

Reinterventions exploration

Controlling Variables

```
cat(controlling_vars %>% as.yaml())
```

- Age
- Gender
- Site
- Prior Spine Surgery
- ASA classification
- 3CO
- SPOs
- BMI_First Visit
- Tobacco use_First Visit
- Osteoporosis / osteopenia
- LGap
- Global Tilt
- ideal LL
- Lordosis (top of L1-S1)
- RLL
- ODI - Score (%)_First Visit
- SRS22 - SRS Total score_First Visit
- SF36 - PCS_First Visit
- SF36 - MCS_First Visit
- Major curve Cobb angle

Proportion of reinterventions by year

	year	N	prop
1:	1	59	35.8
2:	2	27	16.4
3:	3	19	11.5
4:	4	20	12.1
5:	5	15	9.1
6:	6	10	6.1
7:	7	7	4.2
8:	8	7	4.2
9:	9	1	0.6

Reinterventions Impact

odi

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	4.966709	1.522584	0.0012865	1.965606	7.967813	-12.077	41.12562
2	4.879255	1.437928	0.0008178	2.045519	7.712992	-10.109	48.26790
3	5.259115	1.633384	0.0016508	2.025128	8.493102	-11.542	45.56634
4	2.507754	1.811864	0.1695450	-1.088767	6.104275	-9.094	27.57530
5	4.695476	1.334178	0.0005680	2.059958	7.330994	-9.428	49.80426

srss

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	-0.1475420	0.0684007	0.0321183	-0.2823675	-0.0127166	0.709	20.80516
2	-0.1576276	0.0578103	0.0069071	-0.2715519	-0.0437033	0.659	23.91921
3	-0.1410390	0.0618450	0.0242700	-0.2634380	-0.0186400	0.700	20.14843
4	-0.0696183	0.0663575	0.2967481	-0.2013370	0.0621004	0.585	11.89252
5	-0.1859493	0.0577773	0.0015645	-0.3000648	-0.0718339	0.615	30.24039

pcs

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	-1.7676473	0.8975770	0.0502088	-3.536919	0.0016241	5.852	30.20672
2	-1.1040904	0.7827849	0.1598278	-2.646885	0.4387048	5.778	19.10928
3	-2.1127379	0.8669075	0.0162731	-3.829155	-0.3963213	6.717	31.45252
4	-0.9788755	0.9684080	0.3147306	-2.901942	0.9441909	5.958	16.42947
5	-1.6663084	0.7203007	0.0220439	-3.089402	-0.2432148	5.349	31.15334

mcs

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	-3.0182627	1.2249097	0.0145290	-5.432760	-0.6037649	4.342	69.51583
2	-2.2263823	0.9185224	0.0161714	-4.036703	-0.4160614	3.786	58.80762
3	-0.7191905	0.9831568	0.4658929	-2.665773	1.2273917	4.073	17.65824
4	-1.1672607	1.0062184	0.2489991	-3.165411	0.8308897	0.954	122.36594
5	-2.3149951	0.8009945	0.0044106	-3.897432	-0.7325581	3.504	66.07312

Time Last Operation Impact

odi

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	-18.4545256	8.426678	0.0296039	-35.064446	-1.844605	-12.077	152.8081736
2	-3.3701729	3.229806	0.2978754	-9.735333	2.994987	-10.109	33.3393450
3	-1.6234546	2.646735	0.5407957	-6.864255	3.617346	-11.542	14.0660325
4	-0.0910887	2.470613	0.9706669	-4.995875	4.813697	-9.094	1.0016131
5	-0.0897263	1.249195	0.9428325	-2.557497	2.378044	-9.428	0.9517147

srss

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	0.8410495	0.3628505	0.0214041	0.1258117	1.5562873	0.709	118.597894
2	0.2340668	0.1308823	0.0750789	-0.0238639	0.4919976	0.659	35.518489
3	0.0799069	0.0991638	0.4218968	-0.1163661	0.2761798	0.700	11.415268
4	0.0795924	0.0898932	0.3781706	-0.0988681	0.2580529	0.585	13.596343
5	0.0404435	0.0533910	0.4498873	-0.0650138	0.1459009	0.615	6.577214

pcs

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	0.7004176	4.8226962	0.8846644	-8.806163	10.2069985	5.852	11.969195
2	-0.4698833	1.7734790	0.7912995	-3.965333	3.0255664	5.778	8.132607
3	0.7891533	1.4000044	0.5740332	-1.982995	3.5613018	6.717	11.748197
4	0.2082904	1.3601548	0.8786254	-2.493094	2.9096753	5.958	3.495953
5	-0.5757842	0.6628848	0.3864423	-1.885511	0.7339428	5.349	10.764876

mcs

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	-1.4591341	6.5810246	0.8247465	-14.4317617	11.513493	4.342	33.606391
2	4.8969766	2.0546237	0.0180159	0.8474030	8.946550	3.786	129.348655
3	-0.1812165	1.5897716	0.9094386	-3.3291230	2.966690	4.073	4.449398
4	0.5410499	1.4123146	0.7025335	-2.2639287	3.346029	0.954	56.719191
5	0.9442100	0.7349755	0.2008577	-0.5078766	2.396297	3.504	26.949040

Hospitalization Time Impact

odi

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	0.1296905	0.1143905	0.2581670	-0.0957860	0.3551669	-12.077	1.0738703
2	0.0326514	0.1036273	0.7529944	-0.1715727	0.2368755	-10.109	0.3230031
3	-0.1418101	0.2305270	0.5396262	-0.5982765	0.3146563	-11.542	1.2286794
4	0.0358988	0.2319921	0.8773535	-0.4246637	0.4964612	-9.094	0.3947436
5	0.0934964	0.1356732	0.4917789	-0.1745244	0.3615172	-9.428	0.9917032

srss

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	-0.0057484	0.0049971	0.2512894	-0.0155984	0.0041016	0.709	0.8105868
2	-0.0016989	0.0047859	0.7229369	-0.0111305	0.0077326	0.659	0.2578030
3	0.0073799	0.0058977	0.2131748	-0.0042933	0.0190530	0.700	1.0542668
4	0.0047246	0.0084843	0.5789269	-0.0121188	0.0215681	0.585	0.8070861
5	-0.0034662	0.0058818	0.5564981	-0.0150839	0.0081515	0.615	0.5637029

pcs

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	-0.1196534	0.0709034	0.0929674	-0.2594194	0.0201126	5.852	2.044716
2	-0.1453296	0.0582782	0.0133878	-0.2601935	-0.0304658	5.778	2.515324
3	0.1017795	0.1212521	0.4029258	-0.1383118	0.3418708	6.717	1.515201
4	-0.2765079	0.1390987	0.0498006	-0.5527698	-0.0002459	5.958	4.640916
5	-0.1543573	0.0725049	0.0348828	-0.2976124	-0.0111023	5.349	2.885868

mcs

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	-0.1547463	0.0968270	0.1114938	-0.3456134	0.0361207	4.342	3.5640766
2	-0.0012089	0.0693568	0.9861090	-0.1379081	0.1354902	3.786	0.0319330
3	-0.1401774	0.1373182	0.3094096	-0.4120811	0.1317263	4.073	3.4417680
4	0.1209338	0.1470614	0.4130124	-0.1711429	0.4130104	0.954	12.6776929
5	0.0052834	0.0818260	0.9486021	-0.1563797	0.1669465	3.504	0.1507959

Blood Loss Impact

odi

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	0.0006639	0.0009404	0.4813122	-0.0011944	0.0025221	-12.077	0.0054970
2	0.0018922	0.0009744	0.0539843	-0.0000328	0.0038172	-10.109	0.0187184
3	0.0009724	0.0012545	0.4400911	-0.0015165	0.0034612	-11.542	0.0084250
4	-0.0007565	0.0018738	0.6874774	-0.0044847	0.0029717	-9.094	0.0083184
5	0.0005107	0.0013737	0.7108261	-0.0022132	0.0032345	-9.428	0.0054168

srss

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	-8.00e-07	4.13e-05	0.9845694	-0.0000824	0.0000808	0.709	0.0001129
2	1.82e-05	4.18e-05	0.6638271	-0.0000644	0.0001009	0.659	0.0027653
3	-1.50e-05	5.09e-05	0.7690034	-0.0001159	0.0000859	0.700	0.0021411
4	6.99e-05	6.79e-05	0.3065481	-0.0000652	0.0002050	0.585	0.0119358
5	-7.49e-05	6.39e-05	0.2432638	-0.0002016	0.0000517	0.615	0.0121889

pcs

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	-0.0006810	0.0005392	0.2085675	-0.0017465	0.0003845	5.852	0.0116371
2	0.0000379	0.0005772	0.9476857	-0.0011024	0.0011782	5.778	0.0006566
3	-0.0006783	0.0006965	0.3324706	-0.0020599	0.0007034	6.717	0.0100973
4	-0.0006160	0.0009823	0.5323703	-0.0025710	0.0013389	5.958	0.0103396
5	-0.0004230	0.0007866	0.5919314	-0.0019834	0.0011374	5.349	0.0079083

mcs

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	0.0007334	0.0007673	0.3407160	-0.0007830	0.0022498	4.342	0.0168924
2	0.0002154	0.0006746	0.7498826	-0.0011172	0.0015481	3.786	0.0056905
3	-0.0001335	0.0008347	0.8732094	-0.0017893	0.0015222	4.073	0.0032788
4	0.0027518	0.0010013	0.0073999	0.0007593	0.0047444	0.954	0.2884764
5	-0.0005542	0.0009080	0.5429868	-0.0023552	0.0012468	3.504	0.0158174

Surgical Time Impact

odi

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	-0.0041438	0.0075046	0.5814198	-0.0189374	0.0106498	-12.077	0.0343115
2	-0.0058234	0.0084428	0.4910916	-0.0224634	0.0108167	-10.109	0.0576073
3	-0.0046719	0.0109040	0.6690966	-0.0262649	0.0169210	-11.542	0.0404789
4	-0.0019872	0.0155043	0.8982867	-0.0327672	0.0287928	-9.094	0.0218509
5	-0.0088570	0.0105549	0.4026996	-0.0297091	0.0119951	-9.428	0.0939453

srss

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	0.0004430	0.0003251	0.1743657	-0.0001978	0.0010839	0.709	0.0624740
2	0.0007407	0.0003365	0.0287796	0.0000775	0.0014039	0.659	0.1123947
3	0.0003996	0.0004285	0.3528825	-0.0004486	0.0012478	0.700	0.0570849
4	0.0006127	0.0005634	0.2795699	-0.0005058	0.0017311	0.585	0.1046599
5	0.0003456	0.0004633	0.4568706	-0.0005697	0.0012609	0.615	0.0562022

pcs

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	-0.0001948	0.0045381	0.9657986	-0.0091411	0.0087515	5.852	0.0033292
2	0.0033032	0.0048720	0.4985042	-0.0063000	0.0129064	5.778	0.0571707
3	0.0045149	0.0059612	0.4503263	-0.0072898	0.0163196	6.717	0.0672139
4	-0.0097383	0.0086618	0.2638203	-0.0269414	0.0074648	5.958	0.1634478
5	-0.0026636	0.0058996	0.6522955	-0.0143213	0.0089941	5.349	0.0497987

mcs

outcome_year	Estimate	StdError	p_value	2.5 %	97.5 %	mean_outcome	relative impact %
1	0.0049520	0.0062102	0.4261180	-0.0072905	0.0171946	4.342	0.1140541
2	0.0009533	0.0057508	0.8685021	-0.0103822	0.0122888	3.786	0.0251793
3	-0.0017942	0.0067805	0.7917673	-0.0152214	0.0116329	4.073	0.0440533
4	0.0231139	0.0087353	0.0095793	0.0057648	0.0404631	0.954	2.4230745
5	-0.0006105	0.0065441	0.9257956	-0.0135411	0.0123200	3.504	0.0174250