Bibliography of Research Applications Using VA National *Inpatient Databases*

Veterans Affairs Information Resource Center
VA Information Resource Center (VIReC), Building 1, Room C303,
Hines VA Hospital (151V), 5th Avenue & Roosevelt Road, Hines, IL 60141-5000
E-mail:virec@research.hines.med.va.gov

Introduction

This bibliography of research applications using VA national inpatient data lists published reports that researchers may reference in their own research.

A PubMed (http://www.ncbi.nih.gov/entrez/query.fcgi) search was conducted on 11/22/02, with 261 references resulting from using the parameters of:

(veteran OR veterans)
AND (data OR database OR databases)
AND (inpatient OR inpatients OR PTF)

Each abstract was read, and a qualitative judgment was made concerning relevance to the Medical SAS Datasets using the following criteria:

Does the abstract refer to "inpatient" or "administrative" data?
Does the abstract refer to "Austin Automation Center" or "AAC" data?

If the answer to both questions was yes, the article was classified as relevant to research applications using national VA data. This yielded a total of 77 articles.

These 77 relevant articles are listed here, sorted by year and alphabetized within each year. A link to the PubMed entry is provided for each citation.

The list is organized by:
-**Year of publication**
-**Author(s)**
-*Title*
-Medline Journal Abbreviation
-Publisher
-Abstract
-Link to PubMed entry with abstract ID, MeSH terms, and related articles

Bibliography of Research Applications Using VA National Inpatient Databases

Year 2002

Benda BB.
Factors associated with rehospitalization among veterans in a substance abuse treatment program.
Psychiatr Serv 2002; 53(9):1176-1178.

Abstract: This study sought to determine predictors of rehospitalization among veterans in an inpatient substance abuse treatment program, many of whom had psychiatric disorders. A random sample of 600 veterans was interviewed at program entry about some factors not generally assessed as predictors. Information on rehospitalization in the two years after discharge was obtained from the databases of Veterans Affairs hospitals. Cox's proportional hazards model was used. Variables that were the strongest predictors were self-efficacy, childhood sexual and physical abuse, and religiosity. The results indicate that factors not usually investigated, such as attachment to family of origin, early physical and sexual abuse, and self-efficacy, are related to rehospitalization and should be further investigated
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=12221320&dopt=r

Best WR, Khuri SF, Phelan M, Hur K, Henderson WG, Demakis JG et al.
Identifying patient preoperative risk factors and postoperative adverse events in administrative databases: results from the Department of Veterans Affairs National Surgical Quality Improvement Program.
J Am Coll Surg 2002; 194(3):257-266.

Abstract: BACKGROUND: The Department of Veterans Affairs (DVA) National Surgical Quality Improvement Program (NSQIP) employs trained nurse data collectors to prospectively gather preoperative patient characteristics and 30-day postoperative outcomes for most major operations in 123 DVA hospitals to provide risk-adjusted outcomes to centers as quality indicators. It has been suggested that routine hospital discharge abstracts contain the same information and would provide accurate and complete data at much lower cost. STUDY DESIGN: With preoperative risks and 30-day outcomes recorded by trained data collectors as criteria standards, ICD-9-CM hospital discharge diagnosis codes in the Patient Treatment File (PTF) were tested for sensitivity and positive predictive value. ICD-9-CM codes for 61 preoperative patient characteristics and 21 postoperative adverse events were identified. RESULTS: Moderately good ICD-9-CM matches of descriptions were found for 37 NSQIP preoperative patient characteristics (61%); good data were available from other automated sources for another 15 (25%). ICD-9-CM coding was available for only 13 (45%) of the top 29 predictor variables. In only three (23%) was sensitivity and in only four (31%) was positive predictive value greater than 0.500. There were ICD-9-CM matches for all 21 NSQIP postoperative adverse events; multiple matches were appropriate for most. Postoperative occurrence was implied in only 41%; same breadth of clinical description in only 23%. In only four (7%) was sensitivity and only two (4%) was positive predictive value greater than 0.500. CONCLUSION: Sensitivity and positive predictive value of administrative data in comparison to NSQIP data were poor. We cannot recommend substitution of administrative data for NSQIP data methods
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=11893128&dopt=r

Buchner AM, Sonnenberg A.
Factors influencing the prevalence of gallstones in liver disease: the beneficial and harmful influences of alcohol.
Am J Gastroenterol 2002; 97(4):905-909.

Abstract: OBJECTIVE: The Patient Treatment File of the Department of Veterans Affairs comprises the computerized records of all inpatients treated in all Veterans Affairs hospitals distributed throughout the United States. This database was used to study the association between liver disease and clinically manifest cholelithiasis. METHODS: The computerized medical records of 38,459 patients with various forms of liver disease and 69,336 controls without the diagnosis were extracted from the annual files between 1990 and 1993. In a multiple logistic regression analysis, the occurrence of cholelithiasis served as the outcome variable, whereas different forms of liver disease and demographic characteristics, such as age, gender, and ethnicity, served as predictor variables. RESULTS: Among the control population, cholelithiasis was reported in 5.2% (3,571 of 69,336) of subjects. Cholelithiasis occurred in 7.5% (2,898 of

38,459) of patients with all liver disease, 9.5% (1,642 of 17,287) of patients with alcoholic liver cirrhosis, 13.7% (981 of 7,149) of patients with nonalcoholic liver cirrhosis, and 9.1% (66 of 728) of patients with alcoholic fatty liver (chi2 = 1059, df = 4, p < 0.001). In the logistic regression, the odds ratios (ORs) for cholelithiasis associated with various forms of liver disease were: in all liver diseases combined (OR = 1.31, 95% CI = 1.25-1.38), in alcoholic liver cirrhosis (OR = 1.62, 95% CI = 1.54-1.72), in nonalcoholic liver cirrhosis (OR = 2.07, 95% CI = 1.94-2.21), and in alcoholic fatty liver (OR = 1.40, 95% CI = 1.11-1.75). Other risk factors for cholelithiasis besides liver disease were: female gender (OR = 1.43, 95% CI = 1.25-1.63), older age (OR = 1.28 per age decade, 95% CI = 1.26-1.30), Native American (OR = 1.38, 95% CI = 1.12-1.72) or Hispanic ethnicity (OR = 1.25, 95% CI = 1.15-1.35), and presence of diabetes mellitus (OR = 1.43, 95% CI = 1.35-1.52). A history of alcoholism exerted a protective influence (OR = 0.92, 95% CI = 0.87-0.97). CONCLUSION: Gallstone disease occurs frequently in hospitalized patients with chronic liver disease or liver cirrhosis and contributes to the burden of the disease
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=12003426&dopt=r

Buchner AM, Sonnenberg A.
Epidemiology of Clostridium difficile infection in a large population of hospitalized US military veterans.
Dig Dis Sci 2002; 47(1):201-207.

Abstract: The Patient Treatment File (PTF) of the Department of Veterans Affairs (VA) comprises the computerized records of all inpatients treated at all VA hospitals throughout the United States. The database was utilized to study the clinical epidemiology and impact of C. difficile colitis on health care among hospitalized US military veterans. The computerized medical records of 15,091 cases with C. difficile colitis and 61,931 controls without the diagnosis were extracted from the annual files between 1993 and 1998. Of all patients admitted to the hospital, 1% were diagnosed with C. difficile colitis, in 16% of whom it was listed as the primary discharge diagnosis. C. difficile colitis was more likely to occur in elderly white patients with multiple comorbid conditions. Compared with a control population of hospitalized patients without C. difficile colitis, the case population was subjected to more medical and surgical procedures and experienced longer hospital stays. The diagnosis of C. difficile colitis was associated with more frequent admissions to the intensive care unit and higher hospital-related and subsequent mortality. Eleven percent of the cases were admitted to hospital a second time after a mean of 202 days, 2.5% were readmitted a third time after an additional 182 days, and 0.8% were readmitted a fourth time after an additional 194 days. In conclusion, as old age, multiple comorbid conditions, a high number of medical and surgical intervention, and long hospitalization constitute the main risk factors for the development of C. difficile colitis, efforts at prevention should be directed primarily towards patients who present with these characteristics
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=11837725&dopt=r

Collins TC, Johnson M, Henderson W, Khuri SF, Daley J.
Lower Extremity Nontraumatic Amputation Among Veterans With Peripheral Arterial Disease: Is Race an Independent Factor?
Med Care 2002; 40(1 Suppl):106-116.

Abstract: OBJECTIVES: To determine if race/ethnicity is independently associated with an increased risk for nontraumatic lower extremity amputation versus lower extremity bypass revascularization among patients with peripheral arterial disease (PAD). METHODS: Data were analyzed from the National VA Surgical Quality Improvement Program (NSQIP) and from the Veterans Affairs Patient Treatment File (PTF). Race/ethnicity was defined as non-Hispanic white, black, or Hispanic. Variables that were univariately associated (P </=0.05) with the outcome of amputation were placed into a multiple logistic regression model to determine independent predictors for the dependent variable, lower extremity amputation versus lower extremity bypass revascularization. RESULTS: Three thousand eighty-five lower extremity amputations and 8409 lower extremity bypass operations were identified. Among all cases included, there were 416 Hispanic patients (3.6%), 2337 black patients (20.3%), and 8741 non-Hispanic white patients (76.1%). Among all variables within the model, Hispanic and black race were each associated with a greater risk for amputation than a history of rest pain/gangrene (Hispanic race 1.4, 95% CI 1.1, 1.9; black race 1.5, 95% CI 1.4, 1.7; rest pain/gangrene 1.1, 95% CI 1.0, 1.3). The final model had a c statistic of 0.83. CONCLUSION: Hispanic race and black race were independent risk factors for lower extremity amputation in patients with PAD. Although the burden of certain atherosclerotic risk factors (eg, diabetes and hypertension) is higher in minority patients, the impact of this burden does not account for the increased risk for the outcome of lower extremity amputation in these two

populations. Further research is needed to better understand the reason(s) why race/ethnicity is independently associated with poor outcomes in PAD
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=11789623&dopt=r

Cowper D, Kubal J, Maynard C, Hynes D.
A primer and comparative review of major u.s. Mortality databases.
Ann Epidemiol 2002; 12(7):462.

Abstract: PURPOSE: Mortality data are important tools for research requiring vital status information. We reviewed the major mortality databases and mortality ascertainment services available in the United States, including the National Death Index (NDI), the Social Security Administration (SSA) files, and the Department of Veterans Affairs databases.METHODS: The content, reliability, and accuracy of mortality sources are described and compared. We also describe how investigators can gain access to these resources and provide further contact information.RESULTS: We reviewed the accuracy of major mortality sources. The sensitivity (i.e., the proportion of the true number of deaths) of the NDI ranged from 87.0% to 97.9%, whereas the sensitivity for the VA Beneficiary Identification and Records Locator System (BIRLS) ranged between 80.0% and 94.5%. The sensitivity of SSA files ranged between 83.0% and 83.6%. Sensitivity for the VA Patient Treatment File (PTF) was 33%.CONCLUSIONS: While several national mortality ascertainment services are available for vital status (i.e., death) analyses, the NDI information demonstrated the highest sensitivity and, currently, it is the only source at the national level with a cause of death field useful for research purposes. Researchers must consider methods used to ascertain vital status as well as the quality of the information in mortality databases
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=12377423&dopt=r

Cucino C, Buchner AM, Sonnenberg A.
Continued rightward shift of colorectal cancer.
Dis Colon Rectum 2002; 45(8):1035-1040.

Abstract: PURPOSE: Previous analyses of the time trends of colorectal cancer have suggested a shift from left-sided toward right-sided cancer sites. The aim of this study was to determine whether such trends in the subsite distribution of colorectal cancer could be confirmed in hospitalization statistics similarly as in the incidence data. METHODS: The inpatient files of the Department of Veterans Affairs and the Surveillance, Epidemiology, and End Result database of the National Cancer Institute were used to study the time trends of colorectal cancer in the United States during the past three decades. Any cancer location in the rectum, sigmoid, or descending colon was defined as left-sided colorectum. RESULTS: For the period between 1970 and 2000, the data from the Department of Veterans Affairs revealed a statistically significant 16 percent increase in the proportion of proximal lesions among white males and females, as well as a 22 percent increase in black males. For the period between 1973 and 1997, the data from the Surveillance, Epidemiology, and End Result revealed a 6 percent increase in the proportion of proximal colon cancers among whites and blacks of both genders. CONCLUSIONS: The epidemiologic data confirm a rightward shift in the colonic distribution of cancer
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=12195187&dopt=r

Desai MM, Rosenheck RA, Druss BG, Perlin JB.
Mental disorders and quality of diabetes care in the veterans health administration.
Am J Psychiatry 2002; 159(9):1584-1590.

Abstract: OBJECTIVE: The population of persons with mental disorders is potentially vulnerable to poor quality of medical care. This study examined the relationship between mental disorders and quality of diabetes care in a national sample of veterans. METHOD: Chart-abstracted quality data were merged with outpatient and inpatient administrative database records for a sample of veterans with diabetes who had at least three outpatient visits in the previous year (N=38,020). Mental health diagnoses were identified by use of the administrative data. Quality of diabetes care was assessed with five indicators by chart documentation: annual foot inspection, pedal pulses examination, foot sensory examination, retina examination, and glycated hemoglobin determination. RESULTS: Approximately a quarter of the sample had a diagnosed mental disorder (23.7% with psychiatric disorder only, 1.3% with substance use disorder only,

and 2.6% with a dual diagnosis). Overall rates of receipt for the indicators were higher than national benchmarks for all patient subgroups, ranging from 70.8% for retina examination to 95.0% for foot inspection. Rates for both retina examination and foot sensory examination differed significantly by mental health status, mainly because of lower rates among those with a substance use disorder. The associations remained significant in multivariate generalized estimating equation analyses that controlled for demographic characteristics, health status, use of medical services, and hospital-level characteristics. CONCLUSIONS: Rates for secondary prevention of diabetes were remarkably high at Department of Veterans Affairs medical centers, although patients with mental disorders (particularly substance use disorders) were somewhat less likely to receive some of the recommended interventions
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=12202281&dopt=r

Desai MM, Rosenheck RA, Druss BG, Perlin JB.
Receipt of nutrition and exercise counseling among medical outpatients with psychiatric and substance use disorders.
J Gen Intern Med 2002; 17(7):556-560.

Abstract: OBJECTIVE: Mentally ill persons represent a population that is potentially vulnerable to receiving a poorer quality of medical care. This study examines the relationship between mental disorders and the likelihood of receiving recommended nutrition and exercise counseling. DESIGN: Cross-sectional study combining chart-review data and administrative database records. SETTING: One hundred forty-seven Veterans Affairs (VA) medical centers nationwide. PATIENTS/PARTICIPANTS: The sample included 90,240 patients with obesity and/or hypertension who had >/=3 medical outpatient visits in the previous year. MEASUREMENTS AND MAIN RESULTS: The outcomes of interest were chart-documented receipt of nutrition counseling and receipt of exercise counseling in the past 2 years. This chart information was merged with VA inpatient and outpatient administrative databases, which were used to identify persons with diagnosed mental disorders. Most patients received nutrition counseling (90.4%), exercise counseling (88.5%), and counseling for both (85.7%) in the past 2 years. The rates of counseling differed significantly but modestly by mental health status. The lowest rates were found among patients dually diagnosed with comorbid psychiatric and substance use disorders; however, the magnitude of the disparities was small, ranging from 2% to 4% across outcomes. These results were unchanged after controlling for demographics, health status, and facility characteristics using multivariable generalized estimating equation modeling. CONCLUSIONS: Among patients engaged in active medical treatment, rates of nutrition and exercise counseling were high at VA medical centers, and the diagnosis of mental illness was not a substantial barrier to such counseling. More work is needed to determine whether these findings generalize to non-VA settings and to understand the potential role that integrated systems such as the VA can play in reducing disparities for vulnerable populations
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=12133146&dopt=r

Finalyson SR, Stroupe KT, Joseph GJ, Fisher ES.
Using the Veterans Health Administration inpatient care database: trends in the use of antireflux surgery.
Eff Clin Pract 2002; 5(3 Suppl):E5.

Abstract: Context. In the private sector, the use of surgery to treat gastroesophageal reflux disease has increased substantially since the development of minimally invasive laparoscopic techniques. However, trends in the use of antireflux surgery in the Veterans Affairs (VA) health care system have not been explored. Objective. To compare secular trends in the use of antireflux surgery in VA hospitals and the private sector. Data Sources. VA data are from the 1991-1999 medical SAS datasets for inpatient care (commonly known as patient treatment files); private sector data are from the 1991-1997 Nationwide Inpatient Sample and the U.S. census. Calculations. We compared secular trends in the use of antireflux surgery in the VA and private sector with each group's baseline rate in 1991. For the VA, we calculated annual rates of antireflux surgery among active users of the VA health care system by dividing the number of procedures (based on the appropriate procedure codes from the International Classification of Diseases, ninth revision, clinical modification) by the number of veterans who had at least two hospital or clinic visits in a given year. For the private sector, we calculated true population rates by dividing procedure counts by the total U.S. population. Results. From 1991 to 1995, the annual rate of antireflux surgery among active users of VA hospitals increased by 64%, then decreased over the next 4 years to almost baseline rates. In contrast, rates of antireflux surgery in the private sector increased 185% from 1991 to 1995, then appeared to reach a plateau thereafter. Among patients undergoing antireflux surgery, those in the VA were less likely than those in the private sector to undergo laparoscopic surgery (29% vs. 65%, respectively, in 1997). Conclusions. With the development of laparoscopic surgery, rates of antireflux

surgery in VA hospitals increased only modestly compared with the private sector and have decreased in recent years. Both patient and provider factors may explain the substantially higher use of this procedure in the private sector
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=12166926&dopt=r

Murphy PA, Cowper DC, Seppala G, Stroupe KT, Hynes DM.
Veterans Health Administration inpatient and outpatient care data: an overview.
Eff Clin Pract 2002; 5(3 Suppl):E4.

No Abstract Available
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=12166925&dopt=r

Reker DM, Rosen AK, Hoenig H, Berlowitz DR, Laughlin J, Anderson L et al.
The hazards of stroke case selection using administrative data.
Med Care 2002; 40(2):96-104.

Abstract: BACKGROUND: Administrative data and ICD-9-CM diagnostic codes are frequently used in research efforts to evaluate risk adjusted patient outcomes, particularly mortality. Varying ICD-9-CM sampling algorithms have been used to identify stroke patients. OBJECTIVES: This study evaluates the effects of different sampling strategies (one high sensitivity and one high specificity) on modeling stroke mortality as a performance indicator. RESEARCH DESIGN: Risk adjustment models were developed for two stroke cohorts identified using differing ICD-9-CM algorithms. Standard mortality ratios were calculated in a validation sample as network performance measures and compared across the two stroke samples. SUBJECTS: VHA inpatients with stroke during years 1997 (model development) and 1998 (model validation) were selected from the Patient Treatment File based on cerebrovascular diagnostic codes. MEASURES: Patient mortality within 30 days of admission. RESULTS: The model development and validation for each stroke sampling method produced consistent results: c-statistics 0.74 to 0.75, R2 0.07 to 0.09, concordance 73% to 74%. However, ranking differences in network performance varied by 5 or more positions for 7 of the 22 patient networks. CONCLUSIONS: These findings highlight a potential problem when using administrative data to assess stroke mortality. In the absence of an agreed upon definition of stroke patients, results of provider profiling will vary depending on the ICD-9 algorithm used
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=11802082&dopt=r

Rosen AK, Loveland SA, Anderson JJ, Hankin CS, Breckenridge JN, Berlowitz DR.
Diagnostic cost groups (DCGs) and concurrent utilization among patients with substance abuse disorders.
Health Serv Res 2002; 37(4):1079-1103.

Abstract: OBJECTIVE: To assess the performance of Diagnostic Cost Groups (DCGs) in explaining variation in concurrent utilization for a defined subgroup, patients with substance abuse (SA) disorders, within the Department of Veterans Affairs (VA). DATA SOURCES: A 60 percent random sample of veterans who used health care services during Fiscal Year (FY) 1997 was obtained from VA administrative databases. Patients with SA disorders (13.3 percent) were identified from primary and secondary ICD-9-CM diagnosis codes. STUDY DESIGN: Concurrent risk adjustment models were fitted and tested using the DCG/HCC model. Three outcome measures were defined: (1) "service days" (the sum of a patient's inpatient and outpatient visit days), (2) mental health/substance abuse (MH/SA) service days, and (3) ambulatory provider encounters. To improve model performance, we ran three DCG/HCC models with additional indicators for patients with SA disorders. DATA COLLECTION: To create a single file of veterans who used health care services in FY 1997, we merged records from all VA inpatient and outpatient files. PRINCIPAL FINDINGS: Adding indicators for patients with mild/moderate SA disorders did not appreciably improve the R-squares for any of the outcome measures. When indicators were added for patients with severe SA who were in the most costly category, the explanatory ability of the models was modestly improved for all three outcomes. CONCLUSIONS: Modifying the DCG/HCC model with additional markers for SA modestly improved homogeneity and model prediction. Because considerable variation still remained after modeling, we conclude that health care systems should evaluate "off-the-shelf" risk adjustment systems before applying them to their own populations
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=12236385&dopt=r

Subramanian U, Weinberger M, Eckert GJ, L'Italien GJ, Lapuerta P, Tierney W.
Geographic variation in health care utilization and outcomes in veterans with acute myocardial infarction.
J Gen Intern Med 2002; 17(8):604-611.

Abstract: OBJECTIVES: To examine regional variation in health care utilization and outcomes during acute and chronic care of veterans following acute myocardial infarction (AMI), identifying potentially modifiable variables and processes of care that influence patient outcomes. METHODS: Using national VA databases, we identified all veterans hospitalized at any VA Medical Center (VAMC) for AMI between October 1990 and September 1997. Demographic, inpatient, outpatient, mortality, and readmission data were extracted for 4 regions: Northeast, South, Midwest and West. Multivariable Cox proportional hazards regression models, controlled for comorbidity, were used to assess predictors of time to death and readmission. RESULTS: We identified 67,889 patients with AMI. Patient demographic characteristics by region were similar. Patients in the Northeast had more comorbid conditions and longer lengths of stay during the index AMI hospitalization. Region of the country independently predicted time to death, with lower risk of death in the Northeast (hazard ratio [HR] = 0.875; 95% confidence interval [95% CI], 0.834 to 0.918; P < .0001) and West (HR = 0.856; 95%CI, 0.818 to 0.895; P = .0001) than in the South. Patients in the Northeast and West also had more cardiology or primary care follow-up within 60 days and at 1 year post-discharge than patients in the South and Midwest. Outpatient follow-up accounted for a significant portion of the variation in all-cause mortality. CONCLUSION: Substantial geographic variation exists in subsequent clinical care and outcomes among veterans hospitalized in VAMCs for AMIs. Outpatient follow-up was highly variable and associated with decreased mortality. Further studies are needed to explore the causes of regional variation in processes of care and to determine the most effective strategies for improving outcomes after AMI
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=12213141&dopt=r

Year 2001

Buchner AM, Sonnenberg A.
Comorbid occurrence of liver and pancreas disease in United States military veterans.
Am J Gastroenterol 2001; 96(7):2231-2237.

Abstract: OBJECTIVE: The clinical epidemiology of the comorbidity between liver and pancreas disease is unknown. The Patient Treatment File of the Department of Veterans Affairs contains the computerized records of all inpatients treated in 172 Department of Veterans Affairs hospitals distributed throughout the United States. This large database offers a unique opportunity to study the epidemiology of liver-pancreas comorbidity (LPC). METHODS: In a case-control study, 6,393 LPC cases were compared to 34,513 controls with alcoholic liver disease and liver cirrhosis alone and 68,038 controls without liver or pancreas disease. Multivariate logistic regression analysis was used to assess the joint influence of multiple risk factors on the occurrence of LPC. RESULTS: LPC occurred in 15.6% of patients with alcoholic liver disease and liver cirrhosis identified in the Patient Treatment File between 1990 and 1993. Compared to controls with liver disease alone, LPC cases were characterized by younger age (odds ratio = 0.88 per age decade, CI = 0.86-0.90) and African American (2.33, 2.18-2.48) or Hispanic (1.24, 1.12-1.38) ethnicity. Compared to controls with neither liver nor pancreas disease, LPC cases were characterized by male gender (1.67, 1.28-2.17), African American (1.41, 1.32-1.50) or Hispanic (2.04, 1.82-2.30) ethnicity, more frequent history of alcoholism (29.5, 26.7-32.6), and being divorced (1.35, 1.26-1.44). CONCLUSIONS: Comorbidity of liver and pancreas disease is relatively common in the veteran population. Such patients are more frequently divorced and of African American or Hispanic ethnicity, and present with a history of excessive alcoholism at a relatively young age
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=11467658&dopt=r

El Serag HB, Richardson PA, Everhart JE.
The role of diabetes in hepatocellular carcinoma: a case-control study among United States Veterans.
Am J Gastroenterol 2001; 96(8):2462-2467.

Abstract: OBJECTIVE: Diabetes mellitus (DM) has been reported to increase the risk of hepatocellular carcinoma (HCC). We carried out a case-control study to examine the role of DM while controlling for several known risk factors of HCC. METHODS: All hospitalized patients with primary liver cancer (PLC) during 1997-1999 were identified in the computerized database of the Department of Veterans Affairs, the Patient Treatment File. Controls without cancer

were randomly assigned from the Patient Treatment File during the same time period. The inpatient and outpatient files were searched for several conditions including DM, hepatitis C virus (HCV), hepatitis B virus (HBV), alcoholic cirrhosis, autoimmune hepatitis, hemochromatosis, and nonspecific cirrhosis. Adjusted odds ratios (OR) were calculated in a multivariable logistic regression model. RESULTS: We identified 823 patients with PLC and 3459 controls. The case group was older (62 yr [+/-10] vs 60 [+/-11], p < 0.0001), had more men (99% vs 97%, 0.0004), and a greater frequency of nonwhites (66% vs 71%, 0.0009) compared with controls. However, HCV- and HBV-infected patients were younger among cases than controls. Risk factors that were significantly more frequent among PLC cases included HCV (34% vs 5%, p < 0.0001), HBV (11% vs 2%, p < 0.0001), alcoholic cirrhosis (47% vs 6%, p < 0.0001), hemochromatosis (2% vs 0.3%, p < 0.0001), autoimmune hepatitis (5% vs 0.5%, p < 0.0001), and diabetes (33% vs 30%, p = 0.059). In the multivariable logistic regression, diabetes was associated with a significant increase in the adjusted OR of PLC (1.57, 1.08-2.28, p = 0.02) in the presence of HCV, HBV, or alcoholic cirrhosis. Without markers of chronic liver disease, the adjusted OR for diabetes and PLC was not significantly increased (1.08, 0.86-1.18, p = 0.4). There was an increase in the HCV adjusted OR (17.27, 95% Cl = 11.98-24.89) and HBV (9.22, 95% CI = 4.52-18.80) after adjusting for the younger age of HCV- and HBV-infected cases. The combined presence of HCV and alcoholic cirrhosis further increases the risk with an adjusted OR of 79.21 (60.29-103.41). The population attributable fraction for HCV among hospitalized veterans was 44.8%, whereas that of alcoholic cirrhosis was 51%. CONCLUSION: DM increased the risk of PLC only in the presence of other risk factors such as hepatitis C or B or alcoholic cirrhosis. Hepatitis C infection and alcoholic cirrhosis account for most of PLC among veterans
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=11513191&dopt=r

Kazmers A, Perkins AJ, Jacobs LA.
Aneurysm rupture is independently associated with increased late mortality in those surviving abdominal aortic aneurysm repair.
J Surg Res 2001; 95(1):50-53.

Abstract: PURPOSE: The aim of this study was to define whether veterans who survived repair of ruptured abdominal aortic aneurysms (AAA) experienced late survival rates similar to those surviving repair of intact AAA. METHODS: All veterans undergoing AAA repair in DRGs 110 and 111 during fiscal years 1991-1995 were identified using the Veterans Affairs (VA) Patient Treatment File (PTF). Late mortality was defined using VA administrative databases including the Beneficiary Identification and Record Locator System and PTF. Illness severity and patient complexity were defined using PTF discharge data that were further analyzed by Patient Management Category software. Veterans were followed up to 6 years after AAA repair. RESULTS: During the study, 5833 veterans underwent repair of intact AAA while 427 had repair of ruptured AAA in all VA medical centers. Operative mortality was defined as that which occurred within 30 days of surgery or during the same hospitalization as aneurysm repair. For those undergoing repair of intact AAA, operative mortality thus defined was 4.5% (265/5833). Operative mortality was 46% (195/427) after repair of ruptured AAA. Overall mortality (including operative mortality) during 2.62+/-1.61 years follow-up was 22% (1282/5833) with intact AAA versus 61% (260/427) for those with ruptured AAA (P<0.001). Further analysis of survival outcomes was performed in patients who survived AAA repair (i.e., those who were discharged alive and lived 30 days or more after surgery). Of those who initially survived repair of ruptured AAA, 28% (65/232) died during follow-up versus 18% (1017/5568) who initially survived repair of intact AAA (odds ratio 1.74; 95% confidence limits 1.30-2.34; P<0.001). In those initially surviving AAA repair, stepwise logistic regression analysis revealed that increasing age, illness severity, patient complexity, as well as AAA rupture and aortic graft complications were increasingly and independently associated with late mortality. Mean survival time was 1681 days for those who survived >30 days and who were discharged alive after repair of ruptured AAA versus 1821 days for those who initially survived repair of intact AAA (P< 0.001). CONCLUSIONS: In addition to higher postoperative mortality rates with ruptured AAA, mortality during follow-up for survivors of AAA repair was also greater for those who survived repair of ruptured AAA. The toll taken by ruptured abdominal aortic aneurysms did not end in the immediate postoperative period
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=11120635&dopt=r

Rosen AK, Loveland S, Anderson JJ, Rothendler JA, Hankin CS, Rakovski CC et al.
Evaluating diagnosis-based case-mix measures: how well do they apply to the VA population?
Med Care 2001; 39(7):692-704.

Abstract: BACKGROUND: Diagnosis-based case-mix measures are increasingly used for provider profiling, resource allocation, and capitation rate setting. Measures developed in one setting may not adequately capture the disease burden in other settings. OBJECTIVES: To examine the feasibility of adapting two such measures, Adjusted Clinical Groups (ACGs) and Diagnostic Cost Groups (DCGs), to the Department of Veterans Affairs (VA) population. RESEARCH DESIGN: A 60% random sample of veterans who used health care services during FY 1997 was obtained from VA inpatient and outpatient administrative databases. A split-sample technique was used to obtain a 40% sample (n = 1,046,803) for development and a 20% sample (n = 524,461) for validation. METHODS: Concurrent ACG and DCG risk adjustment models, using 1997 diagnoses and demographics to predict FY 1997 utilization (ambulatory provider encounters, and service days-the sum of a patient's inpatient and outpatient visit days), were fitted and cross-validated. RESULTS: Patients were classified into groupings that indicated a population with multiple psychiatric and medical diseases. Model R-squares explained between 6% and 32% of the variation in service utilization. Although reparameterized models did better in predicting utilization than models with external weights, none of the models was adequate in characterizing the entire population. For predicting service days, DCGs were superior to ACGs in most categories, whereas ACGs did better at discriminating among veterans who had the lowest utilization. CONCLUSIONS: Although "off-the-shelf" case-mix measures perform moderately well when applied to another setting, modifications may be required to accurately characterize a population's disease burden with respect to the resource needs of all patients
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=11458134&dopt=r

Sernyak MJ, Rosenheck R, Desai R, Stolar M, Ripper G.
Impact of clozapine prescription on inpatient resource utilization.
J Nerv Ment Dis 2001; 189(11):766-773.

Abstract: Although clozapine has been demonstrated to be clinically superior to typical neuroleptics in refractory schizophrenia, it is also more expensive. It had been hoped that the increased costs associated with its use would be offset by decreases in the utilization of other expensive resources, especially inpatient care. All patients who had clozapine initiated during an inpatient hospitalization within the VA for schizophrenia over a 4-year period (N = 1415) were matched with a comparison group (N = 2,830) on key service utilization variables and other possible confounding demographic and clinical variables using propensity scoring-an accepted statistical method, although still relatively little used in psychiatry. By using centralized VA databases, subsequent inpatient resource utilization for the 3 years after index discharge was examined. Veterans exposed to clozapine while inpatients recorded 33 (36%) more inpatient days in the subsequent 3 years after discharge than the comparison group (124 +/- 190 days vs. 91 +/- 181 days, p = .0002). When all patients exposed to clozapine were divided according to whether they had received 1 year of clozapine treatment after discharge, those that received less than 1 year's treatment recorded significantly more inpatient days than either those maintained on clozapine or controls. These results suggest that in actual practice clozapine treatment may cost substantially more than treatment with conventional neuroleptics
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=11758660&dopt=r

Sernyak MJ, Desai R, Stolar M, Rosenheck R.
Impact of clozapine on completed suicide.
Am J Psychiatry 2001; 158(6):931-937.

Abstract: OBJECTIVE: Clozapine has been found to be superior to typical neuroleptics in ameliorating the symptoms of refractory schizophrenia. This study evaluated clozapine's effect on the rate of death due to suicide. METHOD: All patients over a 4-year period who initiated treatment with clozapine while hospitalized within the Department of Veterans Affairs (VA) system (N=1,415) were matched with a schizophrenic control group (N=2,830) by propensity scoring-a widely accepted statistical method that has been used relatively little in psychiatric research. Centralized VA databases and a national death registry were used to identify all deaths within the two groups, along with listed causes, for the 3 years after discharge. RESULTS: Veterans exposed to clozapine while inpatients were significantly less likely to die during the follow-up period than those in the control group, but this was entirely attributable to the much lower rate of death due to respiratory disorders in the clozapine group. There were no significant differences in rates of suicide or accidental death. CONCLUSIONS: These results fail to support the hypothesis that clozapine treatment is associated with significantly fewer deaths due to suicide
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=11384902&dopt=r

Year 2000

Desai RA, Rosenheck RA.
The interdependence of mental health service systems: the effects of VA mental health funding on veterans' use of state mental health inpatient facilities.
J Ment Health Policy Econ 2000; 3(2):61-67.

Abstract: BACKGROUND: There are relatively few published data on how the financial structures of different health systems affect each other. With increasing financial restrictions in both public and private healthcare systems, it is important to understand how changes in one system (e.g. VA mental healthcare) affect utilization of other systems (e.g. state hospitals). AIMS OF THE STUDY: This study utilizes data from state hospitals in eight states to examine the relationship of VA per capita mental health funding and state per capita mental health expenditures to veterans' use of state hospitals, adjusting for other determinants of utilization. METHODS: This study utilized a large database that included records from all male inpatient admissions to state hospitals between 1984 and 1989 in eight states (n = 152541). Funding levels for state hospitals and VA mental health systems were examined as alternative enabling factors for veterans' use of state hospital care. Logistic regression models were adjusted for other determinants of utilization such as socio-economic status, diagnosis, travel distances to VA and non-VA facilities and the proportion of veterans in the population. RESULTS: The single strongest predictor of whether a state hospital patient would be a veteran was the level of VA mental healthcare funding (OR = 0.81 per $10 of funding per veteran in the population, p = 0.0001), with higher VA funding associated with less use of state hospitals by veterans. Higher per capita state funding, reciprocally, increased veterans' use of state hospitals. We also calculated elasticities for state hospital use with respect to VA mental healthcare funding and with respect to state hospital per capita funding. A 50% increase in VA per capita mental health spending was associated with a 30% decrease in veterans' use of state hospitals (elasticity of -0.6). Conversely, a 50% increase in state hospital per capita funding was associated with only an 11% increase in veterans' use of state hospitals (elasticity of 0.06). IMPLICATIONS FOR HEALTH CARE PROVISION AND USE: These data indicate that per capita funding for state hospitals and VA mental health systems exerts a significant influence on service use, apparently mediated by the effect on supply of mental health services. Veterans are likely to substitute state hospital care for VA care when funding restrictions limit the availability of VA mental health services. However, due to the relative sizes of the two systems, VA funding has a larger effect than state hospital funding upon state hospital use by veterans. IMPLICATIONS FOR HEALTH POLICIES: These data indicate that changes in the organizational and/or financial structure of any given healthcare system have the potential to affect surrounding systems, possibly quite substantially. Policy makers should take this into account when making decisions, instead of approaching systems as independent, as has been traditional. IMPLICATIONS FOR FURTHER RESEARCH: Further research is needed in two areas. First, these results should be replicated in other systems of care using more recent data. Second, these results are difficult to generalize to individual behavior. Future research should examine the extent and individual determinants of cross-system use
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=11967439&dopt=r

Federman EJ, Drebing CE, Boisvert C, Penk W, Binus G, Rosenheck R.
Relationship between climate and psychiatric inpatient length of stay in Veterans Health Administration hospitals.
Am J Psychiatry 2000; 157(10):1669-1673.

Abstract: OBJECTIVE: The study examined whether climate has an impact on inpatient psychiatric length of stay in Veterans Health Administration hospitals (VHA). METHOD: Data from the National Weather Service for eight climate variables for the locations of 134 VHA hospitals nationwide were factor analyzed, resulting in two climate factors representing temperature and precipitation. Factor scores were correlated with psychiatric mean lengths of stay from 1994 to 1998 for 99 VHA hospitals with inpatient psychiatric services and for the 22 VHA regional divisions (Veterans Integrated Service Networks). RESULTS: Climate factors correlated modestly but significantly with length of stay, with correlations ranging from -0. 25 to -0.37 at the hospital level and from -0.38 to -0.45 at the VHA regional level; hospitals in warmer and drier climates had shorter lengths of stay. Medical centers in colder climates had the longest lengths of stay in winter and fall. The significant correlation between climate and length of stay was not affected by recent reductions in length of stay in VHA hospitals. CONCLUSIONS: Higher clinical costs associated with longer lengths of stay in colder climates have implications for budget planning. Climate factors must also be recognized for their potential effect on performance monitoring systems focused on hospital utilization. Researchers

must continue to consider broader contextual variables such as climate if they are to fully understand the determinants of health care utilization and psychiatric hospitalization costs
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=11007722&dopt=r

Kazmers A, Jacobs LA, Perkins AJ.
Outcomes after lower-extremity reconstruction in DRGs 478 and 479.
J Surg Res 2000; 88(1):18-22.

Abstract: PURPOSE: To assess outcomes for 21,261 patients in DRGs 478 and 479 hospitalized in Veterans Affairs Medical Centers (VAMCs) during fiscal years 1991-1994. DRGs 478 and 479 contain patients undergoing a variety of vascular procedures including lower-extremity arterial reconstruction. METHODS: VA Patient Treatment File (PTF) data were analyzed using Patient Management Category (PMC) software which defined illness severity, patient complexity as defined by PMC count, and calculated resource intensity scale (RIS), a measure of resource utilization, for each admission. RESULTS: In-hospital mortality rate was 3.16% (671/21,261) for all patients. Mortality did not differ between the 14,155 patients who underwent extremity arterial reconstruction (3.22%) and the remaining patients (3.03%). The incidence of ICD-9-CM-coded complications was 20.4% after limb revascularization versus 12.8% for remaining patients (P < 0.001). Length of stay (LOS) was 18.6 +/- 17.6 days with versus 10.3 +/- 14. 5 days without limb revascularization (P < 0.001). As defined in this study, patients who underwent limb revascularization were older (64.1 +/- 9.6 vs 62.2 +/- 11.0, P < 0.001); had higher illness severity scores (3.63 +/- 1.60 vs 2.72 +/- 1.72, P < 0.001); were more complex (had higher PMC count: 2.59 +/- 1.35 vs 2.54 +/- 1.34, P = 0.016); and required utilization of more resources (had higher RIS: 2.16 +/- 0.81 vs 1.68 +/- 0.76, P < 0.001) than remaining patients. Logistic regression analysis limited to those undergoing extremity revascularization revealed that age, presence of complications, patient complexity, illness severity, and acute arterial thromboembolism were increasingly and independently associated with greater in-hospital mortality. The logistic regression model also showed that the type of arterial reconstruction was related to in-hospital mortality: arterial bypass (ICD-9-CM 39.29) was associated with lower mortality. Outcomes were defined for the subgroup (n = 7,728) undergoing arterial bypass (ICD-9-CM 39.29) who were assigned to Patient Management Category 4101, 4113, or 4141: Mortality rates were 2.26, 2.19, and 5.03% for those undergoing elective bypass (n = 3003), urgent bypass (n = 3,513), and bypass for gangrene (n = 1212), respectively. Octogenarians did not experience higher mortality rates after elective bypass inverted question mark1.4% (1/73) vs 2.3% (67/2,930), n.s., but experienced higher mortality rates after urgent bypass inverted question mark8.6% (8/93) vs 2.0% (69/3,420), P < 0.001 and after bypass for gangrene inverted question mark11.6% (5/43) vs 4.8% (56/1,169), P < 0.045. CONCLUSIONS: Outcomes for patients in DRGs 478 and 479 who underwent extremity revascularization differed from those who did not. Outcomes varied by the type of arterial reconstruction and its urgency and indication and within selected subpopulations (i.e., octogenarians). DRG-based reimbursement would not be sensitive to these clinically important factors which have a major impact on outcomes and resource utilization
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10644461&dopt=r

Kazmers A, Striplin D, Jacobs LA, Welsh DE, Perkins AJ.
Outcomes after abdominal aortic aneurysm repair: comparison of mortality defined by centralized VA Patient Treatment File data versus hospital-based chart review.
J Surg Res 2000; 88(1):42-46.

Abstract: BACKGROUND: Outcomes after abdominal aortic aneurysm (AAA) repair have been reported by individual Veterans Affairs medical centers (VAMCs) and for the entire VA patient population. PURPOSE: This study was done to determine whether outcomes defined using VA Patient Treatment File (PTF) data were comparable to those defined by direct chart review in those undergoing repair of intact AAA. METHODS: Focused chart review was performed in all veterans undergoing such AAA repair in a sample of VAMCs (n = 5) for separate 1-year periods during fiscal years (FY) 1991-1993. A previous report of outcomes after AAA repair for all veterans in DRGs 110 and 111 during FY 1991-1993 was based on PTF data that were further analyzed by Patient Management Category (PMC) software. Outcomes after AAA repair were defined in a similar fashion using PTF data and PMC analysis in the same sample VAMCs for which direct chart review data were available. Outcomes defined by chart review were then compared to those based on PTF data. RESULTS: Three of the 69 patients undergoing repair of intact AAA for which chart review data were available were assigned to DRGs other than 110 and 111 and, by definition, were not included in the PTF-

derived database. Nine of 10 additional patients undergoing chart review were not identified as having undergone AAA repair by PMC software: 7 had procedure codes 39.25 instead of more standard AAA repair codes 38.34 or 38.44. Two additional patients with codes 38.64 or 38.66 were not identified as having undergone AAA repair by PMC software. The 10th patient not included in the PTF-derived database underwent additional operative procedures. Of the 13 patients missed by the combined PTF and PMC outcome analyses but identified by chart review, none died or had cardiac complications. One of these 13 patients had pulmonary complications based on chart review and PTF but was excluded by PMC analysis. There remained a total of 56 patients at the five sample VAMCs common to the PTF-derived and chart-derived databases identified as having undergone repair of intact AAA. There were two in-hospital deaths in these patients, and both were identified by each approach to outcome assessment. Four of these 56 patients had postoperative cardiac complications (ICD-9-CM code 997. 10) which were identified by both PTF and chart review. Postoperative pulmonary complications (ICD-9-CM code 997.30) were present in 4 of the 56 cases and were also identified by both PTF-based and chart-based outcome analyses. CONCLUSIONS: All deaths as well as cardiac or respiratory complications identified by chart review at the study hospitals were also affirmed by the PTF. Due to study methodologies (which restricted analysis to those in DRGs 110 and 111 and which included secondary analyses of PTF data by PMC software), 19% of patients who underwent repair of intact AAA identified by hospital-based chart review were excluded from the PTF-based outcome analysis. Outcomes defined using large databases such as the VA PTF may be comparable to those defined by chart review if study methodologies permit. Discrepancies in outcome assessment between direct chart review and large database analysis in the present study were due to methodologies used, not to deficiencies, per se, in PTF data
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10644465&dopt=r

Kazmers A, Perkins AJ, Jacobs LA.
Major lower extremity amputation in Veterans Affairs medical centers.
Ann Vasc Surg 2000; 14(3):216-222.

Abstract: Our objective was to assess outcomes for 8696 patients who underwent 9236 above- (AKA) and/or below-knee (BKA) amputations during a 4-year period for disorders of the circulatory system. Veterans Affairs (VA) Patient Treatment File (PTF) data were acquired for all patients in Diagnosis Related Groups (DRGs) 113 and 114 hospitalized in VA medical centers (VAMCs) during fiscal years 1991-1994. Data were further analyzed by Patient Management Category (PMC) software, which measured illness severity, patient complexity, and relative intensity score (RIS), a measure of resource utilization. The results of this analysis showed that mortality and morbidity rates remain high after AKA and BKA. Differing amputation practice patterns found in this study warrant further investigation
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10796952&dopt=r

Kirchner JE, Booth BM, Owen RR, Lancaster AE, Smith GR.
Predictors of patient entry into alcohol treatment after initial diagnosis.
J Behav Health Serv Res 2000; 27(3):339-346.

Abstract: To improve the quality of care for alcohol-related disorders, key transitions in the continuum of care, including treatment entry, must be fully understood. The purpose of this study was to investigate identifiable predictors of patient entry into a substance-use treatment program following the initial diagnosis of an alcohol-related disorder on a medical or surgical inpatient unit. An administrative computerized database was used to identify the sample for this study. Inpatient and outpatient records were obtained from the Little Rock VAMC/DHCP. Predictors of patient entry into treatment within six months of the initial diagnosis of an alcohol related disorder included age younger than than 60 (odds ratio [OR] = 4.6), not married (OR = 1.7), primary diagnosis of an alcohol-related disorder (OR = 7.7), diagnosis of a comorbid drug (OR = 4.3) or psychiatric disorder (OR = 3.6), diagnosis by a medical as opposed to a surgical specialty (OR = 6.0), and African American (OR = 1.7)
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10932447&dopt=r

Reiner BI, Siegel EL, Flagle C, Hooper FJ, Cox RE, Scanlon M.
Effect of filmless imaging on the utilization of radiologic services.
Radiology 2000; 215(1):163-167.

Abstract: PURPOSE: To determine the effect of a large-scale picture archiving and communication system (PACS) on in- and outpatient utilization of radiologic services. MATERIALS AND METHODS: Data were collected at the Baltimore Veterans Affairs (VA) Medical Center (BVAMC) before and after implementation of an enterprise-wide PACS; the numbers and types of imaging examinations performed for fiscal years 1993 and 1996 were evaluated. These data were compared with those from a similar academic medical center, the Philadelphia VA Medical Center (PVAMC), and with aggregate data obtained nationally for all VA hospitals over comparable periods. RESULTS: Inpatient utilization, defined as the number of examinations per inpatient day, increased by 82% (from 0.265 to 0.483 examinations per patient day) after a transition to filmless operation at BVAMC. This is substantially greater than the increases of 38% (from 0.263 to 0.362 examinations per patient day) and 11% (from 0.190 to 0.211 examinations per patient day) at the film-based PVAMC and nationally, respectively. Outpatient utilization, defined as the number of examinations per visit, increased by 21% (from 0.108 to 0.131 examinations per visit) at BVAMC, compared with a 1% increase (from 0.087 to 0.088 examinations per visit) at PVAMC and a net decrease of 19% (from 0. 148 to 0.120 examinations per visit) nationally. CONCLUSION: The transition to filmless operation was associated with increases in inpatient and outpatient utilization of radiologic services, which substantially exceeded changes at PVAMC and nationally over the same interval
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10751482&dopt=r

Rosenheck R.
Primary care satellite clinics and improved access to general and mental health services.
Health Serv Res 2000; 35(4):777-790.

Abstract: OBJECTIVES: To evaluate the relationship between the implementation of community-based primary care clinics and improved access to general health care and/or mental health care, in both the general population and among people with disabling mental illness. STUDY SETTING: The 69 new community-based primary care clinics in underserved areas, established by the Department of Veterans Affairs (VA) between the last quarter of FY 1995 and the second quarter of FY 1998, including the 21 new clinics with a specialty mental health care component. DATA SOURCES: VA inpatient and outpatient workload files, 1990 U.S. Census data, and VA Compensation and Pension files were used to determine the proportion of all veterans, and the proportion of disabled veterans, living in each U.S. county who used VA general health care services and VA mental health services before and after these clinics began operation. DESIGN: Analysis of covariance was used to compare changes, from late FY 1995 through early FY 1998, in access to VA services in counties in which new primary care clinics were located, in counties in which clinics that included specialized mental health components were located, and for comparison, in other U.S. counties, adjusting for potentially confounding factors. KEY FINDINGS: Counties in which new clinics were located showed a significant increase from the FY 1995-FY 1998 study dates in the proportion of veterans who used general VA health care services. This increase was almost twice as large as that observed in comparison counties (4.2% vs. 2.5%: $F = 12.6$, $df = 1,3118$, $p = .0004$). However, the introduction of these clinics was not associated with a greater use of specialty VA mental health services in the general veteran population, or of either general health care services or mental health services among veterans who received VA compensation for psychiatric disorders. In contrast, in counties with new clinics that included a mental health component the proportion of veterans who used VA mental health services increased to almost three times the proportion in comparison counties (0.87% vs. 0.31%: $F = 8.3$, $df = 1,3091$, $p = .004$). CONCLUSIONS: Community-based primary care clinics can improve access to general health care services, but a specialty mental health care component appears to be needed to improve access to mental health services
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=11055448&dopt=r

Rosenheck R, Stolar M, Fontana A.
Outcomes monitoring and the testing of new psychiatric treatments: work therapy in the treatment of chronic post-traumatic stress disorder.
Health Serv Res 2000; 35(1 Pt 1):133-151.

Abstract: OBJECTIVE: To evaluate the effectiveness of a work therapy intervention, the Department of Veterans Affairs (VA) Compensated Work Therapy program (CWT), in the treatment of patients suffering from chronic war-related post-traumatic stress disorder (PTSD); and to demonstrate methods for using outcomes monitoring data to

screen previously untested treatments. DATA SOURCES/STUDY SETTING: Baseline and four-month follow-up questionnaires administered to 3,076 veterans treated in 52 specialized VA inpatient programs for treatment of PTSD at facilities that also had CWT programs. Altogether 78 (2.5 percent) of these patients participated in CWT during the four months after discharge. STUDY DESIGN: The study used a pre-post nonequivalent control group design. DATA COLLECTION/EXTRACTION METHODS: Questionnaires documented PTSD symptoms, violent behavior, alcohol and drug use, employment status, and medical status at the time of program entry and four months after discharge from the hospital to the community. Administrative databases were used to identify participants in the CWT program. Propensity scores were used to match CWT participants and other patients, and hierarchical linear modeling was used to evaluate differences in outcomes between treatment groups on seven outcomes. PRINCIPAL FINDINGS: The propensity scaling method created groups that were not significantly different on any measure. No greater improvement was observed among CWT participants than among other patients on any of seven outcome measures. CONCLUSIONS: Substantively this study suggests that work therapy, as currently practiced in VA, is not an effective intervention, at least in the short term, for chronic, war-related PTSD. Methodologically it illustrates the use of outcomes monitoring data to screen previously untested treatments and the use of propensity scoring and hierarchical linear modeling to adjust for selection biases in observational studies
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10778827&dopt=r

Schnurr PP, Friedman MJ, Sengupta A, Jankowski MK, Holmes T.
PTSD and utilization of medical treatment services among male Vietnam veterans.
J Nerv Ment Dis 2000; 188(8):496-504.

Abstract: This study investigated the effect of posttraumatic stress disorder (PTSD) on help-seeking for physical problems. Merging two large data sets resulted in a sample of 1773 male Vietnam veterans from white, black, Hispanic, Native Hawaiian, and Japanese American ethnic groups. Predictors of utilization included PTSD, other axis I disorders, and substance abuse. In analyses that adjusted only for age, PTSD was related to greater utilization of recent and lifetime VA medical services, and with recent inpatient care from all sources. Further analysis showed that the increased utilization associated with PTSD was not merely due to the high comorbidity between PTSD and other axis I disorders. The uniqueness of the association between PTSD and medical utilization is discussed in terms of somatization and physical illness
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10972568&dopt=r

Zhang Q, Safford M, Ottenweller J, Hawley G, Repke D, Burgess JF, Jr. et al.
Performance status of health care facilities changes with risk adjustment of HbA1c.
Diabetes Care 2000; 23(7):919-927.

Abstract: OBJECTIVE: To develop a risk adjustment method for HbA1c, based solely on administrative data and to determine the extent to which risk-adjusted HbA1c changes the identification of high- or low-performing medical facilities. RESEARCH DESIGN AND METHODS: Through use of pharmacy records, 204,472 diabetic patients were identified for federal fiscal year 1996 (FY96). Complete information (HbA1c levels, demographic data, inpatient records, outpatient pharmacy utilization records) was available on 38,173 predominantly male patients from 48 Veterans Health Administration (VHA) medical facilities. Hierarchical mixed-effects models were used to estimate risk-adjusted unique facility-level HbA1c. RESULTS: Predicted HbA1c demonstrated expected patterns for major factors known to influence glycemic control. Poorer glycemic control was seen in minorities and patients with greater disease severity, longer duration of disease (using treatment type or presence of amputation as surrogates), and more extensive comorbidity (measured by an adapted Charlson index). Better glycemic control was seen in Caucasians, older diabetic patients, and patients with higher outpatient utilization. The number of performance outliers was reduced as a result of risk adjustment. For mean HbA1c levels, 7 facilities that were initially identified as statistically significant outliers were no longer outliers after risk adjustment. For high-risk HbA1c (>9.5%) rates, 12 facilities that were initially identified as statistically significant outliers were no longer outliers after risk adjustment. CONCLUSIONS: Risk adjustment using only administrative data resulted in substantial changes in identification of high or low performers compared with non-risk-adjusted HbA1c. Although our findings are exploratory, risk adjustment using administrative data may be a necessary and achievable step in quality assessment of diabetes care measured by rates of high-risk HbA1c (>9.5%)

http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10895841&dopt=r

Year 1999

Ashton CM, Petersen NJ, Souchek J, Menke TJ, Pietz K, Yu HJ et al.
Rates of health services utilization and survival in patients with heart failure in the Department of Veterans Affairs medical care system.
Am J Med Qual 1999; 14(1):55-63.

Abstract: The objective of this study was to describe patterns of hospital and clinic use and survival for a large nationwide cohort of patients with heart failure. A retrospective cohort study of patients treated in the Veterans Affairs medical care system was conducted using linked administrative databases as data sources. In 1996, the average heart failure cohort member had 1-2 hospitalizations, 14 inpatient days, 6-7 visits with the primary physician, 15 other visits for consultations or tests, and 1-2 urgent care visits per 12 months. The overall risk-adjusted 5-year survival rate was 36%. Hospital use rates in the cohort fell dramatically between 1992 and 1996. One-year survival rates increased slightly over the period. Patients with heart failure are heavy users of services and have a very poor prognosis. Utilization and outcome data indicate the need for major efforts to assure quality of care and to devise innovative ways of delivering comprehensive services
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10446664&dopt=r

Barnett PG, Rodgers JH.
Use of the Decision Support System for VA cost-effectiveness research.
Med Care 1999; 37(4 Suppl Va):AS63-AS70.

Abstract: BACKGROUND: The Department of Veterans Affairs is adopting the Decision Support System (DSS), computer software and databases which include a cost-accounting system which determines the cost of health care products and patient encounters. OBJECTIVES: A system for providing cost data for cost-effectiveness analysis should be provide valid, detailed, and comprehensive data that can be aggregated. METHODS: The design of DSS is described and compared with those criteria. Utilization data from DSS was compared with other VA utilization data. Aggregate DSS cost data from 35 medical centers was compared with relative resource weights developed for the Medicare program. RESULTS: Data on hospital stays at 3 facilities found that 3.7% of the stays in DSS were not in the VA discharge database, whereas 7.6% of the stays in the discharge data were not in DSS. DSS reported between 68.8% and 97.1% of the outpatient encounters reported by six facilities in the ambulatory care data base. Relative weights for each Diagnosis Related Group based on DSS data from 35 VA facilities correlated with Medicare weights (correlation coefficient of .853). CONCLUSIONS: DSS will be useful for research if certain problems are overcome. It is difficult to distinguish long-term from acute hospital care. VA does not have a complete database of all inpatient procedures, so DSS has not assigned them a specific cost. The authority to access encounter-level DSS data needs to be centralized. Researchers can provide the feedback needed to improve DSS cost estimates. A comprehensive encounter-level extract would facilitate use of DSS for research
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10217386&dopt=r

Cowper DC, Hynes DM, Kubal JD, Murphy PA.
Using administrative databases for outcomes research: select examples from VA Health Services Research and Development.
J Med Syst 1999; 23(3):249-259.

Abstract: The U.S. Department of Veterans Affairs (VA) operates and maintains one of the largest health care systems under a single management structure in the world. The coordination of administrative and clinical information on veterans served by the VA health care system is a daunting and critical function of the Department. This article provides an overview of VA Health Services Research and Development Service initiatives to assist researchers in using extant VA databases to study patient-centered health care outcomes. As examples, studies using the VA's Patient Treatment File (PTF) and the Beneficiary Identification and Records Locator System (BIRLS) Death File are described

http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10554740&dopt=r

Druss BG, Rohrbaugh RM, Rosenheck RA.
Depressive symptoms and health costs in older medical patients.
Am J Psychiatry 1999; 156(3):477-479.

Abstract: OBJECTIVE: The authors assessed the association between depressive symptoms and health costs for a national Veterans Administration (VA) sample. METHOD: The Rand Depression Index was administered to 1,316 medical or surgical inpatients over the age of 60 at nine VA hospitals. Scores were merged with utilization, demographic, and hospital data from national VA inpatient and outpatient files. RESULTS: Medical costs for respondents with the highest quartile of symptoms were approximately $3,200-or 50%-greater than medical costs for those in the least symptomatic quartile. Depressive symptoms were not associated with any statistically significant mental health expenditures. CONCLUSIONS: The study extends previous reports of the high medical costs associated with depressive disorders to an older, public sector population. The mechanisms underlying increased medical costs associated with depressive symptoms, while the subject of much speculation in the literature, still remain largely unknown
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10080569&dopt=r

Druss BG, Rosenheck RA, Stolar M.
Patient satisfaction and administrative measures as indicators of the quality of mental health care.
Psychiatr Serv 1999; 50(8):1053-1058.

Abstract: OBJECTIVE: Although measures of consumer satisfaction are increasingly used to supplement administrative measures in assessing quality of care, little is known about the association between these two types of indicators. This study examined the association between these measures at both an individual and a hospital level. METHODS: A satisfaction questionnaire was mailed to veterans discharged during a three-month period from 121 Veterans Administration inpatient psychiatric units; 5,542 responded, for a 37 percent response rate. These data were merged with data from administrative utilization files. Random regression analysis was used to determine the association between satisfaction and administrative measures of quality for subsequent outpatient follow-up. RESULTS: At the patient level, satisfaction with several aspects of service delivery was associated with fewer readmissions and fewer days readmitted. Better alliance with inpatient staff was associated with higher administrative measures of rates of follow-up, promptness of follow-up, and continuity of outpatient care, as well as with longer stay for the initial hospitalization. At the hospital level, only one association between satisfaction and administrative measures was statistically significant. Hospitals where patients expressed greater satisfaction with their alliance with outpatient staff had higher scores on administrative measures of promptness and continuity of follow-up. CONCLUSIONS: The associations between patient satisfaction and administrative measures of quality at the individual level support the idea that these measures address a common underlying construct. The attenuation of the associations at the hospital level suggests that neither type can stand alone as a measure of quality across institutions
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10445654&dopt=r

Hoff RA, Rosenheck RA.
The cost of treating substance abuse patients with and without comorbid psychiatric disorders.
Psychiatr Serv 1999; 50(10):1309-1315.

Abstract: OBJECTIVE: Data from a national sample of patients with a primary diagnosis of a substance use disorder were analyzed to examine whether having a comorbid psychiatric diagnosis-a dual diagnosis-was associated with increased costs of health services over a six-year period and whether dually diagnosed patients used particular types of services more frequently. METHODS: A national sample of substance abuse patients being treated in Veterans Affairs (VA) facilities were classified into two groups-those with a dual diagnosis (N=3, 069) and those with a single diagnosis of a substance use disorder (N=9,538). The sample was identified from two sources during a two-week period in 1990: outpatients in specialty substance abuse clinics and inpatients discharged with a substance-related diagnosis.

Administrative data were used to track VA health care utilization and costs between 1991 and 1996. RESULTS: Dual diagnosis was associated with a significantly increased total cost of care over the six years, which was primarily explained by increased utilization of outpatient psychiatric and substance abuse services. Costs for both groups decreased over time, but they decreased faster among dually diagnosed patients. CONCLUSIONS: Having a comorbid psychiatric diagnosis appears to consistently increase the cost and utilization of services among patients with a primary diagnosis of a substance use disorder. These results are consistent with previous findings for dually diagnosed patients with a primary psychiatric diagnosis. The increased cost may simply reflect the greater severity of illness among dually diagnosed patients, but it may also indicate fragmented and inefficient service delivery
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10506299&dopt=r

Kazmers A, Jacobs LA, Perkins AJ.
Pulmonary embolism in Veterans Affairs Medical Centers: is vena cava interruption underutilized?
Am Surg 1999; 65(12):1171-1175.

Abstract: Veterans with venous thrombosis or pulmonary embolism (PE) were evaluated using Veterans Affairs patient treatment file (PTF) data from fiscal years 1990-1995, inclusive, to define outcomes for those with PE. The specific aims of the study were to define how often those with PE underwent vena cava interruption (VCI) and whether VCI affected in-hospital mortality rates. Outcomes were defined using PTF data and Patient Management Category (PMC) software for 26,132 veterans discharged from all Veterans Affairs Medical Centers (VAMCs) with venous thromboembolism, which included a subset of 4,882 patients identified by both PTF data and PMC software to have PE. PMC software also generated measures of illness severity, patient complexity (PMC count), and resource utilization (called resource intensity scale) for each hospital admission. The in-hospital mortality rate for those with PE was 15.9 per cent (775 of 4882). Only 157 VCIs were performed in those with PE which constituted 3.2 per cent of the latter group. Those with PE who had VCI experienced a 13.4 per cent unadjusted in-hospital mortality rate (21 of 157) versus a 16 per cent unadjusted mortality rate without VCI (754/4725; not significant). In a logistic regression model of in-hospital mortality in those with PE, increasing age and illness severity were directly related to mortality, whereas VCI was independently associated with reduced mortality. The odds of death were reduced by 0.482 (0.287-0.807, 95% limits) for patients with PE who underwent VCI ($P<0.005$). Utilization of VCI varied among VAMCs: the hospital rates that VCI were performed in those with PE ranged from 0 to 16.7 per cent. Mortality associated with PE was substantial in VAMCs, and VCI was independently associated with reduced in-hospital mortality. The low percentage of veterans with pulmonary embolism who underwent VCI was surprising. VCI may be underutilized in veterans with PE
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10597069&dopt=r

Rosenheck R, Fontana A, Stolar M.
Assessing quality of care: administrative indicators and clinical outcomes in posttraumatic stress disorder.
Med Care 1999; 37(2):180-188.

Abstract: BACKGROUND: Although the use of quality of care indicators based on data collected for administrative purposes has become widespread, the relationship between those measures and clinical outcomes has yet to be evaluated. RESEARCH DESIGN: This study used hierarchical linear modeling to examine the relationship between 12 performance indicators derived from administrative data sets and 6 clinical outcome measures addressing symptoms, substance abuse, and social functions. SUBJECTS: Patient interviews were conducted with 4,165 veterans 4 months after their discharge from 62 specialized VA inpatient programs for treatment of Posttraumatic Stress disorder. RESULTS: Five of twelve administrative measures were significantly associated with at least one of the clinical outcome measures, which was all in the expected directions. The number of hospital readmissions during the 6 months after the index discharge was significantly related to poor outcomes on all 5 of 6 measures. Measures of readmission and post-discharge hospital use were more strongly and consistently related to outcome than to measures of access, intensity, or continuity of outpatient care. CONCLUSION: Administrative data, especially measures of hospital readmission, are significantly related to clinical outcomes. Correlations, however, are small to modest in magnitude indicating that these 2 types of performance measures assess different aspects of quality and can not be substituted for one another
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10024122&dopt=r

West DA, Cummings JM, Longo WE, Virgo KS, Johnson FE, Parra RO.
Role of chronic catheterization in the development of bladder cancer in patients with spinal cord injury.
Urology 1999; 53(2):292-297.

Abstract: OBJECTIVES: Patients with spinal cord injury (SCI) and chronic indwelling catheters are known to be at increased risk of bladder malignancy. "Decatheterization" by clean intermittent catheterization, external condom catheterization, or spontaneous voiding is thought to reduce the risk by decreasing the chronic mucosal irritation and rate of infection. We examined two Department of Veterans Affairs (DVA) data bases to test this theory. METHODS: A population-based retrospective analysis of invasive treatments for carcinoma of the bladder in all DVA hospitals was conducted using computerized inpatient files from fiscal years 1988 to 1992. RESULTS: One hundred thirty patients with bladder malignancy were identified from a pool of 33,565 patients with SCI (0.39%). All 130 patients underwent either radical cystectomy (n = 63, 48%) or transurethral resection of bladder tumor (n = 67, 52%). The 30-day perioperative mortality and overall 5-year survival rates were 2 (1.5%) and 49 (38%) of 130, respectively. Of the 130 patients analyzed, 42 (32%) had adequate data available regarding tumor pathologic findings and method of bladder management for analysis. The average age at diagnosis was 57.3 years. The histologic finding was transitional cell carcinoma in 23 (55%), squamous cell carcinoma in 14 (33%), and adenocarcinoma in 4 (10%) of 42. Bladder management was an indwelling urethral catheter in 18 (43%), suprapubic catheter in 8 (19%), clean intermittent catheterization in 8 (19%), and condom catheter in 6 (14%) of 42 patients. Squamous cell carcinoma was more common in patients with indwelling urethral catheters and suprapubic tubes (11 of 26, 42%) than in those using clean intermittent catheterization, condom catheterization, or spontaneous voiding (3 of 16, 19%). CONCLUSIONS: Bladder cancer was diagnosed in approximately 0.39% of this large SCI population during a 5-year period. Most cancers (55%) were transitional cell carcinomas. Squamous cell carcinoma was more common in patients with SCI and indwelling catheters than those without chronic catheterization. These data continue to suggest that avoidance of indwelling catheters, when feasible, is the preferred method of bladder management in patients with SCI
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=9933042&dopt=r

Wray NP, Petersen NJ, Souchek J, Ashton CM, Hollingsworth JC, Geraci JM.
The hospital multistay rate as an indicator of quality of care.
Health Serv Res 1999; 34(3):777-790.

Abstract: OBJECTIVES: To evaluate the hospital multistay rate to determine if it has the attributes necessary for a performance indicator that can be applied to administrative databases. DATA SOURCES/STUDY SETTING: The fiscal year 1994 Veterans Affairs Patient Treatment File (PTF), which contains discharge data on all VA inpatients. STUDY DESIGN: Using a retrospective study design, we assessed cross-hospital variation in (a) the multistay rate and (b) the standardized multistay ratio. A hospital's multistay rate is the observed average number of hospitalizations for patients with one or more hospital stays. A hospital's standardized multistay ratio is the ratio of the geometric mean of the observed number of hospitalizations per patient to the geometric mean of the expected number of hospitalizations per patient, conditional on the types of patients admitted to that hospital. DATA COLLECTION/EXTRACTION METHODS: Discharge data were extracted for the 135,434 VA patients who had one or more admissions in one of seven disease groups. PRINCIPAL FINDINGS: We found that 17.3 percent (28,300) of the admissions in the seven disease categories were readmissions. The average number of stays per person (multistay rate) for an average of seven months of follow-up ranged from 1.15 to 1.45 across the disease categories. The maximum standardized multistay ratio ranged from 1.12 to 1.39. CONCLUSIONS: This study has shown that the hospital multistay rate offers sufficient ease of measurement, frequency, and variation to potentially serve as a performance indicator
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10445902&dopt=r

Year 1998

Ashton CM, Petersen NJ, Wray NP, Yu HJ.
The Veterans Affairs medical care system: hospital and clinic utilization statistics for 1994.
Med Care 1998; 36(6):793-803.

Abstract: OBJECTIVES: The authors describe the role the Veterans Affairs (VA) medical system plays as a provider of clinic and hospital services by examining utilization levels and users' characteristics. METHODS: The Veterans Affairs hospital discharge database, the Veterans Affairs outpatient clinic files, and the veteran population files were used to estimate the number of persons using the Veterans Affairs medical care system in 1994 and the intensity of their clinic and hospital use. Demographic and clinical characteristics of users were tabulated. RESULTS: In 1994, 2.7 million veterans, 10.3% of all US veterans, and approximately 23% of veterans who would have met the statutory eligibility requirements for Veterans Affairs care, used the hospital and/or clinic components of the Veterans Affairs medical system. Sixty-three percent of the system's users were younger than age 65, and 10.5% were women. These 2.7 million veterans had 901,665 Veterans Affairs hospital stays, 15.5 million bed-days, and 31.2 million outpatient visits in fiscal year 1994. The average number of hospitalizations per hospital user was 1.71; the average number of visits per clinic user was 11.7. Medical, surgical, and psychiatric diagnosis-related groups (DRGs) accounted for 56%, 21%, and 23%, respectively, of hospitalizations, but psychiatric diagnosis-related groups accounted for 43% of all inpatient days. Principal medicine clinic visits and psychiatry clinic visits accounted for 21% and 16% of Veterans Affairs ambulatory care. CONCLUSIONS: Because the patient population served by the Veterans Affairs system is skewed in a number of ways, its contribution as a provider of health services in the United States varies by gender, age, socioeconomic status, and diagnosis
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=9630121&dopt=r

Castine MR, Meador-Woodruff JH, Dalack GW.
The role of life events in onset and recurrent episodes of schizophrenia and schizoaffective disorder.
J Psychiatr Res 1998; 32(5):283-288.

Abstract: The experience of both positive and negative recent life events has long been recognized as a possible precipitant of episodes of psychiatric illness. Among individuals with recurrent mood disorders, investigators have found that recent life events are more likely to be associated with initial and early episodes of illness, with later episodes less likely to be temporally associated with life events. This study investigated the relationship between recent life events and episodes of illness in schizophrenia (defined as the number of acute episodes of schizophrenia requiring hospitalization). Among 32 male U.S. Military veteran inpatients, those with three or fewer episodes of illness reported significantly more recent life events than those patients with more than three episodes of illness ($P = 0.01$). Overall, recent life events were negatively correlated with number of episodes ($P < 0.05$). These data suggest that initial or early episodes of schizophrenic illness are more likely to be associated with recent life events than are later episodes
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=9789206&dopt=r

Fortney J, Booth B, Zhang M, Humphrey J, Wiseman E.
Controlling for selection bias in the evaluation of Alcoholics Anonymous as aftercare treatment.
J Stud Alcohol 1998; 59(6):690-697.

Abstract: OBJECTIVE: The purpose of this research was to control for self-selection bias in the evaluation of Alcoholics Anonymous (AA) as aftercare treatment. Observational studies of alcoholism aftercare treatment are subject to selection bias whenever the self-selection process results in important differences in unobserved casemix dimensions between treatment groups. METHOD: The sample included 118 male veterans discharged from inpatient alcohol treatment, 85% of whom were followed-up at 3 months. Drinking outcomes were measured by self-reported abstinence in the third month after discharge. The aftercare treatment effect of AA was estimated using standard logistic regression analysis and instrumental variables analysis. Instruments included the subject's ability to drive oneself to AA meetings and the presence/absence of an AA meeting in the subject's town of residence. A Hausman exogeniety test was used to determine whether the standard logistic regression results were subject to self-selection bias. RESULTS: Estimates from the standard logistic regression yielded a positive ($OR = 3.7$) and significant ($p = .018$) treatment effect for AA attendance. However, the instrumental variables analysis yielded a smaller ($OR^* = 1.7$) and insignificant treatment effect estimate ($p = .782$). The Hausman exogeniety test indicated that the treatment effect estimate from the standard logistic regression was subject to significant self-selection bias ($chi2 = 83.9$, 1 df, $p <.01$). CONCLUSIONS: The AA aftercare treatment effect observed in this sample was due to differences in unobserved casemix factors between the treatment groups. Results suggest that previous AA aftercare research may have also been subject to self-

selection bias. Researchers of substance abuse outcomes should consider analyzing nonexperimental data using instrumental variables methodologies
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=9811090&dopt=r

Kashner TM.
Agreement between administrative files and written medical records: a case of the Department of Veterans Affairs.
Med Care 1998; 36(9):1324-1336.

Abstract: OBJECTIVES: This study examined the reliability of Department of Veterans Affairs' health information databases concerning patient demographics, use of care, and diagnoses. METHODS: The Department of Veterans Affairs' Patient Treatment files for Main, Bed-section (PTF) and Outpatient Care (OCF) were compared with medical charts and administrative records (MR) for a random national sample of 1,356 outpatient visits and 414 inpatient discharges to Department of Veterans Affairs' facilities between July 1 and September 30, 1995. Records were uniformly abstracted by a focus group of utilization review nurses and medical record coders blinded to administrative file entries. RESULTS: Reliability was adequate for demographics (kappa approximately 0.92), length of stay (agreement=98%), and selected diagnoses (kappa ranged 0.39 to 1.0). Reliability was generally inadequate to identify the treating bedsection or clinic (kappa approximately 0.5). Compared with medical charts, Patient Treatment Files/Outpatient Care Files reported an additional diagnosis per discharge and 0.8 clinic stops per outpatient visit, resulting in higher estimates of disease prevalence (+39% heart disease, +19% diabetes) and outpatient costs (+36% per unique outpatient per quarter). CONCLUSIONS: In the absence of pilot work validating key data elements, investigators are advised to construct health and utilization data from multiple sources. Further validation studies of administrative files should focus on the relation between process of data capture and data validity
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=9749656&dopt=r

Kashner TM, Muller A, Richter E, Hendricks A, Lukas CV, Stubblefield DR.
Private health insurance and veterans use of Veterans Affairs care. RATE Project Committee. Rate Alternative Technical Evaluation.
Med Care 1998; 36(7):1085-1097.

Abstract: OBJECTIVES: This study examined the effect of private health insurance on the use of medical, surgical, psychiatric, and addiction services for patients eligible for publicly supported care. METHODS: The authors assembled administrative databases describing 350,000 noninstitutionalized veterans who had been discharged from a Veterans Affairs (VA) inpatient medicine or surgery bed section during a 1-year period. Patient use of care was followed for 1 year after the index discharge. Patient insurance information came from Medical Care Cost Recovery Billing and Collection files obtained separately from each of 162 VA Medical Centers. Distances between VA and non-VA sources of care were estimated from the Health Care Financing Administration's Hospital Distance File. RESULTS: Insured patients were less likely to seek surgical care but were 12 times (65 years of age and older) and 73 times (63 years of age and younger) more likely to initiate outpatient medical visits than were their counterparts, adjusted for patient demographic, diagnostic, and index facility characteristics. Patients who had private health insurance also were 3.4 (> or = 65) and 2.6 (< or = 64) times less likely to use VA surgical care in response to changes in available surgical staff-to-patient ratios than were their uninsured counterparts. CONCLUSIONS: Private health insurance may substitute (reduce) or complement (increase) the continued use of publicly supported health care services, depending on patient age, care setting, and service type
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=9674625&dopt=r

Piette JD, Barnett PG, Moos RH.
First-time admissions with alcohol-related medical problems: a 10-year follow-up of a national sample of alcoholic patients.
J Stud Alcohol 1998; 59(1):89-96.

Abstract: OBJECTIVE: We estimated the rate of first-time hospital admission over 10 years with alcohol-related medical problems among a large national sample of patients with diagnosed alcohol abuse disorders. METHOD: We

identified a nationwide cohort of all patients (N = 46,680) discharged in 1980 from all Department of Veterans Affairs (VA) medical centers with alcohol-related diagnoses. Two comparison cohorts also were identified: patients with musculoskeletal disorders (N = 18,231) and a random sample of nonalcoholic patients (N = 45,204). Using secondary databases, ICD-9-CM coded diagnostic information was collected for all VA inpatient admissions these patients experienced over the decade following their index hospitalizations. Admission rates within age strata and age/race standardized rates were computed. Adjusted rate ratios were estimated using Poisson regression. RESULTS: Alcoholic patients were at substantial risk of admission for multiple medical disorders. Admission rates varied for patients of different ages. Those who were between 50 and 59 years of age during their index hospital stay were at the highest risk of admission with an alcohol-related medical disease over the subsequent decade. CONCLUSIONS: The admission rates for these medical disorders among alcoholic patients provide an important baseline estimate of individual patients' risk profiles and may help providers set priorities among diagnostic tests
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=9498320&dopt=r

Rosenheck R, Seibyl CL.
Homelessness: health service use and related costs.
Med Care 1998; 36(8):1256-1264.

Abstract: OBJECTIVES: This study examines health service use and costs for homeless and domiciled veterans hospitalized in psychiatric and substance abuse units at Department of Veterans Affairs (VA) medical centers, nationwide. METHODS: A national survey of residential status at the time of admission was conducted on all VA inpatients hospitalized in acute mental health care units on September 30, 1995. Survey data were merged with computerized workload data bases to assess service use and cost during the 6 months before and after the date of discharge from the index hospitalization. RESULTS: Of 9,108 veterans with complete survey data, 1,797 (20%) had been literally homeless at the time of admission, and 1,380 (15%) were doubled up temporarily, for a total homelessness rate of 35%. Combining patients from general psychiatry and substance abuse programs, the average annual cost of care for homeless veterans, after adjusting for other factors, was $27,206; $3,196 (13.3%) higher than the cost of care for domiciled veterans (P < 0.0001). Approximately 26% of annual inpatient VA mental health expenditures ($404 million) are spent on the care of homeless persons. CONCLUSIONS: Homelessness adds substantially to the cost of health care services for persons with mental illness in VA, and most likely, in other "safety net" systems that serve the poor. These high costs, along with the prospect of declining public funding for health and social welfare programs, and an anticipated increase in the numbers of homeless mentally ill persons, portend a difficult time ahead for both homeless patients and the organizations that care for them
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=9708597&dopt=r

Rosenheck RA, Neale MS.
Cost-effectiveness of intensive psychiatric community care for high users of inpatient services.
Arch Gen Psychiatry 1998; 55(5):459-466.

Abstract: BACKGROUND: This 2-year experimental study evaluated the effectiveness and cost of 10 intensive psychiatric community care (IPCC) programs at Department of Veterans Affairs medical centers in the northeastern United States. METHODS: High users of inpatient services were randomly assigned to either IPCC or standard Department of Veterans Affairs care at 6 general medical and surgical hospitals (n=271 vs 257) and 4 neuropsychiatric hospitals (n=183 vs 162). Patient interviews every 6 months and national computerized data were used to assess clinical outcomes, health service use, health care costs, and non-health care costs. RESULTS: There was only 1 significant clinical difference between groups across follow-up periods: IPCC patients at general medical and surgical sites had higher community living skills. However, at the final interview, IPCC patients at general medical and surgical sites showed significantly lower symptoms, higher functioning, and greater satisfaction with services. Treatment with IPCC significantly reduced hospital use only at neuropsychiatric sites (320 vs 513 days, P<.001). Total societal costs, including the cost of IPCC, were lower for IPCC at neuropsychiatric sites ($82,454 vs $116,651, P<.001), but greater at general medical and surgical sites ($51,537 vs $46,491, P<.01). When 2 sites that incompletely implemented the model were dropped from the analysis, costs at general medical and surgical sites were $38 lower for IPCC (P=.26). CONCLUSIONS: At acute care hospitals, IPCC treatment is associated with greater long-term clinical improvement and, when fully implemented, is cost-neutral. At long-stay hospitals treating older, less-functional patients, it is not

associated with clinical or functional improvement but generates substantial cost savings. Intensive psychiatric community care thus has beneficial, but somewhat different, outcome profiles at different types of hospitals
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=9596049&dopt=r

Year 1997

Barnett PG, Swindle RW.
Cost-effectiveness of inpatient substance abuse treatment.
Health Serv Res 1997; 32(5):615-629.

Abstract: OBJECTIVE: To identify the characteristics of cost-effective inpatient substance abuse treatment programs. DATA SOURCES/STUDY SETTING: A survey of program directors and cost and discharge data for study of 38,863 patients treated in 98 Veterans Affairs treatment programs. STUDY DESIGN: We used random-effects regression to find the effect of program and patient characteristics on cost and readmission rates. A treatment was defined as successful if the patient was not readmitted for psychiatric or substance abuse care within six months. PRINCIPAL FINDINGS: Treatment was more expensive when the program was smaller, or had a longer intended length of stay (LOS) or a higher ratio of staff to patients. Readmission was less likely when the program was smaller or had longer intended LOS; the staff to patient ratio had no significant effect. The average treatment cost $3,754 with a 75.0% chance of being effective, a cost-effectiveness ratio of $5,007 per treatment success. A 28-day treatment program was $860 more costly and 3.3% more effective than a 21-day program, an incremental cost-effectiveness of $26,450 per treatment success. Patient characteristics did not affect readmission rates in the same way they affected costs. Patients with a history of prior treatment were more likely to be readmitted but their subsequent stays were less costly. CONCLUSIONS: A 21-day limit on intended LOS would increase the cost-effectiveness of treatment programs. Consolidation of small programs would reduce cost, but would also reduce access to treatment. Reduction of the staff to patient ratio would increase the cost-effectiveness of the most intensively staffed programs
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=9402904&dopt=r

Druss B, Rosenheck R.
Evaluation of the HEDIS measure of behavioral health care quality. Health Plan Employer Data and Information Set.
Psychiatr Serv 1997; 48(1):71-75.

Abstract: OBJECTIVE: The Health Plan Employer Data and Information Set (HEDIS) is the most widely used "report card" system comparing health care plans across different dimensions of performance. HEDIS uses only one measure of the quality of behavioral health care-the rate of follow-up after hospitalization for major affective disorder. This study used data from a national Veterans Affairs database to evaluate the generalizability of the HEDIS behavioral health quality measure. METHODS: Using administrative data from a nationwide sample of 114 VA hospitals, the HEDIS (version 2.5) quality measure was compared with several related performance measures including readmission rates and outpatient follow-up rates for other psychiatric disorders and for substance use disorders. The magnitude and statistical significance of Pearson's r value for correlation between measures was calculated. RESULTS: The HEDIS measure was moderately correlated with 30-day follow-up after hospitalization for other psychiatric disorders and with other performance measures of outpatient care. However, it was poorly correlated with follow-up for substance use disorders, inpatient measures including readmission rates, and several other measures of quality. CONCLUSIONS: Caution is needed in drawing conclusions about the quality of behavioral health plans based on the single measure used in HEDIS, version 2.5. Inclusion of other performance measures may be warranted
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=9117504&dopt=r

Huber TS, Durance PW, Kazmers A, Jacobs LA.
Effect of the Asymptomatic Carotid Atherosclerosis Study on carotid endarterectomy in Veterans Affairs medical centers.
Arch Surg 1997; 132(10):1134-1139.

Abstract: OBJECTIVE: To examine the effect of the Asymptomatic Carotid Atherosclerosis Study on the volume of carotid endarterectomies (CEAs) performed in Veterans Affairs medical centers. DESIGN: The data were retrospectively extracted from the Veterans Affairs Patient Treatment File for all patients undergoing CEA using the International Classification of Diseases, Ninth Revision, Clinical Modification procedural code 38.12. Data were classified into patient management categories to identify complications and to quantify the severity of illnesses and comorbidities. SETTING: All 172 US Veterans Affairs medical centers. PATIENTS: Veterans undergoing CEA during fiscal years 1993 through 1995. MAIN OUTCOME MEASURES: Procedural volume, mortality, and morbidity. RESULTS: There was a 43.4% increase in the volume of CEAs performed in fiscal year 1995 despite a 4.6% decrease in the served inpatients and an 8.8% decrease in the inpatient surgical procedures. The monthly volume of CEAs increased ($P < .001$, $r2 = 0.78$) at the onset of the fiscal year (October 1994) immediately after the Asymptomatic Carotid Atherosclerosis Study clinical advisory. The volume of CEAs increased in every region of the country for all nonpsychiatric hospital classifications and for almost every surgeon subspecialty. Despite the increased volume, the operative mortality rate, the International Classification of Diseases, Ninth Revision, Clinical Modification--and patient management categories--based complication rates, and the patients' comorbidity and severity of illness indexes all remained unchanged. CONCLUSION: The dramatic increase in CEAs following the Asymptomatic Carotid Atherosclerosis Study clinical advisory suggests that the conclusions of the trial have been accepted by the medical community throughout the Veterans Affairs medical centers
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=9336515&dopt=r

Mahan CM, Bullman TA, Kang HK, Selvin S.
A case-control study of lung cancer among Vietnam veterans.
J Occup Environ Med 1997; 39(8):740-747.

Abstract: Because of concerns among veterans over Agent Orange exposure, the Department of Veterans Affairs (VA) has conducted a series of studies of specific cancers among Vietnam veterans. Lung cancer is the topic of investigation in this report. The VA's Patient Treatment File (PTF) was used to identify 329 Vietnam era veterans with a diagnosis of lung cancer made between 1983 and 1990. The PTF is a computerized hospitalized database of inpatient records, including patients' demographic data, and diagnoses. A record is created for each patient discharged from any one of the VA's Medical Centers. Variables abstracted from the military record include education, race, branch of service, Military Occupational Specialty Code, rank, and units served within Vietnam. Two hundred sixty-nine controls were randomly selected from the PTF file of men hospitalized for a reason other than cancer. A second control group numbering 111 patients with colon cancer was also selected from the PTF file. Data were also gathered on exposure to Agent Orange through the location of each individual ground troop veteran's unit in relation to an area sprayed and the time elapsed since that area was sprayed. The crude odds ratio between service in Vietnam and lung cancer was of borderline significance (odds ratio = 1.39 with 95% confidence interval = 1.01-1.92). The relationship disappeared when the confounder year of birth was considered. We conclude from these data that there is no evidence of increased risk in lung cancer associated with service in Vietnam at this time
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=9273878&dopt=r

Phibbs CS, Swindle RW, Recine B.
Does case mix matter for substance abuse treatment? A comparison of observed and case mix-adjusted readmission rates for inpatient substance abuse treatment in the Department of Veterans Affairs.
Health Serv Res 1997; 31(6):755-771.

Abstract: OBJECTIVE: To develop a case mix model for inpatient substance abuse treatment to assess the effect of case mix on readmission across Veterans Affairs Medical Centers (VAMCs). DATA SOURCES/STUDY SETTING: The computerized patient records from the 116 VAMCs with inpatient substance abuse treatment programs between 1987 and 1992. STUDY DESIGN: Logistic regression was used on patient data to model the effect of demographic, psychiatric, medical, and substance abuse factors on readmission to VAMCs for substance abuse treatment within six months of discharge. The model predictions were aggregated for each VAMC to produce an expected number of readmissions. The observed number of readmissions for each VAMC was divided by its expected number to create a measure of facility performance. Confidence intervals and rankings were used to examine how case mix adjustment changed relative performance among VAMCs. DATA COLLECTION/EXTRACTION METHODS: Ward where care

was provided and ICD-9-CM diagnosis codes were used to identify patients receiving treatment for substance abuse (N = 313,886). PRINCIPAL FINDINGS: The case mix model explains 36 percent of the observed facility level variation in readmission. Over half of the VAMCs had numbers of readmissions that were significantly different than expected. There were also noticeable differences between the rankings based on actual and case mix-adjusted readmissions. CONCLUSIONS: Secondary data can be used to build a reasonably stable case mix model for substance abuse treatment that will identify meaningful variation across facilities. Further, case mix has a large effect on facility level readmission rates for substance abuse treatment. Uncontrolled facility comparisons can be misleading. Case mix models are potentially useful for quality assurance efforts
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=9018215&dopt=r

Wright SM, Daley J, Fisher ES, Thibault GE.
Where do elderly veterans obtain care for acute myocardial infarction: Department of Veterans Affairs or Medicare?
Health Serv Res 1997; 31(6):739-754.

Abstract: OBJECTIVE: To examine Department of Veterans Affairs (VA) and Medicare hospitalizations for elderly veterans with acute myocardial infarction (AMI), their use of cardiac procedures in both systems, and patient mortality. DATA SOURCES: Merging of inpatient discharge abstracts obtained from VA Patient Treatment Files (PTF) and Medicare MedPAR Part A files. STUDY DESIGN: A retrospective cohort study of male veterans 65 years or older who were prior users of the VA medical system (veteran-users) and who were initially admitted to a VA or Medicare hospital with a primary diagnosis of AMI at some time from January 1, 1988 through December 31, 1990 (N = 25,312). We examined the use of cardiac catheterization, coronary bypass surgery, and percutaneous transluminal coronary angioplasty in the 90 days after initial admission for AMI in both VA and Medicare systems, and survival at 30 days, 90 days, and one year. Other key measures included patient age, race, marital status, comorbidities, cardiac complications, prior utilization, and the availability of cardiac technology at the admitting hospital. PRINCIPAL FINDINGS: More than half of veteran-users (54 percent) were initially hospitalized in a Medicare hospital when they suffered an AMI. These Medicare index patients were more likely to receive cardiac catheterization (OR 1.24, 95% C.I. 1.17-1.32), coronary bypass surgery (OR 2.01, 95% C.I. 1.83-2.20), and percutaneous transluminal coronary angioplasty (OR 2.56, 95% C.I. 2.30-2.85) than VA index patients. Small proportions of patients crossed over between systems of care for catheterization procedures (VA to Medicare = 3.3%, and Medicare to VA = 5.1%). Many VA index patients crossed over to Medicare hospitals to obtain bypass surgery (27.6 percent) or coronary angioplasty (12.1 percent). Mortality was not significantly different between veteran-users who were initially admitted to VA versus Medicare hospitals. CONCLUSIONS: Dual-system utilization highlights the need to look at both systems of care when evaluating access, costs, and quality either in VA or in Medicare systems. Policy changes that affect access to and utilization of one system may lead to unpredictable results in the other
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=9018214&dopt=r

Year 1996

Ehreth J.
The implications for information system design of how health care costs are determined.
Med Care 1996; 34(3 Suppl):MS69-MS82.

Abstract: As the costs of health care assume increasing importance in national health policy, information systems will be required to supply better information about how costs are generated and how resources are distributed. Costs, as determined by accounting systems, often are inadequate for policy analysis because they represent resources consumed (expenditures) to produce given outputs but do not measure forgone alternative uses of the resources (opportunity costs). To accommodate cost studies at the program level and the system level, relational information systems must be developed that allow costs to be summed across individuals to determine an organization's costs, across providers to determine an individual patient's costs, and across both to determine system and population costs. Program level studies require that cost variables be grouped into variable costs that are tied to changes in volume of output and fixed costs that are allocated rationally. Data sources for program-level analyses are organizational financial statements, cost

center accounting records, Medicare cost reports, American Hospital Association surveys, and the Department of Veterans Affairs (VA) cost distribution files. System-level studies are performed to predict future costs and to compare costs of alternative modes of treatment. System-level analyses aggregate all costs associated with individuals to produce population-based costs. Data sources for system-level analyses include insurance claims;n Medicare files; hospital billing records; and VA inpatient, outpatient, and management databases. Future cost studies will require the assessment of costs from all providers, regardless of organizational membership status, for all individuals in defined populations
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=8598689&dopt=r

Moos RH, King MJ, Patterson MA.
Outcomes of residential treatment of substance abuse in hospital- and community-based programs.
Psychiatr Serv 1996; 47(1):68-74.

Abstract: OBJECTIVE: The study sought to determine whether inpatient readmission rates differed for patients with substance use disorders who were treated in either hospital-based or community-based transitional residential care. Length of residential care and intensity of outpatient mental health aftercare were examined as predictors of readmission. METHODS: Department of Veterans Affairs nationwide databases were used to document readmissions at one- and two-year intervals for male inpatients treated for substance use disorders who were discharged either to hospital-based (N = 2,190) or community-based (N = 4,490) residential care. Patients with and without concomitant psychiatric diagnoses were identified. RESULTS: Patients treated in community-based residential programs had lower one- and two-year readmission rates than patients who received hospital-based residential care. Longer episodes of residential care and more outpatient mental health care were also associated with lower readmission rates. Among patients with concomitant psychiatric disorders, those in hospital-based care benefited more from longer episodes of residential care and more intensive outpatient mental health aftercare. Residential care, longer episodes of care, and more outpatient mental health care were independent predictors of lower one- and two-year readmission rates after patient-based risk factors were controlled. CONCLUSIONS: The findings highlight the value of providing adequate amounts of residential and outpatient care for patients in substance abuse treatment, especially patients with concomitant psychiatric disorders
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=8925349&dopt=r

Moos RH, Mertens JR.
Patterns of diagnoses, comorbidities, and treatment in late-middle-aged and older affective disorder patients: comparison of mental health and medical sectors.
J Am Geriatr Soc 1996; 44(6):682-688.

Abstract: OBJECTIVE: To compare the diagnoses, psychiatric and medical comorbidities, and prior and current treatment received by late-middle-aged and older affective disorder patients in mental health and medical service settings and to identify predictors of these patients' length of inpatient care. DESIGN: Department of Veterans Affairs (VA) nationwide databases are used to examine the prevalence, diagnoses, and inpatient and outpatient treatment received by affective disorder patients in mental health and medical units in Fiscal Year 1990. RESULTS: Compared with late-middle-aged and older index medical patients (n = 11,701), index mental health patients (n = 9039) were more likely to have affective psychoses and major depressive disorder and less likely to have depressive disorder NOS. Almost 60% of affective disorder patients in mental health settings had comorbid psychiatric diagnoses; this was true of 30% of patients in medical settings. Moreover, more than 80% of affective disorder patients in mental health settings had concomitant medical disorders. Affective disorder patients also had very high rates of prior mental health and medical care. Patients who had more severe affective disorders and comorbid psychiatric and medical diagnoses had longer episodes of inpatient care; in contrast, more intensive prior medical and mental health outpatient care was associated with shorter episodes of inpatient care. CONCLUSIONS: The findings highlight affective disorder patients' high rates of comorbidity and intensive use of health care resources, emphasize the value of outpatient care in reducing the amount of subsequent inpatient care, and underscore the need for closer integration of mental health and medical care
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=8642160&dopt=r

Ronis DL, Bates EW, Garfein AJ, Buit BK, Falcon SP, Liberzon I.
Longitudinal patterns of care for patients with posttraumatic stress disorder.
J Trauma Stress 1996; 9(4):763-781.

Abstract: This study assessed patterns of mental health service use over time by patients with posttraumatic stress disorder (PTSD) - as compared with patients with schizophrenia and major depression - with emphasis on the persistence and episodic versus continuous nature of use. Data on utilization were extracted from Veterans Health Administration (VA) administrative data bases. Temporal patterns of use were categorized into intervals of inpatient, outpatient, and no use. PTSD patients used substantial amounts of mental health services, but averaged 2.2 nonuse intervals lasting more than 100 days each, implying that use was episodic. Use of mental health services by patients with PTSD is substantial, persistent, and quite episodic. To the extent that use of services reflects the course of the disorder, the results suggest that remissions are usually followed by relapse, and that absence of symptoms does not mean that the disorder has run its course
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=8902745&dopt=r

Smith ME, Sheldon G, Klein RE, Feild T, Feitz R, Stockford D et al.
Data and information requirements for determining veterans' access to health care.
Med Care 1996; 34(3 Suppl):MS45-MS54.

Abstract: The Department of Veterans Affairs (VA) is responding to changing requirements for decision-support data by maximizing the value of data contained in VA and non-VA sources. The data are used to answer questions relating to the accessibility and utilization of VA and non-VA health services. Access studies require accurate estimates of the number of persons served and the number of persons who could be served. To derive these population estimates, VA employs census data to develop projections of the veteran population at the national, state, and county levels. Data from many surveys are used to supplement the census data. Access studies also require quantitative and qualitative data on the characteristics of VA and non-VA health care delivery systems at the national, state, and local levels. The Department of Veterans Affairs obtains health care system data from external sources, including the US Department of Health and Human Services, the American Medical Association, and the American Hospital Association, and from internal sources, including VA surveys and the VA administration inpatient and outpatient files. Utilization studies need more detailed patient-level information than access studies. Data elements pertaining to the reason for health care encounters and the services rendered are obtained from survey data, the VA inpatient and outpatient administration files, the national Medicare database, and state Medicaid databases. The Department of Veterans Affairs'decision-support analyses for eligibility reform and health care system reform demonstrate the effectiveness of VA in analyzing data from many sources
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=8598687&dopt=r

Year 1995

Bannick RR, Ozcan YA.
Efficiency analysis of federally funded hospitals: comparison of DoD and VA hospitals using data envelopment analysis.
Health Serv Manage Res 1995; 8(2):73-85.

Abstract: This article applies the technique known as Data Envelopment Analysis (DEA) to assess differences in performance efficiency among two branches of the federal hospital system, The Department of Defense (DoD) and The Department of Veterans' Affairs (VA). The analysis is based on two measures of performance output (inpatient days and outpatient visit, and six measures of resource input (capital investment in operational beds, service mix intensity, and supplies and three components of labor--providers, nurses and support). This study finds that based on these input and output measures, DoD hospitals are, on average, significantly more efficient than their VA counterparts. Within DoD, however, there are no significant differences in efficiency among the service components (US Air Force, Army or Navy), although Army hospitals appear more efficient in using service mix and provider labor
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10143981&dopt=r

Fedele DJ, Adelson R, Niessen LC, Harrison K.
Oral cavity and pharyngeal cancer among Department of Veterans Affairs hospital discharges.
J Public Health Dent 1995; 55(3):143-147.

Abstract: OBJECTIVES: The purpose of this study is to determine the number of oral cavity and pharyngeal cancers among hospital discharges at Department of Veterans Affairs (VA) medical centers in one 12-month period. METHODS: A SAS file was created from the patient treatment file (PTF) with all discharges during fiscal 1990 having ICD-9-CM codes for oral cavity and pharyngeal cancer. Up to 10 discharge diagnoses from the most recent discharge summary were included in the data set. ICD-9-CM codes for alcohol dependence syndrome, drug dependence, and nondependent abuse of drugs also were included. ICD-9-CM codes for salivary and nasopharyngeal cancers were excluded. RESULTS: There were 3,733 unique individuals discharged with a diagnosis of oral cavity and pharyngeal cancer. The majority of cases (62%) were found in the oral cavity. The age distribution of oral cavity and pharyngeal cancer did not parallel the age distribution of veterans discharged during this year. Race and ethnicity of those discharged with the disease does not differ from that of all VA hospital discharges for 1990. CONCLUSIONS: VA data provide descriptive statistics of oral cavity and pharyngeal cancer among VA hospital discharges. VA data sets such as the PTF may offer the opportunity to examine hospital management issues, length of stay, and co-morbid diagnoses associated with oral cavity and pharyngeal cancer
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=7562726&dopt=r

Rosenheck R, Neale M, Leaf P, Milstein R, Frisman L.
Multisite experimental cost study of intensive psychiatric community care.
Schizophr Bull 1995; 21(1):129-140.

Abstract: A 2-year experimental cost study of 10 Intensive Psychiatric Community Care (IPCC) programs was conducted at Department of Veterans Affairs (VA) medical centers in the Northeast. High hospital users were randomly assigned to either IPCC (n = 454) or standard VA care (n = 419) at four neuropsychiatric (NP) and six general medical and surgical (GMS) hospitals. National computerized data were used to track all VA health care service usage and costs for 2 years following program entry. At 9 of the 10 sites, IPCC treatment resulted in reduced inpatient service usage. Overall, for IPCC patients compared with control patients, average inpatient usage was 89 days (33%) less while average cost per patient (for IPCC inpatient, and outpatient services) was $15,556 (20%) less. Additionally, costs for IPCC patients compared with control patients were $33,295 (29%) less at NP sites but were $6,273 (15%) greater at GMS sites. At both NP and GMS sites, costs were lower for IPCC patients in two subgroups: veterans over age 45 and veterans with high levels of inpatient service use before program entry. No interaction was noted between the impact of IPCC on costs and other clinical or sociodemographic characteristics. Similarly, no linear relationship was observed between the intensity of IPCC services and the impact of IPCC on VA costs, although the two sites that did not fully implement the IPCC program had the poorest results. With these sites excluded, the total cost of care for IPCC patients at GMS sites was $579 (3%) more per year than that for the control patients
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=7770734&dopt=r

Year 1994

Bunn JY, Booth BM, Cook CA, Blow FC, Fortney JC.
The relationship between mortality and intensity of inpatient alcoholism treatment.
Am J Public Health 1994; 84(2):211-214.

Abstract: OBJECTIVES. Previous studies have examined mortality in alcoholics receiving extended inpatient alcoholism treatment, but few have investigated less intense treatment. This study examined mortality within 3 years after discharge from varying intensities of inpatient alcoholism treatment. METHODS. Using the computerized database of the Department of Veterans Affairs, we identified men participating in varying intensities of inpatient alcoholism treatment and followed them for 3 years after discharge. Adjusted mortality rates were computed and survival analysis was performed to assess the risk of death, adjusting for factors that may be related to mortality. RESULTS. The death rate was lower for men who completed extended formal inpatient treatment than for those who began, but did not complete, inpatient treatment or those who underwent short detoxification. Differences among the

treatment groups remained after age, race, marital status, and disease severity were controlled. CONCLUSIONS. These results suggest that extended formal inpatient alcoholism treatment is associated with a lower risk of death than less intense forms of inpatient treatment
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=8296942&dopt=r

Halpern NA, Bettes L, Greenstein R.
Federal and nationwide intensive care units and healthcare costs: 1986-1992.
Crit Care Med 1994; 22(12):2001-2007.

Abstract: OBJECTIVES: To establish Department of Veterans Affairs' intensive care unit (ICU) costs from a database and to use this information to validate the Russell equation, the most commonly used method of calculating ICU costs. To compare and trend Department of Veterans Affairs' and nationwide (USA) ICU and healthcare costs. DESIGN: Comparison study. SETTING: Database analysis of Department of Veterans Affairs' and nationwide ICUs over a 6-yr period (1986-1992), with biennial evaluations. MAIN MEASURES: Costs and bed occupancies of Department of Veterans Affairs' and nationwide hospitals and ICUs, as well as United States national health expenditures and gross domestic product. RESULTS: Fifty percent to Department of Veterans Affairs' ICU funds were used for nurse and physician salaries. Department of Veterans Affairs' ICU direct and indirect cost ratios have remained constant (2:1). The Russell equation is valid, providing that the "inpatient only" cost variable is used. ICU costs were consistently lower in the Department of Veterans Affairs' than nationwide, as compared by the Russell equation. A smaller fraction of the hospital budget was allocated to the ICU in the Department of Veterans Affairs than in nationwide institutions. Despite an increasing nationwide ICU patient workload, the percentage of ICU fund allocations has not increased. Health care in the United States increases at a rate greater than the increase in gross domestic product. Healthcare delivery costs are increasing at a greater rate nationwide than in the Department of Veterans Affairs. The percentage increase in ICU cost per day, both in the Department of Veterans Affairs and nationwide, was less than the increase in healthcare costs. The percent of the gross domestic product, national health expenditure, and hospital cost used by the ICU has increased minimally during the course of this study. CONCLUSIONS: The Department of Veterans Affairs has the only national ICU line item cost database available. For the Russell equation calculation to be accurate, inpatient only costs should be used. Until customized Health Care Financing Administration analyses become available, nationwide ICU costs are best determined by the Russell equation. Department of Veterans Affairs' ICUs have a consistent cost advantage over nationwide ICUs. Increases in United States healthcare delivery costs continue to exceed the increase in gross domestic product. Cost containment is already occurring in critical care
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=7988140&dopt=r

Pankratz L, Jackson J.
Habitually wandering patients.
N Engl J Med 1994; 331(26):1752-1755.

Abstract: BACKGROUND. Physicians are sometimes confronted with patients who gain admission to one hospital after another, sometimes referred to as "wandering patients." Little is known about the presenting symptoms of these patients, their use of hospital resources, or the costs of their medical care. We analyzed the demographic and clinical characteristics of wandering patients served by Department of Veterans Affairs medical centers (VAMCs). METHODS. For each patient they admit, all 159 hospitals in the Veterans Affairs medical system submit demographic and diagnostic information to a central data base at the Data Processing Center in Austin, Texas. We searched these records to identify patients who were admitted to four or more VAMCs within each year from fiscal year 1988 through 1992. Patients so identified in any one year were called "wanderers"; those identified in all five years were designated "habitual wanderers." RESULTS. We identified 1013 wanderers in 1988. The number gradually declined each year to 729 in 1993. In 1991 there were 810 wandering patients, who averaged about eight admissions per year and over 100 days of inpatient care; they accounted for about $26.5 million in costs for inpatient and outpatient care in that year. Only 35 patients wandered in all five years from 1988 through 1992. The most common discharge diagnoses of these 35 men were related to substance abuse (mostly alcoholism) and mental disorders. Their 2268 admissions and 7832 outpatient visits cost an estimated $6.5 million over the five-year period. CONCLUSIONS. Patients who are repeatedly admitted to different hospitals--wandering patients--accumulate high numbers of admissions, cause diagnostic

confusion, and receive uncoordinated care. Because of the complexity of their disorders, such patients require case management on a regional or national basis
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=7984197&dopt=r

Walker RD, Howard MO, Lambert MD, Suchinsky R.
Psychiatric and medical comorbidities of veterans with substance use disorders.
Hosp Community Psychiatry 1994; 45(3):232-237.

Abstract: OBJECTIVE: The authors examined patterns of substance use disorders and psychiatric and medical comorbidity in all male veterans treated in Veterans Affairs (VA) medical centers during a one-year period. METHODS: A national discharge abstract data base was used to derive point prevalence rates of psychiatric and medical disorders for 539,557 inpatients treated in VA medical centers in fiscal year 1991. RESULTS: Nearly one-quarter of all male veterans treated in the study year had a substance-related diagnosis. The most prevalent substance use disorders were alcohol dependence (87.7 percent) and cocaine dependence (17.5 percent), and the most frequent psychiatric diagnoses among veterans with substance-related diagnoses were depression and personality disorders. Digestive disorders were more prevalent among veterans who abused substances than among veterans who did not, and veterans who abused substances were also more likely to have multiple hospitalizations and longer index hospital stays. CONCLUSIONS: Substance use disorders and comorbid psychiatric syndromes are common in male veterans treated in VA hospitals. Veterans with substance-related diagnoses may have longer hospital stays and more frequent hospitalizations than veterans without substance use disorders
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=8188193&dopt=r

Walker RD, Howard MO, Suchinsky R, Kaple J, Anderson B.
Drug dependence treatment within the Department of Veterans Affairs: emerging issues.
Int J Addict 1994; 29(1):53-69.

Abstract: The Department of Veterans Affairs is the largest provider of drug dependence treatment services in the United States. However, a national evaluation of primarily drug-dependent veterans has never been reported. Findings from the Drug Abuse Treatment Services Evaluation Project, a three-year investigation of drug dependence treatment within the Department of Veterans Affairs, are discussed. Demographic and diagnostic data are presented for the population of 46,047 inpatients discharged with drug dependence diagnoses in Fiscal Year 1991. Patient subtypes and clinical issues of growing relevance to the treatment of drug-dependent veterans are discussed
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=8144269&dopt=r

Weaver FM, Burdi MD, Pinzur MS.
Outpatient foot care: correlation to amputation level.
Foot Ankle Int 1994; 15(9):498-501.

Abstract: A retrospective analysis of Department of Veterans Affairs automated inpatient and outpatient records was performed for 3945 patients who underwent lower extremity amputation surgery due to peripheral vascular disease during fiscal year 1991. Demographic and clinical data were collected from reviewing patient database information for all Department of Veterans Affairs Hospitals nationwide. Patients were identified from the Physicians' Current Procedural Terminology codes for lower extremity amputations, and then divided into three groups (above the knee, below the knee, and foot and ankle) based on the most proximal level of amputation performed. Results indicate that increased use of designated foot care clinics was significantly associated with more distal level amputation surgery. Patients with above-the-knee amputations averaged 1.0 foot care clinic visit in the 2 years prior to amputation, whereas below-the-knee and foot and ankle amputees averaged 2.8 and 5.3 foot care clinic visits, respectively ($F[df = 2,3939] = 94.20$, $P < .05$). The same finding was noted when only users of foot care clinics were examined. Patients with a codiagnosis of diabetes were more likely to undergo distal amputation than those with other diagnoses ($P < .05$). The results of this study suggest the potential effectiveness of designated foot care clinics in preserving limb length in individuals with peripheral vascular disease and diabetes
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=7820243&dopt=r

Year 1993

Rosenheck R, Gallup P, Frisman LK.
Health care utilization and costs after entry into an outreach program for homeless mentally ill veterans.
Hosp Community Psychiatry 1993; 44(12):1166-1171.

Abstract: OBJECTIVE: This study evaluated the impact of a Department of Veterans Affairs outreach and residential treatment program for homeless mentally ill veterans on utilization and cost of health care services provided by the VA. METHODS: Veterans at nine program sites (N = 1,748) were assessed with a standard intake instrument. Services provided by the outreach program were documented in quarterly clinical reports and in residential treatment discharge summaries. Data on nonprogram VA health service utilization and health care costs were obtained from national VA data bases. Changes in use of services and cost of services from the year before initial contact with the program to the year after were analyzed by t test. Multivariate analyses were used to examine the relationship of these changes to indicators of clinical need and to participation in the outreach program. RESULTS: Although utilization of inpatient service did not increase after veterans' initial contact with the program, use of domiciliary and outpatient services increased substantially. Total annual costs to the VA also increased by 35 percent, from $6,414 to $8,699 per veteran per year. Both clinical need and participation in the program were associated with increased use of health services and increased cost. Veterans with concomitant psychiatric and substance abuse problems used fewer health care services than others. CONCLUSIONS: Specialized programs to improve the access of homeless mentally ill persons to health care services appear to be effective, but costly. Dually diagnosed persons seem especially difficult to engage in treatment
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=8132189&dopt=r

Weiss TW, Ashton CM, Wray NP.
Forecasting areawide hospital utilization: a comparison of five univariate time series techniques.
Health Serv Manage Res 1993; 6(3):178-190.

Abstract: Time series analysis is one of the methods health services researchers, managers and planners have to examine and predict utilization over time. The focus of this study is univariate time series techniques, which model the change in a dependent variable over time, using time as the only independent variable. These techniques can be used with administrative healthcare databases, which typically contain reliable, time-specific utilization variables, but may lack adequate numbers of variables needed for behavioral or economic modeling. The inpatient discharge database of the Department of Veterans Affairs, the Patient Treatment File, was used to calculate monthly time series over a six-year period for the nation and across US Census Bureau regions for three hospital utilization indicators: average length of stay, discharge rate, and multiple stay ratio, a measure of readmissions. The first purpose of this study was to determine the accuracy of forecasting these indicators 24 months into the future using five univariate time series techniques. In almost all cases, techniques were able to forecast the magnitude and direction of future utilization within a 10% mean monthly error. The second purpose of the study was to describe time series of the three hospital utilization indicators. This approach raised several questions concerning Department of Veterans Affairs hospital utilization
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=10128826&dopt=r

Year 1991

Sonnenberg A, Wasserman IH.
Epidemiology of inflammatory bowel disease among U.S. military veterans.
Gastroenterology 1991; 101(1):122-130.

Abstract: The Department of Veterans Affairs maintains a computerized patient treatment file that contains all records from veterans treated as inpatients in VA hospitals distributed throughout the United States. Using the patient treatment files from 1986 to 1989, the present study takes advantage of this large national data set to examine demographic and geographic associations of inflammatory bowel disease. Inflammatory bowel disease tended to affect predominantly

female, white, and younger veterans, these trends being more marked in cases of Crohn's disease than ulcerative colitis. Hospital discharges secondary to both Crohn's disease and ulcerative colitis appeared to be more frequent in veterans from northern than southern parts of the United States, but did not show a seasonal variation different from the general pattern of all other diagnoses. The results in veterans confirm observations made in other studies and suggest that inflammatory bowel disease among different populations is modulated by similar pathophysiologic mechanisms and environmental risk factors
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=2044901&dopt=r

Year 1990

Goldman MP.
Ciprofloxacin drug utilization review and prospective drug use evaluation.
DICP 1990; 24(1):82-86.

Abstract: Ciprofloxacin is a fluoroquinolone antimicrobial with activity against both gram-negative and -positive bacteria including pseudomonal and staphylococcal species. It is the only available oral agent possessing this unique spectrum of activity that achieves serum concentrations adequate to treat a variety of systemic infections. A retrospective drug utilization review and a prospective drug use evaluation of ciprofloxacin were performed to determine if the agent was being used for appropriate indications, to ensure correct dosing and appropriate monitoring, and to determine whether its use is cost effective at the Veterans Administration Medical Center, Cleveland (VAMCC). For the retrospective review, 40 patients' charts were randomly chosen for review from computerized inpatient and outpatient prescription records. Drug use review criteria were developed by the Pharmacy Service and Infectious Disease Section. For the prospective evaluation, data were collected for all inpatient and outpatient requests for ciprofloxacin during a six-month period (May to November 1988) using the same criteria as in the retrospective study. Cost analysis was performed by identification and cost comparison of alternative therapy and by estimating the number of days saved by using appropriate oral therapy. All charts from the retrospective review were found to meet criteria for appropriate use. All patients for whom documented follow-up was performed had microbiologic or clinical cures. In the prospective evaluation, 168 patients were started on ciprofloxacin. Ninety-five percent of patients had appropriate justification for use according to criteria. Drug cost savings for the six-month period was +14,962.54 or +29,925.08/year. This covered drug and minibag acquisition costs only. An estimated 127 hospital days were saved (shortened length of +71,717.00 or +143,434.00/year.(ABSTRACT TRUNCATED AT 250 WORDS)
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=2301191&dopt=r

Year 1988

Ashcraft ML, Fries BE, Nerenz DR, Falcon SP, Srivastava SV, Lee CZ et al.
A psychiatric patient classification system. An alternative to diagnosis-related groups.
Med Care 1989; 27(5):543-557.

Abstract: It is generally accepted that diagnosis-related groups (DRGs) for alcohol, drug, and mental disorders are inappropriate for inpatient prospective payment. To address this issue, the Veterans Administration (VA) supported a project to construct alternative classes that are more clinically meaningful, more homogeneous in their resource use, and that account for more variation in resource use among psychiatric and substance use cases than existing DRGs. This paper reports on this project. Using a data set containing universally available discharge data plus behavioral, social, and functional information obtained by a survey of 116,191 discharges from VA psychiatric beds, and with AUTOGRP as the classifying algorithm, a classification system was formed. Twelve psychiatric diagnostic groupings (PDGs) were identified, analogous to major diagnostic groups in the DRG system. Within each PDG, from 4 to 9 terminal groups of Psychiatric Patient Classes (PPCs) were formed and validated. The 12 substance abuse PPCs explain greater than 31% of the variation in length of stay; for the mental disorder PPCs the variance explanation is greater than 11%, a substantial improvement over DRGs that, for the same data set, explain less than 2 and 3%, respectively. With the addition of only 5 variables beyond those presently included in discharge data sets, greater precision for payment purposes can be achieved. Implications for adoption of this classification system are discussed
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=2498585&dopt=r

Year 1983

Kiesler CA, Sibulkin AE.
Proportion of inpatient days for mental disorders: 1969-1978.
Hosp Community Psychiatry 1983; 34(7):606-611.

Abstract: Mental hospitalization is an important part of the national picture of hospitalization. Total inpatient days for mental disorders, and their proportion of total hospital days for all disorders, is a statistic of considerable national import, yet there has never been a complete description of total inpatient days for mental disorders. The authors present data from the National Center for Health Statistics for nine years (data for only two years had been published previously), and correct them, and national totals, for the previous exclusion of data from residential treatment centers and community mental health centers. From 1969 through 1978, inpatient days for mental disorders fell from 168 million to 95 million. This decrease was more than accounted for by decreased psychiatric inpatient days at two sites: state mental hospitals and Veterans Administration psychiatric hospitals. The number of psychiatric inpatient days at all other sites increased during this time period. The authors also note a decrease in total inpatient days for all disorders over the decade. However, 85 percent of the total national decrease was accounted for by the decrease in psychiatric inpatient days. The authors stress the implications for public policy and the need for a more adequate national database
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=6885014&dopt=r

Stripling T, Fonseca JE, Tsou V, Copperthite A.
A demographic study of spinal cord injured veterans.
J Am Paraplegia Soc 1983; 6(3):62-66.

Abstract: These demographic characteristics are not absolute. They do, however, represent general trends for those SCI veterans identified by the PTF as utilizing the VAMCs. The typical SCI veteran described from this limited data base would be over 50 years old but possibly under age 65; the veteran would be a Caucasian male who served in World War II; currently he resides in a state with a large SCI center likely in the "sun belt" region of the country; and, this veteran is a nonservice connected paraplegic due to traumatic circumstances
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=6619836&dopt=r

Year 1981

Hornbrook MC.
Economic incentives and control: some issues for research in the VA hospital system.
J Med Syst 1981; 5(1-2):69-96.

Abstract: Within the field of economic research on hospital performance there are four major areas of need. These include the estimation of hospital cost functions, the development of new models of the nonprofit hospital, the development of better measures of hospital output, and an analysis of the determinants of hospital use. Within the Veterans Administration there exist a limited number of policy options to study or aim for in further research, but comparison between the system and other systems is possible and the prospective budgeting process in the VA should also be examined. Specific research can be directed at the case mix and the case-specific patterns of use in the VA system. The effects of the teaching requirements of the Va hospitals also can be more closely studied and the effects of physician and hospital characteristics on the length of stay of inpatients is an important question and may have implications for research outside the system. The potential data wealth of the VA Patient Treatment File and its centralized budgeting system can produce much useful research
http://www.ncbi.nlm.nih.gov/htbin-post/Entrez/query?db=m&form=6&uid=7264483&dopt=r