Health Status Index Series Volume XVII Number I

### CHICAGO RESEARCH YEAR IN REVIEW: 2007 POPULATION HEALTH AND HEALTH SERVICES

CITY OF CHICAGO • DEPARTMENT OF PUBLIC HEALTH • OFFICE OF EPIDEMIOLOGY



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Chicago Research Year in Review: 2007 Population Health and Health Services Kirsti A. Bocskay, Ph.D., M.P.H. Girma Woldemichael, Sc.D. Sandra D. Thomas, M.D., M.S.

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#### Suggested Citation

Bocskay KA, Woldemichael G, Thomas SD. Chicago Research Year in Review: 2007 Population Health and Health Services. Health Status Index Series Volume XVII No. I. Chicago, Illinois: Chicago Department of Public Health Office of Epidemiology, 2008.



Department of Public Health Providing the Prescription for a Healthy City

Dr. Terry Mason, Commissioner

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The purpose of this report is to update health professionals about currently published articles regarding the health of Chicago residents and communities. The articles in this report were taken from peer-reviewed journals with publication dates between January 1, 2007 and December 31,2007. (A peer reviewed journal is a journal that publishes articles after they have been through a review and approval process involving one or more experts.) Articles were retrieved from a search engine and met a set of selection criteria developed for inclusion in the report. The retrieved articles have been grouped under a general topic heading for ease of reference. Each section of the report contains excerpts from the original abstract written by the author. (An abstract is a summary of the main idea and content of a work such as an article, book, or dissertation.) In addition, the citation for each article is included. After reviewing the included excerpts of interest, the user can use the provided citation for further follow up. This report does not contain all articles written in 2007 peer-reviewed journals. Articles pertaining to studies that involved laboratory tests, experiments or clinical trials in Chicago were not included. Articles not related to the health of Chicago communities were excluded.

This report serves as a starting point for community professionals interested in an extended range of information on the health of Chicago communities. We acknowledge that some articles that ought to have been included in this report may have been missed due to the timing of our article search and retrieval. The inclusion of an article in this report does not imply that we agree with the author's conclusions; such discretion is left solely to the user of this report.

In order to determine the articles to include in the report, a set of selection criteria were developed. Each article must have been:

- About the health of Chicago residents and communities,
- Published in 2007, and
- From a peer-reviewed journal.

Articles with multiple study sites are included in this report if Chicago-specific data is presented (i.e., table, graph, etc.) or only the Chicago data is discussed.

We utilized PubMed within Reference Manager® to look for articles. Reference Manager® is software for designed for searching databases, managing references and publishing bibliographies. PubMed is a public use search engine from the U.S. National Library of Medicine and the National Institutes of Health. "Chicago" as a keyword and "2007" as the publication date were used to search for potential articles. Four hundred eight articles were retrieved and reviewed. One hundred forty-one articles met our criteria for inclusion. Each article was then grouped under one of the following topic headings:

- Chronic Disease,
- General Health,
- Health Services,
- Infectious Disease (including sexually transmitted diseases),
- Injury,
- Maternal and Child Health,
- Mental Health,
- Mortality,
- Nutrition,
- Other,\*
- Physical Activity,
- Sexual Behavior,
- Substance Use, and
- Weight.

\*Collection of articles of which only one article for a specific topic met our selection criteria.

#### ALZHEIMER'S DISEASE

#### **ASTHMA**

## Wilson RS, Krueger KR, Arnold SE, Schneider JA, Kelly JF, Barnes LL, Tang Y, Bennett DA. *Loneliness and risk of Alzheimer disease*. Arch Gen Psychiatry. 64(2):234-40, 2007.

OBJECTIVE: To test the hypothesis that loneliness is associated with increased risk of Alzheimer disease (AD). DESIGN: Longitudinal clinicopathologic cohort study with up to 4 years of annual in-home follow-up. PARTICI-PANTS: A total of 823 older persons free of dementia at enrollment were recruited from senior citizen facilities in and around Chicago, Ill. Loneliness was assessed with a 5-item scale at baseline and annually thereafter. At death, a uniform postmortem examination of the brain was conducted to quantify AD pathology in multiple brain regions and the presence of cerebral infarctions. RESULTS: During follow-up, 76 subjects developed clinical AD. Risk of AD was more than doubled in lonely persons compared with persons who were not lonely, and controlling for indicators of social isolation did not affect the finding. Loneliness was associated with lower level of cognition at baseline and with more rapid cognitive decline during follow-up. CON-CLUSION: Loneliness is associated with an increased risk of late-life dementia but not with its leading causes.

#### Wilson RS, McCann JJ, Li Y, Aggarwal NT, Gilley DW, Evans DA. Nursing home placement, day care use, and cognitive decline in Alzheimer's disease. Am J Psychiatry. 164(6):910-5, 2007.

The aim of this study was to examine the associations of day care use and nursing home placement with the rate of cognitive decline in Alzheimer's disease. The participants were 432 older persons with Alzheimer's disease who were recruited from health care settings in the Chicago area. At 6-month intervals for up to 4 years, they completed nine cognitive tests from which a composite measure of global cognition was derived. Nursing home placement is associated with accelerated shortterm cognitive decline in Alzheimer's disease. Prior experience in adult day care may lessen this association. Cagney KA, Browning CR, Wallace DM. The Latino paradox in neighborhood context: the case of asthma and other respiratory conditions. Am J Public Health. 97(5):919-25, 2007.

Evidence indicates that foreign-born Latinos have a health advantage compared with US-born persons of the same socioeconomic status. We examined the extent to which this paradox exists for the prevalence of asthma and other respiratory conditions. We then explored the role of neighborhood social context in understanding any observed advantage. We combined data from the Project on Human Development in Chicago Neighborhoods Community Survey with 2 other data sources and used hierarchical generalized linear modeling techniques. Foreign-born Latinos embedded in a neighborhood that had a high percentage of foreign-born residents experienced a significantly lower prevalence of asthma and other breathing problems; those in communities that had a low percentage of foreign-born residents had the highest prevalence overall. Foreign-born Latinos have a respiratory health advantage only in enclavelike settings.

Eldeirawi KM, Persky VW. Associations of physician-diagnosed asthma with country of residence in the first year of life and other immigration-related factors: Chicago asthma school study. Ann Allergy Asthma Immunol. 99(3):236-43, 2007.

OBJECTIVE: To evaluate the associations of immigration-related variables with physiciandiagnosed asthma in a sample of Mexican American children. METHODS: We analyzed data from the ongoing Chicago Asthma School Study, a population-based cross-sectional study, for 10,106 Mexican American schoolchildren in Chicago, Illinois. RESULTS: Mexican American children who lived in the United States in the first year of life were more likely to have physician-diagnosed asthma than their peers who lived in Mexico in the first year of life, independent of age, sex, income, language, and country of birth. The risk of asthma in US-born children was high-

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Designates author from CDPH.

er (but not significantly) than that observed in Mexico-born children after accounting for covariates, including country of residence in the first year of life. Long-term immigrants had an increased risk of asthma compared with short-term immigrants, independent of country of residence in the first year of life. CONCLUSION: These findings confirm the importance of early childhood exposures and environmental factors that are modified with migration and acculturation in asthma development.

Flores C, Ma SF, Maresso K, Ober C, Garcia JG. A variant of the myosin light chain kinase gene is associated with severe asthma in African Americans. Genet Epidemiol. 31(4):296-305, 2007.

In addition to a multitude of factors contributing to its pathobiology, increased amounts of myosin light chain kinase (MLCK), the central regulator of cellular contraction, have been found in airway smooth muscle from asthmatics. The gene encoding MLCK (MYLK) is located in 3q21.1, a region noted by a number of genome-wide studies to show linkage with asthma and asthma-related phenotypes. We studied 17 MYLK genetic variants in European and African Americans with asthma and severe asthma and identified a single nonsynonymous polymorphism that was almost entirely restricted to African populations and which was associated with severe asthma in African Americans. The association of this polymorphism emphasizes the potential importance of the vascular endothelium, a tissue in which MLCK is centrally involved in multiple aspects of the inflammatory response, in the pathogenesis of severe asthma. This finding also offers a possible genetic explanation for some of the more severe asthma phenotype observed in African American asthmatics.

#### Mosnaim GS, Sadowski LS, Durazo-Arvizu RA, Sharp LK, Curtis LM, Shalowitz MU, Shannon JJ, Weiss KB. *Parental language and asthma among urban Hispanic children*. J Allergy Clin Immunol. 120(5):1160-5, 2007.

We explored the relationship between parent language preference in a Hispanic population and the likelihood that a child with symptoms receives a diagnosis of asthma. We conducted a school-based survey in 105 Chicago public and Catholic schools. Our sample included 14,177 Hispanic children 6 to 12 years of age with a parent who completed an asthma survey. Outcomes of diagnosed asthma and possible asthma (asthma symptoms without diagnosis) were assessed by using the Brief Pediatric Asthma Screen Plus instrument. Overall, 12.0% of children had diagnosed asthma, and 12.7% had possible asthma. Parents of children at risk who completed the survey in English reported higher rates of asthma diagnosis compared with parents who completed it in Spanish. Our findings suggest that estimates of asthma among Hispanic schoolchildren might be low because of underdiagnosis among children whose parents prefer communicating in Spanish.

Naureckas ET, Thomas S. Are we closing the disparities gap? Small-area analysis of asthma in Chicago. Chest. 132(5 Suppl):8588-8658, 2007.

Disparities in asthma outcomes in the Chicago area have been observed between geographic areas and ethnic and socioeconomic groups. We present a variety of data from the Chicago area to assess whether any improvement in previously reported disparities can be demonstrated. While some process outcomes such as medication usage have improved over time, death from asthma has failed to demonstrate an equivalent improvement. More importantly, the differential in asthma mortality and hospitalization rates between African Americans and European Americans has failed to close in the years following the release of the National Asthma Education and Prevention Program asthma guidelines.

Patel B, Sheridan P, Detjen P, Donnersberger D, Gluck E, Malamut K, Whyte S, Miller A, Qing H. Success of a comprehensive schoolbased asthma intervention on clinical markers and resource utilization for inner-city children with asthma in Chicago: the Mobile C.A.R.E. Foundation's asthma management program. J Asthma. 44(2):113-8, 2007.

Children with asthma in low-income households in Chicago were participants in a schoolbased mobile van clinic, Mobile C.A.R.E. Our objective was to investigate whether long-term follow-up changed clinical mark-

ers and resource utilization. Intervention consisted of assessment of allergic environment with avoidance recommendations, institution of appropriate controller therapy and inhaler technique, education on asthma and asthma management, and expectations for asthma control. With follow-up, there was a decrease in hospitalizations and emergency room visits. Symptomatic markers (daytime and nighttime cough, wheezing, and dyspnea symptoms), frequency of rescue inhaler use, and a quality-of-life score improved from baseline. These findings suggest that ongoing school interventions may reduce resource utilization and improve clinical symptoms. Primary care physicians may be able to deliver specialized care to large numbers of inner-city children with asthma.

#### Persky V, Turyk M, Piorkowski J, Coover L, Knight J, Wagner C, Hernandez E, Eldeirawi K, Fitzpatrick A. *Inner-city asthma: the role of the community*. Chest. 132(5 Suppl):831S-839S, 2007.

Asthma morbidity and mortality are disproportionately high in low-income minority populations. Variations in environmental exposures, stress, and access to appropriate health care all contribute to these disparities. The complex nature of asthma with strong contributions from environmental, psychosocial, and biological factors suggest that community-based approaches focused on the unique needs of high-risk populations may be effective. The few previous randomized trials suggest that case management with professionals and/or community health educators may reduce asthma morbidity. Health-educator programs should be lodged in stable infrastructures with training and funding for community health workers to obtain longterm sustainability. Factors not amenable to individual intervention, however, such as poor condition of homes, outdoor pollution, and lack of access to appropriate care, will require collaborative efforts of community groups, academic professionals, public agencies, and health-care providers.

Shalowitz MU, Sadowski LM, Kumar R, Weiss KB, Shannon JJ. Asthma burden in a citywide, diverse sample of elementary schoolchildren in Chicago. Ambul Pediatr. 7(4):271-7, 2007.

The purposes of this study are to describe and develop preliminary models of the burden of diagnosed asthma and symptoms of possible undiagnosed asthma in a large, citywide, ethnically and socioeconomically diverse sample of Chicago elementary schoolchildren. We studied 35,583 students aged 6 to 12 years attending Chicago Public and Archdiocese elementary schools for the Chicago Initiative to Raise Asthma Health Equity (CHIRAH) study. The full enrollments of 105 schools were surveyed for asthma and possible undiagnosed asthma by the Brief Pediatric Asthma Screen Plus (BPAS+) respiratory symptoms. Our study confirms national disparities in diagnosed asthma by race/ethnicity. Respiratory symptoms consistent with possible undiagnosed asthma increase the total potential burden of asthma overall to more than one-quarter of the school enrollees. Among students with respiratory symptoms, African Americans, Hispanics (controlling for language), and families where another person has asthma are more likely to have diagnosed rather than possible asthma.

#### Shannon JJ, Catrambone CD, Coover L. Targeting improvements in asthma morbidity in Chicago: a 10-year retrospective of community action. Chest. 132(5 Suppl):866S-873S, 2007.

Chicago has been described as "asthma ground zero" due to its disproportionately high rates of asthma-related hospitalization and mortality. Asthma prevalence rates in Chicago are higher for whites and African Americans than the national average. In an effort to address the asthma burden and disparities in Chicago, multiple initiatives throughout the city have been launched and continue. The purpose of this article is to describe the policy, advocacy, educational, surveillance, research, quality improvement, community, and consortia activities over the past 10 years and their impact on asthma morbidity and disparities in Chicago.

All abstracts are abridged. For complete abstracts & full articles, refer to citation.

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#### Weiss KB. Eliminating asthma disparities: introduction to the Chicago story. Chest. 132(5 Suppl):856S-857S, 2007.

The problem of inner-city asthma, as studied in Chicago, IL, is introduced. Chicago has a high incidence of asthma, but prevalence, morbidity, and mortality rates vary by neighborhood and are highest in neighborhoods with the lowest socioeconomic status. Efforts in Chicago to mitigate these gaps have been extraordinary, but data suggest that there are challenges to improvement in removing disparities.

#### CANCER

Cameron KA, Francis L, Wolf MS, Baker DW, Makoul G. Investigating Hispanic/Latino perceptions about colorectal cancer screening: a community-based approach to effective message design. Patient Educ Couns. 68(2):145-52, 2007.

OBJECTIVE: We assessed knowledge, attitudes, and behavior regarding colorectal cancer (CRC) screening to inform the development of messages that promote screening among Hispanic/Latino patients. METHODS: In-person structured interviews with Spanishspeaking adults age 50-80 at two clinics and a senior center in a Hispanic/Latino community (N=234). PRACTICE IMPLICATIONS: Messages to increase CRC screening knowledge and behavior in the Hispanic/Latino community should address risk factors, identify relevant anatomy, explain polyps and their asymptomatic presentation, and clearly describe options.

Hirschman J, Whitman S, Ansell D. *The black:white disparity in breast cancer mortality: the example of Chicago*. Cancer Causes Control. 18(3):323-33, 2007.

In order to gain insight into this disparity in Chicago, we examined mortality data together with other important measures associated with breast cancer. Trends in black:white female breast cancer mortality, incidence, stage at diagnosis, and mammography screening in Chicago were examined using data from the Illinois State Cancer Registry, Illinois Department of Public Health Vital Records, and the Illinois Behavioral Risk Factor Surveillance System. The breast cancer mortality rate for black women in Chicago for 1999-2003 was 49% higher than that of white women, but the disparity is a recent phenomenon that is increasing rapidly. This lack of progress for black women is perplexing given that selfreported mammography screening rates have been the same for blacks and whites in Chicago since at least 1996 and that the early detection of breast cancer for black women has been increasing. There has been no improvement in mortality from breast cancer for black women in Chicago in 23 years. This study, along with a review of the literature, lends support to the hypothesis that the disparities in breast cancer mortality are due to differential access to mammography, differential quality in mammography, and differential access to treatment for breast cancer.

Hlubocky FJ, Ratain MJ, Wen M, Daugherty CK. Complementary and alternative medicine among advanced cancer patients enrolled on phase I trials: a study of prognosis, quality of life, and preferences for decision making. J Clin Oncol. 25(5):548-54, 2007.

We sought to describe complementary and alternative medicine (CAM) usage among phase I trial participants and to describe these patients' treatment decision-making preferences, awareness of prognosis, survival, and quality of life. Advanced cancer patients enrolling onto phase I trials were surveyed regarding biologically based CAM use. Decision-making preferences and awareness of prognosis were assessed using validated and/or standardized instruments. The Functional Assessment of Cancer Therapy-General instrument was used to assess quality of life. Univariate and multivariate analyses were performed to detect differences between CAM users and nonusers. Prior CAM use among phase I cancer trial patients studied was common and associated with age, stated acknowledgment of prognosis, and quality of life.

#### Lai JS, Kupst MJ, Cella D, Brown SR, Peterman A, Goldman S. Using Q-methodology to understand perceived fatigue reported by adolescents with cancer. Psychooncology. 16(5):437-47, 2007.

The purpose of this study was to understand how adolescents with cancer perceive their fatigue and to explore potential factors influencing their perceptions by using Q-methodology. The sample included 15 patients (ages 12-18 years) from the Chicago metropolitan area who were receiving cancer treatment. All participants completed a 37-statement Qsort task. Results identified three descriptors of perceived fatigues reported by adolescents: energy and related capacity for physical functioning, psychosocial effects, and anemia-specific concerns.

Mohile SG, Bylow K, Dale W, Dignam J, Martin K, Petrylak DP, Stadler WM, Rodin M. A pilot study of the vulnerable elders survey-13 compared with the comprehensive geriatric assessment for identifying disability in older patients with prostate cancer who receive androgen ablation. Cancer. 109(4):802-10, 2007.

In this pilot study, the authors evaluated the validity of a brief, functionally based screening tool, the Vulnerable Elders Survey-13 (VES-13), for identifying older patients with prostate cancer (PCa) with impairment in the oncology clinic setting. Patients with PCa aged >or=70 years who actively were receiving androgen ablation treatment and who were followed within the clinics at the University of Chicago were eligible. Patients self-completed the VES-13 and Comprehensive Geriatric Assessment (CGA) instruments and repeated the VES-13 1 month later. Functional and cognitive impairments are highly prevalent among older patients with PCa who receive androgen ablation in oncology clinics. The current results indicated that the brief VES-13 performed nearly as well as a conventional CGA in detecting geriatric impairment in this population.

Rubin DT, Rothe JA, Hetzel JT, Cohen RD, Hanauer SB. Are dysplasia and colorectal cancer endoscopically visible in patients with ulcerative colitis? Gastrointest Endosc. 65(7):998-1004, 2007.

OBJECTIVE: To assess the endoscopic visibility of dysplasia and colorectal cancer (CRC) in ulcerative colitis (UC). DESIGN: This was a retrospective review that used the University of Chicago Inflammatory Bowel Disease Registry and the clinical administrative database. All cases of dysplasia or CRC in UC between November 1994 and October 2004 were identified. CONCLUSIONS: Dysplasia and cancer in UC are endoscopically visible in most patients and may be reliably identified during scheduled examinations.

#### Rubin DT, Ulitsky A, Poston J, Day R, Huo D. What is the most effective way to communicate results after endoscopy? Gastrointest Endosc. 66(1):108-12, 2007.

We sought to determine whether providing patients with a written copy of their standard endoscopy report at the conclusion of their procedure enhanced recall of the findings and recommendations. Eighty consecutive outpatients who presented to 3 endoscopists were randomized to receive the results of their upper or lower endoscopy via standard verbal report (VR) or by standard VR followed by receipt of a computer-generated endoscopy report (VR+WR) from the Olympus Image-Manager report generator. Recall of the endoscopic procedure was assessed by using a piloted 11-question survey instrument to be filled out 3 days after the procedure. PA computer-generated endoscopy report (WR) significantly improved patient recall of endoscopic procedure information compared with a VR alone. Despite this, patients were unable to recall 28% of recommendations.

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Weinrich S, Vijayakumar S, Powell IJ, Priest J, Hamner CA, McCloud L, Pettaway C. *Knowledge of hereditary prostate cancer among high-risk African American men.* Oncol Nurs Forum. 34(4):854-60, 2007.

PURPOSE: To measure knowledge of hereditary prostate cancer in a group of high-risk African American men. DESIGN: Cross-sectional, correlational pilot study. SETTING: Four geographic sites: Detroit, MI; Houston, TX; Chicago, IL; and Columbia, SC. SAMPLE: 79 men enrolled in the African American Hereditary Prostate Cancer Study. METHODS: Telephone interviews. FINDINGS: Knowledge of hereditary prostate cancer was low. CONCLUSIONS: The high percentage of incorrect responses on questions that measure genetic testing, prevention, and risk based on a positive family history highlights educational needs.

#### Whitman S, Shah AM, Silva A, Ansell D. Mammography screening in six diverse communities in Chicago--a population study. Cancer Detect Prev. 31(2):166-72, 2007.

Data at the community level regarding mammography screening can help explain health disparities and inform plans for improved screening efforts. In 2002-2003, a comprehensive household health survey in English or Spanish was conducted in six community areas with 1700 households. The module on mammography was based on a state-based nationwide health survey and included questions on frequency of mammography, repeat screenings, and several demographic variables. The community with the highest screening proportion was predominantly Mexican and included recent immigrants. The screening proportion in the poorest community area, which was all Black, was 77%. Women with health insurance, higher income, and more education were more likely to receive a mammogram. Repeat screening, which is recommended, occurred at lower levels.

#### **CARDIOVASCULAR DISEASE**

Berry JD, Lloyd-Jones DM, Garside DB, Greenland P. Framingham risk score and prediction of coronary heart disease death in young men. Am Heart J. 154(1):80-6, 2007.

We tested the ability of the Framingham Risk Score (FRS) and the online ATP III risk estimator to estimate risk and to predict 10-year and longer-term coronary heart disease (CHD) death in younger adults (age 18-39 years). We included 10,551 male participants of the Chicago Heart Association Detection Project in Industry study who were aged 18 to 39 years and free of baseline CHD and diabetes at enrollment from 1967 to 1973. Neither method classified individuals <30 years as high risk despite substantial risk factor burden. Future clinical guidelines should consider alternative strategies to estimate and communicate risk in populations <30 years.

#### Berry JD, Lloyd-Jones DM, Garside DB, Wang R, Greenland P. Social avoidance and longterm risk for cardiovascular disease death in healthy men: the Western Electric study. Ann Epidemiol. 17(8):591-6, 2007.

We sought to examine the association between "social avoidance" (SA) and cardiovascular disease (CVD), coronary heart disease (CHD), and non-CVD death. A total of 2107 men (ages 40-55 years) free of baseline CVD were enrolled in 1957 in the Western Electric Study. After 30 years of follow-up, SA was associated with CVD mortality for the highest vs. the lowest SA group in age-adjusted models and after adjustment for traditional CVD risk factors. After further adjustment for measures of hostility, the findings were similar. Findings for CHD mortality were similar. However, there was no significant association between SA and non-CVD mortality. These findings suggest the hypothesis that social avoidance might promote CVD through physiologic, non-behavioral mechanisms.

All abstracts are abridged. For complete abstracts & full articles, refer to citation.

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#### Jalowiec A, Grady KL, White-Williams C. Functional status one year after heart transplant. J Cardiopulm Rehabil Prev. 27(1):24-32, 2007.

Purposes: (1) to compare the functional status of HT patients before transplant versus 1 year after transplant, (2) to identify functional problems 1 year post-transplant, and (3) to identify which variables predicted worse functional status 1 year later. The sample was 237 adult HT recipients who completed the 1-year post-transplant study booklet. Paired t tests compared Sickness Impact Profile scores before and after transplant. Sickness Impact Profile functional scores improved significantly from pre-transplant to post-transplant; however, many HT recipients still reported problems in 12 functional areas 1 year after surgery. Predictors of worse functional status were greater symptom distress, more stressors, more neurologic problems, depression, female sex, older age, and lower left ventricular ejection fraction (worse cardiac function).

#### Lloyd-Jones DM, Dyer AR, Wang R, Daviglus ML, Greenland P. Risk factor burden in middle age and lifetime risks for cardiovascular and non-cardiovascular death (Chicago Heart Association Detection Project in Industry). Am J Cardiol. 99(4):535-40, 2007.

Few data exist regarding the association of risk factor burden in middle age with lifetime risks for cardiovascular disease (CVD) and non-CVD death. In this study, participants in the Chicago Heart Association Detection Project in Industry aged 40 to 59 years in 1967 to 1973 were stratified into 5 groups on the basis of risk factor burden. Eight thousand thirty-three men and 6,493 women were followed for 409,987 person-years; 2,582 died of CVD, and 3,955 died of non-CVD causes. A greater risk factor burden was associated with a higher incidence of CVD and non-CVD death. In conclusion, having favorable risk factors in middle age is associated with a lower lifetime risk for CVD death and markedly longer survival.

McDermott MM, Ferrucci L, Pearce WH, Guralnik JM, Tian L, Liu K, Schneider JR, Sharma L, Tan J, Criqui MH. Lower extremity ischemia, calf skeletal muscle characteristics, and functional impairment in peripheral arterial disease. J Am Geriatr Soc. 55(3):400-6, 2007.

**OBJECTIVES:** To determine whether lower ankle brachial index (ABI) levels are associated with lower calf skeletal muscle area and higher calf muscle percentage fat in persons with and without lower extremity peripheral arterial disease (PAD). DESIGN: Cross-sectional. SETTING: Three Chicago-area medical centers. PARTICIPANTS: Four hundred thirty-nine persons with PAD (ABI<0.90) and 265 without PAD (ABI 0.90-1.30). CONCLU-SION: These data support the hypothesis that lower extremity ischemia has a direct adverse effect on calf skeletal muscle area. This association may mediate previously established relationships between PAD and functional impairment.

Morenoff JD, House JS, Hansen BB, Williams DR, Kaplan GA, Hunte HE. Understanding social disparities in hypertension prevalence, awareness, treatment, and control: the role of neighborhood context. Soc Sci Med. 65(9):1853-66, 2007.

The Chicago Community Adult Health Study did face-to-face interviews, including direct measurement of blood pressure, with a representative probability sample of adults in Chicago. These data were used to estimate socioeconomic and racial-ethnic disparities in the prevalence, awareness, treatment, and control of hypertension, and to analyze how these disparities are related to the areas in which people live. In sum, residential contexts potentially play a large role in accounting for racial/ethnic and, to a lesser degree, socioeconomic disparities in hypertension prevalence and, in a different way, awareness, but not in treatment or control of diagnosed hypertension.

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Mosley WJ 2nd, Greenland P, Garside DB, Lloyd-Jones DM. Predictive utility of pulse pressure and other blood pressure measures for cardiovascular outcomes. Hypertension. 49(6):1256-64, 2007.

Data are sparse regarding the actual predictive utility of pulse pressure and other blood pressure measures for cardiovascular events. We included all of the participants from the Chicago Heart Association Detection Project in Industry who were free of cardiovascular disease and not receiving antihypertensive treatment at baseline (1967-1973). Baseline blood pressure measures were assessed for predictive utility for fatal and nonfatal events over 33 years. Better predictive utility for systolic and diastolic compared with pulse pressure was indicated. Results for coronary or heart failure death and stroke, myocardial infarction, or heart failure hospitalization were similar. These findings support the approach of current guidelines in the use of systolic and diastolic blood pressure to assess risk and the need for treatment.

Sohn AJ, Hasnain M, Sinacore JM. Impact of exercise (walking) on blood pressure levels in African American adults with newly diagnosed hypertension. Ethn Dis. 17(3):503-7, 2007.

OBJECTIVES: To determine whether the encouragement of walking an extra 30 minutes a day decreases blood pressure in adult African Americans with newly diagnosed hypertension. DESIGN: Randomized controlled study. PARTICIPANTS AND SETTING: A total of 19 African American adults with newly diagnosed hypertension from an urban family medicine office were randomly assigned to intervention and control groups. CONCLU-SIONS: The findings of this study indicate that walking an extra 30 minutes a day is associated with lower mean blood pressure among adult African Americans with newly diagnosed hypertension.

#### DIABETES

Burnet DL, Cooper AJ, Drum ML, Lipton RB. Risk factors for mortality in a diverse cohort of patients with childhood-onset diabetes in Chicago. Diabetes Care. 30(10):2559-63, 2007.

We sought to determine whether risk of death differed by demographic or other characteristics in a population-based cohort of patients with childhood-onset diabetes. The Chicago Childhood Diabetes Registry is an ethnically diverse cohort of patients with diabetes onset between ages 0 and 17 years. Cases that accumulated from 1 January 1985 to 31 December 2000 (n = 1,238) were assessed for vital status using death certificates, family reports, and two large administrative databases (Social Security Death Index and National Death Index). Diabetic ketoacidosis remains a significant cause of death in young people with diabetes. Young people diagnosed at the threshold of adulthood are at increased risk for mortality.

Gee L, Smith TL, Solomon M, Quinn MT, Lipton RB. The clinical, psychosocial, and socioeconomic concerns of urban youth living with diabetes. Public Health Nurs. 24(4):318-28, 2007.

DESIGN: Qualitative study of the social and emotional impact of having diabetes. SAM-PLE: Young adults (n=23), aged 19-26, who had been living with diabetes for a median of 12 years (range 4-19) were contacted; all but one were from underserved ethnic minorities. MEASUREMENTS: Semistructured telephone interviews were conducted, transcribed, and coded. RESULTS: Having diabetes profoundly affected the life choices and expectations of these young people; their feelings and attitudes evolved over time. Financial and insurance concerns were key, because managing diabetes care on one's own as an adult was a major challenge. Most young people reported that family, friends, and coworkers were sources of support, but that disclosure of their diabetes was problematic.

All abstracts are abridged. For complete abstracts & full articles, refer to citation.

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## Gerber BS, Solomon MC, Shaffer TL, Quinn MT, Lipton RB. *Evaluation of an internet diabetes self-management training program for adolescents and young adults*. Diabetes Technol Ther. 9(1):60-7, 2007.

This article describes the pilot phase of an Internet program to assist these individuals who are transitioning to adult-centered medical care. We developed an online program consisting of background information on diabetes, goal-setting exercises with individualized feedback, role-playing, group discussions, empowerment activities, and communication skills training designed to improve interactions with health professionals. We recruited a convenience sample of 19 young adults with diabetes from the Chicago Childhood Diabetes Registry, as well as from two innercity clinics. The study demonstrated feasibility of using an Internet program to meet the informational and social needs of adolescents and young adults with diabetes. Participant involvement relied heavily upon reminders and encouragement from a diabetes educator and immediate family members.

#### Huang ES, Brown SE, Ewigman BG, Foley EC, Meltzer DO. Patient perceptions of quality of life with diabetes-related complications and treatments. Diabetes Care. 30(10):2478-83, 2007.

Understanding how individuals weigh the quality of life associated with complications and treatments is important in assessing the economic value of diabetes care and may provide insight into treatment adherence. We quantify patients' utilities (a measure of preference) for the full array of diabetes-related complications and treatments. We conducted interviews with a multiethnic sample of 701 adult patients living with diabetes who were attending Chicago area clinics. We elicited utilities for hypothetical health states by using time-tradeoff questions. We evaluated 9 complication states and 10 treatment states. End-stage complications have the greatest perceived burden on quality of life; however, comprehensive diabetes treatments also have significant negative quality-of-life effects.

Smith TL, Drum ML, Lipton RB. Incidence of childhood type I and non-type 1 diabetes mellitus in a diverse population: the Chicago Childhood Diabetes Registry, 1994 to 2003. J Pediatr Endocrinol Metab. 20(10):1093-107, 2007.

Reports of increasing risk for type 1 and type 2 diabetes mellitus in youth are emerging, but information on socioeconomically diverse populations is limited. The Chicago Childhood Diabetes Registry is a city-wide study of patients 0-17 years old at onset. Incidence data came from medical records and interviews; census data provided denominators; analyses used Poisson regression. There were 1,366 incident cases: 719 in non-Hispanic Black (NHB), 379 in Hispanic, 229 in non-Hispanic White (NHW), and 39 in children of other ethnicities. Children aged 10-14 years experienced the highest incidence, irrespective of ethnicity. Incidence of childhood diabetes increased between 1994-2003, driven primarily by non-type 1, suggesting a role for behavioral and/or environmental determinants of insulin resistance.

#### **OTHER CHRONIC DISEASES**

Feinglass J, Lee C, Rogers M, Temple LM, Nelson C, Chang RW. Complementary and alternative medicine use for arthritis pain in 2 Chicago community areas. Clin J Pain. 23(9):744-9, 2007.

OBJECTIVE: To compare the use of complementary and alternative medicine (CAM) for arthritis between 2 ethnically distinct metropolitan Chicago community areas. METH-ODS: A telephone interview survey of adults age 45 years or above living in North (88.9%) white) or South (79.7% African American) areas. Differences between areas were compared with population-weighted tests; multiple logistic regression was used to analyze the likelihood of CAM use controlled for demographics, behavioral risk factors, and arthritis severity. DISCUSSION: Although there were only small differences in overall CAM use by area, older residents of largely African American communities were enthusiastic users of relaxation, massage, and nutritional and dietary techniques.

All abstracts are abridged. For complete abstracts & full articles, refer to citation.

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Stankus N, Hammes M, Gillen D, Worcester E. African American ESRD patients have a high pre-dialysis prevalence of kidney stones compared to NHANES III. Urol Res. 35(2):83-7, 2007.

We compared the prevalence of pre-end stage renal disease (ESRD) stones in an African-American (AA) hemodialysis (HD) population to the estimated stone prevalence in a nationally representative cohort of AA persons as obtained by the Third National Health and Nutrition Survey (NHANES III). Face-to-face questionnaires were administered to a sample of 300 AA HD patients undergoing dialysis therapy at the University of Chicago to determine pre-ESRD NL prevalence. After adjustment for age and sex, it was estimated that the prevalence of pre-ESRD kidney stones among AA HD patients is significantly higher than the prevalence of kidney stones found in the general AA population.

#### Hahn EA, Cella D, Dobrez DG, Weiss BD, Du H, Lai JS, Victorson D, Garcia SF. The impact of literacy on health-related quality of life measurement and outcomes in cancer outpatients. Qual Life Res. 16(3):495-507, 2007.

Limited evidence exists regarding the relationship between literacy and health-related quality of life (HRQL). Research is needed to develop measurement techniques for low literacy populations and to evaluate potential literacy-related measurement bias. A Talking Touchscreen (TT) was developed for an HRQL study. Low and high literacy adult cancer outpatients participated, 70% of whom were from racial/ethnic minorities. Patients completed three questionnaires by TT. The TT is valid and useful for HRQL assessment in low literacy populations. There appears to be no systematic literacy bias in reporting HRQL, and low literacy is not an independent risk factor for poorer HRQL.

#### Lee MA, Ferraro KF. Hougham GW, Sachs GA. Neighborhood residential segregation and physical health among Hispanic Americans: good, bad, or benign? J Health Soc Behav. 48(2):131-48, 2007.

Competing hypotheses regarding the effects of neighborhood segregation on health are tested with data from Puerto Rican and Mexican American residents of Chicago. Multilevel analyses reveal that segregation is associated with more health problems for Puerto Rican Americans but not for Mexican Americans. In addition, the relationship between segregation and health was conditioned by generational status for Mexican Americans. These findings reveal that residential segregation has differential effects across Hispanic groups and suggest that a high degree of contact with Mexican Americans promotes health by facilitating flow of informal health resources and social support.

Reynolds AJ, Temple JA, Ou SR, Robertson DL, Mersky JP, Topitzes JW, Niles MD. Effects of a school-based, early childhood intervention on adult health and well-being: a 19-year follow-up of low-income families. Arch Pediatr Adolesc Med. 161(8):730-9, 2007.

OBJECTIVE: To determine the effects of an established preventive intervention on the health and well-being of an urban cohort in

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young adulthood. DESIGN: A follow-up of a nonrandomized alternative-intervention matched-group cohort at age 24 years. PAR-TICPANTS: A total of 1539 low-income participants who enrolled in the Child-Parent Center program in 20 sites or in an alternative kindergarten intervention. INTERVEN-TIONS: The Child-Parent Center program provides school-based educational enrichment and comprehensive family services from preschool to third grade. MAIN OUTCOME MEASURES: Educational attainment, adult arrest and incarceration, health status and behavior, and economic well-being. CON-CLUSIONS: Participation in a school-based intervention beginning in preschool was associated with a wide range of positive outcomes. Findings provide evidence that established early education programs can have enduring effects on general well-being into adulthood.

#### Skarupski KA, de Leon CF, Bienias JL, Scherr PA, Zack MM, Moriarty DG, Evans DA. Black-white differences in health-related quality of life among older adults. Qual Life Res. 16(2):287-96, 2007.

In this paper, we examine black-white differences in health-related quality of life (HRQOL) and identify factors that may account for these differences. The participants were 5,986 community-dwelling persons age 65+ from the Chicago Health and Aging Project. A higher proportion of blacks than whites reported poor HRQOL. The black-white differences in HRQOL tended to increase with age and were greater among females. Lifetime socioeconomic status, summary measures of medical conditions, and cognitive function accounted for most of the black-white difference. Our results suggest that racial differences in HRQOL are associated with the combined effects of social disadvantage, poor physical health, and lower cognitive function.

All abstracts are abridged. For complete abstracts & full articles, refer to citation.

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Arora VM, Georgitis E, Woodruff JN, Humphrey HJ, Meltzer D. Improving sleep hygiene of medical interns: can the sleep, alertness, and fatigue education in residency program help? Arch Intern Med. 167(16):1738-44, 2007.

We assessed the effectiveness of a 60- to 90-minute lecture, the Sleep, Alertness, and Fatigue Education in Residency (SAFER) program, on sleep loss and recovery sleep in residents adhering to Accreditation Council for Graduate Medical Education duty hours. From July 1, 2003, through June 24, 2005, interns from the inpatient medicine service at the University of Chicago were asked to wear wristwatch activity monitors. In March 2005, interns received the SAFER program intervention. We used fixed-effects linear regression to estimate within-subject mean sleep per call day. These estimates were compared with recommended minimum levels of preventive and recovery sleep in healthy populations using 2-tailed t tests. These analyses were repeated to test the effect of the SAFER program. The SAFER program had no significant beneficial effect on intern sleep. Under the current dutyhour regulations of the Accreditation Council for Graduate Medical Education, residents continue to be sleep deprived.

AroraVM, Johnson M, Olson J, Podrazik PM, Levine S, Dubeau CE, Sachs GA, Meltzer DO. Using assessing care of vulnerable elders quality indicators to measure quality of hospital care for vulnerable elders. J Am Geriatr Soc. 55(11):1705-11, 2007.

OBJECTIVES: To assess the quality of care for hospitalized vulnerable elders using measures based on Assessing Care of Vulnerable Elders (ACOVE) quality indicators (QIs). DESIGN: Prospective cohort study. PARTICIPANTS: Subjects aged 65 and older hospitalized on the University of Chicago general medicine inpatient service who were defined as vulnerable using the Vulnerable Elder Survey-13. **MEASUREMENTS:** Inpatient interview and chart review using ACOVE-based process-ofcare measures referring to 16 QIs in general hospital care and geriatric-prevalent conditions; adherence rates calculated for type of care process and type of provider. CONCLU-SION: Adherence to geriatric-specific QIs is lower than adherence to general hospital care QIs. Hospital care QIs that focus on screening may overestimate performance by detecting standard nursing or protocol-driven care.

Bell WC, Dallas CE. Vulnerability of populations and the urban health care systems to nuclear weapon attack--examples from four American cities. Int J Health Geogr. 6:5, 2007.

The effects of 20 kiloton and 550 kiloton nuclear detonations on high priority target cities are presented for New York City, Chicago, Washington D.C. and Atlanta. Thermal, blast and radiation effects are described, and affected populations are calculated using 2000 block level census data. From the point of view of medical casualty treatment and administrative response, there is an ominous pattern where these fatalities and casualties geographically fall in relation to the location of hospital and administrative facilities. It is demonstrated that a staggering number of the main hospitals, trauma centers, and other medical assets are likely to be in the fatality plume, rendering them essentially inoperable in a crisis. Among the consequences of this outcome would be the probable loss of command-and-control, mass casualties that will have to be treated in an unorganized response by hospitals on the periphery, as well as other expected chaotic outcomes from inadequate administration in a crisis.

Buchh B, Graham N, Harris B, Sims S, Corpuz M, Lantos J, Meadow W. *Neonatology has always been a bargain--even when we weren't very good at it!* Acta Paediatr. 96(5):659-63, 2007.

We documented survival and length of stay (LOS) for 2354 Extremely Low Birth Weight (ELBW) infants admitted to the NICU at the University of Chicago between 1978 and 2003. NICU bed-days were a proxy for medical expenses. Over the past 25 years, ELBW admissions have risen four-fold from 25 to 100/year, and ELBW bed-days have risen ten-fold, from 700 to 7000/year. In 1978, when ELBW mortality was 80%, only 30% of ELBW bed-days were expended on non-survivors. Currently, the percentage of ELBW non-survivor bed days (NSBD) is below 10%. Even more striking, as soon as there were

any survivors with BW 450-750 g, the NSBD index fell below 30%, and settled quickly around 10%.

# Campbell JV, Garfein RS, Thiede H, Hagan H, Ouellet LJ, Golub ET, Hudson SM, Ompad DC, Weinbaum C. Convenience is the key to hepatitis A and B vaccination uptake among young adult injection drug users. Drug Alcohol Depend. 91 Suppl 1:S64-72, 2007.

We assessed whether convenience and monetary incentives influenced uptake of free vaccine by 18-30-year-old injection drug users (IDUs) in five U.S. cities. IDUs recruited from community settings completed risk behavior self-interviews and testing for antibodies to hepatitis A virus (HAV) (anti-HAV) and hepatitis B core antigen (anti-HBc). Vaccine was offered presumptively at pre-test (except in Chicago); on-site availability and incentives for vaccination differed by site, creating a quasi-experimental design. Although 83% of participants were willing to be vaccinated, only 36% received > or =1 dose, which varied by site: Baltimore (83%), Seattle (33%), Los Angeles (18%), New York (17%), and Chicago (2%). Participation was highest when vaccine was available immediately on-site and lowest when offered only after receiving results. Monetary incentives may have increased participation when on-site vaccination was not available.

## Coleman K, Reiter KL, Fulwiler D. The impact of pay-for-performance on diabetes care in a large network of community health centers. J Health Care Poor Underserved. 18(4):966-83, 2007.

Using data on 1,166 patients treated by 46 primary care physicians, this paper examines the effect of an innovative pay-for-performance program implemented in 2004 at the nation's largest federally qualified health center on hemoglobin A1c (HbA1c) testing and HbA1c scores. Univariate analysis and logistic regression results show that the payfor-performance program significantly increased the likelihood that patients received two HbA1c tests per year as recommended by the American Diabetes Association. Ordinary least squares (OLS) regression results reveal that physicians' baseline performance was positively related to performance after program implementation. Finally, OLS regression results suggest that the program did not contribute to improved blood sugar control.

Croghan JE, Prince TR, Zekic L, Underwood J, Sheridan PH Jr, Weatherly J, Knohl K. Comprehensive approach to automated assistive telemanagement for seniors in their home or residence-pilot program results. J Ambul Care Manage. 30(4):318-26, 2007.

A comprehensive pilot study was conducted to examine how remote senior monitoring of important vitals information and virtual nurse visits conducted remotely via videophone would improve seniors' adherence to care plan and enable them to remain in their homes longer. Recruitment of study individuals was conducted in the North Shore area of Chicago, Ill. Eleven seniors participated in this small scale study to keep scale issues controlled. The average age was 80+ (64-89) with participants suffering from an average of 4.4 chronic conditions and requiring assistance in 3.4 activities of daily living.

Fitzgibbon ML, Ferreira MR, Dolan NC, Davis TC, Rademaker AW, Wolf MS, Liu D, Gorby N, Schmitt BP, Bennett CL. Process evaluation in an intervention designed to improve rates of colorectal cancer screening in a VA medical center. Health Promot Pract. 8(3):273-81, 2007.

We developed an intervention to improve provider recommendation and patient screening among noncompliant male veterans in a 2-year randomized controlled trial and examined the relationship between participation and study outcomes among patients and providers. Overall, providers who attended intervention sessions recommended CRC screening during 64% of patient visits and providers who did not attend any intervention sessions recommended screening during 54% of visits. Patients of providers who attended intervention sessions also were more likely to be screened. The patient intervention did not have the desired impact. The subgroup of patients in the patient intervention was not more likely to complete CRC screening.

All abstracts are abridged. For complete abstracts & full articles, refer to citation.

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Geanuracos CG. Cunningham SD, Weiss G, Forte D, Reid LM, Ellen JM. Use of geographic information systems for planning HIV prevention interventions for high-risk youths. Am J Public Health. 97(11):1974-81, 2007.

Connect to Protect, a researcher-community collaboration working in 15 cities to reduce HIV infection among youths, developed GIS databases of local health, crime, and demographic data to evaluate the geographic epidemiology of sexually transmitted infections and HIV risk among adolescents. We describe the process and problems of data acquisition, analysis, and mapping in the development of structural interventions, demonstrating how program planners can use this technology to inform and improve planning decisions. The Connect to Protect project's experience suggests strategies for incorporating public data and GIS technology into the next generation of public health interventions.

#### Gilliam ML, Hernandez M. Providing contraceptive care to low-income, African American teens: the experience of urban community health centers. J Community Health. 32(4):231-44, 2007.

The purpose of this study was to examine the provider-patient relationship in reproductive health care for low income African American teens and to identify effective techniques they use in caring for teens. We conducted focus groups with providers at two clinics serving six low-income neighborhoods on the Southside of Chicago. Providers in community clinics use a number of tactics when working with teens. First, they forge strong relationships through the use of language, shared background experiences, honesty and spending extra time with teens. Second, clinic employees work collectively to care for the patients with all staff members, both professional and clerical, contributing to the provider-patient relationship. Third, providers seek opportunities for contraceptive counseling even attempting to reach males outside of clinic.

#### Hagen JC, Parota B, Tsagalis M. TOPOFF 2 and the inclusion of dental professionals into federal exercise design and execution. Dent Clin North Am. 51(4):827-35, 2007.

This article examines the dental professional's role in emergency management activities, specifically related to design and execution of such federal exercises as the Top Officials (TOPOFF) series. Experiences from the Chicago TOPOFF 2 exercise are used as an example.

Harper W, Cook S, Makoul G. Teaching medical students about health literacy: 2 Chicago initiatives. Am J Health Behav. 31 Suppl 1:S111-4, 2007.

Described are 2 novel approaches to health literacy curriculum design. Efforts at both schools have been implemented to improve medical student awareness of health literacy, as well as specific skills in clear communication and strategies that ensure patient understanding. Preliminary data from one school suggest an increase in use of health literacy behaviors.

Jacobs EA, Sadowski LS, Rathouz PJ. The impact of an enhanced interpreter service intervention on hospital costs and patient satisfaction. J Gen Intern Med. 22 Suppl 2:306-11, 2007.

**OBJECTIVE:** To investigate how language barriers and the provision of enhanced interpreter services impact the costs of a hospital stay. DESIGN: Prospective intervention study. SETTING: Public hospital inpatient medicine service. PARTICIPANTS: 124 Spanish-speakers whose physicians had access to the enhanced interpreter intervention, 99 Spanishspeakers whose physicians only had access to usual interpreter services, and 100 Englishspeakers matched to Spanish-speaking participants on age, gender, and admission firm. MEASUREMENTS: Patient satisfaction, hospital length of stay, number of inpatient consultations and radiology tests conducted in the hospital, adherence with follow-up appointments, use of emergency department (ED) services and hospitalizations in the 3 months after discharge, and the costs associated with

provision of the intervention and any resulting change in health care utilization. CON-CLUSION: The enhanced interpreter service intervention did not significantly increase or decrease hospital costs. Physician-patient language concordance reduced return ED visit and costs.

#### Levin T, Scott BM, Borders B, Hart K, Lee J, Decanini A. Aphasia Talks: photography as a means of communication, self-expression, and empowerment in persons with aphasia. Top Stroke Rehabil. 14(1):72-84, 2007.

Through collaboration between Archeworks, Inc., an alternative design program, and the Rehabilitation Institute of Chicago, items and services designed to improve the lives of persons with stroke were developed. After examining the issues related to stroke from a design perspective, a photography class called Aphasia Talks was developed to facilitate selfexpression in persons with aphasia with the goals of reintegration, socialization, recreation, education, and strengthening. A model based on design with, rather than for, persons with stroke was employed to develop the class and a corresponding website, which includes photographs and audio relating to the photographs. By encouraging self-expression and empowering class participants, the class was refined to be used for research purposes to gain further insight into the problems faced by persons living with stroke.

#### Lucas BP, Asbury JK, Wang Y, Lee K, Kumapley R, Mba B, Borkowsky S, Asmar A. *Impact of a bedside procedure service on general medicine inpatients: A firm-based trial.* J Hosp Med. 2(3):143-9, 2007.

OBJECTIVE: Determine whether a procedure service affects the number and success of 4 bedside procedures (paracentesis, thoracentesis, lumbar puncture, and central venous catheterization) attempted on general medicine inpatients. DESIGN: Prospective cohort study. INTERVENTION: A bedside procedure service was offered to physicians from 1 of 3 firms for 4 weeks. This service then crossed over to physicians from the other 2 firms for another 4 weeks. MEASUREMENTS: We examined whether the number of attempts and the proportion of successful attempts differed based on whether firms were offered the beside procedure service. RESULTS: There were no differences between firms in the proportions of successful attempts or major complications.

Niederman LG, Schwartz A, Connell KJ, Silverman K. *Healthy Steps for Young Children program in pediatric residency training: impact on primary care outcomes.* Pediatrics. 120(3):e596-603, 2007.

We report the impact on primary care outcomes after integrating Healthy Steps for Young Children into residency training. Continuity of care, longitudinal care in the practice, quality of primary care services, and rates of behavioral, developmental, and psychosocial diagnoses were measured for 3 cohorts: (1) Healthy Steps-enrolled children, (2) non-Healthy Steps-enrolled children who were followed at the same site of care, and (3) non-Healthy Steps-enrolled children who were receiving primary care at a similar residency training site within the same training program. Multiple indices that measure health service outcomes suggest benefits of incorporating Healthy Steps for Young Children into pediatric residency training. Most important, continuity of care in residents' practices significantly improved, as did the residents' documentation of psychosocial issues in children.

Pierce SJ, Miller RL, Morales MM, Forney J. Identifying HIV prevention service needs of African American men who have sex with men: an application of spatial analysis techniques to service planning. J Public Health Manag Pract. Suppl:S72-9, 2007.

We applied spatial analysis techniques to map the availability of HIV prevention services to young black MSM in Chicago to guide prevention planning. GIS was used to map characteristics of ZIP codes in Chicago. Choropleth maps and descriptive statistics were used to visualize and analyze the data. Areas where young black MSM reside typically have low HIV service densities. HIV service density also corresponds poorly to some ZIP codes in which young black MSM who report high rates of unprotected sexual behavior reside. Spatial analysis can show whether services are located near specific populations of interest.

All abstracts are abridged. For complete abstracts & full articles, refer to citation.

Raja S, McKirnan D, Glick N. The Treatment Advocacy Program--Sinai: a peer-based HIV prevention intervention for working with African American HIV-infected persons. AIDS Behav. 11(5 Suppl):S127-37, 2007.

As part of a Health Resources and Services Administration/Special Projects of National Significance initiative to increase prevention amongst those living with HIV, we implemented the Treatment Advocacy Program Intervention at Mount Sinai Hospital in Chicago, IL, USA. The main goal of the intervention was to help patients increase their medication adherence and sexual safety skills. This paper describes the rationale for implementing this peer-based HIV-prevention intervention, discusses how the intervention was tailored to work within our low socio-economic status, urban patient population, and reviews the training and quality assurance activities needed to integrate the intervention into our primary care clinic. We review the intervention content in detail. Finally, we discuss the challenges in implementing this program, many of which arise from the chaotic social situations that our patients experience.

Rosenbloom SK, Victorson DE, Hahn EA, Peterman AH, Cella D. Assessment is not enough: a randomized controlled trial of the effects of HRQL assessment on quality of life and satisfaction in oncology clinical practice. Psychooncology. 16(12):1069-79, 2007.

This study examined whether offering interpretive assistance of health-related quality of life (HRQL) results would improve patient outcomes. Two hundred and thirteen participants with metastatic breast, lung or colorectal cancer were randomly assigned to one of three conditions: usual care; HRQL assessment or HRQL assessment followed by a structured interview and discussion. HRQL and treatment satisfaction outcomes were assessed at 3 and 6 months. No significant differences were found between study conditions in HRQL or satisfaction. Results suggest that routine HRQL assessment, even with description of results, is insufficient to improve patient HRQL and satisfaction.

Sarnat RL, Winterstein J, Cambron JA. Clinical utilization and cost outcomes from an integrative medicine independent physician association: an additional 3-year update. J Manipulative Physiol Ther. 30(4):263-9, 2007.

This report updates the subsequent utilization data from the integrative medicine independent physician association (IPA) for the years 2003 to 2005 and includes first-time comparisons in data points among primary care physicians (PCPs) of different licensures who were oriented toward complementary and alternative medicine (CAM). Independent physician association-incurred claims and stratified random patient surveys were descriptively analyzed for clinical utilization, cost offsets, and member satisfaction compared with conventional medical IPA normative values. The CAM-oriented PCPs using a nonsurgical/ nonpharmaceutical approach demonstrated reductions in both clinical and cost utilization when compared with PCPs using conventional medicine alone. Decreased utilization was uniformly achieved by all CAM-oriented PCPs, regardless of their licensure.

#### Stubbings J, Durley SF, Lin SJ, Kliethermes M, Aruru MD, *Implementing the Medicare drug benefit in a diverse inner-city community*. Am J Health Syst Pharm. 64(2):193-9, 2007.

An academic medical center and college of pharmacy in a culturally diverse, inner-city Chicago community created a strategy to provide uninterrupted pharmacy services to all of their Medicare Part D eligible patients, particularly those dual eligible for Medicaid and Medicare, during the transition from Medicaid to Medicare Part D. Although problems were encountered, the investment in the preparation and implementation of the Medicare drug benefit, especially the consult service, resulted in a positive return on the institution's investment. Suggestions for other institutions facing the challenge of the implementation of the Medicare drug benefit are provided.

All abstracts are abridged. For complete abstracts & full articles, refer to citation.

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#### HIV/AIDS

# Glikman D, Walsh L, Valkenburg J, Mangat PD, Marcinak JF. *Hospital-based directly observed therapy for HIV-infected children and adolescents to assess adherence to antiretro-viral medications*. Pediatrics. 119(5):e1142-8, 2007.

The purpose of this work was to examine the efficacy of hospital-based directly observed therapy in assessing adherence to antiretroviral medications in HIV-infected children and adolescents suspected of nonadherence and failing other interventions. The medical charts of all HIV-infected patients admitted to the University of Chicago Comer Children's Hospital for directly observed therapy from July 2004 to June 2006 were reviewed. Data collected included demographics, clinical and immune class category, previous and current antiretroviral medications, viral resistance tests, HIV-1 RNA viral load, and CD4+ T-cell number and percentage before and after directly observed therapy. Short, hospitalbased directly observed therapy was helpful in confirming nonadherence to antiretroviral medications, therefore impacting future therapeutic decisions in HIV-infected children and adolescents.

#### Heimer R, Grau LE, Curtin E, Khoshnood K, Singer M. Assessment of HIV testing of urban injection drug users: implications for expansion of HIV testing and prevention efforts. Am J Public Health. 97(1):110-6, 2007.

We sought to determine the extent of HIV testing among urban injection drug users (IDUs) to assess whether an expansion of targeted testing programs would be consistent with national goals to identify previously undetected infections. IDUs in 5 US cities (Oakland, Calif; Chicago, Ill; Hartford and New Haven, Conn; and Springfield, Mass) were recruited either by chain referral or time-location sampling. The IDUs were questioned about HIV testing, and factors associated with HIV testing were analyzed. Testing for HIV has reached the vast majority of IDUs through the current options. Expending scarce prevention money to expand testing of IDUs is unlikely to be productive. Instead, resources should be used for proven HIV-prevention strategies including syringe exchange, drug treatment, and secondary prevention for those who are HIV positive.

#### Lyss SB, Branson BM, Kroc KA, Couture EF, Newman DR, Weinstein RA. Detecting unsuspected HIV infection with a rapid whole-blood HIV test in an urban emergency department. J Acquir Immune Defic Syndr. 44(4):435-42, 2007.

**OBJECTIVE:** To evaluate and compare HIV screening and provider-referred diagnostic testing as strategies for detecting undiagnosed HIV infection in an urban emergency department (ED). METHODS: From January 2003 through April 2004, study staff offered HIV screening with rapid tests to ED patients regardless of risks or symptoms. ED providers could also refer patients for diagnostic testing. CONCLUSIONS: ED screening detects HIV infection and links to care patients who may not be tested through risk- or symptom-based strategies. The diagnostic yield was higher among provider-referred patients, but screening detected patients earlier in the course of disease.

### Scott A, Ellen J, Clum G, Leonard L. *HIV and housing assistance in four U.S. cities: varia-tions in local experience.* AIDS Behav. 11(6 Suppl):140-8, 2007.

This paper provides an account of how young, HIV-positive women manage their lives on limited budgets in four United States cities: New York City, New Orleans, Miami, and Chicago. The study findings elucidate cityto-city variability in housing assistance, and how this manifests in locality specific differences in the experience of HIV. Our research suggests that the receipt of housing assistance has ramifications for women's engagement in care, and for their health.

All abstracts are abridged. For complete abstracts & full articles, refer to citation.

**A**S 5 Ľ Silva A, Glick NR, Lyss SB, Hutchinson AB, Gift TL, Pealer LN, Broussard D, Whitman S. Implementing an HIV and sexually transmitted disease screening program in an emergency department. Ann Emerg Med. 49(5):564-72, 2007.

We assess the feasibility, effectiveness, and cost of routinely recommended HIV/sexually transmitted disease screening in an urban emergency department (ED). From April 2003 to August 2004, patients aged 15 to 54 years were offered rapid HIV testing, and those aged 15 to 25 years were also offered gonorrhea and chlamydia testing, Monday through Friday, 11 am to 8 pm. Infected patients were referred for treatment and care. Prevalence, treatment rates, and cost were assessed. Through ED-based HIV/sexually transmitted disease screening, we identified and treated many sexually transmitted disease-infected patients but identified few HIV-infected patients and linked even fewer to care. However, sexually transmitted disease screening can be added to HIV screening at a reasonable cost.

#### MRSA

Bach HG, Steffin B, Chhadia AM, Kovachevich R, Gonzalez MH. Community-associated methicillin-resistant Staphylococcus aureus hand infections in an urban setting. J Hand Surg [Am]. 32(3):380-3, 2007.

The purpose of this study was to determine prospectively the incidence of methicillinresistant *Staphylococcus aureus* (MRSA) in community-associated hand infections in an urban hospital. Sixty-one patients presented to our institution over a 9-month period with community-acquired hand infections that were evaluated and treated by the hand service. The rate of community-associated MRSA hand infections in an urban setting is higher than previously suspected. This should be taken into account when managing seemingly routine hand infections given that the treatment options are different for MRSA infections. Hota B, Ellenbogen C, Hayden MK, Aroutcheva A, Rice TW, Weinstein RA. Communityassociated methicillin-resistant Staphylococcus aureus skin and soft tissue infections at a public hospital: do public housing and incarceration amplify transmission? Arch Intern Med. 167(10):1026-33, 2007.

Understanding the epidemiology of Community-associated methicillin-resistant Staphylococcus aureus (CA-MRSA) is critical for developing control measures. At a 464-bed public hospital in Chicago and its more than 100 associated clinics, surveillance of soft tissue, abscess fluid, joint fluid, and bone cultures for S aureus was performed. We estimated rates of infection and geographic and other risks for CA-MRSA through laboratory-based surveillance and a case-control study. The incidence of CA-MRSA skin and soft tissue infections increased from 24.0 cases per 100,000 people in 2000 to 164.2 cases per 100,000 people in 2005. Clonal CA-MRSA infection has emerged among Chicago's urban poor. It has occurred in addition to, not in place of, methicillin-susceptible S aureus infection. Epidemiological analysis suggests that control measures could focus initially on core groups that have contributed disproportionately to risk, although CA-MRSA becomes endemic as it disseminates within communities.

#### Jaggi P, Paule SM, Peterson LR, Tan TQ. Characteristics of Staphylococcus aureus infections, Chicago Pediatric Hospital. Emerg Infect Dis. 13(2):311-4, 2007.

Invasive and skin community-associated (CA)-methicillin-resistant *Staphylococcus aureus* isolates from children were matched with invasive CA-methicillin-sensitive *S. aureus* strains during 2000-2004. Isolates were analyzed for presence of Panton-Valentine leukocidin. A USA400 lineage clone (n = 6) and the predominant USA300 lineage clone emerged.

#### Van Howe RS, Robson WL. The possible role of circumcision in newborn outbreaks of community-associated methicillin-resistant Staphylococcus aureus. Clin Pediatr (Phila). 46(4):356-8, 2007.

Outbreaks of community-associated methicillin-resistant *Staphylococcus aureus* were recently reported in newborns at 3 major urban centers. Boys were disproportionately infected. A literature review and a statistical analysis confirmed that male newborns are significantly more likely to be infected with *Staphylococcus aureus*. Circumcision is a possible explanation for the recent outbreaks.

#### **OTHER INFECTIOUS DISEASES**

#### Arun V, Noble AG and Toxoplasmosis Study Group. *Cataracts in congenital toxoplasmosis.* J AAPOS. 11(6):551-4, 2007.

PURPOSE: To determine the incidence and natural history of cataracts in children with congenital toxoplasmosis. METHODS: Children referred to the National Collaborative Chicago-based Congenital Toxoplasmosis Study (NCCCTS) between 1981 and 2005 were examined by ophthalmologists at predetermined times according to a specific protocol. The clinical course and treatment of patients who developed cataracts were reviewed. CONCLUSIONS: In the NCCCTS cohort, 11.6% of patients were diagnosed with cataracts. There was considerable variability in the presentation, morphology, and progression of the cataracts. Associated intraocular pathology was an important cause of morbidity.

Grim SA, Pham T, Thielke J, Sankary H, Oberholzer J, Benedetti E, Clark NM. *Infectious complications associated with the use of rituximab for ABO-incompatible and positive cross-match renal transplant recipients*. Clin Transplant. 21(5):628-32, 2007.

We performed a retrospective review of infectious complications (IC) occurring within six months of ABO-incompatible (ABOI) and positive cross-match (PCM) renal transplantation (RT) in recipients receiving rituximab (RTX). Between July 2001 and December 2004, 34 ABOI or PCM RT were performed at University of Illinois at Chicago, 25 of which received RTX with plasmapheresis and antithymocyte globulin. Among the RTX recipients, the rate of IC was 48% compared with 11% among historical controls who did not receive RTX. There was no difference in the rate of rejection, graft survival or patient survival between the two groups. These data suggest that there is a trend toward an increased rate of IC with RTX therapy in ABOI and PCM RT recipients.

Joslin CE, Tu EY, Shoff ME, Booton GC, Fuerst PA, McMahon TT, Anderson RJ, Dworkin MS, Sugar J, Davis FG, Stayner LT. *The association of contact lens solution use and Acanthamoeba keratitis*. Am J Ophthalmol. 144(2):169-180, 2007.

PURPOSE: To investigate Acanthamoeba keratitis (AK) risk factors. Diagnosis of AK, a rare but serious corneal infection, has recently increased significantly at the University of Illinois at Chicago (UIC) Cornea Service. DESIGN: Retrospective case-control study. METHODS: Fifty-five AK cases with contact lens use were diagnosed between May 1, 2003 and September 15, 2006. Clinicmatched controls with contact lens use were recruited. Subjects completed surveys targeting lens hygiene, contact lens solution use, and water exposure. RESULTS: Analysis was performed on 30 cases and 39 controls with matched pairs with soft lens use. Exclusive use of Advance Medical Optics (AMO) Complete MoisturePlus Multi-Purpose Solution was independently associated with AK in multivariable analysis. However, 38.8% of cases reported no use of AMO Complete Moisture-Plus Multi-Purpose Solution either alone or in combination with other solutions. CON-**CLUSIONS: AMO Complete MoisturePlus** Multi-Purpose Solution use is independently associated with AK among soft contact lens users. However, it does not explain all cases, suggesting additional factors.

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Kim S, Crittenden K. Treatment completion among TB patients returned to the community from a large urban jail. J Community Health. 32(2):135-47, 2007.

This article examined factors associated with treatment completion among jail inmates with TB disease after their return to the community. Retrospective analyses were performed to explore the relationships between demographic, behavioral, incarceration factors, and treatment methods with treatment completion. Hispanics (vs. blacks), those who had children, and those incarcerated for simple charges (vs. drug related charges) were less likely to complete treatment. DOT users were more likely to complete treatment then those who used the self administration method. Inmates whose DOT was administered at a field site were more likely to complete treatment than those whose DOT took place at a clinic or mixed clinic and field. Treatment methods must employ an outreach strategy to meet each patient's need, considering the broader socioeconomic context.

Reddy P, Malczynski M, Obias A, Reiner S, Jin N, Huang J, Noskin GA, Zembower T. Screening for extended-spectrum beta-lactamase-producing Enterobacteriaceae among high-risk patients and rates of subsequent bacteremia. Clin Infect Dis. 45(7):846-52, 2007.

The role of routine inpatient surveillance for extended-spectrum beta-lactamase (ESBL) colonization in predicting related infection is unclear. From 2000 through 2005, we screened 17,872 patients hospitalized in designated high-risk units for rectal colonization with vancomycin-resistant enterococci and ESBL-producing Enterobacteriaceae using a selective culture medium. In patients with a bloodstream infection due to ESBLproducing Enterobacteriaceae (ESBL-BI) during the study period, surveillance results were evaluated for evidence of antecedent ESBL-producing Enterobacteriaceae colonization. Colonization with ESBL-producing Enterobacteriaceae is increasing at a rapid rate, and routine rectal surveillance for ESBLproducing Enterobacteriaceae may have clinical implications. However, in our experience, over one-half of patients with an ESBL-BI did not undergo screening through our current surveillance measures. As a result, targeted

screening for ESBL-producing Enterobacteriaceae among additional patient populations may be integral to future ESBL-BI prevention and management efforts.

#### Ruiz MO, Walker ED, Foster ES, Haramis LD, Kitron UD. Association of West Nile virus illness and urban landscapes in Chicago and Detroit. Int J Health Geogr. 6:10, 2007.

We derived urban landscape classes from the physical and socio-economic factors hypothesized to be associated with West Nile Virus (WNV) transmission and compared those to human cases of illness in 2002 in Chicago and Detroit. The objectives were to improve understanding of human exposure to virusinfected mosquitoes in the urban context, and to assess the degree to which environmental factors found to be important in Chicago were also found in Detroit. The analysis demonstrates how urban form and past land use decisions can influence transmission of a vector-borne virus. In addition, the results are helpful to develop hypotheses regarding urban landscape features and WNV transmission, they provide a structured method to stratify the urban areas to locate representative field study sites specifically for WNV, and this analysis contributes to the question of how the urban environment affects human health.

Schmink S, Watson JT, Coulson GB, Jones RC, Diaz PS, Mayer LW, Wilkins PP, Messonnier N, Gerber SI, Fischer M. Molecular epidemiology of Neisseria meningitidis isolates from an outbreak of meningococcal disease among men who have sex with men, Chicago, Illinois, J Clin Microbiol. 45(11):3768-70, 2007.

We characterized five *Neisseria meningitidis* serogroup C isolates from a Chicago outbreak of meningococcal disease that occurred in 2003 among a community of men who have sex with men. Isolates from this outbreak were identical to each other but distinct from the clone that caused a similar outbreak in Canada in 2001.

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#### Fazel S, Bond M, Gulati G, O'Donnell I. *Elderly homicide in Chicago: a research note.* Behav Sci Law. 25(5):629-39, 2007.

In an examination of homicides committed in Chicago over a 31-year period, we compared cases involving perpetrators aged over 60 years (n = 443) with those involving younger perpetrators (n = 24,066). There were a number of significant differences. Elderly killers were more likely to be White and to commit suicide afterwards. Their victims were more likely to be spouses, females, and aged over 60 years. Inter-racial homicide was more common for younger offenders. The low number of homicides involving the elderly is explained by reference to routine activity theory.

#### Henny KD, Kidder DP, Stall R, Wolitski RJ. Physical and sexual abuse among homeless and unstably housed adults living with HIV: prevalence and associated risks. AIDS Behav. 11(6):842-53, 2007.

We examined the prevalence and risks associated with interpersonal (physical and sexual) abuse among HIV-seropositive homeless or unstably housed adults. Data were obtained from the Housing and Health Study of participants living in Baltimore, Chicago, and Los Angeles (n = 644). We used logistic regression to identify risks associated with abuse. About 77% of men and 86% of women reported ever experiencing abuse. Abuse prevalence among sample exceeds those found in other samples of general USA, HIV-seropositive, and homeless populations. Identifying persons at risk of abuse is needed to reduce risk among homeless or unstably housed persons living with HIV.

#### Houston E, McKirnan DJ. Intimate partner abuse among gay and bisexual men: risk correlates and health outcomes. J Urban Health. 84(5):681-90, 2007.

Using a cross-sectional survey sample of 817 men who have sex with men (MSM) in the Chicago area, this study tested the effect of psychological and demographic factors generally associated with intimate partner abuse and examined their relationship to various health problems. Overall, 32.4% (n = 265) of participants reported any form of relationship abuse in a past or current relationship; 20.6% (n = 168) reported a history of verbal

abuse, 19.2% (n = 157) reported physical violence, and 18.5% (n = 151) reported unwanted sexual activity. Age and ethnic group were unrelated to reports of abuse. Depression and substance abuse were among the strongest correlates of intimate partner abuse. Men reporting recent unprotected anal sex were more likely to also report abuse.

### Kowal-Vern A, Latenser BA. *Demographics* of the homeless in an urban burn unit. J Burn Care Res. 28(1):105-10, 2007.

We sought to determine the demographic characteristics of the homeless citizens admitted to an urban burn center. This was a retrospective review from March 1999 to May 2004. Statistical analysis included chi2 and one-way analysis of variance. There was no significant difference between the homeless and the domiciled population in % total body surface area affected, nutritional values, and assault frequency. More than half of the homeless patient admissions to the burn unit resulted from assault or frostbite. The homeless were mainly African-Americans and Caucasians, with a higher frequency of ethanol and cocaine use than in the domiciled burn population. Lack of discharge options for the homeless prolonged the average length of stay, leading to increased costs.

#### Quinlan KP, Holden J, Kresnow MJ. *Providing car seat checks with well-child visits at an urban health center: a pilot study.* Inj Prev. 13(5):352-4, 2007.

OBJECTIVE: To evaluate a pilot program of providing child restraint system (CRS) checks by certified technicians with well-child care in an urban health center serving a low-income community. METHODS: During wellchild care, nationally certified child passenger safety technicians assessed CRS use, educated care givers, corrected misuse, and provided a new CRS if necessary. The program's effect was assessed at a subsequent medical visit. CONCLUSIONS: This urban health center has high rates of CRS non-use and near-universal misuse. Providing CRS checks by certified technicians during well-child care is a promising means of promoting sustained and improved CRS use.

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#### Ullman SE. Comparing gang and individual rapes in a community sample of urban women. Violence Vict. 22(1):43-51, 2007.

This study compared gang (e.g., multiple offender) and individual (e.g., single offender) rapes in a large, diverse sample of female victims from the community. Comparisons of trauma histories (e.g., child sexual abuse), assault characteristics (e.g., offender violence), outcomes (sexual acts, physical injuries) and current functioning (e.g., posttraumatic stress disorder, lifetime suicide attempts) showed that gang rape victims were worse off overall compared with victims of single offenders. In terms of help seeking, there were few differences in informal support seeking, but gang rape victims perceived their social networks more negatively. Gang rape victims reported to police, medical, and mental health sources more often than single-offender victims and received more negative social reactions from those they told about their assaults.

#### Vokes TJ, Gillen DL, Pham AT, Lovett JM. Risk factors for prevalent vertebral fractures in black and white female densitometry patients. J Clin Densitom. 10(1):1-9, 2007.

This cross-sectional study compared risk factors for prevalent vertebral fractures in 176 black and 345 white women recruited during their clinical bone mineral density (BMD) testing at the University of Chicago Hospitals. We used logistic regression to assess the association of prevalent vertebral fractures and risk factors (age, height loss, history of nonvertebral fractures, BMD, and use of corticosteroids). The prevalence of vertebral fractures was 21% for both races. All risk factors of interest were significantly associated with vertebral fractures in white women. Among black women, only age and corticosteroid use were found to be significant predictors of presence of vertebral fracture(s). We conclude that use of corticosteroids may be associated with relatively greater vertebral fracture risk in blacks than in whites.

Collins JW Jr, David RJ, Simon DM, Prachand NG. Preterm birth among African American and white women with a lifelong residence in high-income Chicago neighborhoods: an exploratory study. Ethn Dis. 17(1):113-7, 2007.

OBJECTIVE: To explore the association between race and preterm birth among women with a lifelong residence in high-income neighborhoods. METHODS: Stratified and multivariable logistic regression analyses were performed on the Illinois transgenerational birthfile (infants born 1989-1991 and mothers born 1956-1975) with appended US Census income data. African American (n = 777) and non-Hispanic White (n = 2,327) infants born to mothers with a lifelong residence in Chicago census tracts with median family incomes in the top income quartile were studied. CONCLUSIONS: A stark racial disparity in the unadjusted rates of preterm birth and very low birth weight exists among women with a lifelong residence in high-income urban neighborhoods; however, the disparity narrows when traditional, individual-level risk factors are mathematically controlled.

Gross D, Fogg L, Young M, Ridge A, Cowell J, Sivan A, Richardson R. *Reliability and* validity of the Eyberg Child Behavior Inventory with African-American and Latino parents of young children. Res Nurs Health. 30(2):213-23, 2007.

This study evaluated the reliability, equivalence, and convergent validity of the Eyberg Child Behavior Inventory (ECBI) in 682, 2- to 4-year-old children. For analysis, parent informants' data were blocked by race/ ethnicity, family income, child's gender, and ECBI language version. ECBI scales had high internal consistency reliabilities and good convergence with the Child Behavior Checklist/1-5. Some racial/ethnic and income effects were found. There were no mean differences by ECBI language version or by child gender. Using confirmatory factor analysis, a singlefactor invariant model of the ECBI Intensity Scale provided a good fit with the data across racial/ethnic and income groups. Implications for using the ECBI to measure behavior problems in young children of color are discussed.

Huttenlocher J, Vasilyeva M, Waterfall HR, Vevea JL, Hedges LV. *The varieties of speech to young children*. Dev Psychol. 43(5):1062-83, 2007.

This article examines caregiver speech to young children. The authors obtained several measures of the speech used to children during early language development (14-30 months). For all measures, they found substantial variation across individuals and subgroups. Speech patterns vary with caregiver education, and the differences are maintained over time. While there are distinct levels of complexity for different caregivers, there is a common pattern of increase across age within the range that characterizes each educational group. Thus, caregiver speech exhibits both long-standing patterns of linguistic behavior and adjustment for the interlocutor.

Masi CM, Hawkley LC, Piotrowski ZH, Pickett KE. Neighborhood economic disadvantage, violent crime, group density, and pregnancy outcomes in a diverse, urban population. Soc Sci Med. 65(12):2440-57, 2007.

The objective of this study was to determine the extent to which census tract economic disadvantage, violent crime rate, and group density are associated with pregnancy outcomes among White, Black, and Hispanic infants in a large metropolitan setting. This crosssectional study utilized 1990 census data, 1991 crime data, and 1991 birth certificate information for singleton live births in Chicago, Illinois. Among all racial/ethnic groups, violent crime rate accounted for most of the negative association between tract economic disadvantage and birth weight. Group density was also associated with birth weight but this association was stronger among Whites and Hispanics than among Blacks. Further analysis revealed that group density was more strongly associated with preterm birth while violent crime rate was more strongly associated with small for gestational age.

Abram KM, Washburn JJ, Teplin LA, Emanuel KM, Romero EG, McClelland GM. Posttraumatic stress disorder and psychiatric comorbidity among detained youths. Psychiatr Serv. 58(10):1311-6, 2007.

This study examined the prevalence of posttraumatic stress disorder (PTSD) and comorbid psychiatric disorders among juvenile detainees. The sample consisted of a stratified random sample of 898 youths aged ten to 18 years who were arrested and detained in Chicago. Among participants with PTSD, 93% had at least one comorbid psychiatric disorder; however, among those without PTSD, 64% had at least one comorbid psychiatric disorder. Over half (54%) of the participants with PTSD had two or more types of comorbid disorders--that is, affective, anxiety, behavioral, or substance use disorders--and 11% had all four types of comorbid disorders.

#### Corrigan PW, Larson J, Sells M, Niessen N, Watson AC. Will filmed presentations of education and contact diminish mental illness stigma? Community Ment Health J. 43(2):171-81, 2007.

This study examines the impact of two versions of anti-stigma programs-education and contact-presented on videotape. A total of 244 people were randomly assigned to education or contact conditions and completed pretest, post-test, and follow-up measures of stereotypes. Results suggest that the education videotape had limited effects, mostly showing improvement in responsibility (people with mental illness are not to blame for their symptoms and disabilities). Watching the contact videotaped showed significant improvement in pity, empowerment, coercion, and segregation.

#### Devlieger PJ, Albrecht GL, Hertz M. The production of disability culture among young African-American men. Soc Sci Med. 64(9):1948-59, 2007.

This paper contributes to the discussion by examining how disability is conceived and disability culture is developed in a poor, African-American community. In 1998 we began a 5 year ethnographic research project concerning young African-American men in the spinal cord injury unit of an inner city rehabilitation hospital in Chicago USA. Based on this research, we argue that there are three necessary conditions for a disability culture to emerge in a group of African-Americans who acquired their disability violently. Our analysis allows us to understand a change in identity among these young men and the emergence of a shared disability culture represented through signs, symbols, language, rules and ceremonies. This analytical framework also permits us to re-examine disability culture in white society and in specific disability cultures such as deaf culture and to suggest that while there are similarities across groups, disability culture is not monolithic.

### Hankin BL, Mermelstein R, Roesch L. Sex differences in adolescent depression: stress exposure and reactivity models. Child Dev. 78(1):279-95, 2007.

Stress exposure and reactivity models were examined as explanations for why girls exhibit greater levels of depressive symptoms than boys. In a multiwave, longitudinal design, adolescents' depressive symptoms, alcohol usage, and occurrence of stressors were assessed at baseline, 6, and 12 months later (N=538; 54.5% female; ages 13-18, average 14.9). Girls reported more depressive symptoms and stressors in certain contexts (e.g., interpersonal) than boys. Sex differences in depression were partially explained by girls reporting more stressors, especially peer events. Girls reacted more strongly to stressors in the form of depression.

#### Hoste RR, Hewell K, le Grange D. Family interaction among white and ethnic minority adolescents with bulimia nervosa and their parents. Eur Eat Disord Rev. 15(2):152-8, 2007.

OBJECTIVE: To examine family adaptability, cohesion and satisfaction among white and ethnic minority families of adolescents seeking treatment for bulimia nervosa. METH-OD: Families completed the Family Adaptability and Cohesion Evaluation Scales as part of their baseline assessment. RESULTS: No differences were found between white and ethnic minority patients' perceived and ideal levels of family cohesion and adaptabil-

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Ш Ş ity or level of satisfaction with family functioning, nor were differences found between white and ethnic minority parents on these measures. CONCLUSION: These findings are consistent with a growing literature on eating disorders among ethnic minorities, which suggests that there may be fewer differences and more similarities among ethnic groups than previously thought.

le Grange D, Crosby RD, Rathouz PJ, Leventhal BL. A randomized controlled comparison of family-based treatment and supportive psychotherapy for adolescent bulimia nervosa. Arch Gen Psychiatry. 64(9):1049-56, 2007.

**OBJECTIVE:** To evaluate the relative efficacy of family-based treatment (FBT) and supportive psychotherapy (SPT) for adolescents with bulimia nervosa. DESIGN: Randomized controlled trial. SETTING: The University of Chicago from April 1, 2001, through June 30, 2006. PARTICIPANTS: Eighty patients, aged 12 to 19 years, with a DSM-IV diagnosis of bulimia nervosa or a strict definition of partial bulimia nervosa. INTERVENTIONS: Twenty outpatient visits over 6 months of FBT or SPT. Participants were followed up at 6 months posttreatment. CONCLUSIONS: Family-based treatment showed a clinical and statistical advantage over SPT at posttreatment and at 6-month follow-up. Reduction in core bulimic symptoms was also more immediate for patients receiving FBT vs SPT.

#### Li ST, Nussbaum KM, Richards MH. Risk and protective factors for urban African-American youth. Am J Community Psychol. 39(1-2):21-35, 2007.

The present study investigated risk and resilience processes in a sample of urban African-American youth. Risk and protective factors were assessed across ecological levels including individual, family and community. Both externalizing and internalizing symptomatology were included as measures of child adjustment. Youth and parental reports as well as various methods were used to capture the daily experiences of the adolescents from different perspectives. Poverty, hassles, and exposure to violence predicted higher rates of externalizing and internalizing symptoms. Individual and family protective variables emerged as powerful sources of resilience. An inner sense of confidence and helpful family support were associated with reductions in the deleterious effects of community poverty. Two main patterns, protective-stabilizing and overwhelming-risk, seemed to characterize most of the risk by protective factor interactions.

Mersky JP, Reynolds AJ. Child maltreatment and violent delinquency: disentangling main effects and subgroup effects. Child Maltreat. 12(3):246-58, 2007.

This study employs data from the Chicago Longitudinal Study (CLS) to investigate the relation between child maltreatment and the incidence and frequency of violent delinquency. The authors also examine if effects vary between physically abused and neglected children and if select indicators (sex, cumulative risk, public aid receipt) moderate the connections between maltreatment and violent outcomes. The CLS follows a cohort of 1,539 low-income, minority children who attended public kindergarten programs in 1985-1986. Maltreatment is significantly associated with all violent outcomes investigated. Effects are comparable for physically abused and neglected children. Results indicate that public assistance, particularly persistent receipt, moderates the association between maltreatment and multiple outcomes.

Salyers MP, Godfrey JL, Mueser KT, Labriola S. Measuring illness management outcomes: a psychometric study of clinician and consumer rating scales for illness self management and recovery. Community Ment Health J. 43(5):459-80, 2007.

Psychometric properties of the Illness Management and Recovery (IMR) Scales (consumer and clinician versions), new 15-item instruments measuring illness self-management and pursuit of recovery goals, were evaluated in consumers with severe mental illness. Both versions had moderate internal consistency and high 2-week test-retest reliability. In addition, the consumer version was correlated with self-ratings of recovery and symptoms, and the clinician version was correlated with clinician ratings of community functioning, indicating convergent validity. The results

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suggest the IMR Scales have adequate psychometric properties and may be useful in treatment planning and assessing recovery in individuals with severe mental illness.

#### Rao D, Feinglass J, Corrigan P. Racial and ethnic disparities in mental illness stigma. J Nerv Ment Dis. 195(12):1020-3, 2007.

The present study sought to examine whether racial/ethnic differences exist in stigmatizing attitudes towards people with mental illness among community college students. Multiple regression models were used to investigate racial/ethnic differences in students' perceived dangerousness and desire for segregation from persons with mental illness both before and after participation in an antistigma intervention. Similar patterns emerged postintervention, except that Asians' perceptions changed significantly such that they tended to perceive people with mental illness as least dangerous of all the racial/ethnic groups. These findings suggest that racial/ethnic background may help to shape mental illness stigma, and that targeting antistigma interventions to racial/ ethnic background of participants may be helpful.

Tsang HW, Angell B, Corrigan PW, Lee YT, Shi K, Lam CS, Jin S, Fung KM. A crosscultural study of employers' concerns about hiring people with psychotic disorder: implications for recovery. Soc Psychiatry Psychiatr Epidemiol. 42(9):723-33, 2007.

We developed a lay model based on Chinese beliefs and values in terms of Confucianism, Taoism, Buddhism, and folk religions which may be used to explain cross-cultural variation in mental illness stigma, particularly in the arena of employment discrimination. In this study, we tested this lay approach by comparing employers' concerns about hiring people with psychotic disorder for entry-level jobs in US and China. One hundred employers (40 from Chicago, 30 from Hong Kong, and 30 from Beijing) were randomly recruited from small size firms and interviewed by certified interviewers using a semi-structured interview guide designed for this study. Content analysis was used to derive themes, which in turn were compared across the three sites using chi-square tests. Although some concerns were raised with equal frequency across sites, comparisons showed that, relative to US employers, Chinese employers were significantly more likely to perceive that people with mental illness would exhibit a weaker work ethic and less loyalty to the company.

#### Weinstein SM, Mermelstein R. Relations between daily activities and adolescent mood: the role of autonomy. J Clin Child Adolesc Psychol. 36(2):182-94, 2007.

This study explored the combined influences of daily activities and autonomy in activity engagement on adolescent daily positive and negative moods. Ecological momentary assessments were used to obtain information about 8th- and 10th-grade students' (N = 517) mood, activities, and situation throughout the day. Mixed-effects regression models examined changes in mood across specific activity categories. Positive mood significantly improved when engaging in numerous activities; negative mood improved during social activities as well as "party" and "hanging out" events but was fairly consistent across other activities. Stronger mood-activity relations were found after controlling for autonomy in activity engagement.

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## Buchman AS, Wilson RS, Boyle PA, Bienias JL, Bennett DA. *Change in motor function and risk of mortality in older persons*. J Am Geriatr Soc. 55(1):11-9, 2007.

OBJECTIVES: To assess the association between change in motor function and mortality. DESIGN: Prospective, observational cohort study. SETTING: Approximately 40 retirement communities across the Chicago metropolitan area participating in the Rush Memory and Aging Project. PARTICIPANTS: Eight hundred thirty-seven community-based older persons without dementia. MEASURE-MENTS: Change in composite measures of motor performance and muscle strength. CONCLUSION: Level and rate of change in strength and motor performance are associated with mortality. The attenuation of the association between strength and mortality by motor performance suggests that motor function is not a unitary process and that its components may vary in their associations with adverse health consequences in older persons.

#### Kaiser R, Le Tertre A, Schwartz J, Gotway CA, Daley WR, Rubin CH. *The effect of the* 1995 *heat wave in Chicago on all-cause and cause-specific mortality*. Am J Public Health. 97 Suppl 1:S158-62, 2007.

We sought to reexamine the effects of the 1995 Chicago heat wave on all-cause and cause-specific mortality, including mortality displacement, using advanced time-series analysis methods. We used Poisson regression with penalized regression splines to model excess mortality and mortality displacement over a 50-day period centered on the day in which the heat wave temperature peaked, adjusting for meteorological and other variables. The 1995 Chicago heat wave substantially effected all-cause and cause-specific mortality, but mortality displacement was limited. Mortality risks and displacement affected Blacks disproportionally. Appropriately targeted interventions may have a tangible effect on life expectancy.

### Kim S, Ting A, Puisis M, Rodriguez S, Benson R, Mennella C, Davis F. *Deaths in the Cook County jail: 10-year report*, J Urban Health. 84(1):70-84, 2007.

The aims of this study were to describe causes of death during the 10-year period between 1995 and 2004 in a large urban jail in Chicago; to compare disease specific mortality rates between the jail population and the general population; to explore demographic and incarceration characteristics of the inmates who died in the jail by cause of death; and to examine gender difference in demographic characteristics, incarceration patterns, and causes of death. A total of 178 deaths occurring in the jail over a 10-year period (1995-2004) were reviewed. Heart disease was the most frequent cause of death in the jail population, followed by cerebrovascular disease and suicide. Mortality rates for heart diseases, infectious/inflammatory conditions and suicide were higher for jail inmates than the general population. Black inmates accounted for the majority of deaths due to illnesses and homicide, and a much higher proportion of white and Hispanic inmates were involved in suicide deaths. Deaths due to drug overdose or withdrawal were disproportionately higher among female inmates compared with male inmates.

## Levine SK, Sachs GA, Jin L, Meltzer D. *A prognostic model for 1-year mortality in old-er adults after hospital discharge*. Am J Med. 120(5):455-60, 2007.

PURPOSE: To develop and validate a prognostic index for 1-year mortality of hospitalized older adults using standard administrative data readily available after discharge. SUBJECTS AND METHODS: The prognostic index was developed and validated retrospectively in 6382 older adults discharged from general medicine services at an urban teaching hospital over a 4-year period. Potential risk factors for 1-year mortality were obtained from administrative data and examined using logistic regression models. RESULTS: Risk factors independently associated with 1-year mortality included: aged 70 to 74 years; aged 75 years and greater; length of stay at least 5 days; discharge to nursing home; metastatic

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cancer; and other comorbidities. In the derivation cohort, 1-year mortality was 11% in the lowest-risk group and 48% in the highest-risk group. CONCLUSION: Reasonable prognostic information for 1-year mortality in older patients discharged from general medicine services can be derived from administrative data to identify high-risk groups of persons.

#### Pae SJ, Carr JA. Ruptured abdominal aortic aneurysms in community practice: age and operative variables predict survival. Am Surg. 73(9):912-6, 2007.

Our objective is to determine if the mortality and functional outcome of patients with ruptured abdominal aortic aneurysms treated at community hospitals is more a function of patient factors and comorbidities or hospital system and surgeon-controlled variables. We used a retrospective review of all patients with infrarenal ruptured abdominal aortic aneurysms treated at three large community hospitals in Chicago from 1996 to 2005. Age and intra-operative factors play a major role in the survival or mortality of patients with ruptured abdominal aortic aneurysms. Short operative time combined with minimizing blood loss and transfusion requirements improve survival, especially in the elderly.

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A O R T A L I T

#### Chávez N, Telleen S, Kim YO. Food insufficiency in urban Latino families. J Immigr Minor Health. 9(3):197-204.

This study presents food insufficiency data from three low income immigrant Latino Chicago communities. Data were collected as part of a larger study of ethnic Latino differences in health and nutrition attitudes/behaviors and child health services use. Face to face interviews were conducted with 320 mothers of Latino children entering school for the first time. Food insufficiency questions from the Radimer/Cornell and NHANES III instruments were used. Participants were 70% Mexican, 22% Puerto Rican and 8% other Latino, reflecting Chicago Latino distribution. Thirty percent (n = 96) reported household food insufficiency, although most was worry about obtaining food, and was due to lack of money or Food Stamps. Some families experienced more severe food access problems, namely adults and children skipping meals, and adults or children going without food for an entire day. Puerto Rican families reported more severe food insufficiency than Mexican families, but there were few other ethnic differences.

### Dunn JE, Weintraub S, Stoddard AM, Banks S. Serum alpha-tocopherol, concurrent and past vitamin E intake, and mild cognitive impairment. Neurology. 68(9):670-6, 2007.

Associations of past dietary vitamin E intake, past and current vitamin E supplement use, and current serum alpha-tocopherol levels, with memory (amnestic) and mixed-domain cognitive impairment in older women, ascertained from an in-depth neuropsychological assessment, were explored. This analysis used baseline data from 526 participants in a single-site ancillary study to the Women's Health Initiative, the Cognitive Change in Women study. There was weak or no evidence of a protective effect of previous vitamin E intake on cognitive function. However, the association of low concurrent serum alpha-tocopherol with memory and mixed impairment merits further exploration.

#### Kim MJ, Lee SJ, Ahn YH, Bowen P, Lee H. Dietary acculturation and diet quality of hypertensive Korean Americans. J Adv Nurs. 58(5):436-45, 2007.

This paper is a report of a study to describe the dietary acculturation of hypertensive and normotensive Korean Americans and native Koreans by comparing dietary pattern and diet quality. A descriptive study of hypertensive and normotensive Korean Americans and native Koreans (n = 398) was conducted in 2003-04, using the 24-hour dietary recall method. Dietary pattern was measured by consumption frequency of Korean, American and common food, and eating outside the home. Diet quality was measured by the revised version of the Diet Quality Index. FINDINGS: Overall Diet Quality Index scores were not statistically significantly different between the two groups after matching. Hypertensive Korean Americans consumed fewer vegetables and fruits, and less sodium and potassium than hypertensive native Koreans. No statistically significant differences were found between hypertensive and normotensive Korean Americans in dietary acculturation.

Suarez-Balcazar Y, Redmond L, Kouba J, Hellwig M, Davis R, Martinez LI, Jones L. Introducing systems change in the schools: the case of school luncheons and vending machines. Am J Community Psychol. 2007;39(3-4):335-45.

This paper illustrates efforts towards systems change in the luncheon program and food vending machines in the Chicago Public Schools. We discuss the different factors that lead to such changes using the framework of the social ecological model and the soft systems methodology, and we analyze how the resulting innovation was implemented and evaluated. First, we present a theoretical perspective to explain factors that influence children's eating patterns from a systems approach. Second, we discuss the antecedent factors that lead to systems change. Finally, we examine challenges to systems change, such as resistance to change, different stakeholder priorities, lack of resources, institutional bureaucracy, and unrealistic funder expectations.

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Bryant Borders AE, Grobman WA, Amsden LB, Collins ET, Holl JL. Factors that influence the acceptability of collecting in-home finger stick blood samples in an urban, low-income population. J Health Care Poor Underserved. 18(1):100-15, 2007.

To examine the acceptability of non-medical, community-based interviewers obtaining blood samples during in-home interviews from low-income study participants. Two separate focus groups were conducted, one with ten non-medical community-based interviewers and the other with eight research participants from a low-income population. Participants and interviewers were comfortable with finger stick blood samples performed in the home. The interviewers felt that adequate training was critical. Participants identified key issues: blood would not be used for other purposes and that the interviewers would be trained to handle blood safely. Both groups felt that it was crucial to communicate the study purpose and results. Proper training of interviewers, organization of supplies, and communication with participants can be combined to maximize acceptance of inhome, finger stick blood sample collection by community-based interviewers among a lowincome population.

#### Cho CC, Oliva J, Sweitzer E, Nevarez J, Zanoni J, Sokas RK. An interfaith workers' center approach to workplace rights: implications for workplace safety and health. J Occup Environ Med. 49(3):275-81, 2007.

This descriptive report characterizes an innovative approach to encourage immigrant workers to access federal and state occupational safety and health programs through an interfaith workers' center. A total of 934 individual records were reviewed, although for any given item, missing data was a limitation. Workers' most frequent concerns focus on pay and discrimination. Recasting occupational safety and health hazards as threats to income and as forms of discrimination may help identify hazards. Diridollou S, de Rigal J, Querleux B, Leroy F, Holloway Barbosa V. Comparative study of the hydration of the stratum corneum between four ethnic groups: influence of age. Int J Dermatol. 46 Suppl 1:11-4, 2007.

Significant work remains to be performed to understand and quantify the ethnic differences in skin properties. In this way, we have carried out a set of in vivo biophysical experiments on the skin of American women from different ethnic populations living in the same environment. Three hundred and eleven American women from four ethnic groups were enrolled in this study. The investigation was performed during the summer season of 2004 on the major relatively distinct ethnic groups of Chicago: African American, Chinese, Caucasian and Mexican. This study has revealed that the hydration of the skin is different according to ethnicity and that the age effects are influenced by ethnicity, suggesting anatomical or physiological property differences in ethnic skin.

#### Eaton DK, Brener ND, Kann L, Pittman V. *High school student responses to different question formats assessing race/ethnicity.* J Adolesc Health. 41(5):488-94, 2007.

In 2005, the format for assessing race/ethnicity on the national Youth Risk Behavior Survey (YRBS) was changed from one to two questions. The 2005 Chicago YRBS included the single-question and two-question formats, providing an opportunity to identify how the change affects reporting of race/ethnicity. Students in grades 9-12 (n = 808) were asked at the beginning, "How do you describe yourself?" with "Hispanic or Latino" as one of several response options. At the end of the questionnaire, students were asked, "Are you Hispanic or Latino?" and then "What is your race?" Regardless of whether the single-question or two-question format was used, 92.0% of students were classified the same when comparing distributions of the four-category race/ethnicity variable. These results suggest self-reported race/ethnicity among high school students is similar regardless of which question format is used, and the changed format will not affect the ability of YRBS data users to conduct trend analysis by race/ethnicity.

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Ш Т Г О

## Mokhlesi B, Tulaimat A, Gluckman TJ, Wang Y, Evans AT, Corbridge TC. *Predicting extubation failure after successful completion of a spontaneous breathing trial*. Respir Care. 52(12):1710-7, 2007.

**OBJECTIVE:** To derive a clinical prediction rule that uses bedside clinical variables to predict extubation failure (reintubation within 48 h) after a successful spontaneous breathing trial. METHODS: This prospective observational cohort study was performed at the Northwestern Memorial Hospital in Chicago, Illinois, which is a large tertiary-care university hospital. Patients were followed after extubation to identify those who were reintubated within 48 h. Three clinical variables predicted reintubation: moderate to copious endotracheal secretions, Glasgow Coma Scale score < or =10 and hypercapnia (P(aCO(2))) > or = 44 mm Hg) during the spontaneous breathing trial. CONCLUSIONS: With our clinical prediction rule, clinicians can predict who will fail extubation despite a successful spontaneous breathing trial.

#### Oyana TJ, Margai FM. Geographic analysis of health risks of pediatric lead exposure: a golden opportunity to promote healthy neighborhoods. Arch Environ Occup Health. 62(2):93-104, 2007.

In this retrospective study, the authors investigated pediatric blood lead levels (BLLs) at 2 threshold levels in neighborhoods across the US city of Chicago, examining geographic associations with demographic risk factors and housing characteristics, using data from large-scale childhood BLL screening records from 1997 through 2003. They used logistic regression and geostatistical methods to assess disease dynamics and probability of elevated BLLs. The results showed a significant decline of elevated BLLs, 74%, compared with a 40% decrease for the lower levels. The Westside and Southside neighborhoods, with a high concentration of minority populations, had the highest prevalence rates, which were significantly associated with living in pre-1950 housing units.

Rogers HS, McCullough J, Kieszak S, Caldwell KL, Jones RL, Rubin C. *Exposure assessment* of young children living in Chicago communities with historic reports of ritualistic use of mercury. Clin Toxicol (Phila). 45(3):240-7, 2007.

The Chicago Department of Public Health (CDPH) and the Centers for Disease Control and Prevention conducted a study to 1) quantify mercury exposure in biological specimens collected from a pediatric clinic or home visit in selected neighborhoods in Chicago, and 2) investigate possible sources of mercury exposure in homes. An exposure assessment study design was chosen to determine whether children living in Chicago communities that historically sold mercury were exposed to mercury vapor. We enrolled and collected biological samples from 306 children aged 2-10 years. In addition, we enrolled 42 children during a door-to-door survey of community residents. We did not find any association between ritualistic mercury use and exposure to mercury.

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Boyle PA, Buchman AS, Wilson RS, Bienias JL, Bennett DA. *Physical activity is associated with incident disability in community-based older persons*. J Am Geriatr Soc. 55(2):195-201, 2007.

**OBJECTIVES:** To examine the association between physical activity and the risk of incident disability, including impairment in activities of daily living (ADLs) and instrumental activities of daily living (IADLs), in community-based older persons free of dementia. DESIGN: Prospective, observational cohort study. More than 1,000 older persons from the Rush Memory and Aging Project, an ongoing longitudinal clinical-pathological study of common chronic conditions of old age participated. MEASUREMENTS: All participants underwent detailed annual clinical evaluations that included assessments of physical activity, ADLs, IADLs, and gait performance. CONCLUSION: For community-based older persons without dementia, physical activity is associated with maintenance of functional status, including a reduced risk of developing impairment in ADLs and IADLs.

Buchman AS, Wilson RS, Boyle PA, Tang Y, Fleischman DA, Bennett DA. *Physical activity and leg strength predict decline in mobility performance in older persons*. J Am Geriatr Soc. 55(10):1618-23, 2007.

OBJECTIVES: To assess the extent to which physical activity and leg strength are associated with change in mobility in older persons. DESIGN: Prospective, observational cohort study. SETTING: Retirement communities across the Chicago metropolitan area participating in the Rush Memory and Aging Project. CONCLUSION: Physical activity and leg strength are relatively independent predictors of mobility decline in older persons. Although physical activity may improve strength, the beneficial effect of physical activity on mobility is likely to involve other pathways.

Fauth RC, Roth JL, Brooks-Gunn J. Does the neighborhood context alter the link between youth's after-school time activities and developmental outcomes? A multilevel analysis. Dev Psychol. 43(3):760-77, 2007.

This article examines links between different measures of after-school time activity participation on youth's developmental outcomes (anxiety/depression, delinquency, and substance use) over 6 years and whether these links are moderated by neighborhood-level variables. The sample (N=1,315) of 9- and 12-year-old youth was drawn from the Project on Human Development in Chicago Neighborhoods (PHDCN), a multilevel, longitudinal study of youth from 80 Chicago neighborhoods. Findings revealed that different types of activities and patterns of participation over time were associated with outcomes for youth and that, to some extent, these outcomes varied with neighborhood characteristics.

Wolin KY, Colangelo LA, Chiu BC, Ainsworth B, Chatterton R, Gapstur SM. Associations of physical activity, sedentary time, and insulin with percent breast density in Hispanic women. J Womens Health (Larchmt). 16(7):1004-11, 2007.

It is unclear whether associations between sedentary time or physical activity and percent breast density are mediated through serum insulin levels or insulin resistance, factors also associated with physical activity and breast cancer risk. In the Chicago Breast Health Project phase II pilot study, detailed information on health and lifestyle factors, including sitting time and total physical activity over the previous 7 days, was collected from 95 Hispanic women aged 40-77 years. We also assessed percent breast density and measured fasting serum insulin and glucose to calculate the Homeostasis Model Assessment index, a measure of insulin resistance. These results are consistent with our previous finding of an association between sedentary time and percent breast density and suggest that insulin or insulin resistance is unlikely to mediate this relation.

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ACT V

PHYSICAL

Gilliam ML, Berlin A, Kozloski M, Hernandez M, Grundy M. Interpersonal and personal factors influencing sexual debut among Mexican-American young women in the United States. J Adolesc Health. 41(5):495-503, 2007.

The purpose of this study is to better understand factors influencing the age of sexual initiation among Latina youth. We enrolled a convenience sample of predominantly Mexican-American adolescent and young adult women from the west side of Chicago. A total of 271 participants were included in the analysis. Bi-variate and multivariable analyses were conducted to determine factors associated with age of first sexual intercourse. This study provides a model that can be used to better understand Latina sexual decision making. Our findings might also inform future programs for Latinas, as they suggest that increasing girls' feelings of personal control over decisions regarding sexual debut and helping Latino parents to communicate strong messages about educational achievement, pregnancy, and sexuality may lead to positive health behaviors.

#### Gilliam ML, Hernandez M. Factors influencing the acceptability of coitus interruptus among Latina teens and young adults. Women Health. 45(3):65-83, 2007.

The purpose of this study was to examine factors associated with the acceptability of coitus interruptus, or withdrawal, as a contraceptive method among a cohort of Latinas. We conducted face-to-face interviews with a cohort of young, urban Latinas in Chicago to assess factors associated with willingness to use withdrawal. Two hundred seventy-three sexually experienced women aged 13-25 years were included in the analysis. One hundred sixty-two women expressed willingness to use withdrawal. In a multivariable analysis, factors associated with willingness to use withdrawal included belief in its efficacy, having communicated with one's partner about waiting to have sex, and lack of knowledge of oral contraceptives.

Kennedy SB, Nolen S, Applewhite J, Pan Z, Shamblen S, Vanderhoff KJ. A quantitative study on the condom-use behaviors of eighteen- to twenty-four-year-old urban African American males. AIDS Patient Care STDS. 21(5):306-20, 2007.

This research study sought to develop, pilot test, and assess a brief male-centered condom promotion program for urban young adult African American males. After recruitment of study participants from hang-out spots and street intercepts, study participants were self-administered a baseline survey regarding their perceived condom-use behaviors prior to random assignment to program conditions. While the occurrence of HIV/STD-related risk behaviors were highly prevalent among this population; importantly, regression analyses revealed that sexual debut, favorable attitudes toward condom use, social or personal connectedness to HIV/STDs, health beliefs, perceived susceptibility, unprotected sexual encounters, and refusal skills were predictive of retrospective condom use while positive reasons to use condoms, condom-use beliefs, condom-carrying, health belief, unprotected sexual encounters and refusal skills were also predictive of prospective condom-use intentions.

#### **ALCOHOL**

Hearst MO, Fulkerson JA, Maldonado-Molina MM, Perry CL, Komro KA. Who needs liquor stores when parents will do? The importance of social sources of alcohol among young urban teens. Prev Med. 44(6):471-6, 2007.

**OBJECTIVES:** Examine sources of alcohol over time in a large, ethnically diverse adolescent population from a poor, urban environment. METHODS: Surveys were administered at four time points (6th-8th grades) assessing demographic characteristics, past year alcohol use and sources of alcohol to youth in Chicago, Illinois 2002-2005. Growth curve analysis was used to examine alcohol access trends among all alcohol using youth and consistent alcohol users. Interactions by race and gender were tested. RESULTS: Social sources of alcohol were the most prevalent source over time. Parents were the primary source of alcohol, but their prominence significantly decreased over time. Taking alcohol from home, and getting alcohol from other adults, individuals under age 21, and commercial sources significantly increased as sources of alcohol over time.

Komro KA, Maldonado-Molina MM, Tobler AL, Bonds JR, Muller KE. *Effects of home access and availability of alcohol on young adolescents' alcohol use*. Addiction. 102(10):1597-608, 2007.

The purpose of the present study was to examine the effects of parental provision of alcohol and home alcohol accessibility on the trajectories of young adolescent alcohol use and intentions. Data were part of a longitudinal study of alcohol use among multi-ethnic urban young adolescents who were assigned randomly to the control group of a prevention trial. Data were collected from a cohort of youth, and their parents, who attended public schools in Chicago, Illinois (2002-2005). Student report, at age 12, of parental provision of alcohol and home alcohol availability, and parental report of providing alcohol to their child and the accessibility of alcohol in the home, were associated with significant increases in the trajectories of young adolescent alcohol use and intentions from ages 12-14 years. Student report of receiving alcohol

from their parent or taking it from home during their last drinking occasion were the most robust predictors of increases in alcohol use and intentions over time.

### Parks CA, Hughes TL. Age differences in lesbian identity development and drinking. Subst Use Misuse. 42(2-3):361-80, 2007.

Relatively little is known about the sexual identity development process in lesbians and even less about lesbians' drinking patterns during this process. Growing societal tolerance and visibility of sexual minorities over the past 35 years has likely created substantially different environments and experiences of coming out for individuals of different age cohorts. Data from the Chicago Health and Life Experiences of Women study provided the opportunity to examine relationships between variables associated with lesbian identity development and alcohol use-related problems in three age cohorts of self-identified lesbians.

Pasch KE, Komro KA, Perry CL, Hearst MO, Farbakhsh K. Outdoor alcohol advertising near schools: what does it advertise and how is it related to intentions and use of alcohol among young adolescents? J Stud Alcohol Drugs. 68(4):587-96, 2007.

The objectives of this study were to (1) document and describe all outdoor alcohol advertisements surrounding schools and (2) examine the association between exposure to alcohol advertising in sixth grade and youth alcohol use, intentions, norms, and attitudes in eighth grade. Participants included 2,586 sixth-grade students in the 2002-2003 school year. Exposure to alcohol advertising around schools at the end of sixth grade was found to predict alcohol intentions at the end of eighth grade.

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C S E

SUBSTANC

#### DRUGS

#### Ensminger ME, Juon HS, Green KM. Consistency between adolescent reports and adult retrospective reports of adolescent marijuana use: explanations of inconsistent reporting among an African American population. Drug Alcohol Depend. 89(1):13-23, 2007.

This study examines the consistency of marijuana self-reports from adolescence and adulthood and what characterizes inconsistent reporting among a cohort of African American first graders followed longitudinally from age 6 to 32 (N=599, 51% female). Self-reported lifetime adolescent marijuana use (ages 16-17) and retrospective reports at age 32 were combined to categorize respondents as consistent reporters of nonuse (22%), consistent reporters of use (42%), adult recanters (19%), adolescent underreporters (8%), and inconsistent reporters of age of initiation (9%). Overall, about 64% of the population were consistent in their reports of adolescent marijuana use from adolescence to age 32. Multivariate logistic regression analyses found that recanters reported less marijuana use as adolescents, lower parental supervision during adolescence, lower deviant behavior as an adult, and stronger anti-drug values as adults than did consistent reporters. Adolescent underreporters reported less assault behaviors and less alcohol use as adolescents and had lower first grade math achievement than consistent reporters.

Garofalo R, Mustanski BS, McKirnan DJ, Herrick A, Donenberg GR. Methamphetamine and young men who have sex with men: understanding patterns and correlates of use and the association with HIV-related sexual risk. Arch Pediatr Adolesc Med. 161(6):591-6, 2007.

OBJECTIVE: To examine patterns, consequences, and correlates of methamphetamine use among adolescent and young adult men who have sex with men (YMSM). DESIGN: Descriptive, bivariate, and hierarchical regression analyses of cross-sectional data. SETTING: Howard Brown Health Center, a community-based facility in Chicago, Ill, from August 2004 to September 2005. PAR-TICIPANTS: Three hundred ten YMSM who completed an anonymous, computer-assisted survey. CONCLUSIONS: A substantial percentage of YMSM in this sample used methamphetamine. Methamphetamine use is a public health problem with significant implications for the health and well-being of YMSM. Methamphetamine use was associated with human immunodeficiency virus-related risk, and patterns of use were predicted by demographic data, sexualized social contexts, and psychological variables.

Hasnain M, Levy JA, Mensah EK, Sinacore JM. Association of educational attainment with HIV risk in African American active injection drug users. AIDS Care. 19(1):87-91, 2007.

This study explored the association between educational attainment and HIV/AIDS risk among African American active injection drug users (IDUs) in Chicago, US. Using snowball sampling techniques, 813 African American active IDUs were recruited for semi-structured interviewing and HIV counseling, testing and partner notification. Logistic regression examined the relationship between level of education attained and HIV risk behaviors and HIV serostatus. The significant associations found between educational attainment and certain HIV risk behaviors and HIV serostatus have implications for tailoring HIV prevention efforts for less educated African American IDUs.

Huo D, Ouellet LJ. Needle exchange and injection-related risk behaviors in Chicago: a longitudinal study. J Acquir Immune Defic Syndr. 45(1):108-14, 2007.

OBJECTIVE: To examine whether needle exchange program (NEP) use by injecting drug users (IDUs) affects injection risk behaviors over time. METHODS: Between 1997 and 2000, 901 IDUs in Chicago were recruited for a cohort study from a multisite NEP and an area with no NEP. Participants were interviewed and tested for HIV at baseline and 3 annual follow-ups. Non-NEP users received HIV prevention services consistent with the Indigenous Leader Outreach Model. Randomeffect logistic models were used to compare 5 injection-related risk behaviors between NEP users and nonusers. CONCLUSIONS: NEP

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use facilitates long-term reductions in injection risk practices, and the reductions are in addition to the effects of a behavioral intervention alone.

#### Johnson TP, Fendrich M. *Homelessness and drug use: evidence from a community sample.* Am J Prev Med. 32(6 Suppl):S211-8, 2007.

Data are presented from a 2001 community survey in Chicago, Illinois that collected information regarding histories of drug use behaviors and homeless experiences from 627 adults aged 18 to 40. Using covariance structure analyses, two alternative models of the association between drug use and homelessness were evaluated: social selection versus social adaptation processes. These findings provide evidence consistent with the social adaptation perspective, as early homeless experiences were predictive of subsequent drug use behavior in this community sample. Social selection processes were observed in bivariate, but not in multivariate, analyses. Efforts to prevent homelessness may also contribute to the prevention of drug abuse.

## Scott G, Thomas SD, Pollack HA, Ray B. Observed patterns of illicit opiate overdose deaths in Chicago, 1999-2003. J Urban Health. 84(2):292-306, 2007.

This article explores trends and correlates of Chicago's opiate-related overdose (OD) deaths. We manually examined data from every death certificate filed between 1999 and 2003 to identify all Chicago residents' accidental deaths involving acute intoxication with illicit opiates, OD, or opiate poisoning. The analysis includes an examination of contextual characteristics in 77 Chicago neighborhoods. Negative binomial regression analysis permits the calculation of incidence rate ratios associated with time trends. In summary, illicit opiate OD in Chicago peaked in 2000 and markedly declined by 2003. Opiate OD continues to pose a major threat of mortality to Chicago adults.

#### Singh S, Trivedi A, Adhikari T, Molnar J, Arora R, Khosla S. Cocaine-related acute aortic dissection: patient demographics and clinical outcomes. Can J Cardiol. 23(14):1131-4, 2007.

BACKGROUND: To compare the demographics, inpatient mortality and short-term survival following hospital discharge between cocaine-using and non-cocaine-using patients presenting with acute aortic dissection. METHODS: Retrospective analysis of 46 consecutive patients admitted with the diagnosis of acute aortic dissection at the Mount Sinai Hospital (Chicago, USA) between 1996 and 2005. CONCLUSIONS: Patients presenting with acute a ortic dissection temporally related to cocaine use are more likely to be younger, smokers, have higher prevalence of hypertensive crises, more likely to have type B aortic dissection and may have a higher mortality following hospital discharge, possibly due to continued cocaine use and recurrent aortic dissection.

#### TOBACCO

Kandel DB, Hu MC, Griesler PC, Schaffran C. On the development of nicotine dependence in adolescence. Drug Alcohol Depend. 91(1):26-39, 2007.

This article describes the development and predictors of DSM-IV nicotine dependence in adolescence when tobacco use is initiated. In a two-stage design, a survey was administered to 6th-10th graders in the Chicago Public Schools to select a cohort of adolescents. Household interviews were conducted with adolescents five times and with one parent three times over 2 years. The analytical sample includes 353 youths, who started using tobacco within 12 months preceding Wave 1 or between Waves 1-5. Pleasant initial sensitivity to tobacco and number of cigarettes smoked the prior month predicted both outcomes. Parental dependence predicted the full syndrome. The predictive significance of the initial smoking experience and parental dependence highlight the potential importance of genetic factors in the etiology of nicotine dependence.

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**S** S

**SUBSTANC** 

#### Kassel JD, Greenstein JE, Evatt DP. Smoking topography in response to denicotinized and high-yield nicotine cigarettes in adolescent smokers. J Adolesc Health. 40(1):54-60, 2007.

The objective of this study was to explore the smoking topography of adolescent smokers. In the present study, we assessed several topographical indices of smoking (e.g., puff volume, puff number) in a sample of 35 light, adolescent smokers. Moreover, we examined whether smoking behavior is different in response to smoking a denicotinized relative to a high-yield, nicotine cigarette. These findings suggest that adolescent smokers do titrate their nicotine intake in response to smoking denicotinized cigarettes, but do so not by taking larger puffs or smoking more quickly, but by simply taking more puffs per cigarette. Implications of the findings and future directions for this type of research with adolescents are discussed.

#### Tuvlin JA, Raza SS, Bracamonte S, Julian C, Hanauer SB, Nicolae DL, King AC, Cho JH, Cho JH. *Smoking and inflammatory bowel disease: trends in familial and sporadic cohorts.* Inflamm Bowel Dis. 13(5):573-9, 2007.

We sought to define the age-dependent effects of smoking on the development of ulcerative colitis (UC) and Crohn's disease (CD) in familial and sporadic cohorts. University of Chicago patients diagnosed with UC or CD between 1990 and 2002 were surveyed about their tobacco use relative to their diagnosis. Smoking trends were used to estimate age-dependent odds ratios and the attributable risks of smoking in the IBD cohort compared to in the general population. Ex-smokers make up an increasing percentage of older patients diagnosed with UC, accounting for more than 35% of the attributable risk of late onset (>45 years) UC and a large component of the second peak in diagnosis. Current smokers account for a large percentage of patients diagnosed at a younger age with familial CD but not with sporadic CD. Families with IBD should be counseled that early tobacco use significantly increases the risk of developing CD or, if an ex-smoker, UC at a young age.

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Aaron DJ, Hughes TL. Association of childhood sexual abuse with obesity in a community sample of lesbians. Obesity (Silver Spring). 15(4):1023-8, 2007.

Our goal was to examine the association between childhood sexual abuse (CSA) and obesity in a community-based sample of selfidentified lesbians. A diverse sample of women who self-identified as lesbian was recruited from the greater Chicago metropolitan area. Women (n=416) were interviewed about sexual abuse experiences that occurred before the age of 18. Self-reported height and weight were used to calculate BMI and categorize women as normal-weight, overweight, obese, or severely obese. The relationship between CSA and BMI was examined using multinomial logistic regression analysis. Mean BMI was significantly higher among women who reported CSA than among those who did not report CSA. CSA was significantly related to weight status; 39% of women who reported CSA compared with 25% of women who did not report CSA were obese. After adjusting for age, race/ethnicity, and education, women who reported CSA were more likely to be obese or severely obese.

Hicks C, Zhu X, Luke A, Kan D, Adeyemo A, Wu X, Cooper RS. A genome-wide scan of loci linked to serum adiponectin in two populations of African descent. Obesity (Silver Spring). 15(5):1207-14, 2007.

The objectives were to identify quantitative trait loci linked to serum adiponectin concentration and to estimate heritability in two populations of African descent. Genome-wide microsatelitte markers were typed in an African-American population consisting of 203 families from the Chicago area and in a Nigerian Yoruba population consisting of 146 families. Linkage analysis was performed to identify loci. Variance component model was used to estimate heritability. Consistency of the finding on chromosome 11 suggests that this region is likely to be involved in regulation of adiponectin, either through a primary influence on hormone levels or through pathways influencing body composition. These results suggest that adiponectin could be a potential therapeutic target for obesity.

Wang Y, Liang H, Tussing L, Braunschweig C, Caballero B, Flay B. Obesity and related risk factors among low socio-economic status minority students in Chicago. Public Health Nutr. 10(9):927-38, 2007.

OBJECTIVES: To assess overweight and related risk factors among urban low socioeconomic status (SES) African-American adolescents in an attempt to study the underlying causes of ethnicity and gender disparities in overweight. METHODS: Cross-sectional data collected on anthropometric measures, diet, physical activity and family characteristics from 498 students in grades 5-7 in four Chicago public schools were analysed to study the risk factors for overweight using stepwise regression analysis. RESULTS: Overall, 21.8% were overweight (body mass index (BMI) >/= 95th percentile); and 39.8% had a BMI >/= 85th percentile. Compared with national recommendations, they had inadequate physical activity and less than desirable eating patterns. Their vegetable and fruit consumption was low, and they consumed too many fried foods and soft drinks. Gender, physical activity and pocket money were significant predictors of overweight. CONCLUSIONS: Several factors in the students' behaviours, school and family environments may increase overweight risk among this population.

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By Population Adolescent/Teen/Young Adult, 7, 10, 15-16 26-27, 32, 34-40 Asian, 31 Black/African-American, 4, 8, 10, 12, 16-18, 25-27, 35, 37, 40 Children, 3-5, 10, 17, 19-21, 25, 27, 33-34 Female, 6, 8, 19, 24, 31-32, 34-36, 40 Hispanic/Latino, 3-4, 6, 13, 25, 31, 34-35 HIV-positive, 18-20, 23 Homeless, 23, 38 Immigrants, 3, 31-32 Incarcerated, 20, 22, 26, 29 IV Drug Users, 15, 19, 37 Lesbian, Gay, Bisexual and Transgender, 17, 22-23, 36-37, 40 Low-income, 4-5, 13, 16, 18, 26-27, 31-32, 40 Male, 8, 17, 22-23, 26, 35, 37 Senior/Older Persons, 3, 6-7, 13-15, 23, 29, 31, 34 By Special Topic Disparities, 4-6, 8-9, 25, 28 Violence, 23, 25, 27, 40



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Department of Public Health Providing the Prescription for a Healthy City

Dr. Terry Mason, Commissioner