

## Supplementary Online Content

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**eTABLE.** Systematic Studies of Discharges Against Medical Advice

This supplementary material has been peer reviewed, edited, and approved by the authors.

eTABLE. Systematic Studies of Discharges Against Medical Advice<sup>a</sup>

Reference	Type of study	Population studied	Patients leaving the hospital AMA	Study period	Conclusions
Albert & Kornfeld, <sup>14</sup> 1973	Case series	Single urban institution	28	1973	Patients who signed out AMA exhibited fear, anger, and psychotic reactions
Schlauch et al, <sup>15</sup> 1979	Retrospective chart review	Single urban teaching hospital	134	1974-1975	Patients who signed out AMA were more likely to be younger, male, and African American
Baile et al, <sup>16</sup> 1979	Case-control	Coronary care patients from a single urban institution	29	1974-1977	Patients who signed out AMA were more likely to be younger, have a history of AMA discharge, and self-report emotional problems
Corley & Link, <sup>11</sup> 1981	Case-control	Single VA institution	33	1976	Patients who signed out AMA were more likely to be younger, have a history of alcoholism, and die within 6 mo of discharge
Wylie & Michelson, <sup>7</sup> 1980	Case-control	Cross-section of 399,971 discharges from general US hospitals	2927	1977	Elderly patients, patients with alcohol-related disorders, and both Medicaid and privately insured patients were more likely to leave the hospital AMA
Jones and Himmelstein, <sup>17</sup> 1979	Retrospective chart review	Urban county hospital	237	1977-1978	Patients who signed out AMA had severe medical illness and alcohol-related diagnoses
Ochitill et al, <sup>18</sup> 1985	Case-control	Single urban institution; cardiology service patients	32	1978-1979	White, English-speaking patients were more likely to leave the hospital AMA; patients who left AMA had signs of alcohol abuse, apparent anxiety, and use of psychotropic medications
Long & Marin, <sup>19</sup> 1982	Retrospective chart review, medical, surgical, pediatric, psychiatric, and MICU units	Single urban teaching hospital	134	1978-1979	Young male patients with psychiatric diagnosis signed out AMA
Link et al, <sup>10</sup> 1983	Retrospective chart review	Single academic hospital	57	1979	Mortality rate among patients discharged AMA was 16%; most patients followed up after discharge
Ochitill et al, <sup>20</sup> 1987	Follow-up on case-control study	Single urban institution	20	1980	No differences were found between the 2 groups in demographics, subsequent hospital admissions, or deaths
Holden et al, <sup>21</sup> 1989	Case-control	Single urban VA institution; combination of medical, surgical, rehabilitation, and ICU wards	31	1980-1985	Patients seen early by psychiatric consultant were less likely to sign out AMA
Weingart et al, <sup>22</sup> 1998	Case-control	Single urban teaching hospital	472	1984-1995	Younger age, male sex, uninsured or Medicaid, and no primary physician increased the likelihood of AMA discharge
Smith & Telles, <sup>23</sup> 1991	Cross-sectional	Discharge data from 67 acute care hospitals in 1 metropolitan area	7613	1986-1987	AMA discharges were less common in suburban areas, among insured or non-Medicaid patients, and among female patients
Chan et al, <sup>24</sup> 2004	Retrospective cohort	HIV/AIDS ward from a single urban institution	263	1987	Discharge AMA was more likely on weekends and among recent injection drug users; inpatient methadone treatment lowered the likelihood of AMA discharge
O'Hara et al, <sup>25</sup> 1996	Retrospective chart review	Single urban teaching hospital in Australia	1146	1991-1993	More patients who signed out AMA were at the extremes of adult age and had diagnosis of cancer or femur fracture
Saitz et al, <sup>26</sup> 1999	Retrospective cohort	Hospital discharge data for all patients discharged with the diagnosis of pneumonia from hospitals in 6 Northeastern states	23,198	1992	Younger age, male sex, uninsured, and an alcohol- or drug-related diagnosis were independently associated with AMA discharge
Jeremiah et al, <sup>27</sup> 1995	Case-control	Single urban teaching hospital	39	1993	History of AMA discharge and not having a primary physician were associated with AMA discharge
Hwang et al, <sup>3</sup> 2003	Prospective cohort	Single urban teaching hospital	97	1997-1998	AMA discharge predicts readmission within 2 wk
Anis et al, <sup>13</sup> 2002	Retrospective cohort	Single Canadian urban institution	125	1997-1999	Injection drug use and leaving the day social assistance checks were issued were associated with AMA discharge
Duñó et al, <sup>28</sup> 2003	Case-control	Single urban teaching hospital in Spain; combination of medical, surgical, ob/gyn, and orthopedic wards	142	1998-1999	Patients who signed out AMA were more likely to have a psychiatric diagnosis
Franks et al, <sup>29</sup> 2006	Cross-sectional	13,933,397 hospital discharges from 3 states (NY, FL, CA)	176,101	1998-2000	Individual and hospital socioeconomic factors likely account for differences in AMA discharges among races

(Continued)

TABLE. Continued<sup>a</sup>

Reference	Type of study	Population studied	Patients leaving the hospital AMA	Study period	Conclusions
Fiscella et al, <sup>9</sup> 2007	Retrospective cohort	California hospital discharge data	1079	1998-2000	Risk of MI and death was 40% greater among patients who signed out AMA
Baptist et al, <sup>8</sup> 2007	Case-control	All asthma discharges from 3 hospitals in same city	180	1999-2004	Younger, male, Medicaid patients were more likely to be discharged AMA and be readmitted within 30 d
Aliyu, <sup>12</sup> 2002	Retrospective cohort	Single urban institution	218	2000	Male sex, lack of insurance, substance abuse, and African American race were associated with AMA discharges
Seaborn Moysse & Osmun, <sup>30</sup> 2004	Retrospective chart review	Single rural institution in Canada; discharges from medical, surgical, psychiatric, and obstetric services	35	2000-2002	Males with psychiatric conditions including substance abuse were more likely to sign out AMA; patients signing out AMA had shorter lengths of stay
Ibrahim et al, <sup>5</sup> 2007	Retrospective cohort	Discharge data from 995 acute care hospitals	43,678	2002	Younger age, male sex, low socioeconomic status, and African American race were associated with AMA discharges

<sup>a</sup> AMA = against medical advice; HIV = human immunodeficiency virus; ICU = intensive care unit; MI = myocardial infarction; MICU = medical intensive care unit; ob/gyn = obstetric/gynecologic; VA = Veterans Affairs.

## REFERENCES

- Hwang SW, Li J, Gupta R, Chien V, Martin RE. What happens to patients who leave hospital against medical advice? *CMAJ*. 2003;168(4):417-420.
- Ibrahim SA, Kwok CK, Krishnan E. Factors associated with patients who leave acute-care hospitals against medical advice. *Am J Public Health*. 2007 Dec;97(12):2204-2208. Epub 2007 Oct 30.
- Wylie CM, Michelson RB. Age contrasts in self-discharge from general hospitals. *Hosp Formul*. 1980;15(4):273, 276-277.
- Baptist AP, Warrior I, Arora R, Ager J, Massanari RM. Hospitalized patients with asthma who leave against medical advice: characteristics, reasons, and outcomes. *J Allergy Clin Immunol*. 2007 Apr;119(4):924-929. Epub 2007 Jan 18.
- Fiscella K, Meldrum S, Barnett S. Hospital discharge against advice after myocardial infarction: deaths and readmissions. *Am J Med*. 2007;120(12):1047-1053.
- Link K, Brody CE, Chan J. Leaving a medical service against advice. *Va Med*. 1983;110(2):100-102.
- Corley MC, Link K. Men patients who leave a general hospital against medical advice: mortality rate within six months. *J Stud Alcohol*. 1981;42(11):1058-1061.
- Aliyu ZY. Discharge against medical advice: sociodemographic, clinical and financial perspectives. *Int J Clin Pract*. 2002;56(5):325-327.
- Anis AH, Sun H, Guh DP, Palepu A, Schechter MT, O'Shaughnessy MV. Leaving hospital against medical advice among HIV-positive patients. *CMAJ*. 2002;167(6):633-637.
- Albert HD, Kornfeld DS. The threat to sign out against medical advice. *Ann Intern Med*. 1973;79(6):888-891.
- Schlauch RW, Reich P, Kelly MJ. Leaving the hospital against medical advice. *N Engl J Med*. 1979;300(1):22-24.
- Baile WF, Brinker JA, Wachspress JD, Engel BT. Signouts against medical advice from a coronary care unit. *J Behav Med*. 1979;2(1):85-92.
- Jones AA, Himmelstein DU. Leaving a county hospital against medical advice [letter]. *JAMA*. 1979;242(25):2758.
- Ochitill HN, Havassy B, Byrd RC, Peters R. Leaving a cardiology service against medical advice. *J Chronic Dis*. 1985;38(1):79-84.
- Long JP, Marin A. Profile of patients signing against medical advice. *J Fam Pract*. 1982;15(3):551, 556.
- Ochitill HN, Byrd RC, Greene J. Leaving a cardiology service against medical advice—a follow-up study. *West J Med*. 1987;146(6):765.
- Holden P, Vogtsberger KN, Mohl PC, Fuller DS. Patients who leave the hospital against medical advice: the role of the psychiatric consultant. *Psychosomatics*. 1989;30(4):396-404.
- Weingart SN, Davis RB, Phillips RS. Patients discharged against medical advice from a general medicine service. *J Gen Intern Med*. 1998;13(8):568-571.
- Smith DB, Telles JL. Discharges against medical advice at regional acute care hospitals [published correction appears in *Am J Public Health*. 1991;81(5):567]. *Am J Public Health*. 1991;81(2):212-215.
- Chan AC, Palepu A, Guh DP, et al. HIV-positive injection drug users who leave the hospital against medical advice: the mitigating role of methadone and social support. *J Acquir Immune Defic Syndr*. 2004;35(1):56-59.
- O'Hara D, Hart W, McDonald I. Leaving hospital against medical advice. *J Qual Clin Pract*. 1996;16(3):157-164.
- Saitz R, Ghali WA, Moskowitz MA. Characteristics of patients with pneumonia who are discharged from hospitals against medical advice. *Am J Med*. 1999;107(5):507-509.
- Jeremiah J, O'Sullivan P, Stein MD. Who leaves against medical advice? *J Gen Intern Med*. 1995;10(7):403-405.
- Duñó R, Pousa E, Sans J, Tolosa C, Ruiz A. Discharge against medical advice at a general hospital in Catalonia. *Gen Hosp Psychiatry*. 2003;25(1):46-50.
- Franks P, Meldrum S, Fiscella K. Discharges against medical advice: are race/ethnicity predictors? *J Gen Intern Med*. 2006;21(9):955-960.
- Seaborn Moysse H, Osmun WE. Discharges against medical advice: a community hospital's experience [published correction appears in *Can J Rural Med*. 2004;9(4):265]. *Can J Rural Med*. 2004;9(3):148-153.