**eTable1**

**Reference levels**: high\_risk = 0 (no), Language at Home = English, Age Category = age >= 85, Service Line = Surgical

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Domain 1: Communication with Doctors** |  | **Domain 2: Communication with Nurses** |  | **Domain 3: Responsiveness of Hospital Staff** |  | **Domain 4: Pain Management** |  |
| **Effect** | **Element** | **Estimate (SE)** | **P Value** | **Estimate (SE)** | **P Value** | **Estimate (SE)** | **P Value** | **Estimate (SE)** | **P Value** |
| **Intercept** |  | 2.0971(0.192) | <.001 | 1.9589(0.1846) | <.001 | 2.0251(0.2281) | <.001 | 1.9034(0.2119) | <.001 |
| **High Risk** |  | -0.1625(0.0521) | 0.002 | -0.0931(0.053) | 0.079 | -0.2672(0.0544) | <.001 | 0.0205(0.0703) | 0.77 |
| **Age Category** | **18 yrs. - 44 yrs.** | -0.0125(0.0943) | 0.894 | 0.0255(0.0954) | 0.789 | -0.1211(0.0998) | 0.225 | -0.1843(0.1258) | 0.143 |
| **Age Category** | **45 yrs. - 54 yrs.** | 0.2713(0.0906) | 0.003 | 0.4032(0.093) | <.001 | 0.2676(0.0966) | 0.006 | 0.1591(0.1237) | 0.198 |
| **Age Category** | **55 yrs. - 64 yrs.** | 0.3144(0.0818) | <.001 | 0.4169(0.0836) | <.001 | 0.1892(0.0866) | 0.029 | 0.4019(0.1165) | <.001 |
| **Age Category** | **65 yrs. - 74 yrs.** | 0.2773(0.0777) | <.001 | 0.4266(0.0793) | <.001 | 0.2642(0.0821) | 0.001 | 0.4556(0.1161) | <.001 |
| **Age Category** | **75 yrs. - 84 yrs.** | 0.1024(0.076) | 0.178 | 0.1368(0.077) | 0.075 | -0.0102(0.08) | 0.898 | 0.1817(0.1177) | 0.123 |
| **Self-Rated Health** |  | -0.2981(0.0165) | <.001 | -0.2713(0.0167) | <.001 | -0.2435(0.0172) | <.001 | -0.3123(0.0198) | <.001 |
| **Highest Grade or School Completed** |  | -0.1865(0.0201) | <.001 | -0.1627(0.0203) | <.001 | -0.2126(0.0209) | <.001 | -0.2267(0.0244) | <.001 |
| **Gender** | **Male** | -0.0743(0.0347) | 0.032 | 0.0678(0.035) | 0.053 | 0.2443(0.0365) | <.001 | 0.1736(0.0418) | <.001 |
| **Lag Time** |  | -0.0062(0.0018) | <.001 | -0.0082(0.0018) | <.001 | -0.009(0.0019) | <.001 | -0.0084(0.0021) | <.001 |
| **Language at Home** | **Spanish** | 0.6916(0.3211) | 0.031 | 0.2219(0.2977) | 0.456 | 0.6284(0.3218) | 0.051 | 0.6288(0.3569) | 0.078 |
| **Language at Home** | **Chinese** | 0.2669(0.1711) | 0.119 | -0.2571(0.1616) | 0.112 | 0.0543(0.1682) | 0.747 | -0.0003(0.1955) | 0.999 |
| **Service Line** | **Medical** | -0.0582(0.1492) | 0.696 | 0.0761(0.1497) | 0.611 | -0.0276(0.1577) | 0.861 | 0.1125(0.2045) | 0.582 |
| **Age Category \* Surgical Line** | **18 yrs. - 44 yrs.** | 0.6647(0.1862) | <.001 | 0.1929(0.184) | 0.294 | 0.0495(0.1921) | 0.797 | 0.5103(0.2322) | 0.028 |
| **Age Category \* Surgical Line** | **45 yrs. - 54 yrs.** | 0.578(0.178) | 0.001 | 0.0722(0.1774) | 0.684 | -0.0217(0.1851) | 0.907 | 0.3863(0.2269) | 0.089 |
| **Age Category \* Surgical Line** | **55 yrs. - 64 yrs.** | 0.3327(0.1663) | 0.045 | -0.0234(0.1668) | 0.889 | 0.1162(0.1749) | 0.506 | 0.2337(0.2194) | 0.287 |
| **Age Category \* Surgical Line** | **65 yrs. - 74 yrs.** | 0.3242(0.1647) | 0.049 | -0.0798(0.1651) | 0.629 | -0.1415(0.1732) | 0.414 | 0.219(0.2207) | 0.321 |
| **Age Category \* Surgical Line** | **75 yrs. - 84 yrs.** | 0.2657(0.1703) | 0.119 | 0.135(0.1709) | 0.43 | 0.0615(0.179) | 0.731 | 0.521(0.2306) | 0.024 |
|  |  |  |  |  |  |  |  |  |  |
|  |  | **Domain 5: Communication about Medicines** |  | **Domain 6: Discharge Information** |  | **Domain 7: Hospital Environment** |  | **Overall Rating** |  |
| **Effect** | **Element** | **Estimate (SE)** | **P Value** | **Estimate (SE)** | **P Value** | **Estimate (SE)** | **P Value** | **Estimate (SE)** | **P Value** |
| **Intercept** |  | 1.0505(0.2765) | 0.019 | 1.7098(0.2217) | 0.002 | 1.288(0.243) | 0.006 | 2.7093(0.2443) | <.001 |
| **High Risk** |  | 0.0944(0.0752) | 0.209 | 0.2633(0.066) | <.001 | 0.0103(0.0519) | 0.842 | -0.0006(0.0574) | 0.992 |
| **Age Category** | **18 yrs. - 44 yrs.** | 0.3092(0.1375) | 0.025 | 0.1459(0.1112) | 0.189 | 0.1747(0.0938) | 0.062 | -0.6291(0.099) | <.001 |
| **Age Category** | **45 yrs. - 54 yrs.** | 0.4395(0.1326) | <.001 | 0.2707(0.1073) | 0.012 | -0.0357(0.0897) | 0.691 | -0.0602(0.097) | 0.535 |
| **Age Category** | **55 yrs. - 64 yrs.** | 0.3829(0.1237) | 0.002 | 0.3093(0.0975) | 0.002 | 0.0749(0.0809) | 0.355 | 0.1617(0.089) | 0.069 |
| **Age Category** | **65 yrs. - 74 yrs.** | 0.2693(0.1193) | 0.024 | 0.3141(0.0922) | <.001 | -0.0111(0.0769) | 0.885 | 0.2015(0.0848) | 0.018 |
| **Age Category** | **75 yrs. - 84 yrs.** | 0.0952(0.1209) | 0.431 | 0.0211(0.0888) | 0.812 | -0.0885(0.0756) | 0.242 | 0.1238(0.0831) | 0.136 |
| **Self-Rated Health** |  | -0.2182(0.0216) | <.001 | -0.1125(0.0201) | <.001 | -0.163(0.0158) | <.001 | -0.2776(0.018) | <.001 |
| **Highest Grade or School Completed** |  | -0.2334(0.0275) | <.001 | -0.0811(0.0247) | 0.001 | -0.2479(0.0193) | <.001 | -0.201(0.0222) | <.001 |
| **Gender** | **Male** | 0.2565(0.0448) | <.001 | 0.2254(0.0435) | <.001 | 0.1453(0.0332) | <.001 | -0.0092(0.038) | 0.808 |
| **Lag Time** |  | -0.0041(0.0024) | 0.082 | 0.0038(0.0023) | 0.092 | 0.001(0.0017) | 0.568 | -0.0042(0.0019) | 0.031 |
| **Language at Home** | **Spanish** | 0.7982(0.4364) | 0.067 | 0.0172(0.3526) | 0.961 | 0.7397(0.2822) | 0.009 | 0.7582(0.3725) | 0.042 |
| **Language at Home** | **Chinese** | 0.1254(0.2185) | 0.566 | -0.069(0.2013) | 0.732 | 0.1473(0.1577) | 0.35 | -0.4538(0.1657) | 0.006 |
| **Service Line** | **Medical** | -0.0853(0.2391) | 0.721 | -0.1465(0.1804) | 0.417 | -0.0254(0.1476) | 0.863 | -0.0628(0.1649) | 0.703 |
| **Age Category \* Surgical Line** | **18 yrs. - 44 yrs.** | 0.2682(0.272) | 0.324 | 0.3899(0.2256) | 0.084 | 0.1671(0.1805) | 0.355 | 0.5553(0.1987) | 0.005 |
| **Age Category \* Surgical Line** | **45 yrs. - 54 yrs.** | 0.1091(0.2642) | 0.68 | 0.7507(0.2223) | <.001 | 0.3039(0.1721) | 0.077 | 0.2724(0.1929) | 0.158 |
| **Age Category \* Surgical Line** | **55 yrs. - 64 yrs.** | -0.0505(0.255) | 0.843 | 0.5282(0.205) | 0.01 | -0.0251(0.1629) | 0.877 | 0.2644(0.1841) | 0.151 |
| **Age Category \* Surgical Line** | **65 yrs. - 74 yrs.** | -0.063(0.2542) | 0.804 | 0.4008(0.2021) | 0.047 | 0.1413(0.1613) | 0.381 | 0.2614(0.1832) | 0.154 |
| **Age Category \* Surgical Line** | **75 yrs. - 84 yrs.** | -0.099(0.2649) | 0.709 | 0.2363(0.2055) | 0.25 | 0.0524(0.1673) | 0.754 | 0.3561(0.1917) | 0.063 |

**eFigure1**

**Sensitivity Analysis:**

**Multivariable model with missing values imputed with Language at Home = Chinese, Highest Education = 4+ Years of College, and Self-Rated Health = Poor, where indicated**

**Reference levels**: high\_risk = 0 (no), Language at Home = English, Age Category = age >= 85, Service Line = Surgical



Domain 7: Hospital Environment

Domain 1: Communication with Doctors

Domain 2: Communication with Nurses

Domain 3: Responsiveness of Hospital Staff

Domain 4: Pain Management

Domain 5: Communication about Medicines

Domain 6: Discharge Information

Overall Rating

Overall Rating