=="0to2" & Q262B_Any==1 & LivingChild==1-4  Par1 - 50.79% Par2 - 45.76% Par3 - 48.17% Par4 - 44.95%
fract_women_del_at_home_Time_1	init_fract_women_del_at_home_Time_1 * effect_of_ambulance_sufficiency_level_on_home_delivery * effect_of_chg_in_knowledge_on_home_delivery_Time_1 * effect_of_pcvd_preg_risk_on_home_delivery_Time_1		unitless	
fract_women_del_at_home_Time_2	init_fract_women_del_at_home_Time_2 * effect_of_JSY_attractiveness_on_home_delivery_Time_2 * effect_of_ambulance_sufficiency_level_on_home_delivery * effect_of_facility_functionality_on_home_delivery * effect_of_chg_in_knowledge_on_home_delivery_Time_2 * effect_of_pcvd_preg_risk_on_home_delivery_Time_2		unitless	
fract_women_del_in_inst_Time_1	1 - fract_women_del_at_home_Time_1		unitless	
fract_women_del_in_inst_Time_2	1 - fract_women_del_at_home_Time_2		unitless	
fract_women_identified_in_ASHA_catchment_area	IF equilibrium_switch=1 THEN init_fract_women_identified_in_ASHA_catchment_area * TEST_fract_women_identified_in_ASHA_catchment_area ELSE (1 - policy_switch) * init_fract_women_identified_in_ASHA_catchment_area *		unitless	

	$\text{chg\_in\_fract\_women\_identified\_in\_ASHA\_catchment\_area} + \text{policy\_switch} * (\text{init\_fract\_women\_identified\_in\_ASHA\_catchment\_area} * \text{chg\_in\_fract\_women\_identified\_in\_ASHA\_catchment\_area} * \text{TEST\_fract\_women\_identified\_in\_ASHA\_catchment\_area})$			
fract_women_switch_fr_Inst_to_Hm_del_Time_2	$\text{init\_fract\_women\_switch\_fr\_Inst\_to\_Hm\_del\_Time\_2} * \text{effect\_of\_chg\_in\_pcvd\_preg\_risk\_on\_switching\_to\_home\_del\_Time\_2}$		1/month	
fract_work_hours_dedicated_for_home_visits	$\text{IF equilibrium\_switch} = 1 \text{ THEN } 0.3 * \text{TEST\_work\_hours\_dedicated\_for\_home\_visits} \text{ ELSE } (1 - \text{policy\_switch}) * 0.3 + \text{policy\_switch} * (0.3 * \text{TEST\_work\_hours\_dedicated\_for\_home\_visits})$		unitless	
gap_in_ambulance	ambulance_required - Ambulance		vehicle	
gap_in_ASHA_capacity	number_ASHA_required - ASHAs		ASHA	
gap_in_facility_capacity	Women_in_Health_Facilities - Facility_Capacity		person	
gap_in_perceived_preg_risk_Time_1	actual_perceived_preg_risk_Time_1 - Perceived_Pregnancy_Risk_Time_1		unitless	
gap_in_perceived_preg_risk_Time_2	actual_perceived_preg_risk_Time_2 - Perceived_Pregnancy_Risk_Time_2		unitless	
gap_in_preg_women_need_ambulance_service	actual_preg_women_need_ambulance_service - Pregnant_Women_Need_Ambulance_Service		person	
growth_rate_of_ASHA_capacity	0.0009		1/month	<p>"FLW Numbers_20170925_Training dashboard.xlsx"</p> <p>Total number of ASHAs in West Champaran in 2012 was 2,941 or 245 person/month. (ASHA Workers Performance and Incentives Portal <a href="http://ashwin.bih.nic.in/Ashwin/PublicReports/AshaFacilitatorConsolidatedActi">http://ashwin.bih.nic.in/Ashwin/PublicReports/AshaFacilitatorConsolidatedActi</a></p>

				<p>tyStatusRpt.aspx)</p> <p>"Details of ASHAs.xlsx" from CARE shows the number of ASHAs in West Champaran in 2021 was 3,230 or 269 person/month.</p> <p><math>(3230-2914) / (2020-2012) = 316/10 = 31.6</math> person/year</p> <p>growth rate of ASHAs is 1.08% per year or 0.09% per month</p>
growth_rate_of_medical_costs	$1 + \text{RAMP}(0.008, 2, 96)$		unitless	
home_health_visit_hours_Time_1	home_visit_hours_for_preg_women_Time_1		hour/month/person	
home_health_visit_hours_Time_2	home_visit_hours_for_preg_women_Time_2 * fract_home_health_visit_hour_Time_2		hour/month/person	
home_social_visit_hours_Time_2	home_visit_hours_for_preg_women_Time_2 * fract_home_social_visit_hour_Time_2		hour/month/person	
home_visit_hours_for_preg_women_Time_1	home_visit_hours_received_per_women_in_ASHA_catchment_area		hour/month/person	
home_visit_hours_for_preg_women_Time_2	home_visit_hours_received_per_women_in_ASHA_catchment_area		hour/month/person	
home_visit_hours_received_per_women_in_ASHA_catchment_area	ASHA_work_hours_dedicated_for_home_visit / number_of_women_identified_in_ASHA_catchment_area		hour/month/person	
init_ave_knowledge_per_preg_woman_Time_1	0.458		unitless	
init_ave_knowledge_per_preg_woman_Time_2	0.985		unitless	
init_facility_capacity	IF equilibrium_switch = 1 THEN 265 ELSE 274 * 0 + 180 * 0 + 200 * 1		person	

init_fract_ambulance_obsolete	0.0083		1/month	<a href="https://www.cms.gov/files/document/2019-12-05-ambulance-service-presentation.pdf">https://www.cms.gov/files/document/2019-12-05-ambulance-service-presentation.pdf</a>  Example: The annual straight line depreciation expense for a vehicle with a \$100,000 purchase price, a salvage value of \$20,000, and a 8-year estimated useful life is: $(\$100,000 - \$20,000) / 8 \text{ years}$ or \$10,000.  $0.1 / 12 \text{ months} = 0.0083 / \text{month}$
init_fract_home_switch_fr_Hm_to_Inst_del_Time_2	0.067/12		1/month	"Does the Preference for Location of Childbirth Change for Successive Births? Evidence from the States and Regions of India"  Adjusted:  Par2 - 0.067 Par3 - 0.088 Par4 - 0.109
init_fract_of_JSY_applicants_received_payment_on_time	0.193		unitless	
init_fract_of_preg_women_aware_of_free_ambulance_service	0.6		unitless	
init_fract_pregnant_women_receive_counseling_recognize_complications_seek_treatment_Time_1	0.5079		unitless	Percentage of Women with Pregnant Complications Who Received Advice and Sought Treatment by Parity CHS R6-R11  svy, subpop(YMarg): tab Q231_AnyTmnt if ChildAge=="0to2" & Q262B_Any==1 & LivingChild==1-4  Par1 - 50.79% Par2 - 45.76% Par3 - 48.17% Par4 - 44.95%

init_fract_pregnant_women_receive_counseling_recognize_complications_seek_treatment_Time_2	0.458		unitless	<p>Percentage of Women with Pregnant Complications Who Received Advice and Sought Treatment by Parity CHS R6-R11</p> <p>svy, subpop(YMarg): tab Q231_AnyTmnt if ChildAge=="0to2" &amp; Q262B_Any==1 &amp; LivingChild==1-4</p> <p>Par1 - 50.79% Par2 - 45.76% Par3 - 48.17% Par4 - 44.95%</p>
init_fract_women_del_at_home_Time_1	0.32 * TEST_init_fract_women_del_at_home_Time_1		unitless	
init_fract_women_del_at_home_Time_2	0.36 * TEST_init_fract_women_del_at_home_Time_2		unitless	
init_fract_women_identified_in_ASHA_catchment_area	0.9		unitless	
init_fract_women_switch_fr_Inst_to_Hm_del_Time_2	0.103/12		1/month	<p>"Does the Preference for Location of Childbirth Change for Successive Births? Evidence from the States and Regions of India"</p> <p>Adjusted:</p> <p>Par2 - 0.103 Par3 - 0.136 Par4 - 0.167</p>
init_home_health_visit_hour_Time_1	0.664		hour/month/person	
init_home_health_visit_hour_Time_2	0.332		hour/month/person	
init_medical_costs	1913		rupee	



inst_del_costs_covered_by_JSY	$\text{JSY\_payment\_per\_inst\_delivery} / \text{total\_institutional\_delivery\_costs}$		unitless	
institutional_delivery_rate_Parity_1	$(\text{preg\_women\_deliver\_in\_inst\_Time\_1} / \text{MAX}((\text{preg\_women\_deliver\_in\_inst\_Time\_1} + \text{preg\_women\_deliver\_at\_home\_Time\_1}), 0.01))$		unitless	
institutional_delivery_rate_Parity_2	$\text{preg\_women\_deliver\_in\_inst\_Time\_2} / (\text{preg\_women\_deliver\_in\_inst\_Time\_2} + \text{preg\_women\_deliver\_at\_home\_Time\_2})$		unitless	
JSY_payment_per_inst_delivery	IF equilibrium_switch = 1 THEN ave_JSY_payment_per_inst_del * TEST_JSY_payment ELSE (1- policy_switch) * ave_JSY_payment_per_inst_del + policy_switch * (ave_JSY_payment_per_inst_del * TEST_JSY_payment)		rupee	
JSY_referral_transport_cash_assistance	ave_JSY_referral_transport_cash_assistance * TEST_JSY_referral_transport_cash_assistance		rupee	
knowledge_gain_per_home_health_visit	IF equilibrium_switch = 1 THEN ave_knowledge_gain_per_home_health_visit * TEST_knowledge_gain_per_home_health_visit ELSE (1 - policy_switch) * ave_knowledge_gain_per_home_health_visit + policy_switch * (ave_knowledge_gain_per_home_health_visit * TEST_knowledge_gain_per_home_health_visit)		1/(hour/month/person)	
knowledge_gain_per_home_social_visit	0.3		1/(hour/month/person)	
number_ASHA_required	number_of_women_identified_in_ASHA_catchment_area /		ASHA	

	number_of_preg_women_cared_by_each_ASHA			
number_of_preg_women_cared_by_each_ASHA	7		person/ASHA	
number_of_women_identified_in_ASHA_catchment_area	$\begin{aligned} & \text{MAX} (((\text{Pregnant\_Women\_Time\_1} + \\ & \text{Pregnant\_Women\_Time\_2} + \\ & \text{Women\_Delivered\_in\_Institutions\_Time\_1} + \\ & \text{Women\_Delivered\_at\_Home\_Time\_1} + \\ & \text{Women\_Delivered\_in\_Institutions\_Time\_2} + \\ & \text{Women\_Delivered\_at\_Home\_Time\_2}) \\ & * \\ & \text{fract\_women\_identified\_in\_ASHA\_catchment\_area}), 1) \end{aligned}$		person	
number_women_served_per_vehicle	30		person/vehicle	
policy_switch	STEP (1, 97) * 0		unitless	
ref_inst_del_rate_CHS_parity_1	<p>GRAPH(TIME) Points: (13.00, 0.690), (14.00, 0.6919), (15.00, 0.6939), (16.00, 0.6958), (17.00, 0.6977), (18.00, 0.6997), (19.00, 0.7016), (20.00, 0.7036), (21.00, 0.7055), (22.00, 0.7075), (23.00, 0.7095), (24.00, 0.7115), (25.00, 0.7134), (26.00, 0.7154), (27.00, 0.7174), (28.00, 0.7194), (29.00, 0.7214), (30.00, 0.7234), (31.00, 0.7254), (32.00, 0.7275), (33.00, 0.7295), (34.00, 0.7315), (35.00, 0.7336), (36.00, 0.7356), (37.00, 0.740), (38.00, 0.7362), (39.00, 0.7323), (40.00, 0.7285), (41.00, 0.7247), (42.00, 0.721), (43.00, 0.7172), (44.00, 0.7135), (45.00, 0.7098), (46.00, 0.7061), (47.00, 0.7024), (48.00, 0.6988), (49.00, 0.690), (50.00, 0.6977), (51.00, 0.7055), (52.00, 0.7133), (53.00, 0.7213), (54.00, 0.7293), (55.00, 0.7375), (56.00, 0.7457), (57.00, 0.754), (58.00, 0.7624), (59.00, 0.7709), (60.00, 0.7795), (61.00, 0.790), (62.00, 0.7877), (63.00, 0.7854), (64.00, 0.7831), (65.00, 0.7808), (66.00, 0.7785), (67.00, 0.7763), (68.00, 0.774),</p>		unitless	

	(69.00, 0.7717), (70.00, 0.7695), (71.00, 0.7672), (72.00, 0.765), (73.00, 0.760), (74.00, 0.7612), (75.00, 0.7623), (76.00, 0.7635), (77.00, 0.7646), (78.00, 0.7658), (79.00, 0.7669), (80.00, 0.7681), (81.00, 0.7693), (82.00, 0.7704), (83.00, 0.7716), (84.00, 0.7728), (85.00, 0.774), (86.00, 0.7751), (87.00, 0.7763), (88.00, 0.7775), (89.00, 0.7787), (90.00, 0.7799), (91.00, 0.781), (92.00, 0.7822), (93.00, 0.7834), (94.00, 0.7846), (95.00, 0.7858), (96.00, 0.790)			
ref_inst_del_rate_CHS_parity_2	<p>GRAPH(TIME) Points: (13.00, 0.710), (14.00, 0.7069), (15.00, 0.7039), (16.00, 0.7008), (17.00, 0.6978), (18.00, 0.6947), (19.00, 0.6917), (20.00, 0.6887), (21.00, 0.6858), (22.00, 0.6828), (23.00, 0.6798), (24.00, 0.6769), (25.00, 0.6739), (26.00, 0.671), (27.00, 0.6681), (28.00, 0.6652), (29.00, 0.6623), (30.00, 0.6595), (31.00, 0.6566), (32.00, 0.6538), (33.00, 0.6509), (34.00, 0.6481), (35.00, 0.6453), (36.00, 0.6425), (37.00, 0.630), (38.00, 0.6269), (39.00, 0.6239), (40.00, 0.6208), (41.00, 0.6178), (42.00, 0.6148), (43.00, 0.6118), (44.00, 0.6088), (45.00, 0.6058), (46.00, 0.6028), (47.00, 0.5999), (48.00, 0.597), (49.00, 0.590), (50.00, 0.5892), (51.00, 0.5885), (52.00, 0.5877), (53.00, 0.5869), (54.00, 0.5862), (55.00, 0.5854), (56.00, 0.5846), (57.00, 0.5839), (58.00, 0.5831), (59.00, 0.5824), (60.00, 0.5816), (61.00, 0.580), (62.00, 0.5885), (63.00, 0.597), (64.00, 0.6058), (65.00, 0.6146), (66.00, 0.6236), (67.00, 0.6327), (68.00, 0.6419), (69.00, 0.6513), (70.00, 0.6608), (71.00, 0.6704), (72.00, 0.6802), (73.00, 0.690), (74.00, 0.6873), (75.00, 0.6846), (76.00, 0.682), (77.00, 0.6793), (78.00, 0.6766), (79.00, 0.674), (80.00, 0.6714), (81.00, 0.6688), (82.00, 0.6661), (83.00, 0.6635), (84.00, 0.661), (85.00, 0.6584), (86.00, 0.6558), (87.00, 0.6532), (88.00, 0.6507),</p>		unitless	

	(89.00, 0.6482), (90.00, 0.6456), (91.00, 0.6431), (92.00, 0.6406), (93.00, 0.6381), (94.00, 0.6356), (95.00, 0.6331), (96.00, 0.620)			
relative_chg_in_home_health_visit_hour_Time_1	home_health_visit_hours_Time_1 / init_home_health_visit_hour_Time_1		unitless	
relative_chg_in_home_visit_hour_Time_2	home_health_visit_hours_Time_2 / init_home_health_visit_hour_Time_2		unitless	
relative_chg_in_knowledge_Time_2	ave_knowledge_per_preg_woman_Time_2 / init_ave_knowledge_per_preg_woman_Time_2		unitless	
relative_chg_in_knowledge_Tmie_1	ave_knowledge_per_preg_woman_Time_1 / init_ave_knowledge_per_preg_woman_Time_1		unitless	
TEST_adj_time_for_ambulance	1 - STEP(0.5, 36) * 0 - STEP(0.5, 97) * 0		unitless	
TEST_adj_time_for_ASHA_capacity	1 - STEP(0.5, 36) * 0 - STEP(0.5, 97) * 0		unitless	
TEST_fract_of_JSY_applicants_received_payment_on_time	1 + STEP(3, 36) * 0 + STEP(1, 97) * 0		unitless	
TEST_fract_of_preg_women_aware_of_free_ambulance_service	1 + STEP (0.5, 36) * 0 + STEP (0.5, 97) * 0		unitless	
TEST_fract_women_identified_in_ASHA_catchment_area	1 + STEP(0.1, 36) * 0 + STEP(0.1, 97) * 0		unitless	
TEST_inflow_of_first_time_preg_women	1 - STEP(1, 36) * 0		unitless	
TEST_init_fract_women_del_at_home_Time_1	1 + STEP (2, 36) * 0		unitless	
TEST_init_fract_women_del_at_home_Time_2	1 + STEP (2, 36) * 0		unitless	
TEST_JSY_payment	1 + STEP (0.25, 36) * 0 + STEP (0.25, 97) * 0		unitless	
TEST_JSY_referral_transport_cash_assistance	1 + STEP(0.3, 36) * 0		unitless	

TEST_knowledge_gain_per_home_health_visit	$1 + \text{STEP}(0.2, 36) * 0 + \text{STEP}(0.2, 97) * 0$		unitless	
TEST_time_to_adj_facility_capacity	$1 - \text{STEP}(0.5, 36) * 0 - \text{STEP}(0.5, 97) * 0$		unitless	
TEST_time_to_report_need_for_ambulance_service	$1 - \text{STEP}(0.5, 36) * 0 - \text{STEP}(0.5, 97) * 0$		unitless	
TEST_work_hours_dedicated_for_home_visits	$1 + \text{STEP}(0.1, 36) * 0 + \text{STEP}(0.1, 97) * 0$		unitless	
time_to_adj_facility_capacity	IF equilibrium_switch = 1 THEN ave_time_to_adj_facility_capacity * TEST_time_to_adj_facility_capacity ELSE (1 - policy_switch) * ave_time_to_adj_facility_capacity + policy_switch * (ave_time_to_adj_facility_capacity * TEST_time_to_adj_facility_capacity)		month	
time_to_adjust_ASHA_capacity	IF equilibrium_switch = 1 THEN ave_time_to_adjust_ASHA_capacity * TEST_adj_time_for_ASHA_capacity ELSE (1 - policy_switch) * ave_time_to_adjust_ASHA_capacity + policy_switch * (ave_time_to_adjust_ASHA_capacity * TEST_adj_time_for_ASHA_capacity)		month	
time_to_adjust_number_of_ambulance	IF equilibrium_switch = 1 THEN ave_time_to_adjust_number_of_ambulance * TEST_adj_time_for_ambulance ELSE (1-policy_switch) * ave_time_to_adjust_number_of_ambulance + policy_switch * (ave_time_to_adjust_number_of_ambulance * TEST_adj_time_for_ambulance)		month	
time_to_recognize_preg_women_need_ambulance_service	IF equilibrium_switch = 1 THEN ave_time_to_recognize_preg_women_need_ambulance_service * TEST_time_to_report_need_for_ambulance_service ELSE (1 - policy_switch) * ave_time_to_recognize_preg_women_need_ambulance_service + policy_switch * (ave_time_to_recognize_preg_women_n		month	

	eed_ambulance_service * TEST_time_to_report_need_for_ambulance_service)			
time_to_update_perceived_preg_risk_Time_1	24+12		month	
time_to_update_perceived_preg_risk_Time_2	24		month	
total_ASHA_monthly_work_hours	MAX (ASHAs, 0) * work_hour_per_ASHA_per_month		hour/month	
total_institutional_delivery_costs	ave_medical_costs + ave_out_of_pocket_transportation_cost		rupee	National Family Health Survey - 5 (2019-20)  Average out-of-pocket expenditure per delivery in a public health facility  2019 - 20 : Rs. 3172 2015 - 16 : Rs. 1882
total_women	Pregnant_Women_Time_1 + Pregnant_Women_Time_2 + Women_Delivered_in_Institutions_Time_1 + Women_Delivered_at_Home_Time_1 + Women_Delivered_in_Institutions_Time_2 + Women_Delivered_at_Home_Time_2		person	
women_age_15_to_26_getting_preg_first_time	GRAPH(TIME) Points: (1.00, 184.00), (2.00, 184.50), (3.00, 184.90), (4.00, 185.40), (5.00, 185.90), (6.00, 186.30), (7.00, 186.80), (8.00, 187.20), (9.00, 187.70), (10.00, 188.20), (11.00, 188.60), (12.00, 189.10), (13.00, 189.60), (14.00, 190.00), (15.00, 190.50), (16.00, 190.90), (17.00, 191.40), (18.00, 191.90), (19.00, 192.30), (20.00, 192.80), (21.00, 193.30), (22.00, 193.70), (23.00, 194.20), (24.00, 194.70), (25.00, 195.10), (26.00, 195.60), (27.00, 196.00), (28.00, 196.50), (29.00, 197.00), (30.00, 197.40), (31.00, 197.90), (32.00, 198.40), (33.00, 198.80), (34.00, 199.30), (35.00, 199.70), (36.00, 200.20),		person/month	

	(37.00, 200.70), (38.00, 201.10), (39.00, 201.60), (40.00, 202.10), (41.00, 202.50), (42.00, 203.00), (43.00, 203.50), (44.00, 203.90), (45.00, 204.40), (46.00, 204.80), (47.00, 205.30), (48.00, 205.80), (49.00, 206.20), (50.00, 206.70), (51.00, 207.20), (52.00, 207.60), (53.00, 208.10), (54.00, 208.50), (55.00, 209.00), (56.00, 209.50), (57.00, 209.90), (58.00, 210.40), (59.00, 210.90), (60.00, 211.30), (61.00, 211.80), (62.00, 212.30), (63.00, 212.70), (64.00, 213.20), (65.00, 213.60), (66.00, 214.10), (67.00, 214.60), (68.00, 215.00), (69.00, 215.50), (70.00, 216.00), (71.00, 216.40), (72.00, 216.90), (73.00, 217.30), (74.00, 217.80), (75.00, 218.30), (76.00, 218.70), (77.00, 219.20), (78.00, 219.70), (79.00, 220.10), (80.00, 220.60), (81.00, 221.10), (82.00, 221.50), (83.00, 222.00), (84.00, 222.40), (85.00, 222.90), (86.00, 223.40), (87.00, 223.80), (88.00, 224.30), (89.00, 224.80), (90.00, 225.20), (91.00, 225.70), (92.00, 226.10), (93.00, 226.60), (94.00, 227.10), (95.00, 227.50), (96.00, 228.00)			
women_delivered_at_home_will_deliver_in_inst_Time_2	DELAYN(Women_Delivered_at_Home_Time_1 * fract_home_switch_fr_Hm_to_Inst_del_Time_2, ave_birth_spacing_interval_home_del, 1)		person/month	
women_will_deliver_at_home_for_pregnancy_Time_2	DELAYN(Women_Delivered_in_Institutions_Time_1 * fract_women_switch_fr_Inst_to_Hm_del_Time_2, ave_birth_spacing_interval_inst_del, 1)		person/month	
work_hour_per_ASHA_per_month	20		hour/ASHA/month	

Run Specs	
Start Time	13
Stop Time	96
DT	1/4
Fractional DT	True
Save Interval	0.25
Sim Duration	1.5
Time Units	Months
Pause Interval	0
Integration Method	Euler
Keep all variable results	True
Run By	Run
Calculate loop dominance information	True
Exhaustive Search Threshold	1000



