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APPENDIX MATERIALS

The Evolving Role of Emergency Departments in the United States

Kristy Gonzalez Morganti • Sebastian Bauhoff • Janice C. Blanchard

Mahshid Abir • Neema Iyer • Alexandria C. Smith • Joseph V. Vesely

Edward N. Okeke • Arthur L. Kellermann

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Appendix A. Additional Quantitative Results

Table A.1. Source of Admission, by Elective and Non-Elective Admission (percent) (2001–2010)

| | 2001* | 2002* | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010** |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Elective and Other | | | | | | | | | | |
| Emergency Dept | 14.6% | 12.2% | 10.0% | 10.8% | 10.1% | 9.3% | 7.1% | 5.4% | 5.7% | 4.3% |
| Referrals | 74.8% | 78.0% | 80.5% | 79.7% | 81.2% | 83.1% | 78.1% | 83.2% | 83.4% | 85.3% |
| Other | 10.6% | 9.8% | 9.6% | 9.5% | 8.7% | 7.6% | 14.8% | 11.4% | 10.9% | 10.4% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Non-elective | | | | | | | | | | |
| Emergency Dept | 55.9% | 57.1% | 60.4% | 60.5% | 61.6% | 62.6% | 64.0% | 68.2% | 69.1% | 49.2% |
| Referrals | 36.1% | 34.9% | 31.6% | 31.6% | 30.8% | 30.0% | 27.2% | 23.7% | 22.8% | 41.5% |
| Other | 8.0% | 8.0% | 8.0% | 7.9% | 7.7% | 7.4% | 8.8% | 8.2% | 8.1% | 9.3% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Overall | | | | | | | | | | |
| Emergency Dept | 45.5% | 45.2% | 46.7% | 46.9% | 47.8% | 48.5% | 48.7% | 52.4% | 52.5% | 37.1% |
| Referrals | 45.9% | 46.4% | 44.9% | 44.7% | 44.3% | 44.1% | 40.9% | 38.6% | 38.7% | 53.3% |
| Other | 8.7% | 8.4% | 8.4% | 8.3% | 7.9% | 7.5% | 10.4% | 9.0% | 8.8% | 9.6% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Source: National Hospital Discharge Survey

Note: Data shown is for non-newborn admissions. Missing data is imputed. * Values for 2001 and 2002 are considered unreliable due to high rate of missing data; ** 2010 data not comparable to earlier figures due to change in NHDS coding.

Table A.2. Source of Admission, by Elective and Non-Elective Admission (count) (2001–2010)

| | 2001* | 2002* | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010** |
|---------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Elective and Other | | | | | | | | | | |
| Emergency Dept | 1,199,513 | 1,094,572 | 938,208 | 1,029,057 | 936,395 | 857,428 | 656,441 | 487,439 | 535,103 | 402,253 |
| Referrals | 6,145,520 | 6,996,311 | 7,584,174 | 7,608,638 | 7,538,395 | 7,686,641 | 7,204,424 | 7,477,930 | 7,904,560 | 8,064,527 |
| Other | 874,854 | 877,919 | 901,311 | 906,475 | 807,484 | 705,466 | 1,361,213 | 1,026,188 | 1,033,676 | 984,266 |
| Total | 8,219,887 | 8,968,802 | 9,423,693 | 9,544,170 | 9,282,274 | 9,249,535 | 9,222,078 | 8,991,557 | 9,473,339 | 9,451,046 |
| Non-elective | | | | | | | | | | |
| Emergency Dept | 13,647,547 | 14,141,877 | 15,287,304 | 15,327,191 | 15,624,759 | 16,030,795 | 16,087,155 | 18,208,270 | 18,409,127 | 12,613,714 |
| Referrals | 8,831,183 | 8,647,529 | 8,007,456 | 7,989,890 | 7,816,770 | 7,683,879 | 6,851,136 | 6,314,910 | 6,087,086 | 10,638,376 |
| Other | 1,953,972 | 1,968,403 | 2,019,958 | 2,002,915 | 1,943,512 | 1,889,687 | 2,208,519 | 2,182,033 | 2,150,092 | 2,375,424 |
| Total | 24,432,702 | 24,757,809 | 25,314,718 | 25,319,996 | 25,385,041 | 25,604,361 | 25,146,810 | 26,705,213 | 26,646,305 | 25,627,514 |
| Overall | | | | | | | | | | |
| Emergency Dept | 14,847,060 | 15,236,449 | 16,225,512 | 16,356,248 | 16,561,154 | 16,888,223 | 16,743,596 | 18,695,709 | 18,944,230 | 13,015,967 |
| Referrals | 14,976,703 | 15,643,840 | 15,591,630 | 15,598,528 | 15,355,165 | 15,370,520 | 14,055,560 | 13,792,840 | 13,991,646 | 18,702,903 |
| Other | 2,828,826 | 2,846,322 | 2,921,269 | 2,909,390 | 2,750,996 | 2,595,153 | 3,569,732 | 3,208,221 | 3,183,768 | 3,359,690 |
| Total | 32,652,589 | 33,726,611 | 34,738,411 | 34,864,166 | 34,667,315 | 34,853,896 | 34,368,888 | 35,696,770 | 36,119,644 | 35,078,560 |

Data Source: National Hospital Discharge Survey

Note: Data shown is for non-newborn admissions. Missing data is imputed. * Values for 2001 and 2002 are considered unreliable due to high rate of missing data.

** 2010 data not comparable to earlier figures due to change in NHDS coding.

Table A.3. Source of Admission, by Elective and Non-Elective Admission, by Payer Type (percent) (2001–2010)

| | 2001* | 2002* | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010** |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Medicaid | | | | | | | | | | |
| Emergency Dept | 46.2% | 46.3% | 50.3% | 50.8% | 51.4% | 52.3% | 54.1% | 58.3% | 58.5% | 46.0% |
| Referrals | 46.7% | 46.1% | 41.5% | 40.6% | 40.0% | 39.0% | 33.9% | 32.5% | 33.0% | 44.8% |
| Other | 7.1% | 7.6% | 8.2% | 8.6% | 8.6% | 8.7% | 12.0% | 9.3% | 8.5% | 9.2% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Medicare | | | | | | | | | | |
| Emergency Dept | 63.7% | 66.3% | 68.0% | 67.7% | 69.5% | 69.9% | 70.9% | 74.4% | 75.9% | 53.5% |
| Referrals | 28.7% | 26.4% | 24.8% | 24.7% | 23.7% | 23.2% | 20.9% | 17.4% | 15.9% | 37.0% |
| Other | 7.7% | 7.3% | 7.2% | 7.6% | 6.9% | 6.9% | 8.2% | 8.2% | 8.3% | 9.5% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Private | | | | | | | | | | |
| Emergency Dept | 50.4% | 51.2% | 55.3% | 56.0% | 57.3% | 57.9% | 59.5% | 62.6% | 63.8% | 44.2% |
| Referrals | 41.1% | 40.6% | 36.3% | 36.1% | 35.0% | 34.8% | 32.6% | 29.8% | 29.4% | 48.0% |
| Other | 8.5% | 8.2% | 8.4% | 7.9% | 7.8% | 7.3% | 7.9% | 7.7% | 6.9% | 7.8% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Other | | | | | | | | | | |
| Emergency Dept | 48.1% | 48.1% | 52.6% | 51.7% | 51.6% | 59.3% | 59.2% | 66.1% | 68.0% | 42.7% |
| Referrals | 43.5% | 41.9% | 37.3% | 37.8% | 37.6% | 31.3% | 30.6% | 24.8% | 23.4% | 43.9% |
| Other | 8.4% | 10.0% | 10.1% | 10.5% | 10.8% | 9.4% | 10.2% | 9.2% | 8.7% | 13.5% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Uninsured | | | | | | | | | | |
| Emergency Dept | 65.6% | 66.3% | 72.3% | 72.5% | 72.5% | 71.2% | 75.9% | 79.3% | 80.7% | 58.7% |
| Referrals | 28.5% | 26.7% | 21.6% | 22.2% | 21.2% | 23.8% | 18.1% | 15.6% | 14.5% | 36.4% |
| Other | 5.9% | 7.0% | 6.1% | 5.4% | 6.3% | 5.0% | 6.0% | 5.1% | 4.8% | 5.0% |

| | 2001* | 2002* | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010** |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Dual Eligible | | | | | | | | | | |
| Emergency Dept | 62.8% | 64.6% | 65.6% | 65.1% | 66.1% | 67.2% | 68.2% | 76.4% | 72.8% | 49.7% |
| Referrals | 26.4% | 25.3% | 25.0% | 26.7% | 27.1% | 25.6% | 23.4% | 14.3% | 14.2% | 36.0% |
| Other | 10.8% | 10.0% | 9.4% | 8.1% | 6.9% | 7.3% | 8.5% | 9.4% | 13.0% | 14.3% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Overall | | | | | | | | | | |
| Emergency Dept | 55.9% | 57.1% | 60.4% | 60.5% | 61.6% | 62.6% | 64.0% | 68.2% | 69.1% | 49.2% |
| Referrals | 36.1% | 34.9% | 31.6% | 31.6% | 30.8% | 30.0% | 27.2% | 23.7% | 22.8% | 41.5% |
| Other | 8.0% | 8.0% | 8.0% | 7.9% | 7.7% | 7.4% | 8.8% | 8.2% | 8.1% | 9.3% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Data Source: National Hospital Discharge Survey

Note: Data shown is for non-newborn admissions. Missing data is imputed. * Values for 2001 and 2002 are considered unreliable due to high rate of missing data; ** 2010 data not comparable to earlier figures due to change in NHDS coding.

Table A.4. Source of Admission for Non-Elective Admissions, by Payer Type (count) (2001–2010)

| | 2001* | 2002* | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010** |
|------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Medicaid | | | | | | | | | | |
| Emergency Dept | 1,631,555 | 1,719,085 | 2,092,304 | 2,141,247 | 2,223,339 | 2,281,672 | 2,396,758 | 2,741,967 | 2,843,088 | 2,197,705 |
| Referrals | 1,648,979 | 1,712,862 | 1,723,791 | 1,711,586 | 1,732,326 | 1,702,921 | 1,501,268 | 1,526,035 | 1,607,330 | 2,136,617 |
| Other | 248,776 | 283,248 | 341,191 | 360,872 | 373,265 | 379,185 | 529,945 | 435,037 | 413,892 | 440,460 |
| Total | 3,529,310 | 3,715,195 | 4,157,286 | 4,213,705 | 4,328,930 | 4,363,778 | 4,427,971 | 4,703,039 | 4,864,310 | 4,774,782 |
| Medicare | | | | | | | | | | |
| Emergency Dept | 5,505,725 | 5,744,243 | 6,193,855 | 6,130,572 | 6,331,660 | 6,332,037 | 6,362,728 | 7,275,461 | 7,405,025 | 5,148,075 |
| Referrals | 2,477,477 | 2,292,103 | 2,256,141 | 2,237,314 | 2,161,140 | 2,101,709 | 1,878,825 | 1,704,604 | 1,548,798 | 3,555,318 |
| Other | 664,444 | 632,047 | 656,478 | 684,827 | 624,453 | 623,060 | 732,738 | 804,124 | 808,827 | 917,177 |
| Total | 8,647,646 | 8,668,393 | 9,106,474 | 9,052,713 | 9,117,253 | 9,056,806 | 8,974,291 | 9,784,189 | 9,762,650 | 9,620,570 |
| Private | | | | | | | | | | |
| Emergency Dept | 4,254,073 | 4,224,665 | 4,297,639 | 4,289,380 | 4,254,818 | 4,356,283 | 4,422,426 | 4,765,900 | 4,534,657 | 2,938,839 |
| Referrals | 3,471,570 | 3,354,516 | 2,818,474 | 2,765,943 | 2,600,620 | 2,621,610 | 2,420,644 | 2,270,216 | 2,089,307 | 3,194,994 |
| Other | 719,353 | 679,320 | 651,725 | 602,405 | 577,086 | 547,185 | 587,006 | 583,095 | 487,000 | 519,339 |
| Total | 8,444,996 | 8,258,501 | 7,767,838 | 7,657,728 | 7,432,524 | 7,525,078 | 7,430,076 | 7,619,211 | 7,110,964 | 6,653,172 |
| Other | | | | | | | | | | |
| Emergency Dept | 563,587 | 658,947 | 774,669 | 755,327 | 877,045 | 967,657 | 951,912 | 858,356 | 1,039,190 | 528,985 |
| Referrals | 510,526 | 575,265 | 550,060 | 552,877 | 638,624 | 511,543 | 491,485 | 321,468 | 356,895 | 543,736 |
| Other | 98,582 | 137,305 | 148,413 | 153,629 | 183,125 | 153,696 | 163,919 | 118,970 | 132,215 | 166,704 |
| Total | 1,172,695 | 1,371,517 | 1,473,142 | 1,461,833 | 1,698,794 | 1,632,896 | 1,607,316 | 1,298,794 | 1,528,300 | 1,239,425 |
| Uninsured | | | | | | | | | | |
| Emergency Dept | 835,529 | 839,181 | 924,401 | 987,929 | 943,383 | 1,074,697 | 1,054,470 | 1,262,315 | 1,293,904 | 919,111 |
| Referrals | 362,424 | 338,445 | 276,070 | 302,216 | 276,001 | 358,557 | 250,685 | 248,997 | 231,836 | 569,587 |
| Other | 75,518 | 88,059 | 78,359 | 73,345 | 82,413 | 76,090 | 83,476 | 80,804 | 77,652 | 78,191 |

| | 2001* | 2002* | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010** |
|----------------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|
| Total | 1,273,471 | 1,265,685 | 1,278,830 | 1,363,490 | 1,301,797 | 1,509,344 | 1,388,631 | 1,592,116 | 1,603,392 | 1,566,889 |
| Dual Eligible | | | | | | | | | | |
| Emergency Dept | 857,078 | 955,756 | 1,004,436 | 1,022,736 | 994,514 | 1,018,449 | 898,861 | 1,304,271 | 1,293,263 | 880,999 |
| Referrals | 360,207 | 374,338 | 382,920 | 419,954 | 408,059 | 387,539 | 308,229 | 243,590 | 252,920 | 638,124 |
| Other | 147,299 | 148,424 | 143,792 | 127,837 | 103,170 | 110,471 | 111,435 | 160,003 | 230,506 | 253,553 |
| Total | 1,364,584 | 1,478,518 | 1,531,148 | 1,570,527 | 1,505,743 | 1,516,459 | 1,318,525 | 1,707,864 | 1,776,689 | 1,772,676 |
| Overall | | | | | | | | | | |
| Emergency Dept | 13,647,547 | 14,141,877 | 15,287,304 | 15,327,191 | 15,624,759 | 16,030,795 | 16,087,155 | 18,208,270 | 18,409,127 | 12,613,714 |
| Referrals | 8,831,183 | 8,647,529 | 8,007,456 | 7,989,890 | 7,816,770 | 7,683,879 | 6,851,136 | 6,314,910 | 6,087,086 | 10,638,376 |
| Other | 1,953,972 | 1,968,403 | 2,019,958 | 2,002,915 | 1,943,512 | 1,889,687 | 2,208,519 | 2,182,033 | 2,150,092 | 2,375,424 |
| Total | 24,432,702 | 24,757,809 | 25,314,718 | 25,319,996 | 25,385,041 | 25,604,361 | 25,146,810 | 26,705,213 | 26,646,305 | 25,627,514 |

Data Source: National Hospital Discharge Survey

Note: Data shown is for non-newborn admissions. Missing data is imputed. * Values for 2001 and 2002 are considered unreliable due to high rate of missing data. **2010 data not comparable to earlier figures due to change in NHDS coding.

Table A.5. Source of Admission, by Elective, Non-Elective, and N/A Admission without Imputation (percent) (2001–2010)

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Elective | | | | | | | | | | |
| Emergency Dept | 2.2% | 2.9% | 2.8% | 4.0% | 3.7% | 3.3% | 2.2% | 2.2% | 2.8% | 1.3% |
| Physician referral | 78.4% | 81.3% | 79.1% | 77.4% | 76.7% | 79.7% | 74.1% | 80.4% | 79.5% | 70.3% |
| Clinical referral | 2.8% | 2.9% | 3.7% | 3.5% | 4.4% | 4.5% | 4.1% | 3.4% | 4.7% | 14.7% |
| Other | 10.1% | 9.4% | 8.8% | 8.7% | 7.9% | 6.8% | 14.3% | 10.7% | 10.5% | 10.1% |
| Not available | 6.6% | 3.5% | 5.6% | 6.6% | 7.5% | 5.8% | 5.4% | 3.3% | 2.6% | 3.6% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Non-elective | | | | | | | | | | |
| Emergency Dept | 58.9% | 60.0% | 61.3% | 60.3% | 60.0% | 60.9% | 62.8% | 69.7% | 70.2% | 49.3% |
| Physician referral | 28.4% | 28.8% | 26.3% | 25.7% | 24.1% | 24.2% | 22.2% | 19.6% | 19.1% | 32.5% |
| Clinical referral | 2.0% | 1.7% | 1.5% | 1.6% | 1.5% | 1.6% | 1.4% | 1.8% | 2.1% | 6.1% |
| Other | 6.8% | 7.0% | 7.2% | 7.0% | 6.8% | 6.4% | 7.9% | 7.5% | 7.7% | 8.9% |
| Not available | 3.9% | 2.6% | 3.8% | 5.4% | 7.6% | 6.9% | 5.8% | 1.4% | 1.0% | 3.2% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Not available | | | | | | | | | | |
| Emergency Dept | 7.4% | 5.9% | 10.6% | 9.2% | 8.7% | 14.3% | 14.5% | 16.5% | 17.8% | 17.1% |
| Physician referral | 9.8% | 8.6% | 11.6% | 10.9% | 12.3% | 12.9% | 14.6% | 27.2% | 20.4% | 36.0% |
| Clinical referral | 0.6% | 0.6% | 4.1% | 4.3% | 4.4% | 3.7% | 7.0% | 13.5% | 13.7% | 9.0% |
| Other | 3.9% | 3.7% | 4.6% | 5.3% | 4.8% | 7.0% | 6.8% | 13.8% | 9.7% | 6.1% |
| Not available | 78.4% | 81.3% | 69.1% | 70.3% | 69.9% | 62.1% | 57.0% | 29.1% | 38.5% | 31.8% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| Overall | | | | | | | | | | |
| Emergency Dept | 34.5% | 36.2% | 40.8% | 40.7% | 41.4% | 42.8% | 44.2% | 50.5% | 50.7% | 35.2% |
| Physician referral | 32.6% | 35.2% | 36.8% | 36.4% | 35.6% | 36.5% | 34.6% | 34.3% | 34.1% | 42.2% |
| Clinical referral | 1.8% | 1.7% | 2.4% | 2.4% | 2.5% | 2.5% | 2.4% | 2.9% | 3.4% | 8.5% |

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Other | 6.6% | 6.8% | 7.2% | 7.2% | 6.8% | 6.6% | 9.4% | 8.6% | 8.5% | 9.0% |
| Not available | 24.5% | 20.2% | 12.9% | 13.4% | 13.8% | 11.7% | 9.4% | 3.7% | 3.4% | 5.1% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Data Source: National Hospital Discharge Survey

Table A.6. Source of Admission, by Elective, Non-Elective, and N/A Admission without Imputation (count) (2001–2010)

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Elective | | | | | | | | | | |
| Emergency Dept | 130,145 | 206,257 | 224,971 | 330,786 | 305,246 | 280,184 | 188,876 | 180,193 | 250,773 | 109,594 |
| Physician referral | 4,706,884 | 5,701,102 | 6,457,111 | 6,484,871 | 6,376,084 | 6,679,367 | 6,334,823 | 6,707,200 | 7,069,702 | 6,173,550 |
| Clinical referral | 168,042 | 199,526 | 302,703 | 289,448 | 362,226 | 372,930 | 347,570 | 282,905 | 415,880 | 1,294,942 |
| Other | 607,711 | 655,412 | 714,144 | 725,679 | 653,760 | 568,048 | 1,221,261 | 892,524 | 932,720 | 888,579 |
| Not available | 393,760 | 247,310 | 460,067 | 548,467 | 620,095 | 482,359 | 462,670 | 277,645 | 228,061 | 317,026 |
| Total | 6,006,542 | 7,009,607 | 8,158,996 | 8,379,251 | 8,317,411 | 8,382,888 | 8,555,200 | 8,340,467 | 8,897,136 | 8,783,691 |
| Non-elective | | | | | | | | | | |
| Emergency Dept | 10,495,022 | 11,556,610 | 13,467,001 | 13,482,908 | 13,734,236 | 14,184,156 | 14,635,492 | 17,472,081 | 17,712,835 | 11,857,893 |
| Physician referral | 5,056,773 | 5,542,922 | 5,783,628 | 5,748,773 | 5,525,028 | 5,639,174 | 5,178,834 | 4,908,590 | 4,823,512 | 7,812,014 |
| Clinical referral | 357,927 | 323,739 | 327,346 | 351,511 | 341,367 | 370,102 | 316,384 | 458,971 | 521,592 | 1,475,122 |
| Other | 1,209,099 | 1,350,417 | 1,576,309 | 1,553,236 | 1,545,550 | 1,490,493 | 1,840,629 | 1,868,146 | 1,931,218 | 2,127,515 |
| Not available | 692,724 | 498,572 | 830,285 | 1,215,313 | 1,740,129 | 1,597,094 | 1,350,289 | 358,606 | 238,534 | 768,810 |
| Total | 17,811,545 | 19,272,260 | 21,984,569 | 22,351,741 | 22,886,310 | 23,281,019 | 23,321,628 | 25,066,394 | 25,227,691 | 24,041,354 |
| Not available | | | | | | | | | | |
| Emergency Dept | 651,332 | 435,181 | 485,425 | 381,139 | 300,241 | 457,154 | 362,220 | 377,671 | 354,176 | 386,066 |
| Physician referral | 863,447 | 639,091 | 531,936 | 450,518 | 424,200 | 409,880 | 364,762 | 623,208 | 407,472 | 810,292 |
| Clinical referral | 49,547 | 46,347 | 190,249 | 177,419 | 153,468 | 118,214 | 175,428 | 308,412 | 273,298 | 202,695 |
| Other | 342,957 | 274,638 | 213,411 | 218,601 | 166,359 | 222,778 | 168,242 | 314,938 | 192,506 | 137,506 |
| Not available | 6,927,219 | 6,049,487 | 3,173,825 | 2,905,497 | 2,419,326 | 1,981,963 | 1,421,408 | 665,680 | 767,365 | 716,956 |
| Total | 8,834,502 | 7,444,744 | 4,594,846 | 4,133,174 | 3,463,594 | 3,189,989 | 2,492,060 | 2,289,909 | 1,994,817 | 2,253,515 |
| Overall | | | | | | | | | | |
| Emergency Dept | 11,276,499 | 12,198,048 | 14,177,397 | 14,194,833 | 14,339,723 | 14,921,494 | 15,186,588 | 18,029,945 | 18,317,784 | 12,353,553 |
| Physician referral | 10,627,104 | 11,883,115 | 12,772,675 | 12,684,162 | 12,325,312 | 12,728,421 | 11,878,419 | 12,238,998 | 12,300,686 | 14,795,856 |
| Clinical referral | 575,516 | 569,612 | 820,298 | 818,378 | 857,061 | 861,246 | 839,382 | 1,050,288 | 1,210,770 | 2,972,759 |

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Other | 2,159,767 | 2,280,467 | 2,503,864 | 2,497,516 | 2,365,669 | 2,281,319 | 3,230,132 | 3,075,608 | 3,056,444 | 3,153,600 |
| Not available | 8,013,703 | 6,795,369 | 4,464,177 | 4,669,277 | 4,779,550 | 4,061,416 | 3,234,367 | 1,301,931 | 1,233,960 | 1,802,792 |
| Total | 32,652,589 | 33,726,611 | 34,738,411 | 34,864,166 | 34,667,315 | 34,853,896 | 34,368,888 | 35,696,770 | 36,119,644 | 35,078,560 |

Data Source: National Hospital Discharge Survey

Table A.7. Standard Errors for Main Results for Aims 1 and 2

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Elective and Other | | | | | | | | | | |
| Emergency Dept | 0.23% | 0.21% | 0.21% | 0.19% | 0.18% | 0.18% | 0.16% | 0.19% | 0.21% | 0.17% |
| Referrals | 0.29% | 0.27% | 0.27% | 0.24% | 0.24% | 0.23% | 0.25% | 0.32% | 0.34% | 0.29% |
| Other and N/A | 0.20% | 0.19% | 0.20% | 0.18% | 0.17% | 0.16% | 0.22% | 0.27% | 0.29% | 0.25% |
| Non-elective | | | | | | | | | | |
| Emergency Dept | 0.14% | 0.13% | 0.13% | 0.12% | 0.11% | 0.11% | 0.09% | 0.11% | 0.13% | 0.10% |
| Referrals | 0.17% | 0.16% | 0.17% | 0.15% | 0.14% | 0.14% | 0.15% | 0.18% | 0.20% | 0.18% |
| Other and N/A | 0.12% | 0.12% | 0.12% | 0.11% | 0.10% | 0.10% | 0.13% | 0.16% | 0.17% | 0.15% |
| Overall | | | | | | | | | | |
| Emergency Dept | 0.17% | 0.17% | 0.18% | 0.15% | 0.15% | 0.15% | 0.15% | 0.20% | 0.22% | 0.22% |
| Referrals | 0.16% | 0.16% | 0.17% | 0.15% | 0.15% | 0.14% | 0.14% | 0.18% | 0.20% | 0.21% |
| Other and N/A | 0.09% | 0.09% | 0.10% | 0.09% | 0.08% | 0.08% | 0.09% | 0.12% | 0.13% | 0.12% |

Source: National Hospital Discharge Survey

Note: Approximate standard errors calculated based on generalized variance curves provided by NCHS.

Appendix B. Focus Groups and Interviews

Focus Group and Interview Guides

Informed Consent

EMAF Focus Groups: Informed Consent

RAND is a non-profit organization with a mission to help improve policy and decisionmaking through research and analysis. RAND researchers are conducting a qualitative and quantitative study to evaluate the value of emergency care to America's health care system. As part of this study, we are conducting focus groups with emergency medicine, family practice, internal medicine, and primary care physicians to gather information on current emergency department and hospitalization procedures and practices. RAND's work is being funded by the Emergency Medicine Action Fund.

This discussion is an important part of our study because it gives us an opportunity to learn from the physicians directly involved with the medical care decisions, procedures, and practices for emergency department and hospital care. In our discussions with you, we are interested in your perceptions of current emergency department practices, including successes or challenges. Don't worry about having a different opinion than someone else, and please respect others' opinions.

RAND will use the information you provide during this discussion for research purposes only. You do not have to participate in the discussion. If you chose to participate, you should feel free to decline to discuss any topic or question that we raise.

RAND will keep confidential the identities of those who participate in the interview and will not attribute any comments to any specific individuals. In the notes from the interview, we will not record individuals' names associated with comments made. RAND requests that each of you also protect the confidentiality of others in the group. Please do not use the name or other identifying information of anyone as you talk about them, and do not repeat anything that is said here in a way that is attributable to particular people. However, RAND cannot guarantee that everything you say during this discussion will be kept confidential by all the participants, so please do not say anything that you do not want anyone else to know.

And finally, we're tape recording the session because we don't want to miss any of your comments. If anyone is uncomfortable with the idea of being taped, just say so and we won't use it. Again, remember that we will not be able to connect the taped information with your name or anything that identifies you.

Do you have any questions about the study?

Do you agree to participate in our research interview?

ADMISSION DECISIONS

One of the most important decisions an emergency physician makes is determining which patients need to be hospitalized, and which can be treated and safely sent home. I would like to start by exploring the factors that go into your decision to admit a patient.

1. In addition to clinical considerations, are there any **NON-CLINICAL CONSIDERATIONS** that play a role in your decision to admit or discharge a patient?
(Probe: factors that promote decisions to admit (e.g., no family or caregiver support, unable to care for self, unable to walk); and those that deter admission decisions (e.g., lack of inpatient beds, no admitting physician willing to accept the patient, primary care provider willing to see the patient in 1-2 days, strong family support at home).
2. What role, if any, do **FINANCIAL** considerations play a role in your decision to admit patient? For example, does the type of health insurance a patient has (e.g., Medicare, Medicaid, HMO or private insurance) or the lack of insurance play a role?
3. What impact does the patients insurance type (e.g., commercial HMO, a Medicare Advantage plan, or another insurance plan) that provides **outpatient case management resources** have on your decision to admit a decision?
4. What impact does the patient having a **primary care physician (PCP)** have on your decision to admit the patient?
5. With which physician are you more likely to discuss an admission decision: the patient's **PCP, the ADMITTING HOSPITALIST, or BOTH?** Has this changed in recent years?
6. How often do you seek the input of an **on-call specialist** to help you decide about admission?
7. When does the **PATIENT'S OR THEIR FAMILY'S WISHES** play a major role in your decision to admit or discharge a patient?

PRIMARY CARE PROVIDER REFERRALS

8. What are the main reasons PCPs send their patients to the ED for **evaluation**?
(Probe: PCP thinks patient too ill to see in the office. Patient too complex for office, no time on schedule to allow same or next day visit, after hours, other considerations)
9. What percent of the patients you see are referred by their PCP the ED for **hospital admission**?
 - a. Why do PCPs do this instead of admitting the patient themselves?

10. How do PCPs that work for an **HMO or managed care plan** use the ED differently than physicians that do not work for an HMO or managed care plan? (*i.e.*, Are they more or less likely to refer their patients to the ED for evaluation and/or admission?)
11. When a patient is sent by their PCP to the ED for admission, how often do you manage the problem in the ED, thereby avoiding hospitalization? Can you provide examples?
12. When it comes time to discharge an ED patient *who has a PCP*, how confident are you that they will get **timely follow up care**?
 - a. In your opinion, what factors influence receipt of timely follow up care? Is access to follow up easier or harder if the patient is part of an HMO, Medicare Advantage or a managed care plan?
13. If you discharge a patient from the ED patient *who does not have a PCP*, how confident are you that they will get timely follow up care? What strategies, if any, does your ED employ to increase the likelihood that an uninsured patient will get the follow up care they need?
14. What could or should be done to help facilitate coordination of care between PCPS and emergency physicians?

“PREVENTABLE” HOSPITALIZATIONS AND REPEAT ED VISITS

15. Could more hospital admissions through the ED be **prevented** if patients had better access to ambulatory care? What sort of patients fit into this category?
16. What are the major causes of:
 - a. Preventable ED visits?
 - b. Preventable ED hospitalizations?
17. How frequently, on average, **do emergency physicians prevent hospital admissions** by effectively addressing the patient’s problem(s) in the ED? Can you provide examples?
18. Does your hospital operate an ED based observation unit? If yes, what sorts of patients who go to your observation unit would otherwise require hospitalization?
19. A growing number of hospitals are concerned about **inpatient readmissions**. What are the most common factors that contribute to discharged patients returning to the ED within 30 days of a previous hospitalization?
20. Are HMO or managed care patients more or less likely to require readmission than other patients? Why?
21. How can EDs further reduce readmissions to the hospital?

ED COSTS

22. In what ways are EDs **contributing** to the growing cost of healthcare in the US?
23. In what ways are EDs helping to **hold down** growth of costs?
24. With each passing year, more patients are being admitted to the hospital through the ED versus other means, such as direct admissions. What is driving this trend?

OTHER COMMENTS

25. Do you have other thoughts about the role of emergency care that you want to share with our team?

Emergency Department vs. Direct Admissions

1. Do you handle direct admissions that occur from an outpatient provider differently from admissions from the ED?
2. With each passing year, more patients are being admitted to the hospital through the ED versus other means, such as direct admissions. From your perspective, **what is driving this trend?**
3. At your hospital, do patients have to undergo financial screening before they can be admitted?
 - a. Does this differ for patients who are admitted through the ED?
4. Are there **advantages** to you if your patient is admitted to the hospital from the ED rather than directly admitted by an outpatient provider?
5. Are there **advantages** to your patient if your patient is admitted to the hospital from the ED rather than directly admitted by an outpatient provider?
6. What **logistical advantages** to you or your patient come from a patient being admitted to the hospital from the ED rather than directly admitted by an outpatient provider?

EMERGENCY DEPARTMENT ADMISSIONS

7. At your hospital, who makes the primary admission decision for ED patients?
 - a. the patient's primary care provider
 - b. the patient's emergency department provider
 - c. you - the hospitalist
8. As a hospitalist, how often do you talk to the **patient's primary care providers** about whether or not to admit a patient from the emergency department?
 - a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Always
9. As a hospitalist, how often do you talk to the **admitting emergency physician** about whether or not to admit a patient from the emergency department?
 - a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Always

PREVENTABLE ADMISSIONS

10. Do you admit many patients whose admission was unnecessary or could have been avoided?
11. What are the primary factors that determine if **patients will present with preventable hospitalizations** (Check all that apply)?
- Clinical concerns
 - Financial/insurance status
 - Lack of access to care
 - Complex patient
 - Age of patient
 - No appointments available
 - Other, please comment
12. In your opinion, what are the ways that preventable hospitalizations could be **decreased**?
13. What role, if any, do hospital Emergency Departments have in **reducing preventable hospitalizations**?
14. What role, if any, do hospital Emergency Departments have in **contributing to preventable hospitalizations**?

FOLLOW-UP AND DISCHARGE PLANNING

15. How often do you contact **the primary care physician** at the time of discharge to arrange outpatient follow-up for their patients?
- Never
 - Rarely
 - Sometimes
 - Often
 - Always

READMISSIONS

16. In your opinion, are there certain patient characteristics that you see with patients that are **more likely to be readmitted** than others?
- Financial reasons
 - Type of insurance
 - Lack of access to care
 - Lack of timely access to care
 - Other

17. In your opinion, what could be done to decrease hospital readmissions?
18. Are there **successful interventions** in place at your institution to reduce readmissions?
19. What role, if any, do Emergency Departments play in **decreasing hospital readmissions**?

ED COSTS

20. In what ways are EDs **contributing** to the growing cost of healthcare in the US?
21. In what ways are EDs helping to **hold down** growth of costs?

OTHER COMMENTS

22. Do you have other thoughts about the **role that emergency departments play in helping you care for your patients**?

EMERGENCY DEPARTMENT REFERRALS

1. How often do you refer your patients for **evaluation in an emergency department (ED)**? In those instances when you or your staff refer one of your patients to the ED, do you mostly advise them to go there, rather than see you first, or do you see the patient first and then send them to an ED?
2. What are the primary factors that determine if you send a given patient to the **ED for evaluation as opposed to seeing them in your office**? (e.g., clinical concerns, financial/insurance status, access to diagnostic and therapeutics, need for admission, complex patient, after hours, no appointments available)
3. Do you work for an **HMO or managed care plan**? If so, how does that impact your **ED referral patterns**? (i.e., Are you more or less likely to refer your patients to the ED for evaluation and/or admission?)
4. When you send a patient to the ED for evaluation and/or admission, **how often are you directly involved in your patient's ED management**? How often does the ED doctor contact you for input regarding the ED management of your patient? Does the **likelihood of the ED doctor contacting you vary by the time of day or day of the week**? Can you provide examples?
5. What systems, if any, exist to help ED doctors work with you to **coordinate the care of your patients**? Do you have suggestions for improving care coordination?
6. What factors would help **reduce the frequency of ED referrals from your practice**?

HOSPITAL ADMISSION DECISIONS

7. Do you have **admitting privileges** at any hospital(s)? If so, how often do you **directly admit** patients to the hospital as opposed to **sending these patients to the ED to be admitted**? What is the ratio with which you refer patients to the ED for hospitalization versus directly admitting them yourself?
8. What **factors help you decide** whether to **send your patient to the ED for admission as opposed to directly admitting the patient yourself**? (e.g. unsure if they need admission, ease of admission through the ED, patient clinically unstable)
9. What **advantages to you or your patient come from going to the ED for hospital admission versus being directly admitted by you or one of your practice partners**?
10. How does the patient's insurance type influence whether you **send a patient to the ED versus directly admitting the patient**?

11. For patients that you send to the ED, **how often are you involved in the admission decision?** Would you rather have a **larger or smaller role in the admission decision** and why?
12. Do you use a **hospitalist service** to care for your patients in hospital? If so, does the hospitalist **discuss the decision with you before they admit one of your patients from the ED?**

ED COSTS

13. In what ways are EDs **contributing** to the growing cost of healthcare in the US?
14. In what ways are EDs helping to **hold down** growth of costs?
15. With each passing year, more patients are being admitted to the hospital through the ED versus other means, such as direct admissions. From your perspective, what is driving this trend?

OTHER COMMENTS

16. Do you have other thoughts about the **role that emergency departments play in helping you care for your patients?**

Characteristics of Focus Group and Interview Participants

Table B.1. Characteristics of Emergency Physician Focus Group Participants

| Characteristic | Number (Percentage) |
|--|----------------------------|
| Years in Practice | |
| 0–5 | 6 (21.4) |
| 6–10 | 5 (17.9) |
| >10 | 17 (60.7) |
| Practice Setting* | |
| Academic Medical Center with Emergency Medicine Residency | 10 (25.7) |
| Community Hospital | 16 (57.1) |
| Large Metropolitan Hospital | 2 (7.1) |
| Non-Academic Medical Center | 3 (10.7) |
| Rural Hospital | 1 (3.6) |
| Geographic Setting | |
| Suburban | 11 (39.3) |
| Urban | 10 (35.7) |
| Small Town | 5 (17.9) |
| Rural | 2 (7.1) |
| Region of Country | |
| Northeast | 10 (35.7) |
| Southeast | 6 (21.4) |
| Midwest | 4 (14.3) |
| Southwest | 4 (14.3) |
| West | 4 (14.3) |
| Organization Affiliation* | |
| American College of Emergency Physicians | 28 (100) |
| American Academy of Emergency Physicians | 9 (32.1) |
| Society of Academic Emergency Medicine | 7 (25.0) |
| Emergency Department Practice Management Association | 3 (10.7) |
| Emergency Medicine Residents Association | 3 (10.7) |
| American College of Osteopathic Emergency Physicians | 2 (7.1) |
| Council of Residency Directors | 2 (7.1) |

*Participants could have more than one response

Table B.2. Characteristics of Hospitalist Physician Focus Group Participants

| Characteristic | Number (Percentage) |
|--|----------------------------|
| Years in Practice | |
| >10 | 6 (100) |
| Practice Setting* | |
| Academic Medical Center with Emergency Medicine Residency | 4 (67) |
| Community Hospital | 2 (33) |
| Large Metropolitan Hospital | 1 (17) |
| Non-Academic Medical Center | 2 (33) |
| Rural Hospital | |
| Geographic Setting | |
| Suburban | 2 (33) |
| Urban | 4 (67) |
| Rural | 1 (17) |
| Region of Country | |
| Northeast | 3 (50) |
| Southeast | 2 (33) |
| Midwest | 1 (17) |

*Participants could have more than one response.

Table B.3. Characteristics of Primary Care Physician Interview Participants

| Characteristic | Number (count) |
|--|-----------------------|
| Type of Primary Care* | |
| Internal Medicine | 8 |
| Family Medicine | 4 |
| Pediatrics | 3 |
| Geriatric Medicine | 2 |
| Emergency Medicine | 1 |
| Practice Setting* | |
| Private practice – single physician | 2 |
| Group practice | 10 |
| Community Health Center | 1 |
| Other | 2 |
| Years in Practice | |
| <5 | 1 |
| 5+ | 3 |
| 10+ | 3 |
| 20+ | 3 |
| 25+ | 2 |
| 30+ | 3 |
| Region of Country | |
| East | 2 |
| South | 6 |
| Midwest | 6 |
| West | 1 |
| Frequency of Emergency Department Referral | |
| Less than once a month | 2 |
| Once a month | 1 |
| Two to three times a month | 0 |
| Once a week | 4 |
| Two to three times a week | 5 |
| More than three times a week | 3 |

*Participants could have more than one response

Focus Group and Interview Results

Emergency Care Physicians

1. Inpatient admission decisions

During our focus groups with ED physicians, we asked participants to identify the factors they consider prior to making the decision to hospitalize a patient. Participants reported that clinical considerations are most important, but they also consider many non-clinical issues, such as the patients' safety at home, the availability of family or social services' support, and timely access to follow up care.

a. ED focus group participants cited lack of access to follow-up care as a major concern that influenced their admission decisions.

Most physician participants in our ED focus groups indicated that lack of access to follow up primary care was an important factor in admission decisions. Participants stated that their ED patients did not necessarily have to have assured access to a PCP, just some type of reliable outpatient primary care support, such as a non-physician provider. Representative quotes follow:

“If the PCP is not reliable, there is no follow-up. If they do have follow-up care, I'll be comfortable sending home.”

“[It] Doesn't have to be a PCP. Any provider [will do]. Even by telephone. Have a nurse call. It allows you to be more comfortable with discharge.”

b. Financial considerations influence the admission threshold of ED physicians; particularly when access to follow-up care is an important consideration.

Most participants stated that they are no more or less likely to admit a patient based on their insurance status. However, they might be more inclined to admit a medically fragile patient if they feel that the patient may not be able to get timely outpatient follow-up for a worrisome diagnosis. Representative quotes follow:

“If they [low income patients] don't have the money to get a prescription, to get whatever they need as an outpatient, you may end up admitting [them] because that's the only care you can give them.”

“Particularly for chest pain patients, if I know I have someone [who is] underinsured, I will admit them for observation. If I discharge them [instead], they will receive no service.”

“Our hospital formed an ACO. And they employ all the consultants directly. We just send to them, don't know insurance status. Doesn't matter.”

c. ED focus group participants agreed that case managers influence their admission decisions; often by providing options that otherwise would not be available to them.

Focus group participants who work in EDs that have access to case managers found them helpful in facilitating access to follow-up outpatient care. According to our participants, managed care organizations with case managers make providers like them more comfortable with discharge decisions. In addition, managed care plans often direct providers to consider less costly facilities to which patients may be directed. Representative quotes follow:

“Sometimes, we admit direct to rehab, alternate settings other than admission such as observation. This is facilitated by [managed care] case managers. It gives us other opportunities rather than discharge.”

d. Opinions differed regarding whether participation in a managed care plan influences the likelihood that an ED physician will admit a patient

The majority of providers did not seem to think managed care plans significantly influence their admission decisions. Opinions of the group were mixed about the role managed care plans have in their admission and discharge decisions. In some cases, patients in a managed care plan have more options to access outpatient care; however, this is not always the case.

“I am more likely to discharge them [managed care patients] because I know they will be seen.”

“I feel the opposite. With certain HMOs, it is difficult to set up an appointment. A patient might not be able to see a doctor for 3–4 days to get a referral. I try to facilitate that process.”

“Since my hospital formed an Accountable Care Organization [ACO], it is much easier for my patients to secure outpatient care within our system, including specialists. Our ACO has shifted a lot of former inpatient care to the outpatient setting.”

e. ED focus group participants agreed that family and social issues strongly influence their admission decisions.

Other factors that impact decisions include access to support at home, logistical considerations such as transportation to and from hospital, and eldercare issues. This is a particular issue after hours, when such factors are harder to address because ED case managers are often only available during daytime business hours. Representative quotes follow:

“Family or living support, lack of being [able] to coordinate that support, especially after hours. If an accident happens in the night or on a weekend, you are stuck with the patient if they have no support.”

“We have elderly patients, and their family is across country...[in that instance] they need to be able to take care of themselves.”

“Such patients are unable to go home. No form of transport from the hospital. They have to be admitted.”

“You can try to get someone to get follow up...but often they need not only money, but transportation. An ambulance will bring you to ER, but not to your clinic.

2. ED referrals from primary care providers

We asked focus group participants to share their thoughts about why primary care providers refer their patients to the ED. Focus group participants cited a number of factors that drive these referrals. Observations and quotes follow:

a. Our ED focus group participants reported that PCPs use EDs as a convenient way to access diagnostic services

Participants in our ED focus groups felt that one of the most common reasons PCPs use the ED for referrals is convenience. According to them, patients can get rapid evaluation of complex medical problems in a day. Many of these workups would otherwise take a much longer time and involve considerable travel to get the same answer from other outpatient settings. EDs provide immediate access to cross-sectional imaging and other advanced diagnostic technology.

“Some PCPs can’t get tests pre-approved, MRIs, even CT [scans].”

“Expedite diagnostic studies...[PCP says] ‘We want an MRI, send to the ED.’ PCP can order one, but it will take a month to get it.”

b. ED physicians also believe PCPs rely on EDs to manage overflow and “after hours” care

Several of our focus group participants noted that PCPs have limited office hours, and face intense pressure to see large numbers of patients. Because of this, they rely on the ED for overflow, unscheduled care, and visits that would otherwise not be available in their restrictive practice environments.

“They send patients when they are busy or overwhelmed. They are only available 1/3 of a day. We are there [in the ED] 100 percent of the time.”

c. ED MDs believe PCPs respect their expertise in making diagnoses and their willingness to evaluate risky cases.

Many participants cited that often primary care providers use the ED because they respect emergency providers’ ability to rapidly reach a diagnosis. They also find the ED easier to navigate than the direct admission process. Liability concerns were cited as well. For example, some ED focus group participants reported that PCPs like to use their ED colleagues for a quick second opinion or to make a difficult clinical decision.

“Everybody is basically saying that patients get better care in ER. Shorter length of stay, outcomes are better. PCPs respect ER docs’ ability to take care of patients.”

“PCPs use the ED for admission because of convenience compared to the direct admission process.”

“We are the path of least resistance.”

d. ED focus group participants noted that although they frequently talk to PCPs, communications are far from ideal.

Our focus group participants identified a number of ways ED and primary care providers can facilitate communication with each other. These include employing interoperable electronic medical record systems to ease communication between providers. Participants noted that if primary care providers were able to consistently share their patient’s medical history—either through an electronic format or proactive transfer of a mini-medical record—it would vastly improve transitions of care between providers.

“If PCPs would provide patient list of diagnoses, medication, and other basic info on a card...it would facilitate our ability to [provide medical recommendations]. We would understand better. We are trying to rely on the patients explaining what they have.”

3. Preventable ED visits and readmissions

We asked our focus group participants to share their opinions about the causes of preventable ED visits and readmissions. Participants cited social issues, the high burden of chronic disease, lack of adequate health insurance, and an insufficient primary care infrastructure as major causes of preventable ED visits. Poor care coordination was cited as a major cause of readmissions.

a. ED focus group participants believe that social issues and a high burden of chronic disease contribute to preventable ED visits

The ED physicians who participated in our focus groups felt that many preventable ED visits and admissions are due to social issues, as well as the high burden of chronic illness present in many of their patients. In recent years, technology has improved care to the point that it is possible to prolong patient lifespans, leading to more intensive use of the health care system.

“We need to start being realistic about chronic disease. We keep them alive...they are going to wind up getting sick again. Doesn’t mean you failed...those people used to die. It’s a crazy goal.”

b. Participants agreed that the convenience and accessibility of EDs encourage preventable visits

Our ED focus group participants stated that often, patients view the ED as a convenient source of care without the barriers, such as large copayments or other out-of-pocket costs that may be present in outpatient settings. The 24/7 availability of the ED makes it an attractive option for patients; particularly those who cannot afford to miss a day of work.

“It’s too hard to take the other paths. Offices closed, work hours. [Primary care offices have] other barriers that don’t exist for ER.”

“A lot of it is making it is too easy for patients to access ER. People on... Medicaid. They know they can go to the ER with no co-pay.”

“When you ask ‘Why didn’t you see a PCP?’ they answer, ‘I would have to wait a week. I don’t want to miss work.’”

c. Lack of adequate access to primary care contributes to preventable ED visits, particularly by patients who are uninsured or underinsured.

Some ED focus group participants noted that the lack of an adequate primary care infrastructure in areas surrounding their ED leads to heavy use of the ED for primary care. As a result, their ED now plays a larger role in delivering care that should be happening in primary care settings, if the care were available.

“We have accepted a lot of PCP responsibility. The neighboring county has 13 percent unemployment. People just lost their [employer-sponsored health] insurance. They don’t have cash up front for the PCP, so the PCPs refer them to our ED. [It’s so bad, we even] end up having to tell people to come back to [the] ED for follow up care.”

“Everyone is overbooked. Common for patient to show up saying ‘I’ve been sick for two months and couldn’t find a doc.’”

d. Because EDs are a key element of the safety net, uninsured and underinsured patients use the ED for care they can’t otherwise get. In particular, our ED focus group participants cited low rates of Medicaid reimbursement as a major barrier hindering patients from accessing outpatient care.

“Some docs only allow 5 percent of [their] patients to be on Medicaid.”

“Medicaid is insurance without access.”

e. ED focus group participants believe that better care coordination could reduce preventable ED visits and readmissions.

The ED physician participants in our focus groups believe that many patients who return to the ED for readmission do so because they were discharged too early without an appropriate outpatient follow up care plan. Often, patients are unable to obtain the medications they need or visit their primary care provider after discharge. Other suggestions included: (1) better education of staff in nursing homes, who otherwise quickly send patients back for repeat admission; (2) improved discharge instructions; and (3) interventions to improve provision of discharge medications and prompt outpatient follow-up care. In general, ED focus group participants asserted that reducing readmissions is not the ED physician’s responsibility, but a larger hospital and system issue.

“They [inpatient physicians] need to better coordinate care. They aren’t aggressive enough about treating the patient during the initial admission. Instead, they try to get them out too fast. It’s important to get them back to a realistic baseline. I don’t accept this as an ER issue, but rather it’s a system issue. There’s nothing we [ED providers] can do.”

a. Several focus group participants believe that ED observation units reduce needless hospital admissions and in some cases, readmissions.

Some of our participants work in an ED with an adjoining observation unit, most commonly for chest pain patients. They believe that these units offer a useful alternative for borderline and short-stay patients. This allows the ED physician sufficient time to fully evaluate a worrisome complaint (such as chest pain) so the patient can safely be discharged, even if they cannot be assured of access to timely follow-up care.

4. Admission Decisions

a. ED focus group participants said that they most often discuss admission decisions with a hospitalist, rather than the patient's personal physician.

Focus group participants stated the ultimate decision to admit or discharge is up to the ED physician. Although many ED physicians incorporate primary care providers in their efforts to arrange outpatient follow-up, most do not involve them directly in discussions about admitting a patient. Most of the ED physicians who participated in our focus group work at institutions who employ hospitalists to manage inpatients so PCPs can focus on outpatient care. Therefore, they tend to discuss their admission decisions with the hospitalist, since he or she will be primarily responsible for managing the patient's inpatient stay.

“In our hospital, the decision to admit is made by ER medicine. I don't even talk to them [hospitalists or primary care providers]”

“Sometimes PCPs don't want to be involved in the decision. They are primary care, outpatient, so they don't want to deal with the rest of it. They are happy to have experts taking care of their patients. And they don't have the time, anyway.”

When discussing how having a hospitalist at their institution has impacted admission decisions in recent years, most cited that their addition has made the admission process less cumbersome. They did not, however, believe that the ready availability of accepting physicians has changed their threshold to admit patients.

“The shift to hospitalists has made it more efficient in terms of patient flow.”

b. On-call specialists influence some admission decisions, but to a lesser extent than hospitalists.

In some cases, on-call specialists influence admission decisions, but only to a limited degree. In general, they will admit a patient only if they are confident that a procedure will be performed during the admission. Often specialist availability is limited, but when they are present in-house, they can sometimes provide immediate assessments in the ED. This allows a specialist to clear a patient for discharge who might have otherwise required hospital admission.

“If the patient has a hip fracture, I have to speak to orthopedics. They always say admit.”

“We don’t have [specialists available] 24/7. They are not there all the time. It makes a difference if they can come by and take care of the problem.”

5. The ED’s impact on healthcare costs

The last segment of both focus groups asked participants about how they believe ED care is either increasing or constraining growth of healthcare costs. Participants cited a number of factors that contribute to the high cost of ED care, including overuse of diagnostic tests, high burden of illness in their patients and the inability to coordinate their patient’s care with the patient’s PCP. Subthemes follow:

a. Overuse of diagnostic tests

ED providers stated that they have the benefit of being able to order tests that often are not available elsewhere. Primary care providers recognize this, so sometimes they will rely on the ED to secure expensive tests for their patients that are not readily available elsewhere. This can result in an overuse of diagnostic tests.

“There is no limit to what we can order or do. No stop gap.”

b. High burden of illness in ED settings

Focus group participants stated that because they see patients who often are unable to access outpatient care in a timely manner, they end up in the ED with a high burden of illness. Because these patients then require more extensive treatment to correct the problem, many of our participants believe this represents a system failure that contributes to increased costs. A number of participants added that growth in medical technology that prolongs lives for patients with severe chronic illness, including care at the end of life, has led to higher health care costs inside and outside the ED.

“It’s unfair to talk about ED in terms of cost compared to other areas. We see the sickest patients.”

“Expansion of [palliative and end-of-life care]. ICU care at the end of life is terribly expensive.”

c. Poor communication between ED physicians and primary care providers

Focus group participants felt that lack of interoperability between health IT platforms and less-than-optimal communication between ED physicians and primary care providers leads to inefficiencies in health care delivery, including needless duplication of tests. In addition, the inability of patients to get timely follow-up with their primary care providers after hospital or ED discharge often leads patients to return to the ED instead of getting the follow-up care they need.

“When patients get transferred to my ED from a PCP outside my system, we end up repeating all of their tests because we don’t have access to the PCPs test results.”

d. Malpractice liability concerns and “defensive medicine.”

ED providers who participated in our focus groups stated that excess tests are sometimes ordered due to medico-legal concerns. This contributes to higher health care costs.

“We often order more tests for medico-legal reasons.”

e. Excessive hospital charges

Some of our focus group participants stated that the high cost of ED visits is not due directly to provider costs, but rather to excessive facility fees imposed by hospitals

“The charges are outrageous. They are not based on costs, just what [the hospital] can get away with. When you look at why people want us to stop seeing patients, it’s not because we are inefficient; it’s because hospitals charge so much for our care. Perhaps it’s because the ED is the only place left in their budget where they can.”

f. EDs help lower costs by making medical diagnoses early and efficiently

Our ED focus group participants felt that they often make diagnoses earlier than would be possible in other settings, and this saves money later on. Early and efficient ED care was thought by participants to lead to shorter hospital stays, fewer repeat visits, and better long-term outcomes.

“We can diagnose problems patients don’t even think they have. ‘Abscess?...Oh, you have diabetes.’”

“We diagnose things that could have otherwise gone untreated and been more costly to manage later.”

“Good ED work ups help patients get quicker care and go home sooner.”

g. EDs efficiently diagnose and treat patients who lack health insurance

“We provide a lot of uncompensated care. This saves the healthcare system tremendous amounts of money.”

Hospital Physicians

1. Experience with receiving admissions by source (e.g., emergency department versus direct admission)

All of our participants cited that they handled ED admissions differently from direct admissions. Participants cited both logistical and medical advantages and disadvantages to admissions that occurred from the ED versus direct admissions. Some of these advantages and disadvantages impacted the providers and some directly impacted the patient.

a. ED admissions often have less prior medical history available.

According to our hospitalist focus group participants, unlike direct admissions, patients admitted from the ED often do not have a detailed office-based visit history. Direct admissions often have a more detailed office visit history available through shared electronic medical

records or direct communication with their outpatient provider. This makes the direct admission more convenient, as often there are some directives about the needed workup and suggestions about admission orders from the patient's primary care provider. In contrast, many ED patients do not even have a primary care provider and much less is known about his or her prior workups. As one hospitalist stated:

“Patients referred by someone you know [outpatient provider] as opposed to someone cold coming into the ER brings about a whole different set of tasks. Someone [from the ER] might not have a medical home, so need to do all these tests for the first time.”

b. Emergency Department admissions offer convenience in obtaining diagnostic workups and specialty consultations for acute complaints.

On the other hand, ED admissions often have a more current medical evaluation of the patient's acute complaint. The hospitalist has access to this workup, including all studies done prior to the patient's admission. Hospitalists also noted an ease of acquisition of diagnostic tests and consults from the ED that may otherwise be less readily available when patients are admitted directly. In some cases, however, there may be tests ordered in the ED workup that are duplicative in nature to prior tests done in the outpatient setting. As one provider noted:

“If the patient is coming from the ED . . . it's easier to coordinate inpatient care with consultants. Downside, the person has had their 19th abdominal scan of the year, because they were in for pain again, but that could have been avoided if we had the [outpatient provider] data.”

c. Although direct admissions are perceived as usually being of lower acuity, some need additional stabilization on the inpatient ward.

Many participants in our hospitalist focus group cited that direct admissions as generally having a lower acuity than those arriving from the ED. But because many of these patients have not seen their doctor immediately prior to arrival, more of their workup has to be done on the hospital floor. As this workup is in process, problems may surface that require additional stabilization. This is less often a problem when patients come from the ED. One focus group participant noted:

“I feel that when a patient comes from his home [there is a perception of] low acuity. Their workup and treatment is delayed compared to somebody who is coming to the ER or those people who we know more about their clinical scenarios. We give patients [who are direct admissions] low priority because we feel they are stable and have been seen by their physician recently.”

One pediatric hospitalist noted that often there is a higher confidence about the adequacy of the evaluation and stabilization of patients who are admitted from the ED:

“[In] pediatrics, we have a higher rate of ICU transfers for direct admissions than the ED.... Physicians on the outside just don't treat kids as well as ED docs.”

d. Being admitted through the ED offers both advantages and disadvantages to the patient.

Participants cited direct positive and negative consequences to the patient from ED versus direct admissions. On the one hand, ED admissions may facilitate enrollment into emergency Medicaid for patients without insurance and save costs by avoiding a separate outpatient visit. However, ED admissions may result in prolonged and inconvenient ED stays that could have otherwise been avoided with direct admission. As focus group participants noted:

For a lot of people who are uninsured or self-pay, they go through the ED and if they are admitted the hospital [they] will have them fill out . . . [an] emergency Medicaid [application] . . . the ED [visit] is bundled into the hospital visit.

Patients like direct [admissions] so they don't sit in [an] uncomfortable bed in the ER for a long time.

e. Admission decisions in the ED are primarily made by the ED physician.

In the majority cases, hospitalists stated the main decision for admission is left to the ED doctor although often they would discuss the case with the ED. Often because patients are admitted to the floor prior to evaluation or because residents may be involved in admission, many hospitalists stated they did not have an opportunity to see patients in the ED for prolonged discussion about the appropriateness of the admission. The majority of hospitalists (five of six) in our focus group stated they usually do not engage the primary care provider in making decisions about the admission. Some hospitalists did state that in some cases more communication with the outpatient primary care provider would be helpful in their roles as admitting physicians. As one stated:

In some situations, it would be nice to have that conversation [with the PCP to] get some missing information.

2. Hospitalist physician perspectives on trend towards ED versus direct admissions

We also asked focus group participants about their opinions about factors driving the trend in ED-generated admissions. Many hospitalists echoed a number of comments from other focus groups and interviews that a myriad of issues impact the trend in the increase in ED admissions, including factors related to access to care and outpatient provider practice capacity.

a. Reduced access to outpatient care is a major contributor to the rising number of admissions from the ED.

Hospitalists in our focus groups felt that access to care and insurance coverage is a primary cause of the trend in increased ED admissions. In particular, the current economic situation has shifted care from the outpatient setting, which may be difficult to access due to cost and insurance coverage, to EDs. As one hospitalist stated:

“It has a lot to do with insurance. We are in a difficult time, lots of people have lost their jobs and have no insurance. They can't afford to see their primary care doc, so they wait until things get really bad and then come to the ER.”

Hospitalists also felt that the ED also may be viewed as a more flexible alternative for patients with insurance who cannot afford up-front cost sharing, such as co-pays and large deductibles associated with outpatient visit evaluations. As one hospitalist noted:

“Those with insurance and financial hardship don’t want to spend on their co-pay. Coming to the ER, they’ll have a big bill and if they can’t pay, the hospital has to handle it.”

b. Outpatient providers have limited capacity to provide the type of comprehensive workups available through the ED.

Participants cited limitations in primary care provider capacity that prohibited extensive workups in the outpatient setting as another factor contributing to the trend in higher ED-generated admissions. Outpatient providers may also be more likely to use the ED for fear of adverse consequences, such as malpractice, if acute care workups for certain complaints are not pursued. According to one participant:

“What might be driving it is economics...for outpatient primary care you have to see each patient in 10–15 minutes. You don’t have enough time to package someone, get the bed set up, get orders done, and get them directly admitted. It’s easier for doctors to say ‘go to the ER and they will figure it out.’ ...The other thing that might be driving [costs] is fear and lawsuit and malpractice. You’re here in my office with chest pain, I’m just going to send you to an acute care setting for triage.”

3. Hospital physician experience with preventable admissions

Hospitalists in our focus group were queried about their opinions about preventable admissions. Participants cited sociodemographic and diagnostic factors that led to preventable hospitalizations, as well lack of access to outpatient data.

a. Certain patient demographic groups are more prone to preventable admissions, such as nursing home patients.

Participants cited dizziness and chest pain as frequently seen, preventable-admission diagnoses coming from the ED. Many participants felt that certain populations, such as nursing home patients, account for a large number of preventable admissions, mainly due to lack of provider support at the referring facility. As one participant noted:

“If the patient comes from the nursing home, they are often admitted when they don’t have to be. But the nursing home doesn’t have a doctor to keep tabs on the patients.”

b. Lack of access to outpatient primary care was cited as the most common cause of preventable admissions by hospitalists in our focus groups.

The most common cause of preventable admissions cited was lack of access to primary care, noted by all of the focus group participants in one poll question (six of six). Five of six providers also noted financial concerns as another cause. Other commonly cited reasons included the growing age and complexity of patients (four of six respondents).

Social concerns and lack of coordination of care were also noted in our discussion as a reason for preventable admissions, particularly those occurring through the ED. As focus group participants stated:

“Patients get admitted because we don’t have a good system in place for follow-up. If there was rapid follow up [with a PCP, the ER] might not admit.”

“There’s often a lot of ‘social admissions’ where even the ER MD will say they don’t want to admit, but they don’t know what else to do, where else to send [the patient].”

c. Hospitalists in our focus group felt that emergency physicians’ inability to access outpatient medical records contributes to preventable admissions.

Access to outpatient data, such as electronic medical records, was also noted as an important factor in reducing preventable admissions from the ED. Often, such access can reduce duplicative tests and avoid a potential admission. As one participant noted:

“Some ER docs don’t take advantage of the EMR [due to time and other factors]... They just ask the patient, leading to multiple CTs.”

4. Hospital physician experience with readmissions.

Hospitalists in our focus groups were asked about readmissions. The reasons they cited were very similar to those cited for preventable hospitalizations. For example, three of six respondents cited lack of timely access to outpatient care as a common cause of readmissions. Other reasons included poor communication with the patient at the time of discharge, leading to such preventable consequences as medication errors and patient noncompliance. Focus group participants also felt that better care coordination and more careful discharge planning could reduce readmissions.

Most participants in our focus group noted the importance of having coordination in place to reduce readmissions, but often noted that it is difficult to achieve due to time constraints. We also asked focus group participants if they were aware of successful interventions to reduce readmissions. One participant described a novel program in which all patients are phoned within one to three days of discharge to inquire about follow-up care, access to outpatient care and prescriptions, and satisfaction with care. However, it is too early to know the impact of this effort. Another participant noted that they have a flag in place so that any patient returning to the ED within 30 days after a hospital discharge is assessed by a hospitalist, to try to treat the patient in the ED and avoid readmission. This focus group felt it would be important to include emergency providers in future discussions about reducing readmissions. As one participant noted:

“Even if you do a great discharge, there’s still got to be solutions out there...someone reaching out for a home visit, making sure timely follow-up [is obtained]. Reviewing the medicine, really having a good transfer of information [to the PCP].”

5. Hospitalist physicians' views of the ED's impact on health care costs.

Our hospital physician focus group participants also shared their perspectives on how ED care is influencing health care costs. Most viewed the ED as a contributor to excess costs, rather than cost saving. For example, our hospitalist focus group felt that EDs order expensive tests due to lack of prior medical history on patients with often complex medical issues. Because they have limited information about past medical history, they often have to do tests that may be duplicative. As one participant noted:

“It’s difficult to condemn the ER docs if they are operating in a data vacuum. [It would help] if they could link into other databases and not have to repeat tests.”

Hospitalists felt EDs could help lower ED-generated costs by incorporating observation units into their operations and using less expensive mid-level providers to see patients with lower-acuity complaints.

Primary Care Physicians

1. Referrals to emergency department.

During our interviews with PCPs, we asked each participant to describe their experience with ED referrals, including the frequency with which they referred patients to an ED for evaluation. Participants varied in the frequency that they referred patients to the ED, from once a month to five to seven times per week. We also asked participants to explain the factors they consider when deciding to see a patient themselves, versus referring him or her to the ED.

a. PCPs cited patient illness severity and complexity as the major reasons they refer patients to the emergency department

“... they will call with symptoms and it is clear that they need an ED evaluation rather than an appointment.”

“... complexity of patients”

“Clinical concerns. Strictly clinical concerns. Are they likely to have something critical to life or limb”

“In patients that are very complicated, where it could be one of several things, this will make me send them to an ER.”

“I recognize that the problem represents a level of care that cannot be handled in the office.”

b. Time of day or day of week

“Contacted after hours or no appointments [available], yes, it would be a factor in sending to the ED”

“Day of week is a consideration as well ... people tend to get sicker on the weekend, for example. Also, people with lower income will more likely go for care after [physician office] hours.”

“If a patient calls during office hours, I would see them first.”

“ER patients were directed there by their doctors. When I call a doctor to speak to them, you get their answering machine, they just say go to the ER.”

“We always make room for a sick patient in my office.”

“If I have a lot of patients in the office that day, I have to consider the other patients I have scheduled that day. Things that are easier to handle, I can take care of in the office ... but more complicated things go to the ER.”

“When they couldn’t see a patient in the office, they send them to the ER.”

“If it’s 4:30 in the afternoon, we can’t work them in. They could go to the urgent care clinic, but if there’s no choice, then the ER. So in this case, availability or time of day.”

“If the office is closed, and [the patient] cannot wait, send them to the ER.”

c. The ED’s access to diagnostic equipment

“If it’s a Friday at 4:30 PM and we wouldn’t be able to get blood work or imaging, we send them. In general we try to get them to our office first.”

“Occasionally x-ray plays a role. If someone fell from a height and we don’t have an x-ray tech available, we’ll send to the hospital. We have an x-ray machine in the office, but we don’t always have an x-ray technician. Maybe on a Friday afternoon we wouldn’t have someone available. Usually we’ll see them first.”

d. PCPs were also asked to identify factors that might reduce their need to make ED referrals from their practices

Most could not identify specific factors to reduce the frequency of ED referrals. The few who did cited improving patient access to their primary care provider and earlier recognition of worrisome symptoms.

“Patient’s access to their primary care doctor. ... There has got to be some other access than the ER when the patient needs timely care.”

“Preventive screening has a huge impact in terms of the acute medical issues that will bring people to more urgent care settings.”

“Early recognition and prompt care. If we had more open slots for sick kids [patients], that would really help.”

“Increasing availability. Change the approach. If the office is full, figure out something. The urgent care approach we had really helped out a lot.”

e. All the PCPs we interviewed asserted that type of insurance has no impact on ED referrals.

“I try not to make decisions based on insurance.”

“No [insurance] does not affect my decision. I give everyone the same quality of care whether they are Medicare, Blue Cross, or HMO.”

“Type of insurance does not affect me at all. It doesn’t tell me if it’s HMO or PPO so I don’t even know.”

“I’d rather not know anything about insurance.”

“We have Medicare managed care patients. If patients have to go to a certain ED depending on the plan. Certain HMO’s have to go to certain hospitals. But it does not guide my decision – not more or less likely to refer to the ED.”

“Doesn’t affect referral patterns.”

f. Most of our PCP interviewees said they are minimally involved in decisions about ED management and hospital admission

Generally, interview participants reported limited involvement with their patients’ ED care.

“Rarely to never. Never contacted by ED doctor. We do a sign off and can tell them things, but whether they listen, I don’t know.”

“ED contacts only if they [the patient] needs to be admitted or transferred. I would mostly not get a call.”

“Rarely, Happens once or twice a month. I’ll get a call from the ED about one of my patients. I’m happy to get those calls.”

“Generally, they don’t call. They handle it and let me know if the patient is going to be admitted or discharged.”

“Less than 1 percent.”

“We are not involved in managing patients in the ED.”

There were exceptions when PCPs reported significant involvement with their patient’s ED care:

“If a patient is being sent to the ED from my office, then yes. I’m involved in their care.”

“Any time I send someone over, I always call and speak with the physician in the ED. Whether it’s from the office or directly, I encourage them to let the ED physician know that I am their primary care doctor and that I would like to be involved. Once they’ve had the evaluation done, I do like to be called.”

“I’ll either directly admit or send to the ED for observation. I’d prefer to do a direct admission if I know what’s going on because it saves hassle for the patient and saves money. But if it’s chest pain, I can’t directly admit them. They have to go to the ER first to look at the enzymes, etc.”

“When referring, I send a chart summary, flow sheet, and recent lab work to the ER ... anything relevant I’ve done in the last year.”

g. The PCPs we interviewed explained that there are challenges with current care coordination. They also provided suggestions to improve it.

“It’s not great.”

“Definitely [need] more communication. ... A number of patients on their own have gone to the EDs and I never get a call.”

“Nothing I’m aware of for care coordination.”

“Currently, use telephone or pager. No email.”

“...I have no idea what’s going on. I need to get an ER report every time there is an encounter [with one of my patients].”

“No transfer of information, no interface between us and the hospital.”

Interview participants provided several suggestions for improving care coordination.

“Electronic medical record. We provide a brief summary [for the ED]. It would be nice to get communication in return. They don’t dictate a letter.”

“Ideally, there would be a completely integrated electronic health system.”

“They always fax a report, so I always know when my patients have been seen.”

“The key of the future is ‘one patient, one chart.’ Whether the ER writes me or not, set up the chart [EMR] so that it automatically updates me.”

6. PCP perceptions of ED versus direct admission to the hospital from office.

During our interviews, we asked participants describe their experience with hospital admission decisions, including the factors they considered when sending a patient to the ED for admission versus directly admitting the patient from their office. We also asked about the advantages for the patient and the physician that come from sending the patient to the ED for hospital admission versus directly admitting the patient.

a. All the physicians we interviewed have admitting privileges with at least one hospital; however, the frequency with which our interviewees directly admit patients ranged from never to almost always.

More physicians reported rarely admitting patients directly to the hospital; however, there was variation in this answer.

“100 percent go to the ER.”

“Have admitting privileges, but I don’t use them.”

“Rare, very rarely. . . . I use the hospitalist. I rarely direct admit.”

“If it’s someone that I know needs admission, I’ll make arrangements. I call the hospital, send notes. I am paid nothing for such admissions, about 30 minutes of work.”

“For every direct admission from my office, around 3–4 are sent to the ER.”

“We are frequent users of direct admit.”

“For every patient I sent to the ED, I probably admit 20, 50, or more directly myself. I have a nurse practitioner, and if she sees people, we’ll admit them directly to the floor and I’ll see them. It’s a very easy process.”

“As often as we’re able, we’ll try to direct admit. . . . We’re frequent users of direct admit.”

b. PCPs consider various clinical and non-clinical factors when making the decision to refer a patient in need of admission to the ED.

Several factors were identified as reasons to send patients to the ED for admission. The most commonly cited reason was clinical concerns followed by the needs for more timely medical tests. Other reasons included the time it takes for direct admission and the need for patient information, which may not be available (after hours or on weekends).

“If something needs to be done immediately, CT scan, blood work, etc., then we can’t admit directly.”

“They [the ED] can initiate treatment while the patient waits for a bed.”

“Clinical concerns, primarily. Disposition and stabilization.”

“Strictly clinical [reasons]. Is the patient better served in the ED for a few hours rather than on the floor? If I need them to be closely monitored, I send them to the ED.”

“If somebody is unstable, you get another set of eyes looking at the patient. You do have that access going through the ER versus going directly into admission.”

“If it’s someone that I know needs admission, I make arrangements. I call the hospital, send notes. Will bypass the ER if admission is certain. I am paid nothing for such admissions, about 30 minutes of work.”

“If it’s the weekend and I don’t have access to the patient’s chart. I don’t have a way to write the order. There are many reasons, because they can’t provide the service, as opposed to during office hours. You could do the orders yourself. I think it’s a lot of laziness.”

We also asked specifically about the role of the type of insurance in influencing whether the physician sent the patient to the ED versus directly admitting the patient. The vast majority physicians responded that insurance type does not influence that decision.

“No factor. Not even if uninsured.”

“Doesn’t factor either way.”

“Zero. It’s my clinical judgment.”

One physician explained that patients covered by certain insurance plans cannot be admitted to their community hospital, so this physician must send them to the ED of a hospital that accepts their insurance. This physician does not have admitting privileges at the other hospital.

We asked PCPs to offer their views on the trend for more patients to be admitted through the ED rather than directly. Several reasons were cited.

“The number one reason is that primary care physicians are no longer doing hospital work...If you look at the data, less than half of the family medicine graduates, after finishing residence, never go into the hospital again. They no longer do inpatient work.”

“Shortage of primary care access. It’s so easy to admit that I don’t think admitting is much of a barrier. We have a phone number and someone can bring the hospitalist and ED doctor in for a conversation.”

“Physician groups. The outside doctor doesn’t know what’s going on. If I’m not on call and it’s my patient, the ER is going to be more capable.”

“Ease of admission [through the ED] for the outlying doctor.”

c. We also asked PCPs if there are advantages to both the physician and their patient from going to the ED for admission.

The responses were similar to the factors that physicians considered when determining whether to send the patient to the ED or directly admit the patient. The most commonly cited reason was to ensure immediate medical care and observation, including the need for timely testing.

“Making sure they are getting the care. So that there is no lapse in treatment.”

“More careful observation in those first few hours while you’re getting the ball rolling.”

“ER – faster services, faster start time for meds and tests. Another educated set of eyes looking at patient differently.”

d. We discussed the PCPs’ experience working with hospitalists service and, particularly, whether hospitalist physicians discuss admission decisions with the patient’s PCP.

Nine of the physicians we interviewed reported using a hospitalist service. The communication with the hospitalist varied somewhat; however, the majority of responses indicated limited communication with the hospitalist both in the admission decision and in subsequent hospital care of the patient.

“The ED doctor provides all the information to the hospitalist. From then, throughout the hospitalization, generally the hospitalist does not call.”

“Do not discuss [the admission decision]. Decision about admission is between hospitalist and ED doctor.”

“Not involved in decisions after...Entire decision is up to the hospitalist.”

“Hospitalist does not discuss decision. No contact.”

“They might contact you when they [the patient] get admitted and sometimes they [the hospitalist] do when they get discharged.”

“We will call the hospitalist [if a patient] needs to be admitted, then send the information with the patient to the hospital. But they are admitted through the hospital. They do not have to go to the ER.”

“Hospitalists are thought of as an inpatient service. Often they admit sub-specialties. The hospitalists as the slaves of everybody else and they’re just put to work and they don’t question it.”

7. Interview participants also shared their perspectives on how ED care influences healthcare costs

During our interviews with PCPs, we asked participants to describe their experience with ED referrals, including the frequency with which they referred patients for evaluation in an ED. Participants varied in the frequency that they referred patients to the ED from once a month to five to seven times per week.

a. PCPs cited patient self-referral to the ED for issues that could be treated in other health care settings as a common contributor to the growing cost of health care.

“Unnecessary emergency room visits. Things that could be handled in the clinic.”

“I don’t think ED’s are contributing. I think it’s the patients. A lot of patients like the service they get in the ER. They get quick tests, answers, easily accessible, 24/7. I don’t think they [the ED] are doing anything that is unnecessary or inappropriate.”

“It’s patients who go for unnecessary reasons. I have a patient, for instance...for whatever reason, in the past year he has visited the ER on at least two or three occasions. I’ve gotten reports [that he went to the ER] for an acute sore throat...something that does not warrant an ER visit. I think he goes because it’s convenient. He can go since he doesn’t have to miss work.”

“A lot of the costs are because patients feel they should go to the ED and they don’t need to. We set up our schedule so patients can be seen same-day, but most are self-referral patients.”

“Older, sicker people not coming in to see their primary care doctor. Knuckleheaded patients. Lack of [primary care office] hours.”

“Shortage of primary care doctors. The expectation that patients want immediate care that you can’t provide.”

“Patients are having a difficult time getting in to see their PCPs. Lots of self-referrals to EDs.”

b. The PCPs we interviewed cited other cost-driving factors as well.

The use of tests and defensive medicine to avoid malpractice suits were also cited as reasons EDs contribute to growing costs.

“Sometimes they do a lot of testing, such as chest x-rays.”

“The training of ER docs today...Based on chief complaint, you [the ED physician] order tests before you see the patient. Someone comes in with abdominal pain, you order the CT scan before you see them.”

“I talked to ED directors, they said they didn’t want to get sued...ERs do a lot extra. That’s the way they are taught due to malpractice concerns.”

“Extensive testing when things may be more reassuring and defensive medicine needs to be played.”

“CT scans. Imaging studies.”

“Excess imaging. People go in for various complaints and end up with a CT of their head if they are complaining about abdominal pain.”

“Far too many tests ordered and less reliance on exams.”

“They [the EDs] are a safety net and they are a place of last resort, but it is very expensive. If it wasn’t there, there would be people dying on the streets. ... They can’t send people back once they present to the ER because they are in violation of the [EMTALA] law.”

“The pricing is outrageous. Just a bag of IV fluids is \$200.”

“It’s a lot of defensive medicine... we need to work on the malpractice laws.”

c. Our interviewees also cited a few ways that EDs are helping to hold down the growths of costs.

Generally, interview participants reported that EDs can help reduce the growth of health care costs by providing patients with timely health care and by keeping patients from being admitted who do not need to be.

“Timely access to health care.”

“By keeping people out of the hospital.”

“Because they can observe patients and discharge them so that they are not admitted.”

“If they are seeing someone who is kind of sick but doesn’t have to be admitted, then by avoiding admission they are saving money. Even though it is more expensive than being seen in my office, it’s a lot cheaper than an admission.”