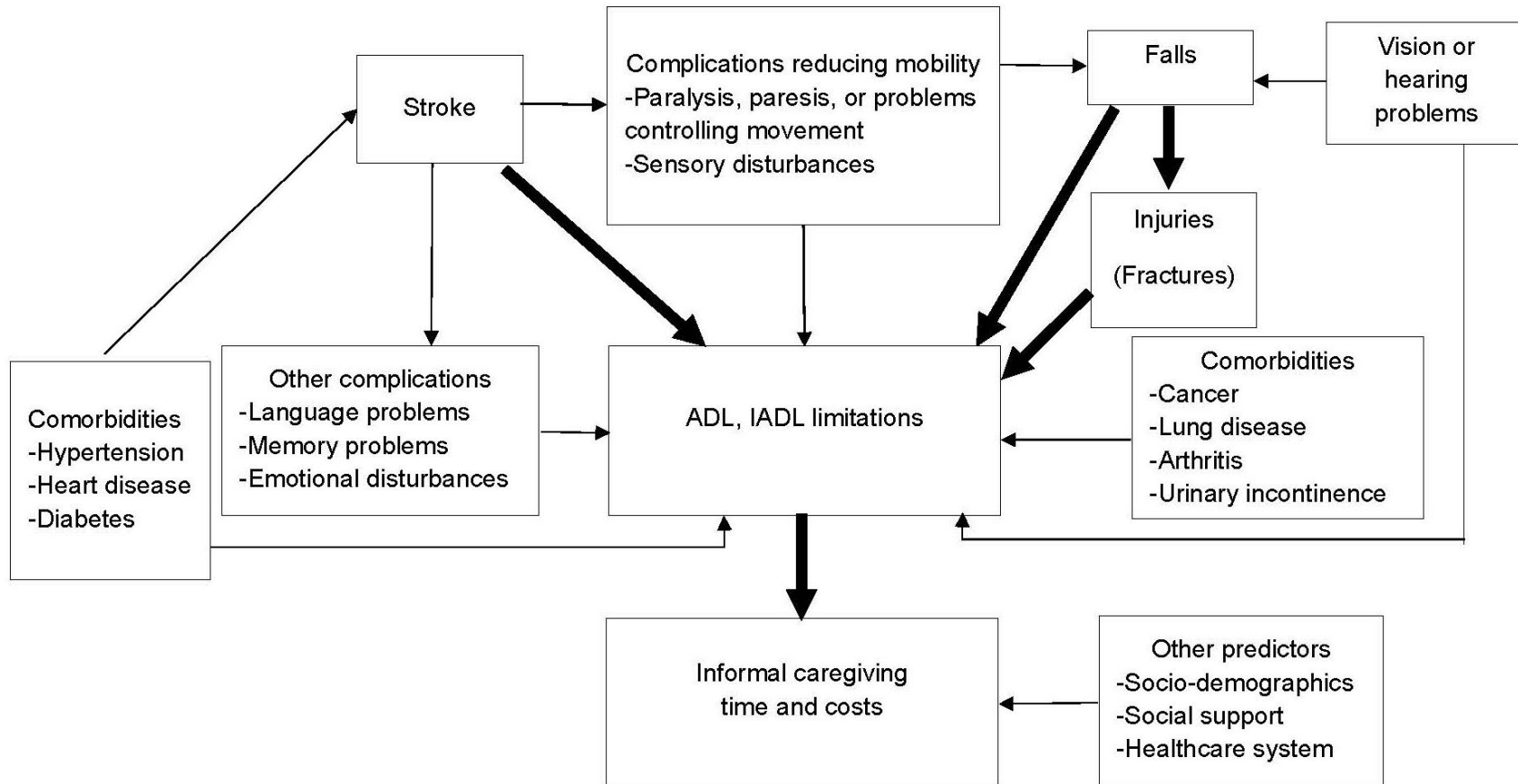


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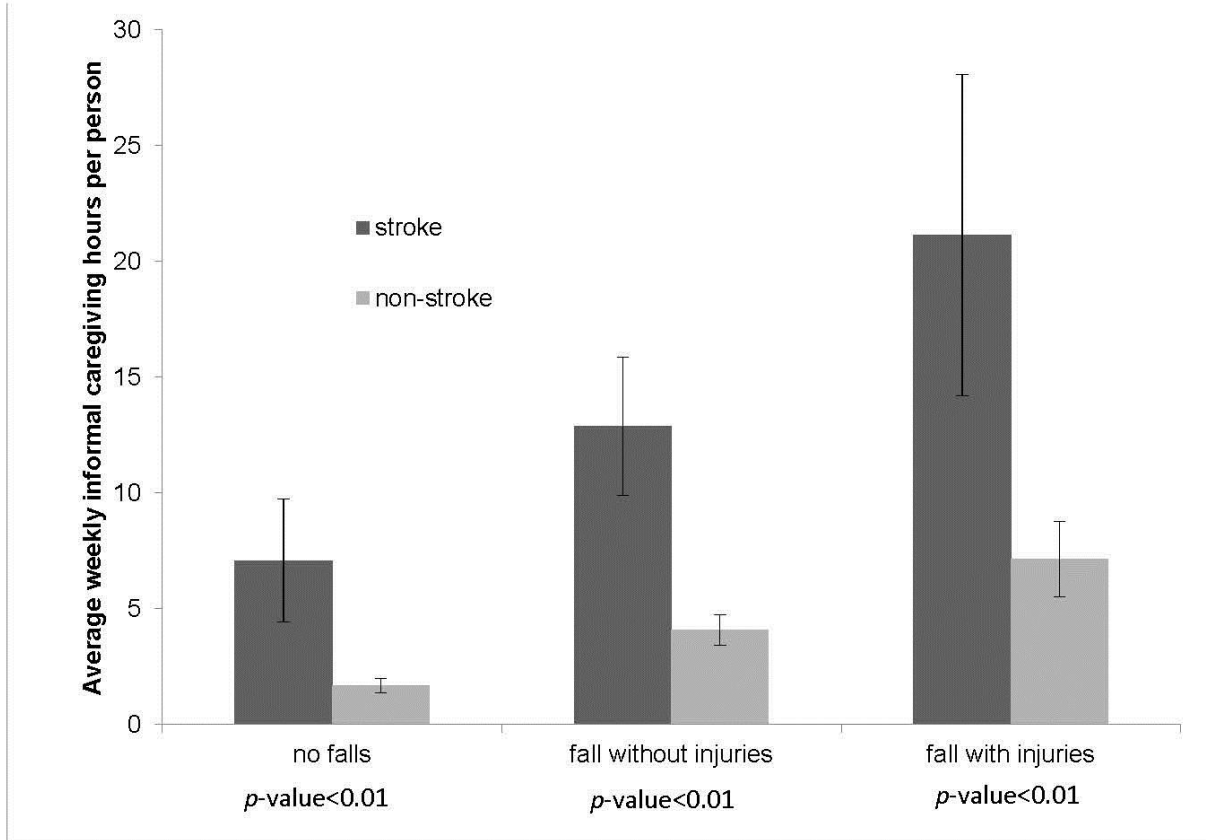
**Appendix Figure 1.** Conceptual model of informal caregiving for stroke and falls.



ADL, Activities of Daily Life, IADL, Instrumental Activities of Daily Life

**Appendix**  
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**Appendix Figure 2.** Weekly hours of informal caregiving in stroke versus non-stroke group for those with no falls and those with falls, by injury status.



Notes: Error bars show 95% CIs.

**Appendix**  
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**Appendix Table 1.** Estimates From Two-part Models

Independent variables	Stroke (N=970)		Non-stroke (N=9,159)		Total (N=10,129)	
	Coef.	<i>p</i> -value	Coef.	<i>p</i> -value	Coef.	<i>p</i> -value
The first part (logit regression)						
Fall without injury	0.724	<0.001	0.697	<0.001	0.725	<0.001
Fall with injury	1.443	<0.001	0.941	<0.001	1.049	<0.001
Race/Ethnicity						
Non-Hispanic black	1.045	0.003	0.256	0.070	0.396	0.003
Hispanic	0.935	0.002	0.362	0.009	0.408	0.001
Other races	-0.927	0.107	0.250	0.401	0.116	0.685
Female	0.150	0.466	0.116	0.169	0.094	0.244
Age, years						
75–84	0.675	0.001	0.566	<0.001	0.594	<0.001
≥85	1.082	<0.001	1.482	<0.001	1.418	<0.001
Education						
High school	-0.142	0.477	-0.431	<0.001	-0.383	<0.001
Some college	-0.272	0.288	-0.606	<0.001	-0.546	<0.001
College and more	-0.156	0.518	-0.800	<0.001	-0.677	<0.001
Currently married	0.688	0.003	0.473	<0.001	0.511	<0.001
# of chronic conditions						
2–3	0.492	0.257	0.831	<0.001	0.877	<0.001
≥4	1.265	0.003	1.695	<0.001	1.789	<0.001
Total non-housing wealth (U.S. \$)						
≤6,000	0.097	0.661	0.281	0.004	0.250	0.003
66,001–306,000	-0.349	0.144	-0.350	0.002	-0.362	<0.001
>306,000	-0.192	0.467	-0.183	0.116	-0.222	0.048
Formal caregiving utilization	1.466	<0.001	1.922	<0.001	1.851	<0.001
Constant	-3.248	<0.001	-3.918	<0.001	-3.982	<0.001
The second part (ordinary least squares regression)						
Fall without injury	0.059	0.802	0.043	0.666	0.055	0.531
Fall with injury	0.122	0.597	0.353	0.010	0.317	0.006
Race/Ethnicity						
Non-Hispanic black	0.493	0.046	0.414	<0.001	0.472	<0.001
Hispanic	0.623	0.004	0.289	0.109	0.353	0.032
Other races	0.383	0.369	1.085	<0.001	1.032	<0.001
Female	0.092	0.515	0.150	0.140	0.118	0.155
Age, years						
75–84	-0.048	0.838	0.047	0.647	0.049	0.616

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≥85	0.300	0.150	0.202	0.069	0.222	0.018
<b>Education</b>						
High school	0.039	0.835	-0.227	0.052	-0.151	0.152
Some college	-0.060	0.824	-0.208	0.112	-0.167	0.143
College and more	-0.048	0.857	-0.072	0.633	-0.026	0.820
Currently married	0.673	0.007	0.417	<0.001	0.463	<0.001
<b># of chronic conditions</b>						
2-3	0.377	0.440	0.012	0.945	0.050	0.767
≥4	0.196	0.662	0.180	0.292	0.258	0.111
<b>Total non-housing wealth (U.S. \$)</b>						
≤6,000	0.062	0.824	0.179	0.075	0.156	0.123
66,001-306,000	-0.056	0.844	-0.147	0.361	-0.139	0.321
>306,000	-0.146	0.650	-0.217	0.160	-0.211	0.117
Formal caregiving	0.269	0.229	0.312	0.020	0.329	0.003
Constant	1.848	0.001	1.835	<0.001	1.773	<0.001

Coef., coefficient

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**Appendix Table 2.** Marginal Effects (ME) From Two-part Models

Independent variables	Stroke (N=970)		Non-stroke (N=9,159)		Total (N=10,129)	
	ME	<i>p</i> -value	ME	<i>p</i> -value	ME	<i>p</i> -value
Fall without injury	5.26	0.096	1.70	<0.001	2.12	<0.001
Fall with injury	10.54	0.001	3.28	<0.001	4.06	<0.001
<b>Race/ethnicity</b>						
Non-Hispanic black	12.77	<0.001	1.96	<0.001	3.00	<0.001
Hispanic	13.74	<0.001	1.78	0.025	2.54	0.004
Other races	-0.90	0.889	4.21	<0.001	4.60	0.001
Female	2.10	0.298	0.76	0.026	0.74	0.038
<b>Age, years</b>						
75–84	3.60	0.194	1.42	0.001	1.76	<0.001
≥85	10.56	0.002	3.98	<0.001	4.63	<0.001
<b>Education</b>						
High school	-0.49	0.870	-1.72	<0.001	-1.63	0.001
Some college	-2.45	0.460	-2.05	0.001	-2.12	0.001
College and more	-1.58	0.645	-2.02	0.002	-1.88	0.001
Currently married	12.84	<0.001	2.46	<0.001	3.27	<0.001
<b>Number of chronic conditions</b>						
2–3	7.85	0.246	1.89	0.008	2.50	0.003
≥4	10.37	0.108	4.38	<0.001	5.75	<0.001
<b>Total non-housing wealth (U.S. \$)</b>						
≤6,000	1.39	0.707	1.23	<0.001	1.30	0.003
66,001–306,000	-2.90	0.476	-1.27	0.025	-1.52	0.014
>306,000	-3.05	0.500	-1.14	0.045	-1.46	0.022
Formal caregiving utilization	12.56	<0.001	5.33	<0.001	6.21	<0.001

**Appendix**  
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**Appendix Table 3.** Lower-bound Estimates of Incremental Hours and Economic Burden of Informal Caregiving Associated With Falls With and Without Injuries, per Person

Model <sup>a</sup> /Fall status <sup>b</sup>	Weekly hours <sup>c,d</sup>	Annual economic burden	
		Per patient (\$) <sup>d,e</sup>	National estimates (\$ billion) <sup>d,f</sup>
<b>Stroke</b>			
Falls without injuries	5.26 (-0.94, 11.46)	1,983 (-354, 4,320)	2.18 (-0.39, 4.75)
Fall with injuries	<b>10.54</b> (4.10, 16.98)	<b>3,974</b> (1,546, 6,401)	<b>1.99</b> (0.77, 3.20)
<b>Non-stroke</b>			
Falls without injuries	<b>1.70</b> (0.97, 2.42)	<b>641</b> (366, 912)	<b>5.58</b> (3.18, 7.94)
Fall with injuries	<b>3.28</b> (2.17, 4.39)	<b>1,237</b> (818, 1,655)	<b>4.45</b> (2.95, 5.96)
<b>Total</b>			
Falls without injuries	<b>2.12</b> (1.34, 2.90)	<b>799</b> (505, 1,093)	<b>7.91</b> (5.00, 10.82)
Fall with injuries	<b>4.06</b> (3.02, 5.11)	<b>1,531</b> (1,139, 1,926)	<b>6.43</b> (4.78, 8.09)

Notes: Boldface indicates statistical significance ( $p < 0.05$ ).

<sup>a</sup> Authors conducted three two-part models separately, using different samples. The first model used stroke survivors only, the second used those who never had a stroke only, and the last model used all samples.

<sup>b</sup> Fall status is the main independent variable. Other independent variables used in the model is shown in footnote C.

<sup>c</sup> Estimated results are from two-part models with adjustment for race, gender, age, marital status, education, number of chronic diseases (0–1, 2–3, and  $\geq 4$ ), net total non-housing wealth, and usage of formal caregiving.

<sup>d</sup> Numbers in brackets are the 95% CIs.

<sup>e</sup> Per-patient lower-bound annual economic burden of informal caregiving associated with falls with and without injuries were estimated by multiplying total weekly hours by 52 weeks and then multiplying the product by the federal minimum wage (\$7.25/hour) supplied by Wage and Hour Division in the U.S. Department of Labor.

<sup>f</sup> National estimates were derived by multiplying the per capita annual economic burden of informal caregiving times the national estimate of people with stroke and without stroke aged  $\geq 65$  years from 2010 HRS by their experience with falling.