

1993 Interim House Committee on Public Health and Welfare

Committee Action Index

October 1, 1993

Health Care Reform in Kansas -- Staff review of Kansas actions since
1988: Report by Kansas Commission
on the Future of Health Care, Inc.

Smoking in Child Care Facilities -- Hearing on Smoking in licensed
day care facilities and family day
care homes

Review of bill draft -- no bill introduced

MINUTES

HOUSE COMMITTEE ON PUBLIC HEALTH AND WELFARE

October 1, 1993
Room 526-S -- Statehouse

Members Present

Representative Joann Flower, Chairperson
Representative Susan Wagle, Vice-Chairperson
Representative Tom Bruns
Representative Greta Hall-Goodwin
Representative Jerry Henry
Representative Carlos Mayans
Representative Jim Morrison
Representative Rocky Nichols
Representative Melvin Neufeld
Representative Kay O'Connor
Representative Ellen Samuelson
Representative Forrest Swall
Representative Alex Scott
Representative Galen Weiland
Representative Elaine Wells

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Members Absent

Representative Tom Bishop
Representative Joel Rutledge
Representative Carol Sader

Staff Present

Norman Furse, Revisor of Statutes Office
Emalene Correll, Kansas Legislative Research Department
William Wolff, Kansas Legislative Research Department
Nikki Feuerborn, Secretary

Conferees

Dr. Barbara Langner, Kansas Commission on the Future of Health Care, Inc.
Myra Christopher, Kansas Commission on the Future of Health Care, Inc.

Representative Carolyn Weinhold
Christine Ross-Baze, Bureau of Adult and Child Care
Cheryl DeBrot, Kansas Respiratory Care Society
Pamela K. Shaw, M.D., Kansas City
Kharon Hunter, Day Care Provider, Topeka
Lorrie O'Neil, Day Care Provider, Topeka
Shirley Norris, Kansas Administration for the Education of Young Children

Others Attending

See attached list.

The meeting was called to order by the Chairperson, Representative Flower, at 9:15 a.m. Attachments enclosed in Committee members packets were:

Attachment 1: Memo on Health Care Reform Legislation

Attachment 1A: Glossary on Health Care A to Z from the *Congressional Quarterly*, September 25, 1993

Morning Session

Health Care Reform in Kansas

Dr. Barbara Langner, Executive Director of the Kansas Commission on the Future of Health Care, Inc., gave the history of the Commission's inception, its charge, membership, and an update on the critical issues health forums held around the state (Attachments 2 and 2A). Two of the types of meetings were designed to elicit active participation of Kansas citizens in the development of a long-range health policy plan (town meetings and health values forums) and utilized a balloting procedure the results of which have been analyzed. The results are included in the report. The third type, citizen input meetings, are to begin in October, are intended to ensure that the plan reflects the social values of all Kansans. The prototype for this citizen input procedure was developed by the Public Agenda Foundation and the Georgia Health Decisions Project model which had a \$1.5 million grant for the development of the methodology. Dr. Langner explained the proposal of the Commission which is a blended approach to health care reform, capitalizing upon the strengths of the market-based and "single payor" philosophies to produce needed changes in our current system of delivering and financing health care.

Dr. Langner showed the Committee the film, on *Condition Critical - The American Health Care Forum* and a ballot which is used with the presentation (Attachments 3 and 4). Even though our health care is among the finest, nearly everyone is unhappy with the system of delivery and cost. The three choices are to make a good system better, to establish a national insurance program that covers everyone equally, or to make employers provide insurance for their workers and have the government insure everyone else. The average individual now spends \$6,000 a year on taxes and insurance for health care and costs are escalating. As a result, a choice needs to be made and made soon.

The last report of the Kansas Commission on the Future of Health Care, Inc., was presented to the Committee (Attachment 5).*

Myra Christopher, Vice-Chair of the Commission, led the Committee through a series of decision making exercises regarding the allocation and characteristics of an ideal health care system (Attachment 6). These questionnaires were used in the town meetings forums held in Kansas. Attendance at the forums was not representative of the general population even though there was extensive advertising by major news media in the state. A larger percentage of health professionals and providers attended than general public. It was suggested by a member of the Committee that the form could have included a question on whether the respondent had health insurance or not, and if so, what type, and who was the payer. Of the surveys returned, one-third wanted government run programs, one-third wanted a pay or play plan, and one-third had no opinion.

Kansas Legislative Research Department staff presented a memo on Health Care Reform Legislation enacted in Kansas (Attachment 1). They reviewed the purpose and composition of the 12-member Joint Committee on Health Care Decisions for the 1990s; S.B. 403 which created the quasi-governmental corporation known as the Kansas Commission on the Future of Health Care, Inc.; and Sub for S.B. 118, enacted in 1993, which mandates the creation of a health care database and health-related information. The staff described health insurance reforms applicable to groups, individuals, and the implementation of universal claim forms and uniform electronic data exchange. Legislation regarding health care for the indigent and those receiving Medical Assistance was explained as was health care legislation covering women and children, including infant and toddler programs, immunizations, child health assessments, and the Kansas Healthy Kids Program. The creation of the Kansas University Medical Center Medical Student Loan Program, the medical residency bridging program to assist physicians in rural Kansas, the collaborative nurse practitioner program, KUMC contract authority, KUMC management study and integrated computer system, and scholarship programs for nursing, osteopathic, optometry, and ARNP education were reviewed. Healing arts referrals, ambulatory surgical centers, and rural health legislation were also addressed.

The Chairperson recessed the Committee for lunch.

Afternoon Session

Smoking in Day Care Facilities

A memo, *Facts About Secondhand Smoke* was distributed by personnel of the Kansas Department of Health and Environment (KDHE) (Attachment 7). The Revisor presented information on current definitions of the classification of homes for children including licensed day care homes for children and registered family day care homes (Attachment 8).

*Attachment 5 is on file in Kansas Legislative Research Department, but is not included with the minutes filed with Legislative Administrative Services.

Representative Carolyn Weinhold presented testimony in favor of legislation that would prohibit smoking in the physical confines of any family day care home or licensed day care homes when unrelated children are in care (Attachment 9). This represents a compromise in that smoking could take place when such children were not present and outside the home. Legislation of this type would also be an educational tool for many providers and parents who do not recognize the dangers of second hand smoke. The fiscal note for the bill is under \$5,000. Enforcement would be difficult and would have to depend on the cooperation of providers and reports of infractions by parents of children in day care.

Chris Ross-Baze, Director of Child Care Licensing and Registration of the Bureau of Adult and Child Care, KDHE, gave statistics on the dangers to children of exposure to second-hand smoke to children (Attachment 10). Lower respiratory tract infections such as pneumonia and bronchitis, asthma, middle ear disease, and reduced lung function are special health hazards for these exposed children. Banning smoking in day care facilities would encourage young people not to start smoking. The City of Topeka passed a no smoking ordinance which applies to enclosed public places about six years ago. This restriction was made applicable to family day care homes in Topeka in the past two to three years. Day care providers are prohibited from smoking in vehicles while transporting children. The Department supports a statutory ban on smoking inside the entire day care facility during the hours of operation when children who are not relatives are present.

Cheryl DeBrot of the Kansas Respiratory Care Society presented information on a recent study published in the *American Journal of Pediatrics* regarding children subjected to a smoking environment (Attachment 11). Lower respiratory infections were three times greater than those in a nonsmoking environment. Asthmatic children's conditions were significantly worsened by being subject to environmental tobacco smoke (ETS) as were middle ear problems.

Brian Gilpin of Tobacco Free Kansas asked the Committee to please support the measure to prohibit smoking in all day care homes (Attachment 12). Smoking is currently prohibited in licensed day care centers.

Pamela K. Shaw, M.D., presented testimony supporting her statement that passive smoking may be the most important source of environmental contamination and is the etiology for some of the most common childhood illnesses (Attachment 13).

Kharon Hunter, a family child care provider for more than 26 years, supports a bill which would disallow smoking in day care homes (Attachment 14).

Lorrie O'Neill, a licensed day care provider in Topeka, told the Committee that since she had stopped smoking in her home, her two asthmatic children have improved (Attachment 15).

Shirley A. Norris, Kansas Association for the Education of Young Children, stated support for the prohibition of smoking in licensed and registered family child care homes (Attachment 16). When a private home is licensed or registered by the state to become a family day care home, it is no longer a private home but a place of business and must abide by state statutes. Prohibiting smoking in all out-of-home care is in the best interest of Kansas children.

A question from the Committee alluded to the possibility of flawed data from KDHE regarding the dangers of secondhand smoke. Dr. Shaw said, if the data were overblown by 3 percent to 10 percent, the effect of secondhand smoke is still significant enough to cause illness in children. Smoke is the most powerful allergin in our environment. Dr. Shaw said the reported 9 percent to

10 percent increase in asthma is attributable to ETS. The average annual hospitalization for these children is from two days to three months. Parents are more likely to reduce their smoking if the children are in smoke-free environments during the day.

In response to questions, it was stated registered day care homes are not inspected unless there is a complaint so no smoking would become part of the written provider orientation and education. All licenses or registrations would have to be reissued with a no smoking regulation attached or an addendum to the license or registrations would have to be mailed out. Possibilities for penalties for infractions could be a fine for the first and second reported offenses and revocation of the license or registration for the third offense.

Committee members voiced concern as to whether we are over-reacting to a problem which concerns a very small number of the population. Probably 20 percent to 30 percent of all family day care providers or someone in the family smokes. There are 250,000 Kansas children in day care at least part of the day. If a child comes from a smoking environment home, smoking in a day care home would probably not make the child's problems any worse. Comments regarding the invasive and intrusive nature of the proposed legislation and the inability to enforce it were made by several members. Perhaps the \$5,000 proposed in the fiscal note would be better spent on educating parents about the dangers for their children of smoking.

The Revisor reviewed a bill draft (Attachment 17).** It was noted the bill would allow smoking outside on the premises of a day care home. Discussion ensued regarding adding "compensation" to Line 19 of the bill or to add language to make it clear it includes a registered family day care home. A member moved to introduce the bill as a Committee bill. Another member seconded the motion. Motion failed by a vote of 8 to 5.

The meeting adjourned at 4:07 p.m.

Prepared by Emalene Correll

Approved by Committee on:

November 16, 1993

(Date)

**Attachment 17 is on file in the Kansas Legislative Research Department, but is not included with the minutes filed with Legislative Administrative Services.

Guest List for October 1, 1993

Carolyn Middendorf, KSNA, Topeka
Dave Charay, HCC, Topeka
Annette Silvert, KAHA, Topeka
Trix Niernberger, KHKC, Topeka
Chip Wheelen, Kansas Medical Society, Topeka
Larry Pitman, KFMC, Topeka
Steve Potsic, KDHE, Topeka
Alan Cobb, Wichita Hospitals, Wichita
Bill Pitsenberger, Blue Cross, Topeka
Jim McBride, Observer, Topeka
Mary Ellen Conlee, St Francis Regional Medical Center, Wichita
Bill Sneed, HIAA, Topeka
Thelma Hunter Gordon, SRS, Topeka
Brian Gilpin, Tobacco Free Kansas Coalition, Topeka
Pam Shaw, M.D., Kansas City
Chris Ross-Baze, KDHE, Topeka
Kharon Hunter, Child Care, Topeka
Lorrie O'Neil, Child Care, Topeka
Jim Lumig, Western Resources, Topeka

MEMORANDUM

Kansas Legislative Research Department

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May 27, 1993

To: Joint Committee on Health Care Decisions for the 1990s and Interested Parties
Re: Health Care Reform Legislation

Government Structure and Health Care Reform

Joint Committee on Health Care Decisions

H.B. 2609 created in 1990 a 12-member Joint Committee on Health Care Decisions for the 1990s. The members of the Joint Committee are to be the chairperson or a member designated by the chairperson and the ranking minority member or a member designated by the ranking minority member of each of the following standing committees of the Legislature: the House and the Senate Committees on Public Health and Welfare; the House Committee on Appropriations and the Senate Committee on Ways and Means; and the House Committee on Insurance and the Senate Committee on Financial Institutions and Insurance. The chairperson of the Joint Committee will be a House member designated by the Speaker of the House in odd-numbered years and a Senate member designated by the Senate Committee on Organization, Rules and Calendar in even-numbered years. The bill directs the Joint Committee on Health Care Issues for the 1990s to address policy priorities appropriate for health care in Kansas; problems of access to health care services; rural health care issues; coordination of the delivery of health care services; financing of health care by the public and private sectors; initiatives in health care policy, delivery, and financing developed by the public and private sectors in other states and by the federal government; and such other matters relating to health care in Kansas as directed by the Joint Committee. The Joint Committee is authorized to introduce legislation and will be subject to the same restrictions on meetings as other joint committees of the Legislature.

Commission on Future of Health Care

S.B. 403 created in 1991 a quasi-governmental corporation that is to be known as the Kansas Commission on the Future of Health Care, Inc. The purpose of the Commission is: (1) to develop a long-range health care policy plan, including both short and long-term strategies; (2) to identify social values of Kansans; and (3) to provide a forum for Kansans to participate in the development of health policy. The Commission is charged with involving interested citizens directly in the development of health policy by establishing a network of "town hall" meetings throughout the state to allow Kansans to participate in open discussion about health policy matters. Commission reports required by the act are to include proposals for new laws and recommendations for changes in existing laws and rules and regulations, and the Commission is to monitor such recommendations to encourage their implementation. The Kansas Commission on the Future of Health Care, Inc., is

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given specific powers enumerated in the legislation as well as those other powers necessary to achieve the purposes of the Commission, including the authority to apply for and accept donations, grants, and services or property from the federal government, any governmental agency, any not-for-profit entity, and from for-profit entities in amounts not in excess of \$20,000. The Commission is directed to report at least semiannually to the Governor and to the Joint Committee on Health Care Decisions for the 1990s concerning the activities of the Commission and any findings and recommendations developed by the Commission. The final report of the Commission is due on or before June 30, 1994.

The Commission is exempt from specified taxes levied by the state, exempt from state purchasing laws, and may request assistance from legislative and other state agencies. All officers and employees of the Commission are to be considered to be state employees and the Commission itself considered a state agency for payroll, deferred compensation, retirement, employment security, workers' compensation, health benefits, Social Security, and tax purposes. Nothing in the bill is to be construed as placing any officer or employee of the Commission in the civil service system.

The Commission on the Future of Health Care is to be governed by an eleven-member board of directors composed of seven directors appointed by the Governor from nominees submitted by organizations set out in the bill and a person trained in medical and health care ethics and four additional directors, who are not providers of health care, appointed by the majority and minority leadership of the House and Senate. Directors will serve until July 1, 1994, when the provisions of the act expire, and will elect a chair and vice-chair from among the membership of the board.

S.B. 403 makes a "no limit" appropriation of all moneys raised under the provisions of the legislation for FY 1992 and credited to a special revenue fund created by the bill available for expenditure by the Commission. Substitute for H.B. 2640 provides for the transfer of \$50,000 from the State General Fund to the Future of Health Care Fund created by the bill for operating expenditures in FY 1992.

Health Care Database

Sub. for S.B. 118 created in 1993 a new act under which a health care database is to be created and health-related information is to be developed.

The bill creates a seven-member health care data governing board which is directed to develop policy regarding the collection of health data and procedures for ensuring the confidentiality and security of the data collected. The board, which is to include appointees of the Kansas Medical Society, the Kansas Hospital Association, the Executive Vice-Chancellor of the University of Kansas School of Medicine, and members appointed by the Governor representing health insurers or other commercial payors, adult care homes, an institute or center associated with the University of Kansas Department of Health Services Administration, and consumers, will be chaired by the Secretary of Health and Environment or the Secretary's designee. The Secretaries of Health and Environment and Social and Rehabilitation Services and the Insurance Commissioner or their designees are to serve as nonvoting members of the board. The chairperson of the health care data governing board is authorized to appoint a task force or task forces composed of interested citizens and providers of health care to study technical issues associated with the collection of health care data. At least one member of any such task force must be a member of the board.

Under the provisions of Sub. for S.B. 118, the Secretary of Health and Environment is to administer the health care database and to receive data from medical care facilities, psychiatric facilities, and third-party payors who are required by the new legislation to submit data annually to the Secretary as prescribed by the health care governing board created by the bill. The Secretary,

as directed by the health care data governing board, may contract with an organization that is experienced in health care data collection to collect data from medical care facilities and to build and maintain the database. The Secretary is required to adopt rules and regulations, approved by the board, governing the acquisition, compilation, and dissemination of all data collected pursuant to the act. The Secretary may make data available to interested parties on the basis prescribed by the board and directed by rules and regulations.

The Secretary of Health and Environment is required to make an annual report to the Governor and the Joint Committee on Health Care Decisions for the 1990s. Three years after enactment of the legislation a performance audit is to be conducted, either by or under contract to the Legislative Post Auditor, for the purpose of identifying total costs to the state and data providers and the benefits of the health care data program. The audit report is to be submitted to the Legislature at the beginning of the 1997 Legislative Session.

The Department of Health Services Administration of the University of Kansas and any institute or center established in association with the Department is authorized by Sub. for S.B. 118 to request data from public, private, and quasi-public entities for the purposes of conducting research, policy analysis, and the preparation of reports describing the performance of the health care delivery system. The Department may request data for the same purposes from any quasi-public or private entity which has data deemed necessary by the Department of Health Services Administration.

Health Insurance Reform

(a) Group

Underwriting in Group Health Insurance

S.B. 539, enacted in 1988, amended K.S.A. 40-2209 which related to group accident and health insurance, to prohibit any policy providing benefits to any member of a single employer group from containing any provision preventing any employee from insurance coverage, with some exceptions. An employee or dependent who did not enroll by the end of an open enrollment period could be subject to a waiting period, not to exceed one year, for any preexisting condition and any hospitalization in progress at the time of enrollment need not be covered. The group plan could provide for participation requirements and define "full-time" employee for the purposes of participation.

Health Insurance Data

H.B. 3027, passed in 1990, requires the Insurance Commissioner, starting in 1991, to develop or approve statistical plans for the filing of loss and expense experience by health insurance companies, HMOs, and Blue Cross/Blue Shield. The data must be available at least annually to aid the Commissioner and others in determining whether the rates being charged are, in fact, reasonable. The statistical plans could be required to contain reporting of expense experience for items specific to Kansas *i.e.*, certain mandates.

The Commissioner is given authority through rules and regulations to develop the plans, but is required to consider the rating systems and various insurance classifications that are already filed, as well as the rating systems in other states.

The Commissioner is authorized to designate recognized trade associations or other agencies to assist in gathering the experience data.

Small Employer Health Benefit Act

Small Employer Health Benefit Act

H.B. 2610 created in 1990 the Small Employer Health Benefit Act under which any two or more employers who qualify under the act may establish a small employer health benefit plan and contract with carriers for health insurance as described in the act. To qualify as small employer under the act the employer must employ no more than 25 employees, not have contributed to any health insurance premium on behalf of any employee in the preceding two years and make a minimum contribution as set by the plan toward the premium incurred on behalf of a covered employee. In order to encourage small employers to enter into a plan created under the act, any insurance provided under a small employer health benefit plan is exempt from mandates and is exempt from premium tax. In addition, the employer who provides insurance under a plan created pursuant to the act may be eligible for a tax credit and any contribution made by the employer toward the premium is not to be counted as income to the employee for purposes of Kansas income tax. The Small Employer Health Benefit Act was amended by the 1992 Legislature to any employer with 50 or fewer employees.

Also in 1990, the Legislature amended the Municipal Group-Funded Pool Act that allows municipalities to pool their workers' compensation liability. The Act was expanded to allow the pooling of liability for health and accident insurance and life insurance. The effect of the 1990 action was to make health insurance coverage available and, perhaps, at a rate less than the rate at which the individual municipality could purchase coverage for employees.

Small Employer Health Benefit Plans -- Expansion

H.B. 2440 expanded in 1992 the availability of small employer health benefit plans authorized by K.S.A. 1991 Supp. 40-2242 to certain businesses by increasing the maximum number of eligible employees from 25 to 50.

Group Health Insurance Regulation

H.B. 2001, enacted in 1991, made a number of changes in the regulation of group accident and sickness insurance. The bill amends K.S.A. 1990 Supp. 40-2209 to state:

X that no person eligible for coverage under a group may be excluded from group coverage;

X that the statutory right to group coverage exists only at the time of initial eligibility and ends 31 days after that date;

that eligibility applies to all Kansas insureds regardless of the place of issuance of the policy (extraterritoriality);

that no policy may limit or exclude benefits for specific conditions existing at or prior to the date of coverage;

that a policy may establish up to a one year waiting period for conditions diagnosed, treated, or for which advice was sought or received in the 90 days prior to the effective date of coverage;

that the provisions for no exclusion for specific conditions with possible waiting periods applies to all Kansas insureds regardless of the place of issuance of the policy;

that, to the extent any waiting period is served under a "replaced" policy, it shall be considered served under a new policy with no gap in coverage (portability); and

that, among other things, any group policy may impose participation requirements and define full-time for purposes of determining eligibility for coverage.

K.S.A. 40-2215, concerning the filing of forms, classification of risks, and the premium rates pertaining thereto, also is amended to require:

that all forms, classification of risks, and the premium rates for any group or blanket policy or certificate of accident and sickness insurance be filed with the Insurance Commissioner prior to their use -- "file and use" (the provision would allow all insurers, including nonprofit medical and hospital service corporations BC/BS and health maintenance organizations whose rates are currently subject to approval prior to their use);

that rates charged to any group covered by the statute be prohibited from increasing by more than 75 percent in one year unless the insurer can clearly document a "material and significant change in the risk characteristics" of the group.

that any risk classification, premium rates, etc., shall not establish an unreasonable, excessive or unfairly discriminatory rate, discriminate against any individuals eligible for participation in a group, or establish rating classifications within a group that are based upon medical conditions;

that the Commissioner could at any time, after right of hearing is extended, disapprove any rate filed; and

that violations of the amendments to K.S.A 40-2215 (e) would be treated as violations of the Unfair Trade Practices Act and subject to the penalties prescribed in that Act.

Other statutes applicable to nonprofit dental service corporations, nonprofit optometric service corporations, nonprofit medical and hospital service corporations, and nonprofit pharmacy service corporations are amended to make the provisions of the bill applicable to those entities. Statutes relating to municipal group-funded pools, small employer health benefit plans organized under K.S.A. 40-2241 (1990 H.B. 2610), health maintenance organizations and captive insurance companies created under K.S.A. 1990 Supp. 40-318 are all made subject to the provisions of the bill.

Small Employer Group Health Benefit Plan

S.B. 561, passed in 1992, required, on and after May 1, 1993, every carrier issuing or maintaining health benefits plans covering small employers, as a condition of transacting such business in Kansas, to offer at least a basic and a standard small employer health care plan to any

small employer group seeking such coverage (guarantee issue). For the purposes of S.B. 561, a "small employer" generally is defined as one with 25 or fewer employees; however, a group covered under the plan may continue in the plan even though the group may have grown beyond the cap of 25 if the board and the carrier agree to its continuation. "Carrier" is defined to include insurance companies, nonprofit medical and hospital service corporations, and health maintenance organizations.

Health benefit plans made available to small employers will be designed by an 11-member board of directors created pursuant to S.B. 561 and will identify benefits levels to be provided as well as any deductibles, coinsurance factors, and exclusions and limitations. The board of directors also is to serve as the governing body of the reinsurance program that will be created pursuant to the bill.

X S.B. 561 applies the existing statutory mandates relating to providers to both the basic and standard health benefits plans that are required to be offered and sold to small employers. Further, the board of directors shall review and recommend the inclusion of specified benefits set out and other health services in both the basic and standard plans, subject to the approval of the Insurance Commissioner and subject to the development of a plan that is cost effective and meets the most critical needs of small employers and their employees. The board is permitted but not required to incorporate provisions in the plans that direct insureds to the most appropriate and cost effective available service provider.

Since carriers are required to offer health care plans to any small group soliciting such coverage, the bill allows the carrier to classify the groups for purposes of establishing premium rates. However, the health status or past claims experience of the small group may not be used in determining the classifications. Carriers may establish not more than a one-year waiting period for a pre-existing condition, *i.e.*, is a condition for which diagnosis, treatment, or advice was sought or received within six months immediately preceding the effective date of coverage. The bill allows carriers to adjust premium rates based on specific formulae set out and subject to annual actuarial certification of compliance to the Insurance Commissioner. In no case, however, can an annual premium increase more the 75 percent over the previous rate.

Further, because of the guarantee issue provision of the bill, S.B. 561 authorizes reinsurance of certain risks through the Kansas Small Employer Health Reinsurance Program. The Program is authorized to reinsure only group risks with the original carrier being required to retain specific amounts of liability for the group reinsured. If the Program should have insufficient funds to cover losses, assessments would be made first upon carriers with risks in the Program and, secondly, to all writers of accident and sickness insurance policies or contracts in Kansas. Maximum assessments would be established that might be levied upon the carriers and a second tier of assessments will exclude from the assessment ratio any premium earned by a small employer carrier from small employer plans that are mandated by the bill.

Health Insurance Reform

(b) Individual

Kansas Uninsurable Health Insurance Plan

H.B. 2511, also passed in 1992, created a new act to be known as the Kansas Uninsurable Health Insurance Plan Act, under which a nonprofit legal entity that will be named the Kansas Health Insurance Association is created to make limited health insurance available for eligible persons who are unable to secure health insurance in the market or are unable to secure such insurance at a premium rate that is less than that set for participants in the limited coverage to be marketed by the Association. Insurers and fraternal benefit societies providing "health insurance" as that term is defined in the bill; health maintenance organizations; Blue Cross-Blue Shield and dental and optometric nonprofit health care service plans; multiple employer trusts; associations or other organizations that provide members health care services or benefits; group funded pools; and certain self insured health benefit plans are required to participate in the Association. Association members share the risks and costs of the insurance that is to be made available through the Kansas Uninsurable Health Insurance Plan developed by a board of directors selected by members of the Association and approved by the Commissioner of Insurance.

Among other requirements, the operating plan developed by the Kansas Health Insurance Association must provide for appropriate cost control measures, including preadmission review, case management, utilization review, and exclusions and limitations on the treatments and services covered under the plan; for assessments against members of the Association; and for a program to publicize the availability of insurance under the plan. The insurance to be offered may cover only those health care expenses enumerated in the bill, including such limitations and optional benefits levels as prescribed by the plan. The laws mandating coverage of specific services or benefits are not applicable to insurance offered under the plan, but the mandates relating to coverage of the services of specific health care providers are to apply. The plan may, however, incorporate provisions that direct covered insureds to the most appropriate, lowest cost health care provider and, subject to the approval of the Commissioner of Insurance, the board of directors must review and recommend the inclusion of coverage for mental health services and such other primary and preventive health services as it determines will not materially impair affordability of the plan. All coverage is to be subject to copayments and deductibles as set by the board of directors, subject to limitations set out in the legislation. At least one option must provide for a minimum annual deductible of \$5,000, and any coverage under the plan is to be subject to a maximum lifetime benefit of \$500,000 per individual. In the first two years of operation of the plan, coverage must exclude any charges or expenses incurred for a preexisting condition for 12 months following the effective date of the coverage. In succeeding years exclusion of preexisting conditions is to be determined by the board, but may not exceed 12 months. Any applicant for insurance provided under the plan is to be provided with a form for making a declaration directing the withholding or withdrawal of life-sustaining procedures in a terminal condition that is in substantial conformance with the form in the Kansas Natural Death Act.

In the first two years of the plan's operation, rates are required to be set in an amount that is estimated by the board to cover the cost of all claims and the expense of operating the plan. In subsequent years, the premium rate must be reasonable in terms of the benefits provided. Premium rates and rate schedules may reflect appropriate risk factors such as sex, age, and geographic location and take into consideration appropriate risk factors in accordance with accepted actuarial and underwriting practices. Rates may not be based on the health conditions or illness of the applicant for insurance. All members required to participate in the Association are subject to

an annual assessment to pay a proportionate share of losses incurred by the plan during the previous year. Any net gains would be held to offset future losses or reduce future premiums. In addition to any losses to be offset by assessments, all members of the Association can be assessed for the initial costs of developing and implementing the insurance plan to the extent that funds authorized to be loaned from the Pooled Money Investment Board in the first four years are insufficient to pay such initial costs. Eighty percent of the assessment made against a member, except for those made during the first four years of operation, can be claimed as a credit against the member's premium or privilege tax. In order to be eligible for insurance under the plan created by the Kansas Health Insurance Association, an individual must have been a Kansas resident for at least six months prior to applying for insurance and meet one of the following criteria:

- had health insurance coverage involuntarily terminated other than for nonpayment of a premium; or
- applied for health insurance and been rejected by two carriers because of health conditions; or
- applied for health insurance and been quoted a premium that is more than 150 percent of the premium set by the plan in the first two years of the plan's operation or, in succeeding years, is in excess of the plan's premium rate in an amount set by the board; or
- been accepted for health insurance subject to a permanent exclusion of a preexisting condition.

No person is eligible for coverage under the plan who is a recipient of Medicaid, eligible for Medicare, or for any other public or private program that provides or indemnifies for health services, or if such person has access to health insurance through an employer-sponsored group or self-insured plan, has had coverage under the Association plan terminated within the preceding 12 months, or has received accumulated benefits in excess of the lifetime limit established under the law.

Providers of health services that are to be indemnified through the insurance offered under the plan would have to enter into provider agreements with the plan under which rates of reimbursement for covered services would be set by the board, and no provider of health care services could collect an additional fee or charge from the insured except authorized copayments and deductibles and fees for noncovered services if the insured has been informed in advance that the service is not covered.

H.B. 2511 authorizes loans in the amount of \$500,000 annually for four years from the Pooled Money Investment Board to an Uninsurable Health Insurance Plan Fund created by the legislation in order to assist with the start-up costs and expenses of the plan. Moneys loaned under this provision are required to be repaid over a ten-year period. Other provisions of the bill relate to audits and reports required to be made to the Joint Committee on Health Care Decisions for the 1990s.

Health Insurance Reform

(c) Other

Universal Claim Forms Required – Health Insurance

H.B. 2216, enacted in 1991, required the Insurance Commissioner to devise universal accident and sickness insurance claim forms which must be utilized by all insurance companies, HMOs, and nonprofit health care-related service corporations commencing not later than six months following notification by the Commissioner. Additional provisions clarify that insurers may not refuse to accept a claim filed on a uniform claim form but may accept a claim filed on any other form; and that insurers will not violate the uniform claim form law by using forms required by the federal government.

Uniform Electronic Data Exchange

S.B. 722, passed in 1992, amended the statute that was enacted by the 1991 Legislature that requires the Commissioner of Insurance to develop universal claim forms to be utilized by every insurer and, where applicable, HMO, offering any type of accident and sickness coverage for Kansas residents. The amendments require the Commissioner to report to the Governor and Legislature by the beginning of the 1993 Session on the development of uniform electronic data interchange formats and standards, along with a proposed plan, and an analysis of the cost impact.

Health Care – Indigent/Medical Assistance

Primary Care for the Medically Indigent

H.B. 2019, created in 1991 new statutory authority for three pilot programs to be operated through local health departments to determine the feasibility of providing primary care health services for the medically indigent and Medicaid and MediKan clients. The bill also amends several statutes in the Kansas Tort Claims Act and one statute that concerns the state program of financial assistance for local health departments.

The bill authorizes the allocation of state grant funds for the establishment and operation of three pilot programs conducted through local health departments chosen by the Secretary of Health and Environment from among local health departments applying for the grant funds. One of each of the pilot primary care programs must be located in a local health department or a consortium of local health departments that meets each of three population criteria set out in the bill. The local health agencies that receive grant funds are authorized: to contract with health care providers, community agencies, organizations, other public bodies, and private persons in order to provide primary care services; to define medically indigent for the purposes of the pilot program; to set fees based on the cost of services and established on a sliding scale based on ability to pay; to apply for financial assistance from governmental sources or the private sector; and to define primary care for the purposes of the pilot program. A health care provider who contracts with a local health department to provide professional services as a part of a pilot project is to be considered a charitable health care provider under the Kansas Tort Claims Act if such services are provided gratuitously or the provider is paid by the local health department.

One of the statutes in the existing laws that provide for the allocation of general state financial assistance to local health departments is amended by H.B. 2019 to make it clear that any one-time special project grant and moneys collected by local health departments from fees charged for services are not to be considered to be a part of the local tax revenues allotted to local health for the purpose of determining the state financial assistance to be distributed during the county fiscal year. Two statutes in the Kansas Tort Claims Act are amended to include health care professionals who provide services as part of a pilot program authorized by H.B. 2019 in the definition of "charitable health care provider" under that Act. The latter amendments have the effect of covering, under the Tort Claims Act, any professional liability that might be incurred through participation in a pilot program.

The provisions of H.B. 2019 relating to the creation of three pilot primary care programs expire on July 1, 1995.

Medicaid Managed Care Pilot

S.B. 119 created in 1993 a new law that directs the Secretary of Social and Rehabilitation Services, subject to applicable federal guidelines and regulations and to appropriations, to contract for a managed care pilot project to be conducted during fiscal year 1995 in Sedgwick County and another county having a population of less than 100,000 specified by the Secretary and a task force established pursuant to the provisions of the bill.

The new legislation directs that the pilot project be conducted to provide health services through a managed care system for Medicaid clients on the basis of a predetermined set of services to a predetermined population. In order to carry out the directives of the new legislation, the Secretary is authorized to contract with a single provider or a contracting agency, or both, to provide Medicaid services through a group of qualified health care providers within the areas specified as the pilot project. The Secretary is directed to appoint a task force or task forces to advise the Secretary on matters relating to the implementation of the pilot project and to make findings and recommendations concerning the pilot project that are to be reported to the Joint Committee on Health Care Decisions for the 1990s and to the Legislature on or before the beginning of the 1994 Session. The Secretary also is required to submit a preliminary report on the results of the pilot project to the Senate Committee on Ways and Means and the House Committee on Appropriations at the beginning of the 1994 Session and annually for the next four years.

Health Care Providers Serving the Poor – Liability

S.B. 736 extended coverage of the Kansas Tort Claims Act (KTCA) to health care providers providing charitable professional care services to medically indigent persons in 1990. As a precondition of coverage under the KTCA, a health care provider must have entered into an agreement with the Secretary of the Kansas Department of Health and Environment (KDHE) to provide gratuitous health care services to the medically indigent.

The Secretary is required to establish by rules and regulations criteria for determining whether a person qualifies as a medically indigent person. Medically indigent person is defined to mean a person who lacks resources to pay for medically necessary health care services and who meets the eligibility criteria established by the Secretary of KDHE.

Charitable Health Care Providers

S.B. 14 amends one of the statutes in the Kansas Healing Arts Act and three of the statutes that make up the Kansas Tort Claims Act as they relate to encouraging health care providers to provide charity care.

The Kansas Healing Arts Act is amended to make it clear that a license in the healing arts who holds an exempt license (a license issued to a person who has been licensed to practice the healing arts and who is no longer regularly engaged in such practice) may serve as a paid employee of either a local health department or an indigent care clinic without jeopardizing the exempt license status.

Amendments to the tort claims statutes expand the definition of "charitable health care provider" as that term is used in the Tort Claims Act. The term, charitable health care provider is expanded to include:

1. health care providers who enter into an agreement with the Secretary of Health and Environment and who, under such agreement, gratuitously render health care services to medically indigent persons or to persons receiving medical assistance under programs operated by the Secretary of Social and Rehabilitation Services (Medicaid or MediKan) and who are a health care provider considered an employee of the state under K.S.A. 1992 Supp. 75-6120;
2. health care providers who, under an agreement with the Secretary of Health and Environment, gratuitously render professional services in children's immunization programs administered by the Secretary; or
3. health care providers who have entered into an agreement with an indigent health care clinic or local health department which provides health care to medically indigent persons or persons receiving medical assistance under programs operated by the Secretary of Social and Rehabilitation Services to render health care services to the patients of such clinic or health department, regardless of whether the clinic or health department charges a fee for the services, if the health care provider is considered an employee of the state under K.S.A. 1992 Supp. 75-6120.

In the case of the health care provider who is considered a charitable health care provider under alternative 3 above, the provider is considered to be providing gratuitous services regardless of whether the health care provider is paid a fee by the local health department or indigent health care clinic.

Other amendments define terms used in the definition of charitable health care provider by adding definitions of "indigent health care clinic" and "local health department"; add professional services rendered in local health departments and indigent health care clinics and the employees thereof to the exemptions to the prohibition in the tort claims statutes against the payment of claims for health care provider professional liability from the Tort Claims Fund; and provide that payment may be made from the Tort Claims Fund rather than professional liability insurance to satisfy professional liability claims arising from the services provided by charitable health care providers who are considered employees of the state and by local health departments and indigent care clinics and the employees thereof for claims arising prior to July 1, 1995, or for claims in which the cause of action arose prior to July 1, 1995.

Amendatory language also requires the Legislature to conduct an annual review of claims and expenditures against the Tort Claims Fund arising from services provided by charitable health care providers, the number of charitable health care providers, and the extent to which coverage under the Tort Claims Fund has increased services to the medically indigent and those who are eligible for Medical Assistance. The provisions of the bill that concern the annual legislative review expire on July 1, 1995.

Health Care – Women and Children

Child Health Assessments

H.B. 2695 created a new act in 1992 under which, after July 1, 1993, all children entering a Kansas school for the first time will be required to present the results of a child health assessment that has been done within six months prior to school admission. As defined in the bill, health assessment means a basic screening for hearing, vision, dental, lead, urinalysis, hemoglobin-hemocrit, nutrition, developmental, health history, and complete physical examination. Health assessment results must be recorded on a form provided by the Secretary of Health and Environment and must have been conducted by a person licensed to practice medicine and surgery, or a licensed professional nurse or other health care provider approved by the Secretary of Health and Environment to do health assessments. Information contained in the health assessment is to be confidential and may not be disclosed or made public except as provided in the legislation. As an alternative to the health assessment required by the new legislation, a pupil may present a written statement signed by a parent or guardian that the child is an adherent of a religious denomination whose teachings are opposed to such assessments or a written statement that the health assessment is in the process of being done and will be completed within 90 days after admission to school. School boards may exclude children from school who have not complied with the law, must transfer records of compliance if the child transfers from one school to another, and must give pupils known to be enrolled or to be enrolling a copy of the applicable subsection of the legislation and the school's policy relating to implementation prior to the beginning of the school year.

H.B. 2695 requires any county, city-county, or multicounty health department, upon application of a school board, to provide a health assessment as required in the legislation to any child whose parent or guardian has not provided for such an assessment. Any assessments requested by a local school board must be conducted by the appropriate local health department, to the extent that funds are available for this purpose, at federal, state, county, municipal, local health department, or school district expense. The local health department may charge a fee based on ability to pay, except that no fee may be charged a pupil eligible for participation in a school lunch program. If no funds are available for the local health department to provide child health assessments, the local health department must certify to the school board that insufficient funds are available and, upon such certification, pupils who have been referred for the mandated assessment are to be exempt from the requirements of the law.

Child Health Assessments – Delay Thereof

1993 H.B. 2546 delayed the effective date of the mandate enacted in 1992 that requires, on and after July 1, 1993, any pupil entering a Kansas school for the first time to present the results of a health assessment recorded on a form provided by the Secretary of Health and Environment. The date on which health assessments are to be required is on or after July 1, 1994.

Infant-Toddler Program

H.B. 2759 created two new statutes in 1992 that concern the federally authorized early childhood intervention program that is most often referred to as the Infant-Toddler Program. An existing statute is amended by the bill.

Terms used in the new legislation are defined by H.B. 2759, including a definition of infants and toddlers with disabilities as children from birth through two years of age that are experiencing developmental delays or have a diagnosed mental or physical condition that has a high probability of resulting in developmental delay. Lead agency is defined as the Department of Health and Environment for purposes of the early intervention program. New authority is given to the Secretary of Health and Environment to adopt rules and regulations necessary to carry out agency responsibilities under P.L. 102-119, Part H, the Infant-Toddler Federal Grant Pilot Program section of the federal act. The bill amends K.S.A. 1991 Supp. 74-7802, the statute that sets out the duties of the Coordinating Council on Early Childhood Disabilities, to make the Council the agency responsible for advising and assisting the Department of Health and Environment in implementing P.L. 102-119, Part H, at the state and local level.

Immunizations – Children in Childcare

1992 H.B. 2694 amended K.S.A. 1991 Supp. 65-519 and K.S.A. 65-508, statutes that concern family day care homes and all other places in which children under age 16 are cared for outside their own homes by persons who are not related to such children by blood or marriage. The amendments provide that on or after January 1, 1993, each child cared for in a family day care home or other child care facility, including children of the provider of care, are required to have current immunizations determined by the Secretary of Health and Environment to be necessary. The registered family day care provider or licensed child care provider also is required to maintain a record of immunizations of children in care and to provide information thereon to the Secretary as required by rules and regulations adopted by the Secretary. H.B. 2694 provides for two exceptions to the immunization requirements, *i.e.*, when certification from a licensed physician is provided stating that the immunization would endanger the child's life or health or when a written statement signed by the child's parent or guardian is provided stating that the parent or guardian is an adherent of a religious denomination whose teachings are opposed to immunizations.

Immunizations

1993 S.B. 199 amended a statute that requires a child who is entering a Kansas school for the first time to present certification from a physician or local health department that such child has received or is in the process of receiving tests and inoculations as established by the Secretary of Health and Environment. The new language added to the statute by S.B. 199 extends the requirement to those children who are enrolling for the first time in a preschool or daycare program operated by a school.

Children and Families – Health Services for Pregnant Women and Children; Education and Services Relating to Perinatal Effects of Certain Substances; and Budget Information

S.B. 631 created a number of new laws that concern pregnant women, children, and families in 1992.

One of the new statutes created by the bill directs the Secretary of Health and Environment, on or before January 1, 1993, and working in cooperation with the Secretary of Social and Rehabilitation Services and the Commissioners of Insurance and Education, to develop a proposal for consolidating all existing health programs required by law for pregnant women and children into one comprehensive plan to be implemented by one or several agencies through interagency contracts, through contracts with private agencies, or by the provision of direct services. The plan developed pursuant to S.B. 631 is to include, at a minimum, comprehensive prenatal services for all pregnant women who qualify for existing programs; comprehensive medical care for all children under 18 years of age; preventative and restorative dental care for all children under 18 in a family that qualifies under the plan; periodic sight and hearing tests and corrective devices for children under 18; a case management system under which each family with a child under the plan is assigned a case manager and under which every reasonable effort is made to assure continuity of services and access to other appropriate social services. The plan developed pursuant to the new statute created by S.B. 631 is to be submitted to the Governor, the Joint Committee on Health Care Decisions for the 1990s, and the Kansas Commission on the Future of Health Care, Inc.

Seven new statutes that are created by S.B. 631 concern the identification of pregnant women at risk for substance abuse, the provision of services for such persons, and education as to the effects of the preconceptual and perinatal use of specified substances.

Under the seven new statutes, the Secretary of Health and Environment is directed to:

1. conduct an ongoing public awareness campaign directed at both men and women regarding the preconception and perinatal use of tobacco, alcohol, and controlled substances listed in Schedules I, II, and III of the Uniform Controlled Substances Act for nonmedical purposes;
2. provide educational materials and guidance to health care professionals that address the services available to pregnant women from local health departments and the perinatal effects of the use of certain substances;
3. in collaboration with the Secretary of Social and Rehabilitation Services, provide an educational program for health care professionals who provide care for pregnant women concerning patient education, taking drug histories, and counseling techniques;
4. develop a risk assessment profile to assist health care providers in screening pregnant women for prenatal substance abuse; and
5. maintain a toll free information line for the provision of information on resources for substance abuse treatment and for assisting with the referral of pregnant women.

Other provisions authorize any health care provider who identifies a pregnant woman at risk for prenatal substance abuse to refer such woman, with her consent, to a local health department or the Department of Health and Environment for service coordination by providing her name to the local agency or the Department of Health and Environment within five working days. Any referral and associated documentation is to be confidential and cannot be used in any criminal prosecution. The required consent for referral is to be deemed a waiver of the physician-patient privilege only for the purpose of making the referral. Any local health department receiving a referral from a health care provider is required to coordinate social services, health care, mental health services, and education

and rehabilitation services if needed. Service coordination must be initiated within 72 hours of the referral. Any pregnant woman referred for substance abuse treatment is to be a first priority for treatment available through Social and Rehabilitation Services, and all records regarding such woman are to be confidential. The Secretary of Social and Rehabilitation Services is required to ensure that family oriented substance abuse treatment is available, and substance abuse treatment facilities that receive public funds may not refuse to treat a pregnant woman solely because she is pregnant. The seven new statutes relating to perinatal substance use become effective on January 1, 1993.

S.B. 631 amends two statutes that concern the preparation of the annual Governor's Budget Report and repeals one such statute.

Amendments to K.S.A. 1991 Supp. 75-3717, in addition to technical amendments, require that each agency's budget estimates include a listing of all programs of the agency that provide services to children and their families, and specified information regarding each such program. In addition, the amendments define "services for children and their families" as that term is used in the statute to include financial support or the enforcement of support obligations; prenatal care, health care for children, or immunizations; mental health or mental retardation services for children; nutrition services for children or families with children, or nutritional counseling or supplements for pregnant or nursing women; child care, early childhood education, or parenting education; licensure or regulation of child care or early childhood education programs; treatment, counseling or other services to preserve families; care, treatment, placement, or adoption of children without functioning families; services to prevent child abuse and to treat and protect child abuse victims; services for children who are pregnant, substance abusers, or otherwise involved in high risk behavior; services relating to court proceedings involving children; and youth employment services.

New language added to K.S.A. 1991 Supp. 75-3721 by S.B. 631 requires the Division of the Budget to compile a children's budget from information contained in agency budget estimates regarding programs that provide services for children and their families. The document developed by the Director of the Budget is to be provided to the Joint Committee on Children and Their Families; the Kansas Commission on Children, Youth and Families; and other persons or entities on request.

Other new provisions contained in S.B. 631 repeal K.S.A. 75-3721a, make it clear that nothing in the bill is to be construed to create any new programs, and make the provisions of the bill, except for the provisions relating to preconception and prenatal use of certain substances, effective on publication in the *Kansas Register*.

Kansas Healthy Kids Program Act

H.B. 2913 created a new act in 1992 under which a quasi-governmental corporation, to be known as the Kansas Healthy Kids Corporation, is directed to develop a health insurance program, based on ability to pay, for all Kansas school children in grades kindergarten through 12 and their siblings younger than age 18 who are not otherwise covered by public or private insurance programs. Under the provisions of the new legislation, the corporation is required to have the insurance benefits to be covered and the location of three pilot school districts established by July 1, 1993. Children are to be enrolled, and the corporation is to be providing insurance in at least three pilot school districts by July 1, 1994. The corporation also is required to provide for the expansion of the insurance program to other school districts. Insurance benefits offered under the program are exempt from the state provider and service mandates applicable to accident and health insurance.

The governing board of the corporation is directed to, among other responsibilities, establish the benefits to be offered through the insurance program; establish eligibility criteria; accept

and receive grants, loans, gifts, and donations; develop funding sources; and contract for the administration of any health insurance program initiated under the bill. The corporation also is directed to coordinate the program with other public and private initiatives and to report on its activities to the Governor and the Legislature. The corporation is given access to medical records of students with permission of the student's parent or guardian and subject to confidentiality requirements set out in the bill.

The Kansas Healthy Kids Corporation is to be governed by a 17-member, appointed board of directors assisted by the Secretaries of Social and Rehabilitation Services and Health and Environment and the Commissioners of Education and Insurance or their designees who are to serve as nonvoting members of the board. Appointed members of the board are to serve staggered four-year terms, except members of the Legislature who are to be appointed to terms that end on the first day of the regular legislative session held in odd-numbered years. Members of the board are to be paid subsistence, mileage, and expenses as authorized by subsection (e) of K.S.A. 75-3223, except the legislative members who are to receive compensation, subsistence, mileage, and other expenses as authorized for legislators. All officers and employees of the corporation are to be considered to be state employees and the corporation to be considered to be a state agency for payroll, deferred compensation, retirement, employment security, workers' compensation, health benefits, Social Security, and federal tax purposes. However, officers and employees of the corporation are not subject to the provisions of Article 32 of Chapter 75 of the Kansas statutes relating to compensation and expenses nor be a part of the state civil service system.

H.B. 2913 establishes a Healthy Kids Trust Fund in the state treasury to which are to be deposited all state appropriations, gifts, grants, contributions, matching funds, and payments made by program participants. All payments from the trust fund are to be made in accordance with appropriation acts and warrants issued pursuant to vouchers approved by the chairperson or such person's designee.

Health Care Provider

(a) Education

Kansas University Medical Center Medical Student Loan Program -- Creation

Sub. for H.B. 2941 created in 1992 the Kansas University Medical Center (KUMC) Medical Student Loan Program. The program, subject to appropriations, will provide medical students the payment of all tuition and a stipend for living expenses in an amount of up to \$1,500 per month for each month enrolled during a school year. The medical student receiving the loan must complete an approved postgraduate residency training program in general pediatrics, general internal medicine, family medicine, family practice, or emergency medicine. Within nine months after completion of an approved postgraduate residency training program the loan recipient must agree to practice medicine in any community within any county of Kansas other than Douglas, Johnson, Sedgwick, Shawnee, or Wyandotte counties. Other options for service include the practice of medicine at any state medical care facility or institution, any medical center operated by the Veterans Administration of the United States, or as a full-time faculty member of the University of Kansas School of Medicine in family practice or family medicine. For each year individuals receive loans they must practice medicine in an appropriate service commitment area or facility on a year for year basis. However, for those individuals who meet their service commitment on the faculty of

the University of Kansas School of Medicine, there is required two years of service for each year the loan is received.

The bill provides that the service commitment by a medical student loan recipient may be postponed for a period of up to five years because of active military service, service as a part of the Volunteers in Service to America (VISTA), service in the Peace Corps, service in the United States Public Health Service, or service as a religious missionary. In addition, the bill provides that a person may satisfy the obligation to engage in the full-time practice of medicine and surgery in a service commitment area by devoting at least 100 hours per month to a local health department or nonprofit organization serving medically indigent persons.

If medical student loan recipients enter a nonapproved postgraduate residency training program or if they do not enter the practice of medicine in an approved service commitment area they will be considered to be in noncompliance with the loan agreement. The recipients will have to repay KUMC the amount of moneys they received, plus 15 percent interest.

Kansas University Medical Center Medical Residency Bridging Program

*** H.B. 3211 established the Kansas Residency Bridging Program in 1992. The purpose of the program is to provide an incentive to medical residents in primary care training programs of the University of Kansas Medical Center (KUMC) or an affiliate of KUMC to commit to locating their medical practice, upon completion of training, in rural communities in Kansas. The program will be administered by the Institute for Rural Health Care of the University of Kansas School of Medicine.

Any individual is eligible for the program who has completed the first year of primary care residency training in general pediatrics, general internal medicine, family medicine or family practice, which is operated or affiliated with the University of Kansas School of Medicine and entered into between a medical resident and a city located in any county in the state other than Douglas, Johnson, Sedgwick, Shawnee, or Wyandotte. Under such an agreement the city must agree to pay the medical resident an amount equal to or greater than the amount paid by the Medical Center.

Under a residency bridging loan agreement the student would receive a payment of \$5,000 from KUMC for each year of primary care residency training. Upon completion of the residency program, the resident would receive a \$6,000 bonus payment. The agreement also would require that the individual complete the primary care residency training program, engage in the full-time practice of medicine and surgery in an eligible county for a period of three years, and start medical practice within 90 days after completing the residency training program. If any person who receives a loan fails to satisfy the agreement obligations, the individual must repay KUMC an amount equal to that received by the individual, less any credits earned, plus interest at an annual rate of 15 percent from the date the money was received.

Added Saline program

Kansas Medical Residency Bridging Program

H.B. 2025 amended in 1993 the statute enacted in 1992 that created the Kansas Medical Residency Bridging Program under which medical residents in primary care who have completed the first year of a residency training program may enter into an agreement with any city in Kansas, except those located in specified counties, to practice medicine in the city upon completion of the residency in exchange for supplemental payments made during the remainder of the residency training by the University of Kansas Medical Center and the city and a bonus on completion of the residency program.

The amendments extend the residency bridging program to allow participation by residents in primary care programs in Kansas that are not affiliated with or operated by the University of Kansas School of Medicine, *i.e.*, osteopathic primary care residency programs operated in Kansas and approved by the Board of Healing Arts. Additionally, the amendments open the residency bridging program to permit residents to sign up for the program prior to entering into a practice commitment agreement with a city and to allow a person who graduated from the University of Kansas School of Medicine prior to July 1, 1992, and who has completed one year of a residency training program in family practice located outside of Kansas and entered into a practice commitment agreement with the North Central Kansas Health Care Foundation to be eligible to enter into a residency bridging loan agreement.

Medical Student Loan Program

1993 S.C.R. 1606 expresses the sense of the Legislature that increasing the number of primary care physicians in Kansas is an urgent issue and that it is the policy of the Legislature to support full funding and utilization of the Medical Student Loan Act and the 1992 legislation that created the medical residency bridging program through utilizing money available in the Medical Scholarship and Loan Repayment Fund. The specific policy enunciated by S.C.R. 1606 is that money in the Fund should be used solely to finance medical student loans, the bridging program, and two locum tenens positions to provide respite for rural primary care physicians. For FY 1994, the Legislature has recommended expenditures of \$4,502,338 from the Medical Scholarship and Loan Repayment Fund, of which \$2,802,338 is for medical loans (35 new and 94 renewals), \$330,000 is for the Medical Residency Bridging Program, \$276,000 is for the Faculty Locum Tenens Program, and \$1,094,000 is for support of general operating expenditures in the KUMC-Education portion of the budget.

The 1992 Legislature created the KUMC Medical Student Loan Program to replace the Medical Scholarship Program. The new program, subject to appropriation, provides medical students the payment of all tuition and fees, and, in addition a stipend for living expenses up to \$1,500 per month for each month enrolled during the school year. A medical student receiving a school loan must complete an approved postgraduate residency training program in general pediatrics, general internal medicine, family medicine, family practice, or emergency medicine. Within nine months after completion of an approved postgraduate residency training program the loan recipient must agree to practice medicine in any community within any county of Kansas other than Douglas, Johnson, Sedgwick, Shawnee, or Wyandotte counties. Other options for service include the practice of medicine at any state medical care facility or institution, any medical center operated by the Veterans Administration, or the University of Kansas School of Medicine as a full-time faculty member in family practice or family medicine.

In general for each year individuals receive loans they must practice medicine in an appropriate service commitment area or facility. If medical student loan recipients enter a nonapproved postgraduate residency training program or if they do not enter the practice of medicine in an approved service commitment area they will be considered to be in noncompliance with the loan agreement. The recipients will have to repay the amount of the loan they received, plus 15 percent interest. Repayments to the old medical scholarship program and new medical loan program are credited to the Medical Scholarship and Loan Repayment Fund.

The 1993 Legislature appropriated funding to provide 45 new loans in FY 1993 and 35 new loans in FY 1994. The loans for FY 1993 are retroactive to the beginning of the academic year.

Faculty Locum Tenens Program

The Legislature appropriated in 1993 \$276,000 to initiate a Faculty Locum Tenens Program at KUMC. The program is intended to provide the equivalent of two full-time faculty members (one located at the Kansas City campus in the Family Practice Department and the other to be located at the Wichita campus in the Family Practice Department) to provide temporary relief for solo practitioners in rural Kansas who are not able to serve the community due to illness, a need for vacation, continuing medical education, or a variety of other reasons. Rural primary care physicians cite the lack of relief as a significant deterrent to establishing and maintaining a rural practice. According to KUMC, the program will be designed so that the locum tenens physicians would assume practice responsibilities in those communities where patient care is seriously compromised when the community physician must be away. Revenue for the program would also be generated from a combination of patient charges, contractual payments from the community physician, or both. KUMC is expected to report to the 1994 Legislature a full description of the program, an accounting of the program's activities in FY 1994, including the amount of time actually spent out in relief in rural communities.

Collaborative Nurse Practitioner Program

The Legislature appropriated \$400,000 from the State General Fund in 1993 and added 11.0 FTE positions for nurse practitioners programs offered collaboratively by Kansas University Medical Center, Wichita State University, and Fort Hays State University. In addition to the State General Fund appropriation, the Kansas Health Foundation awarded the collaborative project a grant which provides approximately \$475,000 annually for FY 1994 and FY 1995. The collaborative program includes several classes via interactive video.

Kansas University Medical Center Contracting Authority

The omnibus appropriation bill (1993 Sub. S.B. 437) also included a subsection authorizing expenditures from the Hospital Revenue Fund, upon recommendation of the Chancellor and approval of the State Board of Regents, for the University Hospital to enter into contracts for purposes of affiliations, partnerships, and equity ownerships with other health care providers. Such contracts are not subject to the competitive bid requirements. Contracts shall not be made for acquisition of equipment, supplies, materials, or other goods. KUMC is required to make a quarterly report to the Legislative Coordinating Council, the Chairpersons of Senate Ways and Means and House Appropriations, and the Secretary of Administration on all such contracts and expenditures made pursuant to this subsection.

Kansas University Medical Center Managed Care Contracts

The omnibus appropriation bill (Sub. S.B. 437) includes a subsection permitting KUMC to contract with the Kansas State Employees Health Care Commission to provide health care services to state employees through a managed care system. Such contract is not subject to the competitive bid requirements.

Also, in addition to the implementation of two managed care pilot projects for the medical program envisioned by 1993 S.B. 119, the Conference Committee on the SRS budget agreed to recommend a third pilot project at the University of Kansas Medical Center. These projects would not be operational until FY 1995.

Kansas University Medical Center Management Study

The 1993 Legislature appropriated \$100,000 (\$50,000 from the EDIF and \$50,000 from the KUMC Hospital Revenue Fund) to the Kansas Board of Regents for a comprehensive management study of KUMC.

Kansas University Medical Center Integrated Computer System

The 1993 Legislature appropriated \$350,000 from the EDIF in FY 1994 for the state's share of an integrated computer system to be used by the University Hospital and the private practice foundations for billing, scheduling, etc. The funding is subject to approval by the State Finance Council and is contingent upon the University and private practice foundations providing the remaining two-thirds of the total cost of the project. Also, the Joint Committee on Computer and Telecommunications is required to review the proposal and advise the State Finance Council.

Service-Based Student Scholarship Programs -- Amendments

H.B. 2026 amended in 1992 the law relating to the Osteopathic Scholarship Program, Nursing Scholarship Program, and Optometry Education Program.

The bill amends the Osteopathic Scholarship Program to: increase the maximum award from \$10,000 to \$15,000; change the practice obligation requirement for all recipients of scholarships after June 30, 1992 to provide that recipients may fulfill their obligation by practicing primary care in any county, except Douglas, Johnson, Sedgwick, Shawnee, or Wyandotte counties; and alter the requirements for fulfilling a service obligation to permit a student to pursue a residency training program in a nonprimary care specialty prior to fulfilling the service obligation.

The bill amends the Nursing Scholarship Program to establish two additional funds, Nursing Student Scholarship Discontinued Attendance Fund and Nursing Student Scholarship Repayment Fund.

Also, the bill amends the Optometry Education Program to create an Optometry Education Repayment Fund.

Advanced Registered Nurse Practitioner Scholarship Program

1993 S.B. 17 creates the Advanced Registered Nurse Practitioner Scholarship Program under which not more than 12 new state funded scholarships may be offered annually to nurses enrolled in post-basic education and training programs leading to certificates of qualification to practice as advanced registered nurse practitioners (ARNPs) in the specialties of nurse clinician or nurse practitioner or clinical nurse specialist. The scholarship program is to be administered by the State Board of Regents and to be available to applicants who agree to enroll as full-time students in an advanced training and education program and who meet other qualifications set out in the bill.

Under the provisions of S.B. 17, scholarships awarded under the act may not exceed \$15,000 annually and are conditioned on the recipient entering into an agreement to engage in full-time practice or equivalent practice as provided in rules and regulations of the administrative agency in a rural area or a medically underserved area of Kansas on the basis of one year of practice for each year the scholarship assistance was awarded. Failure to satisfy the terms of the agreement entered into between the nurse and the Board of Regents would result in an obligation to repay the

state an amount representing the total amount of money received by the scholarship recipient plus annual interest of 15 percent.

S.B. 17 creates the Advanced Registered Nurse Practitioner Student Scholarship Program Fund in the State Treasury and provides that all monies deposited to the Fund are to be used for scholarships awarded pursuant to the provisions of the bill.

The State Board of Regents is authorized by S.B. 17, after consultation with the Nursing Scholarship Review Committee created under K.S.A. 74-3299, to adopt rules and regulations as set out in the new legislation.

Health Care Provider

(b) Other

Healing Arts Referrals – Notice Required

★ S.B. 19 amended in 1993 K.S.A. 65-2837, one of the statutes that makes up the Kansas Healing Arts Act, to add to the list of actions that constitute unprofessional conduct on the part of a licensee in the healing arts. Pursuant to the new provisions, a healing arts licensee who refers a patient to a health care entity in which the licensee has a significant investment interest without informing the patient in writing of such interest and that the patient may obtain services elsewhere would be engaging in unprofessional conduct and be subject to disciplinary action by the Board of Healing Arts.

For the purposes of the new provision, "health care entity" means any corporation, firm, partnership, or other business entity which provides services for diagnosis or treatment of human health conditions and which is owned separately from a referring licensee's principle practice. The term "significant investment interest" is defined for the purposes of the new provision to mean ownership of at least 10 percent of the value of the firm, partnership, or other business entity which owns or leases the health care entity, or ownership of at least 10 percent of the shares of stock of the corporation which owns or leases the health care entity.

★ Ambulatory Surgical Centers

★ S.B. 402 amended in 1993 the statute that defines terms used in the act under which medical care facilities are licensed and regulated. The amendment changes the definition of "ambulatory surgical center," a facility that, under prior law, is an establishment with an organized staff of physicians and permanent facilities that are equipped and operated primarily for the purpose of performing surgical procedures, with continuous physician services and registered professional nursing services whenever a patient is in the facility, that does not provide services or other accommodations for a patient to stay overnight. The amendments define an ambulatory surgical center as an establishment with an organized medical staff of one or more physicians that does not provide services or accommodations for a patient for more than 24 hours. In addition, the amendments change the requirement relating to the availability of physician services in an ambulatory surgical center. The new definition requires only that physician services be available on site during surgical procedures and until the patient has recovered from the obvious effects of an anesthetic. At other times physician services are required to be available whenever a patient is in the facility,

and each patient is required to be evaluated by a physician for proper anesthesia recovery prior to discharge. New language added to the definition makes it clear that physician's offices are not required to be licensed as ambulatory surgical centers.

S.B. 402 defines the term "physician" for the purposes of the entire act under which medical care facilities are licensed and regulated to mean a person licensed to practice medicine and surgery.

Rural Health

Rural Health

Sub. for H.B. 2710 created in 1992 a new act that recognizes in Kansas law concepts embodied in federal legislation authorizing incentives to encourage the organization of rural health resources into rural health networks. The bill states the policy of the State of Kansas as encouraging the development of and participation in rural health networks. The latter term is generally defined as an alliance of members including at least one rural primary care hospital (RPCCH) and one essential access community hospital (EACH) or supporting hospital that has developed an approved comprehensive plan regarding patient referral and transfer, the provision of emergency and nonemergency transportation among members, a network-wide emergency services plan, and a plan for sharing patient information and services between hospital members concerning medical staff credentialing, risk management, quality assurance, and peer review.

The seven new statutes created by Sub. for H.B. 2710 define new terms used in the legislation; provide for the licensing of rural primary care hospitals and the designation of essential access community hospitals; authorize members of rural health networks (hospitals, emergency medical services, local health departments, home health agencies, mental health centers or clinics, medical clinics, or nonemergency transportation systems) or the rural health network to enter into agreements for the performance of services with any other person or entity; allow rural primary care hospitals, essential access community hospitals, and rural health networks to employ health care providers to provide patient care and services and providers or other persons to carry out the functions of the network; authorize the Secretary of Health and Environment to set minimum standards for the establishment and operation of rural health networks; and provide that accident and sickness insurance policies, HMO contracts, and other health benefits plans must cover services provided in rural primary care hospitals, essential access community hospitals, and supporting hospitals if such services would be covered if provided in a general hospital. Other provisions of the legislation make it clear that members of a rural health network are acting pursuant to state policy and under state supervision in forming an integrated network and contracting for services and are not subject to state or federal antitrust laws when acting in compliance with the authorization of the state.

Sub. for H.B. 2710 also amends one of the statutes in the act under which hospitals are licensed and regulated to add a definition of rural primary care hospital and to provide that hospitals may be licensed as such. Amendments to K.S.A. 1991 Supp. 65-4909 add mid-level practitioners as defined in the new legislation and respiratory therapists to the statutes relating to the liability of organizations for actions arising from peer review.

HEALTH CARE A TO Z

A

Accountable Health Plans

Accountable Health Plans, a concept put forward by a group of health experts who meet periodically in Jackson Hole, Wyo., would provide medical coverage to groups of people. The plans, associated with managed competition, would offer a standard benefits package and issue reports about patient care. Plans could be open or closed. The open plan would provide coverage through a Health Insurance Purchasing Cooperative (HIPC), a private administrative body that would pool individuals together to purchase insurance. It would be for individuals employed by small companies. The closed plan would be for large companies and would not involve a purchasing cooperative. (See *Jackson Hole Group, managed competition, Health Insurance Purchasing Cooperative*)

Acute Care

Medical care of limited duration for an injury or short-term illness. A physician usually provides the care in an office or hospital.

Administrative Costs

Non-medical expenditures for health-care management, such as billing, claims processing, marketing and overhead.

All-Payer System

A system under which the government and private insurance plans ("all payers") pay the same amount for the same service. For instance, federal-state Medicaid insurance programs would not be able to reimburse hospitals at a lower rate than Blue Cross, a private insurer. This would prohibit the health provider from shifting costs from one payer to another.

Alliance for Health Reform

1133 20th St. N.W., Suite 220, Washington D.C. 20036; (202) 466-5626; fax, 466-6525. The alliance is a nonprofit, nonpartisan organization founded in 1991 by Sen. John D. Rockefeller IV, D-W.Va. It coordinates forums, meetings and seminars regarding health care and disseminates information to media, businesses and legislative staff members.

American Association of Retired Persons (AARP)

Health Care Campaign, 601 E St. N.W., Washington, D.C. 20049; (202) 434-3828; fax, 434-6477; main number, (202) 434-2277. Founded in 1958, the AARP is a lobbying group for individuals 50 or older. With 33 million members, it seeks to protect the welfare of older Americans. The group's Health Care Campaign advocates improvements in Medicare and Medicaid and equal access to health care for all individuals. It offers consumer information and health education material. AARP members qualify for group health insurance and mail-order pharmacy services.

American Hospital Association (AHA)

Washington office: 50 F St. N.W., 20001;

(202) 638-1100; fax, 626-2345. The hospital association, founded in 1898, is an umbrella group representing hospitals, health-care facilities and medical administrators. It has 50,000 members, with headquarters in Chicago. The association conducts research and education projects regarding comprehensive care, hospital economics, hospital facilities and design, and community relations. The AHA also monitors legislation and participates with other health-care associations in establishing hospital care standards.

American Medical Association (AMA)

Washington office: 1101 Vermont Ave. N.W., 20005; (202) 789-7400; fax, 789-7454. The AMA, founded in 1847, represents 297,000 of the country's 600,000 doctors. The organization monitors legislation and regulations on health matters and malpractice insurance. It also provides information on health care. The main office is in Chicago.

B

Benefits (See *health benefits*)

Blue Cross/Blue Shield Association

676 N. St. Clair St., Chicago, Ill., 60611; (312) 440-6000. Blue Cross/Blue Shield is a system of 69 independent corporations that are collectively the nation's oldest and largest private health insurer and the largest third-party administrator of Medicare benefits. Blue Cross/Blue Shield provides direct coverage to more than 67.5 million Americans. Each plan is an independent corporation, and the system is not-for-profit.

C

California Public Employees' Retirement System (CalPERS)

CalPERS organizes pension, health and other benefits for state and local government workers in California. It negotiates prices with 19 health maintenance organizations (HMOs) and four preferred provider organizations (PPOs), and monitors the quality of care. Supporters of managed competition cite CalPERS' success as evidence that the approach works. CalPERS has 890,000 members and is by far the largest state health system. (See *health maintenance organization, managed competition*)

Canadian Plan

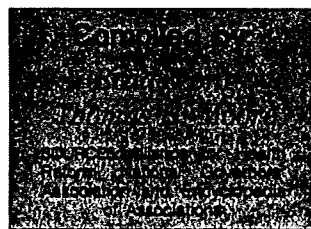
A single-payer system, Canada's national health insurance system covers all Canadians' hospital care, outpatient care and some prescription drugs. Thirty-eight percent of the system is financed by national taxation, 62 percent by provincial taxation. Private doctors in fee-for-service practices bill Provincial Health Ministries monthly, and trustee- or community-owned hospitals negotiate annual budgets with provincial governments. The government sets rates limiting the fees that providers can charge for their services. (See *single-payer system, fee for service*)

Capitation

Often used by health maintenance organizations (HMOs), capitation is a payment method in which a physician or hospital is paid a fixed amount per patient, per year — regardless of the services the patient requires.

Case Management

This is one way of handling patients under managed-care systems, such as HMOs. It is also known as "gatekeeping. Under primary care case management, the practitioner de-



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termines the quantity and mix of services a patient requires, including access to specialists. Acute care case management usually refers to service for a few high-cost, seriously ill patients. The system has a case manager who monitors services and arranges for alternative treatments. For example, the manager may recommend home treatment instead of hospital care.

Catastrophic Coverage

This type of insurance pays for high health-care costs, usually associated with accidents and chronic illnesses and diseases, such as cancer and AIDS. The medical circumstances determine the coverage, which is usually expensive and hard to find. In 1988, Congress passed the Medicare Catastrophic Coverage Act (PL 100-360), which provided benefits for those with catastrophic medical problems, capped out-of-pocket expenses and provided coverage for prescription drugs. But Congress repealed the law in 1989 (PL 101-234) after senior citizens objected to paying for the new benefits.

Catholic Health Association of the United States

Washington office: 1776 K St. N.W., Suite 204, 20006; (202) 296-3993; fax, 296-3997. The association, founded in 1915, is an umbrella organization for more than 1,200 nonprofit Catholic health-care facilities. They aim to care for everyone, particularly the poor and infirm. The association, based in St. Louis, advocates universal coverage with managed competition and a national budget. (*See Universal Coverage, Managed Competition*)

CHAMPUS

An acronym for the Civilian Health and Medical Program of the Uniformed Services, CHAMPUS is the health insurance program that serves the dependents of active-duty military personnel as well as retired military personnel and their dependents. Health care for active-duty personnel is provided by the Defense Department.

Charity Care

Charity care is free health care given by doctors, nurses and hospitals, often in conjunction with a religious organization or charity. In 1956, the Internal Revenue Service mandated charity care for nonprofit hospitals to keep their tax-exempt status. That ruling was rescinded in 1969, but many hospitals continue to provide charity care.

Co-Insurance

This is a percentage of health-care costs, not covered by medical insurance, that an individual must pay. For example, many insurance plans pay 80 percent of hospital and doctors' costs; the individual must cover the remaining 20 percent. A co-payment, however, refers to an actual dollar amount.

Community Rating

This is a method to determine the cost of health insurance premiums, the yearly amount that individuals must pay for an insurance policy. The community rating premium is based on the average medical cost for all covered people in a geographical area. It does not consider any one person's medical condition. Community rating usually keeps health-care costs relatively low because the method factors a large pool of individuals into the premium equation. (*See Experience Rating*)

Continuum of Care

This is a range of services and care settings that a patient may require at different stages of his or her illness. A person undergoing hip replacement, for example, might need hospitalization, surgery, nursing home care, rehabilitation services and home care.

Cost Sharing

A health insurance provision that requires individuals to cover some part of their medical expenses. Examples include co-insurance, co-payments and deductibles. Cost sharing may help hold down costs by deterring individuals from seeking unnecessary care.

Cost Shifting

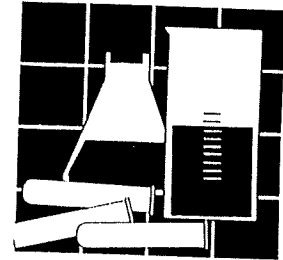
This is the practice by which health-care providers offset their losses from treating one group of patients by charging other patients more. For instance, if a certain health insurance company will pay only a specified amount for a particular procedure, the provider may bill another patient a higher fee for the same procedure.

**Deductible**

The amount a patient must pay out of pocket before insurance will cover costs.

Diagnosis Related Groups (DRGs)

Adopted by Medicare in 1983, this is a classification system designed to control costs and set standard Medicare payments. The payments are predetermined based on the patient disease, diagnosis, procedure, sex, age and medical history. After a physician determines what medical procedure or operation a Medicare beneficiary requires, Medicare reimburses the health-care provider based on the system.

**Direct Employer Coverage**

This is health insurance obtained through an individual's employer (current or former), union or family member. Sixty percent of Americans are insured through their employer or that of a family member. (*See Indirect Employer Coverage*)

**Employee Retirement Income Security Act (ERISA)**

A 1974 federal law (PL 93-406) that set the standards of disclosure for employee benefit plans to ensure workers the right to at least part of their pension. The law governs most private pensions and other employee benefits, and overrides all state laws that concern employee benefits, including health benefits.

Employer Mandate

A regulation, rather than a tax, directed at employers. One such mandate would be to require that all employers offer and pay for a portion of their workers' health coverage. Many small businesses fear that a health-care mandate would be so costly it would drive them out of business.

Entitlements

Government benefits, including health-care benefits, that go automatically to all qualified individuals. They are part of mandatory spending programs. Examples are Social Security, Medicare, Medicaid and food stamps.

Experience Rating

This is a method used to determine the cost of health insurance premiums. The cost is based on the previous amount a certain group — such as the employees of a

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business — paid for medical services. Indemnity insurance companies most often use experience rating when determining rates for businesses. Small businesses, however, can be hurt by experience rating because one employee's severe medical problems could force the entire group's premiums to increase significantly. (See *Community Rating*)

**Fee for Service**

This refers to a billing system in which a health-care provider charges a patient for a specific service.

First Party

The patient. (See *Third Party Payer*)

**Global Budget**

A global budget is an amount, set by an administrative body, that aims to control all health costs. It usually covers government spending and other insurance buyers. Global budgets are most often associated with universal health insurance, in which almost all individuals in a country are covered. The United States currently does not have a global budget, but some politicians are interested in the concept.

**Health Alliance**

This is a quasi-governmental entity under development as part of President Clinton's health-care overhaul. The alliance would pool consumers into a large purchasing group, then bargain with local health plans for low-cost, quality care. Health plans would be made up of hospitals, doctors and other providers. Almost all consumers in a given region would select their insurance plan through a list provided by the local alliance. Employers, employees and others would pay their premiums to the alliance; the alliance in turn would pass the money to the health plans based on the number of subscribers. No one could be excluded from a plan or forced to pay higher premiums because of a pre-existing health condition.

Health Benefits

These are payments made by a health insurance company to a patient or health-care provider to cover all or some of the costs of medical care or hospitalization.

Health Care Financing Administration (HCFA)

200 Independence Ave. S.W., Washington D.C. 20201; Administrator: (202) 690-6726; fax, 690-6262; information: 690-6113. HCFA is part of the Department of Health and Human Services. It administers Medicare, the health insurance program for the elderly (age 65 and older) and disabled, and Medicaid, the health insurance program for the poor. HCFA also records Medicare and Medicaid statistics.

Health Industry Manufacturers Association (HIMA)

1200 G Street N.W., #400, Washington D.C. 20005; (202) 783-8700; fax, 783-8750. Founded in 1974, HIMA serves as an umbrella group for manufacturers of medical devices, diagnostic products and health-care information systems. A primary concern is the safety and effectiveness of medical

devices. HIMA conducts educational seminars and monitors legislation and regulations.

Health Insurance Association of America (HIAA)

1025 Connecticut Ave. N.W., Washington D.C. 20036; (202) 223-7780; fax, 223-7889. The association, founded in 1956, represents 270 companies that write and sell policies. It monitors legislation, promotes effective cost management and provides statistical information on health insurance issues. Former Rep. Bill Gradison, R-Ohio, serves as its president.

Health Insurance Purchasing Cooperative (HIPC)

A HIPC, like a health alliance, pools individuals or employees for buying health insurance. A health alliance is quasi-governmental, but a HIPC is a private, nonprofit organization. The concept is a product of the Jackson Hole plan. (See *Jackson Hole Group*)

Health Maintenance Organization (HMO)

This is a prepaid health-care plan in which an individual pays the HMO a certain amount, usually on a monthly basis, and seeks treatment from affiliated medical staff. The goal is to provide affordable health care through managed care — a system in which a primary care provider acts as a gatekeeper to specialists and expensive medical tests. In general, subscribers pay a small amount at each visit. Under such plans, patients have a limited choice of doctors.

■ Staff Model

Under a staff model, physicians are salaried and work only for the HMO, usually at a single site.

■ Group Model

Under a group model, physicians are organized in an independent partnership, corporation or association that contracts only with the HMO.

■ Network Model HMO

A network model HMO combines two or more other types of HMOs.

■ Preferred Provider Organization (PPO)

Under this contract system, providers, usually organized by "networks" or panels, give medical care for a set fee. Various benefits, such as lower co-insurance and better coverage, create incentives for patients to see "preferred" physicians. Under some PPO plans, individuals are able to visit non-PPO physicians for a higher cost; the providers are compensated directly by an insurance company and co-payments. Not all PPOs cover visits to non-PPO physicians.

■ Point of Service Plan (POS)

A POS is a feature of a health insurance plan in which patients are encouraged to use a select group of providers but are permitted to seek out-of-network care. An individual who selects a POS plan may have to pay higher premiums, co-insurance or deductibles than in a standard HMO. Such a feature enables an HMO to provide more flexibility.

■ Independent Practice Association (IPA)

An IPA is a practice in which physicians can treat both HMO and private patients. HMO patients are charged a negotiated rate, usually on a per capita or fixed fee-for-service basis. Like the POS, it is similar to a PPO.

Health Plans

The term refers to the benefits offered by health insurance providers to individuals and companies. The term sometimes refers to methods of paying for health care.

**Indemnity Insurance**

This is a traditional health insurance plan in which the patient submits the medical bill to the insurance company

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for reimbursement to the physician. It differs from other coverage plans, such as those including deductibles and co-payments, in which the insurance company pays part of the bill and the patient pays the rest.

Indirect Employer Coverage

Insurance provided by employers to employee family members, who may receive fewer benefits than the employee.

Integrated Service Network (ISN)

A type of broad health maintenance organization — one that offers complete health-care coverage — being developed in Minnesota. Quasi-public cooperatives and the state Medicare system will negotiate rates and terms with the networks on behalf of large groups of consumers. Exactly what benefits the networks will be required to offer is under debate, but state officials hope they will be able to include acute care, long-term care and prescription drugs. Traditionally, a medical practice makes more money if it performs more procedures. But because ISNs will receive set payments, the incentive shifts to keeping patients as healthy as possible.



Jackson Hole Group

This is an informal group of businesspeople and academics who occasionally meet at the Jackson Hole, Wyo., home of Dr. Paul Ellwood to discuss health-care policy. Dr. Ellwood previously worked for InterStudy, a Minnesota health policy research company, but now focuses on Jackson Hole Group issues. The group produced the Jackson Hole plan, which calls for Accountable Health Plans and Health Insurance Purchasing Cooperatives. Group members favor managed competition, taxation of health benefits above a minimum package and mandating that employers provide health coverage for their workers. The group has played a significant role in the national health-care debate, and President Clinton is interested in many Jackson Hole proposals. (See *Accountable Health Plans, Health Insurance Purchasing Cooperatives, employer mandates, managed competition*)

"Job Lock"

Under "job lock," people are forced to remain in a job for fear of losing health insurance coverage altogether or because a prospective employer's health plan refuses to cover a medical circumstance, such as a dependent's pre-existing condition.



Long-term care

This is health care required by chronically ill, physically disabled or mentally disabled individuals. Such patients usually require 24-hour supervision in a hospital or nursing home.



Major Medical

This usually refers to an insurance policy designed to cover the high expenses associated with serious illness. Typically, policy holders must pay extremely high deductibles before coverage starts. They may also have to pay co-insurance.

Malpractice

Malpractice refers to harmful or unprofessional treatment or neglect of a patient by a physician or other health-care provider.

Managed Care

This type of health-care delivery aims to control costs by using "gatekeepers" — primary care doctors or caseworkers — to coordinate patients' use of health services. Managed-care networks usually are organized by insurance companies, employers or hospitals. One such network is the type run by health maintenance organizations, in which a patient sees one physician who determines the medical care — both general and specialized — that the patient will receive. A patient's access to medical services is controlled.

Managed Competition

A brainchild of the Jackson Hole group, managed competition is a health-care system in which insurance companies and health-care providers would create health plans that would compete with other health plans for large groups of consumers. Under managed competition, individuals would be organized into large health purchasing groups to buy insurance. Health-care providers, organized in a network, would vie for their business. A purchasing group would bargain with a network to obtain the best cost per individual. The concept is popular on Capitol Hill because it promises to provide universal coverage with low costs. Alain Enthoven, a business professor at Stanford University, is considered to be the father of the concept.

Medicaid

Enacted into law in 1965 (PL 89-97), Medicaid is the federal-state health insurance program for the poor. It took effect in 1966. Nearly 30 percent of Medicaid dollars are spent on long-term care for the elderly and care for the mentally disabled. The program differs from state to state. According to the Health Care Financing Administration, states spent \$50 billion on Medicaid in 1992 and the federal government spent \$68 billion. The program covered 32.6 million people.

Medicaid Waiver

This is a formal process by which a state receives a waiver from certain Medicaid program rules. States request such waivers when they are implementing their own health-care programs for the poor.

Medical savings accounts

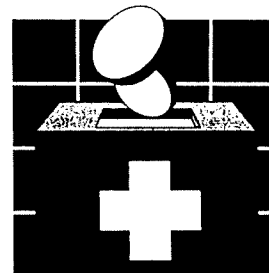
Accounts similar to individual retirement accounts into which employers and employees can make tax-deferred contributions and from which employees may withdraw funds to pay covered health-care expenses.

Medicare

Medicare is the federal health insurance program for the elderly (those 65 and older) and disabled. It covers benefits for hospital care and physician visits. Funding comes from individual premiums, taxes and general revenues. President Lyndon B. Johnson signed Medicare legislation (PL 89-97) into law in 1965. It started a year later.

■ Medicare Part A

This universal part of Medicare pays for hospital care. The hospital insurance program covers inpatient care after beneficiaries meet a \$676 deductible. The program also provides short-term nursing care. Medicare Part A cost \$80.8 billion in 1992 and covered 34.4 million people. It is financed by a 1.45 percent payroll tax.



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■ Medicare Part B

This voluntary part of Medicare, known as Supplementary Medical Insurance, helps pay doctors' bills. Medicare Part B works by covering 80 percent of certain physician and non-hospital services after beneficiaries meet a \$100 deductible. It covered 33.6 million people in 1992, at a cost of \$48.6 billion. It is financed by patient premiums and general federal revenues.

Medigap

These are private health insurance plans that augment Medicare by paying costs not covered by the federal government. Payments could include co-insurance, coverage of Medicare deductibles and bills not covered by Medicare (including prescription drugs).

Multiple Employer Trust

A legal trust involving several small and unrelated employers who provide group health coverage through an insurance company or self-insurance.

**National Governors' Association (NGA)**

444 North Capitol St., No. 267, Washington, D.C. 20001; (202) 624-5300; fax, 624-5313. An organization representing the nation's governors, NGA studies and makes recommendations to Congress and the president about public policy. NGA has been an active participant in the health-care debate. It was founded in 1908 and currently has 55 members, including governors of states and territories.

National Health Care

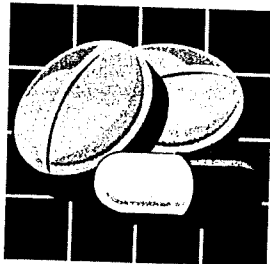
This term refers to a health-care insurance system that covers all citizens and various other residents. It often refers to a single-payer system in which the federal government is the payer. Under many such plans, the government sets all fees for hospitals, physicians and other providers.

National Health Budget

The national health budget is the total amount spent on health care by government and private payers. In 1992, the United States spent \$832 billion — one-seventh of the entire U.S. economic output. The Congressional Budget Office estimates that the cost will soar to \$1.6 trillion by 2000.

**Oregon Plan (See Rationing)****"Orphan Drugs"**

"Orphan drugs" are medicines for ailments that afflict fewer than 200,000 people. In 1983, Congress passed the Orphan Drug Act (PL 97-414), which gave tax credits and exclusive market rights to medical companies involved in developing such drugs. Many considered the law a success. From 1983 to 1992, the Food and Drug Administration approved more than 60 new medicines, and at least 350 others are in development. However, critics charged that the law gave pharmaceutical companies too much latitude in setting prices and making profits. In 1990, Congress attempted to amend the 1983 legislation, but President George Bush vetoed the bill. Congress made another attempt in 1992, but



the bill (S 2060) never reached the floor. A drug company user-fee law (PL 102-571), however, included orphan drug provisions that permit the secretary of Health and Human Services to waive certain fees for producers of orphan drugs.

Outcomes Analysis

Outcomes analysis is an evaluation system associated with managed competition that rates medical treatments according to outcomes, or success rates. For a health care plan to qualify to offer its services to consumers, the doctors and hospitals in the plan must show results that are average or better. Analysts disagree, however, on whether reliable data to assess outcomes exist. The White House says such data exist, but critics point to loopholes and legal pitfalls if a health-care plan receives a low rating.

**Pepper Commission**

A 15-member commission led by the late Rep. Claude Pepper, D-Fla. (Senate: 1936-51; House: 1963-1989) that explored how to address the needs of those who lacked health insurance and how to finance long-term care for the chronically ill or disabled. The commission was created by the 1988 catastrophic-coverage law (PL 100-360). In 1990, the commission recommended a "play or pay" plan for employers and a universal plan to cover long-term care services for all Americans. Under play or pay, employers would have to provide health insurance ("play") for their workers, or pay into a government insurance pool.

Per-Person Premium

This refers to a flat-rate insurance premium that every firm would have to pay for every employee's health care.

Physician Payment Review Commission

2120 L Street N.W., Suite #510, Washington D.C. 20037; (202) 653-7220; fax, 653-7238. Founded by Congress in 1986, the PPRC recommends Medicare reimbursement rates for physicians. The 13-member commission studies Medicare payment issues and then submits its findings to Congress. Congress sets the policies to be used, and the Health Care Financing Administration sets the actual rate. In addition, the commission holds health care and physician forums, studies Medicaid payment issues, examines medical school financing and undertakes other medical studies. It issues at least three reports to Congress every year.

"Play or Pay"

"Play or pay" is a universal coverage plan in which employers either provide their workers with a basic health benefits package, or pay into a government insurance pool. It is a combination of employer mandate ("play") and the single-payer system ("pay").

Pharmaceutical Manufacturers Association (PMA)

1100 15th St. N.W., #900, Washington D.C. 20005; (202) 835-3400; fax, 835-3414. Founded in 1958, the association is a lobbying group that represents 88 companies that discover, develop and manufacture prescription drugs. It provides consumer information on drug abuse, the safe and effective use of prescription medicines and developments in important areas including AIDS. PMA is also a clearing-house for pharmaceutical industry statistics.

Pre-Existing Condition

This is a physical or mental condition diagnosed before an individual receives health insurance coverage. Some ins-

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urers may refuse to cover someone because of such a condition. Others may increase their rates or refuse to cover the patient for a specific time.

Preferred Provider Organization (PPO) (See *Health Maintenance Organization*)

Premium Tax

This is a state tax on the premiums collected by an insurance company from policyholders who live in the same state.

Price Controls

Price controls are government-set price ceilings on basic commodities. If the government were to institute price controls on medical products or services, the products would be more affordable to the general public, but medical product companies, doctors and hospitals would be paid less.

Primary Care

Primary care is the general care people routinely receive when they go to the doctor. It can be delivered by a doctor, nurse practitioner or physician's assistant. Physicians who practice family medicine, pediatrics and internal medicine are considered primary care providers. In some cases, specialists such as obstetricians and gynecologists and practitioners of preventive and emergency medicine are considered primary care physicians.

Prospective Payment System

Adopted in 1983, this is a pay scale to compensate hospitals for Medicare services. The scale is based on the complexity of services a patient requires and uses the Diagnosis Related Groups, a classification system that sets standard Medicare reimbursement rates. For example, Medicare will pay a hospital only a certain amount for a specific medical procedure. Medicare adopted the system to control costs.



Qualified Medicare Beneficiary

A person 65 or older whose income falls below the federal poverty line, and for whom the government must pay all Medicare costs, including Medicare Part B premiums, deductibles and copayments.



Rate Setting

Rate setting usually refers to the system the government uses to reimburse doctors and hospitals for services. It implies strict control of costs. Under Medicare, the government has a complicated reimbursement formula that takes into account the procedure and the provider's cost.

Rationing

Any system that limits the amount of health care that a person can receive. The best-known example is Oregon's experiment, which ranks medical procedures and conditions and provides Medicaid coverage only to a certain point down the list; thus, vaccinations may be covered but organ transplants may not be. Proponents of Oregon's plan point out that a sort of rationing exists already, based on income.

Reinsurance (See *Stop-Loss Coverage*)

Relative Value Scale (RVS)

Medicare put the RVS in place in 1992 pursuant to a 1989 law in an effort to shift Medicare funding toward primary care and away from specialists. The scale assigns a value to each medical procedure in the new Medicare Fee Schedule,

based on the complexity of the procedure. A simple Medicare office visit may have a value of one, while complex surgery may have a value of three. The RVS uses a conversion factor that translates the number into a dollar amount. Medicare did this to control costs. Under the old system, high Medicare payments went disproportionately to specialists.

Risk Pool

A risk pool is a group of people seeking insurance; it can refer to people who can afford insurance but cannot obtain it for medical reasons. Under Clinton's plan, the risk pool is everyone within a health alliance or a health plan.

Risk-Control Insurance (See *Stop-Loss Coverage*)



Second Party

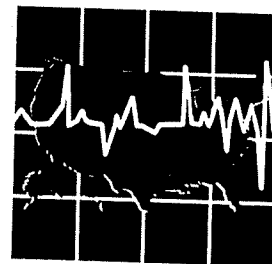
The caregiver or provider. See *Third-Party Payer*.

Self Insurance

Self insurance is a form of private coverage in which an employer, rather than an insurance company, assumes the risk. Third-party administrators or insurers, however, may administer the plan.

Single-payer system

A universal coverage plan under which the government collects insurance premiums and administers health-care benefits for everyone in the state or country. It cuts out the role of insurance companies. Proponents argue that it is the best way to dramatically cut national health-care costs.



Small Group Market

Selling insurance to small businesses is known as selling to a small group market, generally defined as businesses employing fewer than 100 employees. Small businesses tend to face higher per-employee costs for health insurance than larger businesses.

Stop-Loss Coverage

Insurance coverage purchased by a health plan from an insurance company to reimburse the plan for the cost of benefits paid out to an individual or account that has exceeded what the plan expected to pay out. It stops the insurance company's loss. It is also known as reinsurance or risk-control insurance.



Task Force on National Health Care Reform

Formed in January 1993 by President Clinton, the task force studied how to overhaul the nation's health-care system. First lady Hillary Rodham Clinton served as its chair; she held more than 100 health-care meetings with members of Congress. The task force included 13 members, mainly Cabinet level officials, and a working group of more than 500 people, including health-care professionals, policy analysts and Capitol Hill aides. The task force did not publish a report but funneled its recommendations and findings to the president. The task force dissolved in May.

Third-Party Administrator

A person or corporate entity that handles the administrative details of a health-care insurance plan for a self-insured group. The group, not the administrator, assumes the liabilities.

GLOSSARY

Third-Party Payer

Anyone paying for health care who is not the patient (the first party) or the care-giver (the second party). It includes public and private insurance providers such as Medicaid, Medicare, Blue Cross/Blue Shield and most commercial health insurance companies. Generally, the patient pays a premium to the third-party payer, and the third-party payer then pays the bills — or a percentage of the bills — incurred by the patient. Health maintenance organizations are an example of an arrangement with no third-party payer; the HMO collects the money from the patient and HMO doctors dispense the care.

**Uncompensated Care**

Care given by a hospital or other care-giver that is not paid for by patients, their insurance companies or the government. The cost of uncompensated care is often charged to paying patients and their insurance companies.

Underinsured

The number of people with inadequate health insurance is large, but hard to pin down. A 1992 report by Lewin-VHI Inc., a private health-care research company based in Fairfax, Va., estimates that 15 million people are underinsured.

Health insurance can be inadequate for reasons including: high deductibles that discourage people from seeking preventive care; policies that do not cover needs such as substance abuse rehabilitation or mental health care; and policies that impose a waiting period before coverage kicks in.

Also underinsured are those covered by Medicaid who are unable to find a provider willing to treat Medicaid clients, and pregnant patients unable to find one of the country's dwindling number of obstetricians.

Uninsured

A 1991 Census Bureau study found that 14.7 percent of all Americans had no health insurance — 36.6 million people in all. If those over 65 — most of whom are covered by Medicare — are factored out, 16.6 percent of Americans had no coverage. The bureau also looked at a 28-month period from 1986 to 1989 and found that the proportion of people who were without health insurance at some point during that period was even higher — 30 percent. Males, minorities and young adults are disproportionately without health insurance. (*Story*, p. 19)

Universal Coverage

A plan designed to give everyone in a country or state access to health insurance. Ways to do that include employer mandates, single-payer systems and "play or pay" systems.

**Volume Performance Standard (VPS)**

The VPS aims to control the rate of Medicare spending increases. It adjusts the reimbursement amount a Medicare physician will receive under Medicare Part B by focusing more on the amount that it costs to operate a medical practice each year than on the number of patients a doctor sees or the number of procedures a doctor performs. This offsets physicians' tendencies to make up for restraints in Medicare fees by increasing the number of services provided.

**Wage-Based Premium**

This is a way of paying for health care. Favored by many liberal lawmakers, it would require that all employers pay a percentage of their payroll to cover the cost of providing health insurance to their employees.

A small portion of the premium would be paid by the employee. People with higher salaries and firms with higher payrolls would pay more than firms with lower salaries. For instance, if the price of a premium were about \$2,000 and the government required that 10 percent of the payroll be paid toward it, the employer of a worker earning \$50,000 a year would pay \$5,000, and the employer of a worker earning \$20,000 a year would pay \$2,000. The \$5,000 — more than is actually needed — would go toward covering the uninsured. The political problem with a wage-based premium is that it resembles a tax.

**Zero-Sum Budgeting**

This term suggests a "deficit-neutral" budget process in which new expenditures are paid for through cuts in existing programs or increases in revenues; the end result is no increase in the federal deficit. In the current health care debate, this concept will be central to all considerations of providing universal health care coverage while also trying to rein in costs.



OBJECTIVES

1. Review what has been done in Kansas in health care reform -- primarily improving access.
2. Review what may be done in Kansas in the future regarding health care reform -- recommendations of the Commission on the Future of Health Care, Inc.
3. Review what type of revisions may come from federal government health care reform proposals -- what we know today about proposal, issues for Kansas.

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KANSAS AND INCREMENTAL HEALTH CARE REFORM.

The Kansas Legislature has chosen the path of incremental steps in improving access to health care for those who lack access because they are uninsured, underinsured, are unable to pay for their own health care, covered by a governmental program that makes it difficult to find a provider, or live in an area where a range of health services are not available.

Governmental Organization

In 1990 the Legislature created the Joint Committee on Health Care Decisions for the 1990s (explain why and the composition of the Committee and why it is unique)

The Committee is directed to address public policy priorities appropriate for health care in Kansas; problems of access to health

House Public Health & Welfare
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care services; rural health care issues; coordination of the delivery of health care services; financing of health care by the public and private sectors; initiatives in health care policy, delivery, and financing developed in other states and by the federal government; and such other matters relating to health care as directed by the Committee. Let me note the goals adopted by the Committee and recommended to the 1993 Legislature:

1. The focus should be on the provision of primary care, prevention programs, general health education and wellness programs, and changes in health care provider education. The following steps are recommended to implement this goal:

Prenatal care and primary health care for all children should be provided with an initial implementation priority for ages 0 to 5

The number of primary care physicians practicing in Kansas should be increased

Expanded training for and the use of mid-level and multi-skilled health practitioners should be supported

has implications for legislative decisions re licensing & creation of exclusive freedoms

2. The Commission on the Future of Health Care should foster public discussion on health issues and present proposals to the Joint Committee for changes in the health care delivery system in Kansas, addressing issues of access, cost containment and cost shifting
3. The legislative and public policy should be to establish spending priorities based on need and available resources
4. Rural health care has been neglected and new strategies should be developed and adopted to improve rural health care in Kansas, with support for innovative programs.
5. Comprehensive changes in the health care delivery system

in Kansas must include insurance reform such as

community rating
continued monitoring of mandates
reduction of program and administrative costs
monitoring of the implementation and operation of
a reinsurance mechanism for small group insurance ✓

6. The collection of health-related data should be required in order to create a base for informed policy decisions ✓
- 7 Expenditures for duplicative, high-technology procedures and equipment must be curtailed. Measures such as certificate of need procedures and moratoriums should be considered
8. State policy should encourage the provision of health care services by all providers to those who have difficulty accessing health care
9. Integrated health care services shall be developed at the local level under the jurisdiction of the governing board of the county or counties that are included in a natural service area
10. Telemedicine and interactive video should be encouraged, and interested parties should work together to ensure the highest level of compatibility with the least amount of duplication

In 1991 the Legislature created a quasi-governmental corporation known as the Commission on the Future of Health Care, Inc. which is often referred to as the 403 Commission because of the number of the Senate bill that created the Commission. The Commission is partly funded by state appropriations and in-kind services with the remainder raised from the public sector. The Commission has an 11-member board, 10 of whom come from the private sector from nominees proposed to the Governor by various organizations set out in the legislation and the legislative leadership and one member of the

Legislature who is also on the Joint Committee on Health Care Decisions. The Commission, which expires on a date specified in the legislation, is directed to develop a long-range health care plan, including both short and long-term strategies.; to identify the social values of Kansans; and to provide a forum for Kansans to participate in the development of health policy.

The 1993 Legislature created legislation under which a health care data base is to be developed for Kansas because we know that health care reform is going to require a great deal of data that we don't currently have available or which is produced in the private sector or by numerous state agencies but not aggregated in any one data system. Work has commenced on identifying the elements to be included initially in the data base and the preliminary design of the data system under the direction of a governing board composed of members drawn from academic and private sectors. The actual data base once developed will operate under the administrative supervision of the Secretary of Health and Environment.

Improved Access Through Insurance Reform

As early as 1988, the Legislature enacted legislation that prevents insurers from excluding any eligible member of an employee group from an employer sponsored employee health insurance plan. In effect, this means that in Kansas, insurers cannot refuse to include an individual in a group plan because that individual is high risk for health care or has a condition that has the potential for high health

care costs. There are some exceptions if the individual does not enroll in the plan at the time of an open enrollment period to avoid having persons enroll in the group plan only after they know they have developed a high risk condition or disease. (adverse selection)

In 1991 a number of changes were made in the insurance laws that correct or change some of the practices that have prevented individuals from being covered by group health insurance. These practices have been applied to small groups in order to keep rates down because one bad experience in a small group can result in increasing the risk to the insurer significantly without the ability to spread the increased risks over a large number of group members. The changes include:

New provisions preventing any one eligible for coverage under a group plan from being excluded, beginning at the time of initial coverage and extending 31 days after that date. (no underwriting)

That eligibility extends to all Kansans regardless of the place the policy is issued (extraterritoriality)

No group policy may exclude or limit benefits for specific conditions existing at or prior to the date of coverage, except that the policy may establish up to a one-year waiting period for conditions diagnosed, treated, or for which medical advice was sought or received in the 90 days prior to the effective date of the coverage.

the portability of coverage is guaranteed which means that any waiting period served under one policy must be considered met under any new or replacement policy with no gap in coverage (allows persons with preexisting conditions to change jobs without worrying about exclusion or a waiting period for the condition.)

that group policy rates are prohibited from increasing more than 75% in any one year unless the insurer can demonstrate a material and significant change in the characteristics of the group.

insurers are required to submit forms and premium rates for any group policy to the Insurance Commissioner who may disapprove the rates that are filed.

In 1992 legislation was enacted that attempts to insure that any small employer-sponsored group can get health insurance coverage and to make small employer group plans more affordable. This is particularly of importance in Kansas which has a disproportionate number of small businesses (Kansas Department of Commerce and Housing estimates that 90% of Kansas businesses have 25 or fewer employees.)

The 1992 legislation specifically provides:

every carrier who does business covering small employers (3 to 25 employees) must offer at least a basic and standard small employer health benefits plan to any small employer group seeking coverage

an 11-member board was created to design small employer benefit plans, including a basic benefit plan designed to keep costs down and not subject to coverage mandates except those relating to provider choice. The basic plan must include copayments and deductibles. The standard plan is also exempt from certain statutory mandates relating to covered services but includes more benefits than the basic plan. Both may include not more than a 12 month waiting period for preexisting conditions. (These small employer plans have been developed and are available in the market at the present)

Carriers may classify small groups for the purpose of setting premium rates, but the health claims or past claims experience of the group may not be a basis of classification. Rates may be adjusted according to a specific formula set out in the bill, but not otherwise. This had the effect of increasing rates for some small groups with many young members and good experience in the first year and decreasing rates for some other groups. Ultimately, the rate differentials between groups will "smooth out", and premium increases will be controlled within the parameters set out in the law.

The 1992 Legislature also passed legislation directing the creation of the Kansas Uninsurable Health Insurance Plan, under which

eligible individuals may get limited health insurance coverage if they are unable to secure health insurance in the market because of a preexisting condition or disease or can only secure coverage that excludes preexisting conditions or at a cost above that than can be purchased through the Plan. The Uninsurable Plan, which is now in operation, is what is sometimes referred to as a risk pool not unlike the Kansas Uninsurable Motorists Plan under which individuals who can't get automobile insurance because of their driving track record are insured at a significantly higher cost through a pool of insurers. The Kansas legislation differs from that of most states that have uninsurable health insurance risk pools in that the law specifies the plan must include cost control measures, including preadmission review, case management, utilization review, and exclusions and limitations on the treatments and services covered under the plan. The insurance that is offered may only cover specific services set out in the legislation and is exempt from all statutory mandates. The maximum lifetime benefit is \$50,000 and at least one plan offered must include a \$5000 deductible. Managed care must be a part of the plan.

Kansas law now requires all health carriers to use a universal claim form developed by the Insurance Commissioner. Carriers may not refuse to accept a provider claim filed on the universal claim form, but may accept claims filed on other forms.

Primary Care for the Medically Indigent and Medicaid Clients

go to p. 9

Legislation enacted in 1991 authorized three pilot projects under which state grants are made available to local health departments that agree to provide primary care health services for the medically indigent and Medicaid/MediKan clients. The program was expanded through appropriations action to include funding for more than three pilot projects and to include not-for-profit community clinics. ^{Bilwren} Since January of 1992 and December of 1992 funds have been available to 9 primary care clinics -- the majority operated by local health departments, but including some not-for-profit community clinics. From January 1992 through the end of December of 1992, the clinics, which must match the state funds with local money, ~~provided~~ served a total of 35,090 individuals with 44,318 patient visits, (41% Medicaid, 7% Medicare, and 52% uninsured. 74% of the patients seen had incomes below the federal poverty level. Funding was extended for the current fiscal year. The clinics have received enthusiastic local support and, in some communities where they are located, have overmatched the state funds.

Since 1990, the Legislature has extended professional liability protection under the Kansas Tort Claims Act to health care providers who agree to provide charity care and meet the criteria in the law. In 1992 there was legislation enacted to expand such coverage that was vetoed by the Governor. In 1993 legislation was enacted and approved by the Governor. The following health care

providers are covered:

a health care provider who has entered into an agreement with the Secretary of Health and Environment to provide gratuitous health care services to the medically indigent as that term has been defined by rules and regulations of the Secretary and who:

1. is a health care provider who gratuitously renders health care to medically indigent or persons receiving assistance under programs operated by the Secretary of SRS;
2. is a health care provider who gratuitously renders professional services in children's immunization programs administered by the Secretary of Health and Environment;
3. is a health care provider who has entered into an agreement with an indigent care clinic or local health department that provides care to medically indigent persons or clients of SRS to render care to patients of the clinic or health department, regardless of whether the clinic charges a fee for the services and even if the provider is paid a fee by the clinic or health department.

The law allows any claim arising against the health care provider who meets one of the criteria listed above to be paid from the state Tort Claims Fund rather than the provider's malpractice insurance. As of May of this year there were 521 physicians, 41 dentists, and 146 licensed professional nurses signed up as charity care providers providing care through 53 local health departments and 15 indigent care clinics. There were 561 nurses who had been approved as charity care providers for the purposes of immunization programs administered by the Secretary of Health and Environment as of May. We assume the number of charity care providers extended protection from malpractice liability has increased since May as a result of the broadened criteria for serving as a charitable health care provider

that became effective with enactment of the 1993 legislation.

Cost Containment

The 1993 Legislature enacted a new law that requires the Secretary of Social and Rehabilitation Services to contract for managed care for Medicaid clients in Sedgwick County and one other area having a population of less than 100,000.

The legislature has also begun to shift state emphasis in funding and new programs from illness care to primary and preventive health services as evidenced by enactment of legislation mandating a health assessment prior to first entrance to a Kansas school; authorizing rural health networks; increasing funding for the infants and toddlers programs aimed at early identification and intervention in conditions that may delay development or affect health; requiring immunizations for all children prior to entrance to child care or preschool; funding Operation Immunize; creating a number of new laws and programs aimed at pregnant women and infants and funding Medicaid eligibility for these two groups at 150% of the federal poverty level; and requiring the development and submission to the Legislature each year of a children's budget.

COMMISSION ON THE FUTURE OF HEALTH CARE, INC. AND HEALTH CARE REFORM

I noted earlier the creation of the Commission on the Future of Health Care in 1991 as a quasi-state corporation. The Commission has received grant funds as well as state appropriations since the beginning of FY 1992 and has been very active in carrying out its

mission to develop a long-range health care delivery plan for Kansas. In 1992 the Commission held 25 town meetings across the state called critical issues forums. This schedule of meetings followed an intensive two to three-week media information campaign by the Wichita Eagle/KSNW TV/KNSS-AM radio, the Topeka Capitol-Journal/KSNT TV/KTPK FM radio and print and electronic media statewide who participated in varying degrees depending on the community. The town meetings followed a format developed by the Public Agenda Foundation and tested in Georgia and other more local areas as a means of receiving public input into the values of Kansans when it comes to health care. Individuals attending the meetings had an opportunity to weigh the advantages and disadvantages of the three most discussed approaches to health care reform. Following the town meetings, 11 Kansas newspapers printed the "Condition Critical Ballot" used at the town meetings to allow persons who were not present at the meetings to have input into the final results of the social values component. 2,957 ballots printed in the news media were received by the Commission following the town meetings, along with 254 letters and 1500 comments that supplemented the ballots. About 2,932 individuals attended the 25 town meetings with attendance ranging from 25 to 375 persons. 970 ballots were collected at the meetings and an additional 615 ballots were mailed to the Commission by persons who had attended the meetings or a total of 1585 ballots from persons attending the meetings (51%) Following this phase of the Commisisions charge,

demographic and other analysis was done by a firm that specializes in this type of data analysis. Of those that attended the largest percent were in the 50-64 age range followed closely by the 40-49 age group: 45.4% were male and 54.6% female; 70.7% were college graduates; 72.5% were employed, with a high % (53.3% employed in a health care related field; the highest percentage were in the \$30,000 to 49,000 income range followed closely by the \$50,000 to 74,999 range. 93.3 of those in attendance had health insurance. Outcome analysis of the ballots indicated:

2/3 said Americans should have the right to good quality, comprehensive care

Compared to national survey data, Kansas respondents were much less likely to think that eliminating waste from the health care system would enable the US to afford health insurance for everyone

Given 3 policy options, 34% preferred a national insurance program run by the government, 33% favored an expanded version of the current health insurance system, and only 19% preferred employer-mandated coverage

Solid or large majorities supported limiting malpractice awards to the cost of care plus a small amount; discouraging doctors from using extraordinary measures to extend the lives of terminal patients; and legislation to force hospitals to share expensive equipment and services.

Kansas residents expressed strong opposition to limits on choice of doctors or hospitals

The series of town meetings was followed in late winter of 92 and the spring of 1993 by 25 values forums held around the state. In these smaller, more representative groups participants were asked to come up with the characteristics of an ideal health care system. From

20 characteristics they were asked to select the top five and the bottom five. The top five choices were, in order of preference:

1. Basic level health care services available to everyone, regardless of ability to pay;
2. Control cost of health care in the U.S.;
3. Ensuring the competence of health care providers and institutions;
4. Ability to choose doctor, hospital, or other provider;
5. Emphasis on care that results in an improved quality of life rather than the prolongation of life.

The bottom five choices were:

20. Access to non-traditional care (for example, herbal treatment, acupuncture, faith healing).
19. Access to not yet proven treatment options, often not currently covered by health insurance;
18. Right to sue doctor or hospital for malpractice;
17. Ability of health care workers to understand how culture and racial background influence health;
16. Visits by health workers to homes of new mothers for education.

Those who participated in the values forums took home the values exercises to use with other groups, and the Commission continues to receive input from community groups.

The Commission is now conducting up focus groups to get feedback from those segments of the population not represented or underrepresented in the earlier meetings.

The Commission will be presenting recommendations for health

care reform in Kansas to the Joint Committee on Health Care Decisions for the 1990s late in the fall, but the members have made some tentative decisions at this point as follows. It should be stressed these are very preliminary and in a draft stage so the members should not leave the room stating that these are the Commission's recommendations.

The Commission is proposing a blended approach to health care reform, capitalizing upon the strengths of the market-based and "single payor" philosophies to produce the needed changes in our current system of delivering and financing health care.

All Kansans would be required to have health insurance covering a set of core services. Each individual would select the Health Service Network from which he would obtain the health benefits. The core benefit package would include a continuum of health services, including public health, prevention, promotion, primary care, acute care, mental health, home and community-based services, and prescription drugs. Premiums for individuals with a family income below 200% of the federal poverty level would be subsidized on a sliding scale.

The Health Care Purchaser for All Kansans (HCPAK) would be an intermediary between consumers purchasing core services and the health services networks providing the core benefits.

The mandated set of core services would be made available to all Kansans, primarily through competing integrated delivery systems

called Kansas Health Services Networks (HSNs).

A Kansas Health Commission (KHC) would be established to set broad policy parameters and perform oversight functions related to the performance of both health service networks and the Health Care Purchaser for All Kansans. See attached chart.

NATIONAL HEALTH CARE REFORM AND ITS AFFECT ON THE STATE

The first point I would make is that I don't have the 239 page document that has been circulating in the Congress for the past several weeks, nor any more real insight than you do as to what is being proposed or what we will hear when the President addresses the nation on his health care reform proposal. After listening to two members of task forces that worked with Ira Magaziner and the First Lady, I have one or two comments:

First -- the overriding issue in Washington, both at the White House and the Congress, is not access or other corrections in the health care system, but cost control. There is a realization there is no way to get the federal budget or budget deficit under control unless health care costs are controlled. The federal governments share of the health care expenditure has risen from 9% of the total in 1960 to 30% today and this is the fastest growing segment of the federal budget and largely represents entitlements that are not subject to real restrictions. Second, there is a growing realization that US business cannot compete in a global economy when health benefits for US workers are so out of line with the cost of benefits

in competing industrial nations.

The goal is to cut the US \$900 billion annual health care bill, while adding coverage for the 37 million uninsured Americans and slow the rate of cost growth in the public and private sectors to about half its current level by the late 1990s.

Second -- several of the Administration proposals that have been leaked are diametrically opposed to both Kansans values and desires and the Commission's proposals. For example linking health benefits to employment.

Third -- once the debate begins and the public begins to understand the tradeoffs and additional costs, the public ambivalence about health care reform will be reflected demographically and geographically and will play a part in the debate.

Fourth -- the big losers could be the states which are already strapped by the cost of Medicaid to the point that they can't make investments in education, public safety and other areas that citizens support because of the cost increases they have to absorb in Medicaid, some of which are the direct result of federal mandates. If the states are saddled with unrealistic basic benefits packages and global limitations on premium and cost increases, the subsidies they may have to come up with may make Medicaid look good.

WHAT DO WE KNOW AT THIS POINT

The federal government would gain dramatic new regulatory power over the nation's health care, including the right to control

spending. The federal Department of Health and Human Services could take over state programs that fail to meet federal goals, and impose payroll taxes on employers in those states.

The states will have vastly expanded responsibility to monitor and police the practice of health care providers, including marketing plans, expenditures, the qualifications of providers, and procedures for deciding how patients should be treated.

Under the Administrations proposal a seven-member presidentially appointed National Health Board would be created to establish national rules that each state would have to carry out, to monitor the state's compliance, and to set baseline budgets for each regional alliance through which most consumers will purchase health coverage.

Regional alliances will limit annual premium increases; as for example, premiums would be allowed to increase beginning in 1996 by the CPI plus population growth and 1.5%; the allowable growth increment above the CPI would then decline by .5% each year for the next 3 years. The states could also limit enrollment in high-cost plans or adopt a single payor system in which the state set fees and pays hospitals and doctors.

The regional alliances could exclude plans whose proposed premiums exceeded the average of all other plans by 20% or whose proposed premium would cause the alliance to exceed its budget target. They could also exclude plans that discriminate or offer a substandard

level of care.

The President's proposal would give the states a three-year window (beginning in 1995) to implement the program -- including extending coverage to the uninsured, requiring all employers to pay a part of their workers' health insurance costs, and setting up regional health purchasing alliances. The states would have to develop their own systems for accrediting health plans, regulating the flow of money to the plans, and collecting data on each plan's quality. In addition, states would be responsible for ensuring that health plans are solvent --each would need to meet a minimum capital requirement of \$500,000 -- and would operate a guarantee fund to protect consumers in case a plan became insolvent.

If any state failed to meet federal guidelines and deadlines, the Department of Health and Human Services would take over the system and withhold federal appropriations. It could also impose a payroll tax on all employers in the state in an amount sufficient to allow the federal government to provide health coverage to all individuals in the state and to reimburse the federal government for the costs of monitoring and operating the state system.

There are 30 other areas of change, including major revisions in the existing system of federal subsidies to academic health centers the laws governing malpractice, antitrust activities, and health-related fraud and abuse. For example, federal funding for medical education would be revamped to ensure that within five years at least 50% of all

new doctors were trained in primary care.

On the issue of freedom of choice, the Administration proposal would require the regional alliances to offer consumers a traditional fee-for-service plan, but an alliance could waive that requirement if a fee-for-service plan is not financially viable or there is insufficient provider interest in the plan.

In terms of rural care, the federal government would offer technical assistance to develop primary care facilities where none exist and would create a system for doctors to communicate with others in health centers through telecommunication. In addition, the plan would offer tax incentives to attract doctors to underserved parts of the country, including a \$1000 a month personal tax credit for the first five years and a \$500 for ARNPs and PAs, an allowance of up to \$10,000 annually for purchase of medical equipment, and deductions of up to \$5000 in annual student loan interest,

Disabled persons who work would get a tax credit of half the cost of personal care and assistance necessary to perform daily activities up to a maximum of \$15,000 a year.

The VA would be allowed to organize its hospitals and health centers into health plans similar to those offered the public or it could allow them to provide services under contract with general health plans. Persons with service connected disabilities could elect to be covered by a DVA health plan.

Federal employees would purchase plans from regional health

alliances in their areas rather than through the federal government.

The Administration plan proposes a standard benefit package that may be beyond the ability of many Americans to afford without substantial government subsidies. See chart.

There is concern that the proposals will stifle competition rather than encourage it, particularly on the part of the gurus who developed the managed competition concept but see it being very different in the Administration proposal than their concept of large health purchasing alliances contracting with provider networks and offering alternative plans to their members with no government intervention.



Kansas Commission on the Future of Health Care, Inc.

TESTIMONY TO
HOUSE PUBLIC HEALTH & WELFARE COMMITTEE

on October 1, 1993

by
Barbara E. Langner, R.N., Ph.D., Executive Director
Kansas Commission on the Future of Health Care, Inc.
and
Myra Christopher
Executive Director, Midwest Bioethics Center and
Vice Chair, Kansas Commission on the Future of Health Care, Inc.

The Kansas Commission on the Future of Health Care, Inc. was created by the enactment of Senate Bill 403 during the 1991 legislative session.

The legislative charge to the Commission is four-fold:

- 1) Develop a long-range health care policy plan, including both short- and long-term strategies.
- 2) Identify social values of Kansans
- 3) Provide a forum for Kansans to participate in the development of health policy.
- 4) Report periodically, but not less than semi-annually to the Governor and to the Joint Legislative Committee on Health Care Decisions for the 1990s.

The 11 person multidisciplinary Commission includes:

<u>Board of Directors</u>	<u>Appointed by/Representing</u>
Larry Anderson, M.D.	Governor/ Kansas Medical Society
Myra Christopher, V Chair	Governor
Barbara J. Gibson	House Minority Leader
Myron Leinwetter, D.O.	Governor/Kansas Assn of Osteopathic Medicine
Betty Jean McElhaney, R.N.	Governor/Kansas State Nurses Assn
Joe Pucci	Governor/AFL-CIO
Stan Regehr	Governor/Kansas Hospital Assn
William R. Roy, Sr., M.D., J.D.	Speaker of the House
Doug Walker	Senate Minority Leader
Merrill Werts	Governor/Chamber of Commerce
Azzie Young, Ph.D.	President of Senate

Dr. Bill Roy, Sr., a former United State Congressman, is Chair of the Commission.

To fulfill our legislative charges two and three, to identify social values and provide a public forum for Kansans, the Commission devised a multistage community interaction strategy utilizing three discrete types of statewide public meetings; Critical Issues Health Forums, Kansas Health Values Forums, and Plan Refinement Meetings.

Public Health & Welfare
Oct. 1, 1993

Critical Issues Health Forums: A Town Meeting Project

The Kansas Commission on the Future of Health Care, Inc. has completed its Critical Issues Health Forums: A Town Meeting Project. The goals of this project were to help average Kansas citizens identify and better understand critical health care issues, to establish a mechanism for their community-based participation in the health care discussion and debate of alternatives, and to include them in the development of solutions to health care problems faced by Kansans. This project was made possible by a grant from the United Methodist Ministry Fund, contributions from a variety of individuals and professional organizations, and the invaluable support of the print and electronic media.

The project began with a two week media information campaign anchored by the Wichita Eagle/KSNW-TV/KNSS-AM and the Topeka Capital Journal/KSNT-TV/KTPK-FM collaborative efforts. In addition print and electronic media statewide participated in this project. Active local information campaigns were implemented by the Atchison Daily Globe, Emporia Gazette, Garden City Telegram, Great Bend Tribune, Hutchinson News, Iola Register, Southwest Daily Times, Manhattan Mercury and the Winfield Daily Courier. Through these statewide information campaigns the key issues related to health care reform were outlined.

Subsequent to the media information campaign, the Kansas Commission on the Future of Health Care, Inc. held twenty-five town meetings across the state to provide public forums for grassroots discussion of health care issues in Kansas. Town meetings were held in the following locations:

Wichita, Winfield, Salina, Lawrence, Atchison, Manhattan, Topeka, Hutchinson, Hays, Garden City, Iola, Dodge City, Pittsburg, Great Bend, Independence, Emporia, Overland Park, Colby, Pratt, Phillipsburg, Liberal, Concordia, Kansas City, and Leavenworth.

Two Commissioners moderated each of the twenty-five Town meetings utilizing a structured format. Citizens attending those meetings had the opportunity to weigh the advantages and drawbacks of various proposals for change. The meetings were designed to promote dialogue within the community about the challenges facing our health care system and to encourage participants to examine their values and preferences. Attendance at Town meetings ranged from 25 in Leavenworth to 375 in Topeka. Both audience size and provider-consumer ratios were closely correlated to level of local medial involvement as reflected by the 290 person attendance in Iola, a town of a little over 6,000 people. In total over 3000 people attended the Town meetings. In addition over 3500 newspaper ballots have been mailed to the Commission office, many accompanied by written comments. Preliminary meeting data indicates strong support by Kansans for universal access to basic health care for all Kansans, and a preference for allocating more resources to health promotion and prevention activities. The total data has been analyzed and is summarized in the document Critical Issues Health Forums: A Town Meeting Project, Report on Phase I: Quantitative Data Findings. The information gained from this Town Meeting Project validated the Commission's proposed inclusion criteria.

INCLUSION CRITERIA

- | | |
|--------------------------------------|---|
| 1. UNIVERSAL
COVERAGE | Access to a basic standard of health care is a fundamental right and barriers which produce inequities in access to such care should be eliminated. |
| 2. COMPREHENSIVE
BENEFITS | All citizens should be assured access to a basic level of health care services with emphasis on health promotion and disease prevention. |

- | | | |
|-----|---|--|
| 3. | EQUITABLE FINANCING | Financing of health care should be broad-based and equitably shared. |
| 4. | INCENTIVES FOR EFFICIENCY AND EFFECTIVENESS | Providers and consumers have shared responsibility for prudent utilization of health care resources. |
| 5. | COST CONTAINMENT | The current trend of rapid escalation in health care spending is unsustainable and cost control strategies aimed at slowing the rate of growth in health care costs must be employed. |
| 6. | CONSUMER CHOICE OF PROVIDER | Individual choice is an inherent American value and should be an important component in any health care plan. |
| 7. | ADMINISTRATIVE SIMPLICITY | The administrative structure of the health care system should facilitate ease of operation. |
| 8. | FLEXIBILITY | The diversity of clients served, the presence of regional variation, and the rapidity of change within the health care field necessitates that the delivery system have the ability to accommodate plural approaches and support innovation. |
| 9. | GENERAL ACCEPTABILITY TO PROVIDERS AND CONSUMERS | Health care reform must be congruent with the social values of Kansans and based on public and professional input. |
| 10. | FISCAL RESPONSIBILITY | A health care reform plan must be fiscally responsible and recognize competing social claims. |

The Commission viewed the Town Meeting Project as just the beginning in what we hoped and has proven to be a sustained interchange between the public and the Commission, with the public providing vital input essential to the completion of the Commission's primary task--the development of a workable health care reform plan for Kansas. The Commission returned to local communities to hold Kansas Health Values Forums in the Spring of 1993.

KANSAS HEALTH VALUES PROJECT

The Commission conducted Health Values Forums across the state in Phase I of the Kansas Health Values Forums Project. These forums were patterned on the Georgia Health Decisions Project model. The Georgia group spent a year developing and piloting materials designed to elicit information about social values related to health from their citizens and then over 250 meetings attended by over 4600 citizens were held across Georgia.

The purpose of the Kansas Health Values Project was to find out what values and principles Kansans believe should underlie our health care system. The 25 forums were structured using a small group format to provide ample opportunity for all to participate in this important discussion.

Exercise 1: The 70 groups, composed of 7 to 10 people, which prioritized resource allocations identified on the exercise demonstrated the following rankings with #1 being the most important and #7 being the least important.

John	4.09
Paula	4.30
Jimmy	5.86
Edward	6.91
Margaret	2.19
George	1.77
Ruth	2.91

Rationale provided by groups for putting certain cases as higher priorities were cost-benefit, proven therapy, quality of life, prevention, early intervention, and years of productivity.

Exercise 2: The 70 groups, composed of 7 to 10 people, developed consensus on most desirable attributes of an ideal health care system.

Most Desired by the Groups

(B) Health Care for All	62 groups
(A) Affordable	55 groups
(Q) Assured Quality	33 groups
(N) Choice of Doctor	32 groups
(M) Quality of Life	30 groups
(S) Right to Decide	29 groups
(D) Accessible Care	16 groups
(G) Health Promotion	14 groups
(C) Environmental Protection	10 groups
(J) Life Style Incentives	7 groups
(E) Nursing Home	5 groups
(I) Standard Price	3 groups
(R) Access to Soc Scvs	3 groups
(F) Short Wait	2 groups
(P) Right to Sue	1 group
(K) High Tech	1 group

Least Desired by the Groups

(T) Non Traditional	69 groups
(H) Experimental	51 groups
(P) Right to Sue	46 groups
(O) Culturally Sensitive	36 groups
(L) Home Postpartum Visits	20 groups
(F) Short Wait	16 groups
(I) Standard Price	11 groups
(K) High Tech	10 groups
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(E) Nursing Home	4 groups
(R) Access to Soc Scvs	4 groups
(C) Environmental Protection	3 groups
(N) Choice of Doctor	3 groups
(D) Accessible Care	2 groups

Continued Input: Participants at the Kansas Health Values Forums took home the values exercises to use with other existing groups in their community and the Commission continues to receive mailed input from a variety of groups.

- The Commission continues to gain public input related to the values and principles which Kansans believe should underlie their health care system to supplement that information acquired through the Kansas Health Values Forums. Most recently on July 21, 1993 a Multicultural Health Values Forum held in Wichita was attended by 125 AfricanAmericans. These individuals, like those attending the previous 25 Health Values Forums, expressed strong preferences for the values of; Health Care for All, Affordable, Choice of Provider, and Assured Quality.
- A Values Forum was held in Salina attended by parents of children in the Head Start Program and community leaders. Results on both exercises were similar to those previously mentioned.

In October we hope to begin the second phase of the Health Values Project replicating the scientific portion of the Georgia Health Decisions Project, convening 40 focal groups to gain indepth information on health values from a representative sampling of the Kansas population.

In late October the Commission will be holding the third in the triad of community meetings. The purpose of this final series of meetings is to gain public feedback on the draft long-range health care policy plan.

CITIZEN INPUT MEETINGS

CITY	DATE	LOCATION
Hays	October 25, Monday	Ft Hays State Black & Gold Auditorium
Garden City	October 26, Tuesday	Garden City CC Science Lecture Hall
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Kansas City	November 3, Wednesday	City Council Chambers 701 N 7th

Testimony Presented to
House Public Health and Welfare Committee

October 1, 1993

Kansas Commission on the Future of Health Care, Inc.
Barbara E. Langner, R.N., Ph.D.

The Kansas Commission on the Future of Health Care, Inc. is pleased to have the opportunity to address members of the House Public Health and Welfare Committee to provide an overview of the Commission's activities. I am Barbara Langner and I staff the Commission and am joined by Myra Christopher, Executive Director, Midwest Bioethics Center.

The Kansas Commission on the Future of Health Care, Inc. was created by the enactment of Senate Bill 403 during the 1991 legislative session.

The legislative charge to the Commission is four-fold:

- 1) Develop a long-range health care policy plan, including both short- and long-term strategies.
- 2) Identify social values of Kansans
- 3) Provide a forum for Kansans to participate in the development of health policy.

- 4) Report periodically, but not less than semi-annually to the Governor and to the Joint Legislative Committee on Health Care Decisions for the 1990s.

The 11 person multidisciplinary Commission includes

<u>Board of Directors</u>	<u>Appointed by/Representing</u>
Larry Anderson, M.D.	Governor/ Kansas Medical Society
Myra Christopher, V Chair	Governor
Barbara J. Gibson	House Minority Leader
Myron Leinwetter, D.O.	Governor/Kansas Assn of Osteopathic Medicine
Betty Jean McElhaney, R.N.	Governor/Kansas State Nurses Assn
Joe Pucci	Governor/AFL-CIO
Stan Regehr	Governor/Kansas Hospital Assn
William R. Roy, Sr., M.D., J.D.,	Speaker of the House
Doug Walker	Senate Minority Leader
Merrill Werts	Governor/Chamber of Commerce
Azzie Young, Ph.D.	President of Senate

Dr. Bill Roy, Sr., a former United State Congressman, is Chair of the Commission.

Kansas policymakers endorsed a comprehensive approach to health care reform. In creating the Kansas Commission on the Future of Health Care, Inc. they provided for broad representation, allowed adequate time for thoughtful deliberation to create a viable plan, provided for consistent interchange with policymakers, and most importantly, required the seeking of full participation and of the public in producing health care reform solutions for Kansas.

The timing of the formation of the Kansas Commission positioned it to draw upon the experiences and avoid some of the pitfalls experienced by other states moving to implementable health care reform.

- Policy experts believe that the primary reason for lack of development of a viable health care reform proposal, one which can capture public support is due to the existence of deep divisions between the experts' and the public's view of the underlying factors creating the current

health care crisis.

- Health care reform proposals have generally been generated by expert panels with limited input from the public. The emergence of true health care reform requires bridging the gap between the experts and the public.
- There is also growing sentiment that until we critically examine the value base which citizens want in a health care system, it will be highly improbable that a significantly better system will emerge.

Governor Finney announced appointments to the Kansas Commission on September 17, 1991 and the first meeting was held October 28.

To fulfill our legislative charge, the Kansas Commission on the Future of Health Care, Inc. utilized three distinct types of statewide community meetings held over a sixteen month period. Two of the meeting types were specifically designed to elicit active participation of Kansas citizens in the development of the long-range health policy plan and the third type of

meeting was intended to ensure that the plan reflected the social values of Kansans. This series of three separate but integrated community meetings provided essential information to enable the Commission to develop a long-range health care policy.

I'd like now to take time to describe the three kinds of public meetings we held across the state, and discuss what we learned from each of them and how we have used that information in formulating the long-range health care policy plan for Kansas.

The first of the triad of community meetings was the Critical Issues Health Forums-Town Meeting Project.

This project, the Commission's first entry into local communities, began November 8, 1992 and concluded December 11, 1993. The Commission viewed the Town Meeting project as just the beginning in what we hoped would be a sustained interchange between the public and the Commission, with the public providing vital input essential to the completion of the Commission's primary task--the development of a workable health care

reform plan for Kansas.

Purpose and Scope of Project

The project had the dual purposes of providing public education about health care issues and stimulating active public participation in the development of health policy.

The goals of this town meeting project were to:

- 1) Help average Kansas citizens identify and better understand critical health care issues
- 2) Establish a mechanism for their community-based participation in the health care discussion and debate of alternatives
- 3) Include them in the development of solutions to health care problems faced by Kansans

Description of Project

In the Critical Issues Health Forums: Town Meeting Project, The Kansas Commission on the Future of Health Care, Inc. adopted the format developed by the Public Agenda Foundation. The Public Agenda Foundation is a non-profit, non-partisan research and education organization, founded by Cyrus Vance and Daniel Yankelovich, whose work has focused on understanding and enhancing the public's role in key public policy issues (see Appendix A). Their format incorporates an intensive information campaign employing prepared video and print messages and radio spots which highlight essential health care reform issues and are supplemented with local interest stories. It also makes use of a ballot which provides a vehicle for citizens to express their views about selected health care reform issues and a structured town meeting process designed to promote grassroots discussion of health care issues and public dialogue about solutions. This format helps to foster public judgement, the informed views people develop about an issue when they have confronted it realistically and thought seriously about the choices it presents.

Theoretical framework: Daniel Yankelovich has pioneered many of the research techniques which have become a standard in the field of public

opinion assessment. His extensive work and study in the field has led him to draw the following conclusions.

- 1) In this Age of Information the importance of information in shaping responsible public opinion is vastly exaggerated--the information driven model is a one way process expert > public
- 2) We know a lot about how to measure (manipulate public opinion and very little about how to improve it. This gap makes it almost impossible to create a national consensus needed to deal with the problems of our society.
- 3) Most public opinion polls are misleading because they fail to distinguish between people's top of the mind offhand views (mass opinions) and their thoughtful considered judgements (public judgement)
- 4) Public judgement--the most advanced form of public opinion is a genuine form of knowledge on certain aspects of issues and deserves

consideration

5) There are rules that describe the transformation of public opinion from mass opinion to public judgement--three stages of development with principles to overcome obstacles retarding movement through the developmental stages. The key to creating national consensus is use of the rules and principles.

Policy has been shaped primarily by special interests and experts--not average citizens. It is assumed that policy decisions are dependent upon high levels of specialized knowledge held only by experts. A large gap exists between the public and the experts/this is the reason for failure to gain endorsement and consensus on a solution/to resolve this gap a balance of public expert input is needed.

1) Enhance public judgement--public opinion which is more thoughtful weighing of alternatives/genuine engagement with the issue/taking into account a wide variety of factors than ordinary public opinion polls measure

Most expressions of public opinion as measured in opinion polls do not reflect public judgement--people are not engaged in the issue--they have not considered it from all sides, understood the choices and consequences.

Stage 1 Consciousness raising--public learns about the
issue/aware of existence and meaning

Stage 2 Working through---must be actively engaged and involved

Stage 3 Resolution--cognitive/emotional/moral---clarify fuzzy
thinking, grasp consequences/also --confront feeling

The Town Meeting Project began with two to three week collaborative media information campaigns by the Wichita Eagle/KSNW-TV/KNSS-AM as part of their People Project and by the Topeka Capital Journal/KSNT-TV/KTPK-FM. In addition print and electronic media statewide participated in this project.

Through these statewide information campaigns key issues related to health care reform were outlined.

Subsequent to the media information campaign, the Kansas Commission on the Future of Health Care, Inc. held twenty-five town meetings across the state to provide public forums for grassroots discussion of health care issues in Kansas. A local liaison network, consisting of one or more individuals from each of the twenty-five communities, advised the Commission on ways to maximize public participation and assisted with meeting arrangements. Two Commissioners moderated each of the twenty-five Town meetings utilizing the structured format developed by the Public Agenda Foundation. Moderator training was provided by the Kettering Foundation, facilitator of the National Issues Forums. Citizens attending town meetings had the opportunity to weigh the advantages and drawbacks of the three most commonly discussed approaches to health care reform; incremental change, national health insurance, and employer mandated health insurance.

Project Data Sources

Phase I: Data Findings being discussed today were generated from analysis of ballots collected from two sources, newspapers and town meetings.

Phase II: Data Findings were also generated from content analysis of the twenty-five town meeting records supplemented with participant observations and examination of the 264 letters and the 1500 comments which accompanied the ballots mailed to the Commission.

Newspaper Sources

Eleven newspapers statewide culminated their information campaigns with the circulation of the Condition Critical ballot: Atchison Daily Globe, Emporia Gazette, Garden City Telegram, Great Bend Tribune, Hutchinson News, Iola Register, Southwest Daily Times, Manhattan Mercury, Topeka Capital-Journal, Wichita Eagle, and the Winfield Daily Courier. This ballot contained

nineteen questions developed by the Public Agenda Foundation and two local questions. 1730 individuals mailed newspaper ballots to the Commission office and an additional 891 were collected by the Wichita Eagle and 336 by the Manhattan Mercury yielding a total of 2957 newspaper ballots.

Town Meeting Sources

Condition Critical ballots were also distributed at the twenty-five town meetings held across the state: Wichita (2), Winfield, Salina, Lawrence, Atchison, Manhattan, Topeka, Hutchinson, Hays, Garden City, Iola, Dodge City, Pittsburg, Great Bend, Independence, Emporia, Overland Park, Colby, Pratt, Phillipsburg, Liberal, Concordia, Kansas City, and Leavenworth. Approximately 2932 individuals attended the twenty-five town meetings with meeting size ranging from 25 to 375 attendees. 970 ballots were collected at the conclusion of the town meetings and an additional 615 ballots were mailed to the Commission by meeting attendees yielding a total of 1585 meeting ballots or an overall response rate of 54%.

Demographic data sheets were completed by 1632 or 55.7% of the approximately 2932 people attending town meetings. The majority of those attending the town meetings who completed the demographic sheet were in the 40 to 55 year age range, there were equal numbers of men and women, most of the group were college graduates, 73 percent were employed and of those 53 percent worked in a health care field and 47 percent worked in a non-health care field, almost half of the group had household incomes of over \$50,000, and most of the group had health insurance.

Project Findings

Newspaper ballots represented 62.3% of the total data set and meeting ballots represented 37.7%. Zip codes were provided on 2976 ballots and analysis showed ballot responses from 102 or 97.1% of the 105 counties in Kansas; exceptions were Trego, Wallace, and Lincoln counties.

Public Agenda Foundation Analysis

Analysis by the Public Agenda Foundation not only examined Kansans' responses to the survey questions and looked at differences between newspaper ballot and meeting ballot respondent groups; but it also provided a comparison of Kansas ballot respondents to respondents of Condition Critical Campaigns conducted in California, Georgia, and nationally.

The following findings were highlighted in the Public Agenda Foundation's analysis of the Kansas Condition Critical ballots:

- Two-thirds of Kansas ballot respondents said Americans should have the right to good-quality, comprehensive care.
- Compared to national survey data, Kansas respondents were much less likely to think that eliminating waste from the health care system would enable the U.S. to afford health insurance for everyone.

- Given three policy options, 34 percent of Kansas respondents preferred a national insurance program run by the government, 33 percent favored an expanded version of the current health insurance system, and only 19 percent preferred employer mandated insurance coverage. In other Condition Critical sites, support for retaining the current system was much lower.
- Solid or large majorities of Condition Critical respondents in Kansas (as in other sites) supported: limiting malpractice awards to the cost of care plus a small amount, discouraging doctors from using extraordinary measures to extend lives of dying patients, and legislation to force hospitals to share expensive equipment and services.
- Kansas respondents expressed strong opposition to placing limits on choice of doctors or hospitals.

Commission Analysis

The Commission also compared the responses of those returning newspaper ballots, who represented a broader cross-section of Kansans, and the responses on the meeting ballots, which were more likely to have been completed by individuals employed in the health care field.

- Newspaper ballot respondents (37.6%) were more likely to favor a health care reform policy employing a national insurance system than were meeting ballot respondents (28.2%).
- Newspaper ballot respondents (65.9%) expressed greater dissatisfaction with health care cost than did meeting ballot respondents (55.5%).
- Both types of ballot respondents expressed a similar level of support for options which increased general taxes (45%), but when questioned about options which increased out-of-pocket expenses the newspaper ballot respondents (62.6%) expressed greater opposition than the

meeting ballot respondents (48.6%).

Regional Differences

On 2970 of the newspaper and meeting ballots respondent Kansas zip codes were recorded. Using the three-digit zip code map of Kansas, data runs were generated which grouped the ballot responses received from each of the 13 service areas to allow examination of regional differences in response patterns. Analysis of ballot responses by region showed some regional variation which for the most part clustered into two response patterns dependent upon proximity to a metropolitan area.

- The zip prefix regions which were more distant from a metropolitan area (674, 676, 677, 678, 679, and 669) showed less support for reform solutions using either a national health insurance approach or an employer mandated health insurance approach.

- This group also showed less support for options which required adoption of managed care arrangements or required increases in general taxes.

During January, 1993 the Wichita Eagle through its Research Center conducted the Kansas Survey which had a margin of error of 3.4 percentage points. This statewide survey conducted telephone interviews with 831 randomly selected adults. The sample was chosen to provide a demographic profile of representative of all Kansans. Findings of this scientifically conducted statewide survey, showed much similarity with those revealed in the Commission's Town Meeting project:

- Support for guaranteeing that all Americans have a right to health care was supported at an even higher level than that found by the Commission (91%)
- Support for taxpayers helping with the financial burden of guaranteeing access to all

- Resistance to limits being placed on choice of physician or hospital was similar to that found by the Commission

The Wichita Survey asked several additional questions; strong sentiment was expressed to one in particular related to personal choice in carrying health insurance with 80% of individuals stating it should be a person's choice, this theme was also heard in many of the town meetings.

The paradoxes revealed in this Town Meeting project served to highlight how difficult the task will be to develop a state or federal reform strategy which can be embraced by the public, without whose support reform efforts are likely to go the way of the Medicare Catastrophic Coverage Act of 1988-- policy sound but politically futile.

However sentiments expressed in this first project did validate the Commissions proposed inclusion criteria - providing a foundation for drafting the long range policy plan.

1. **UNIVERSAL
COVERAGE** Access to a basic standard of health care is a fundamental right and barriers which produce inequities in access to such care should be eliminated.
2. **COMPREHENSIVE
BENEFITS** All citizens should be assured access to a basic level of health care services with emphasis on health promotion and disease prevention.
3. **EQUITABLE
FINANCING** Financing of health care should be broad-based and equitably shared.
4. **INCENTIVES FOR
EFFICIENCY AND
EFFECTIVENESS** Providers and consumers have shared responsibility for prudent utilization of health care resources.

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8. **FLEXIBILITY** The diversity of clients served, the presence of regional variation, and the rapidity of change within the health care field necessitates that the delivery system have the ability to accommodate plural approaches and support innovation.

9. **GENERAL** Health care reform must be congruent with
ACCEPTABILITY TO the social values of Kansans and based on
PROVIDERS AND public and professional input.
CONSUMERS

10. **FISCAL** A health care reform plan must be fiscally
RESPONSIBILITY responsible and recognize competing social claims.

The Commission returned to communities statewide during the Spring conducting Health Values Forums. These forums were patterned on the Georgia Health Decisions Project model. The Georgia group spent a

developing and piloting materials designed to elicit information about social values related to health from their citizens and then over 250 meetings attended by over 4600 citizens were held across Georgia.

The purpose of the Kansas Health Values Project was to find out what values and principles Kansans believe should underlie our health care system. The 25 forums were structured using a small group format to provide ample opportunity for all to participate in this important discussion.

We'd like to give you a similar opportunity so Myra Christopher is going to conduct a modified version of a Health Values Forum.

KANSAS HEALTH VALUES FORUMS PROJECT OVERVIEW

Exercise 1: The 70 groups, composed of 7 to 10 people, which prioritized resource allocations identified on the exercise demonstrated the following rankings with #1 being the most important and #7 being the least important.

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Continued Input: Participants at the Kansas Health Values Forums took home the values exercises to use with other existing groups in their community and the Commission continues to receive mailed input from a variety of groups.

- The Commission ^{seek} continues to gain public input related to the values and principles which Kansans believe should underlie their health care system to supplement that information acquired through the Kansas

Health Values Forums. Most recently on July 21, 1993 a Multicultural Health Values Forum held in Wichita was attended by 125 AfricanAmericans. These individuals, like those attending the previous 25 Health Values Forums, expressed strong preferences for the values of; Health Care for All, Affordable, Choice of Provider, and Assured Quality.


- A Values Forum was held in Salina attended by parents of children in the Head Start Program and community leaders. Results on both exercises were similar to those previously mentioned.

In October we hope to begin the second phase of the Health Values Project replicating the scientific portion of the Georgia Health Decisions Project, convening 40 focal groups to gain indepth information on health values from a representative sampling of the Kansas population.

(dependent upon funding)

We believe that the health values knowledge base is a vital foundation, a yardstick against which specific policy options will be measured for inclusion in the plan. Such a value base was the linchpin of the Clinton

Administration's Proposal - Security, Simplicity, Savings, Quality, Choice, and Responsibility.

- 
- Throughout the summer the Commission has devoted its monthly meeting time to drafting a long-range health care reform plan for our state which incorporates the input provided by Kansans during the Town Meeting Project and the Health Values Forums. Through our dialogue with the public over the past year, the Commission has become convinced that the majority of Kansans support reform of our current health care system, with fundamental changes in the system to ensure availability of basic health care to all residents of our state at a reasonable cost.
 - The Commission is also working under the premise that any state reform plan must be congruent with federal reform activity and the Commission's Working Paper on Health Care Reform is being drafted with sensitivity to anticipated federal action. *weekend*

In late October the Commission will be holding the third in the triad of

community meetings. The purpose of this final series of meetings is to gain public feedback on the draft long-range health care policy plan.

CITIZEN INPUT MEETINGS

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WORKING PAPER ON HEALTH CARE REFORM

I'd like now to discuss some of the key components of our Working Paper on Health Care Reform, stressing that this document is very fluid; it's really

CONDITION CRITICAL



The American
Health Care
Forum

This is your **CONDITION CRITICAL** ballot. To take part in this important debate on health care, fill out this ballot and mail it in by **December 11** to:

CONDITION CRITICAL
Kansas Commission
on the Future of Health Care
Landon State Office Building
900 SW Jackson, Suite 1003
Topeka, Kansas 66612-1290

WHY DOES HEALTH CARE COST SO MUCH?

Health care costs are rising at twice the rate of inflation, and people have different ideas about what's causing costs to go up. For each of the following, say whether you think it is **one of the most important** reasons costs are going up, a major reason, a minor reason, or not a reason at all.

	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	One of the Most Important Reasons	Major Reason	Minor Reason	Not a Reason	Not Sure
1. Advances in medicine that extend and improve people's lives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Malpractice suits against doctors and hospitals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Money spent on virtually hopeless efforts to extend the lives of dying patients for a few days or weeks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Hospitals and doctors using costly new medical equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Profits for drug companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Inefficiency and waste at hospitals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Fraud in programs like Medicare and Medicaid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Paperwork required by insurance companies and government	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Growth in the over-65 population who need more health care than younger people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Health insurance company profits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Incomes for doctors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Overtesting and overtreatment by doctors who want to protect themselves if they're sued	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. Which of these statements comes closer to your view?

Check only one answer.

- ☐ A. There's so much waste in health care – the paperwork, unnecessary testing, excess profits, high salaries, and so on – that the U.S. could afford to insure everyone if only the waste were eliminated.
- OR
- ☐ B. This is wishful thinking. There is some waste in health care – as in everything else – but not nearly enough to pay for insuring everyone.
- ☐ C. Don't know/Not sure

DOES EVERY AMERICAN HAVE A RIGHT TO HEALTH INSURANCE?

14. Which of these statements comes closer to your view?

Check only one answer.

- ☐ A. All Americans should have the right to health insurance that covers good-quality, comprehensive health care.
- OR
- ☐ B. All Americans should have the right to emergency care – but that's really all the nation can afford right now.
- ☐ C. Don't know/Not sure

HOW SHOULD WE CUT COSTS?

Say whether you favor or oppose each of the following proposals. Be sure to consider the pros and cons of each idea before making your choice.

15. Limit malpractice awards to the cost of care, plus a small amount for the patient's pain and suffering.

☐ Favor ☐ Oppose ☐ Not Sure

PRO: Could prevent doctors from ordering tests and procedures just to protect themselves in case they are sued.

CON: Could make doctors less careful and result in more mistakes.

16. Enact legislation that forces hospitals to share expensive equipment such as MRIs and services such as neonatal units.

☐ ☐ ☐

PRO: Could save money by reducing the duplication of very expensive equipment and personnel.

CON: Could force patients to wait longer and/or travel long distances to have some tests done.

17. Discourage doctors from using extraordinary measures to extend the lives of dying patients for a few days or weeks.

☐ ☐ ☐

PRO: Could reduce the suffering of patients and their families – and save money that could be used to help others.

CON: Could prevent some patients and families who want every effort made to preserve life from having their wishes followed.

*House Public Health & Welfare
attachment 3*

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18. Have more companies adopt "managed care" plans in which employees are fully covered only when they use doctors and hospitals selected by their employer for their history of keeping costs down.

Favor ☐ Oppose ☐ Not Sure ☐

PRO: Could keep expenses down and encourage doctors and hospitals to be more cost-conscious.

CON: Could mean that doctors and hospitals might start thinking more about how to save money than how to provide the best care.

WHAT SHOULD WE DO ABOUT THE UNINSURED?

19. Which of these three policies regarding uninsured Americans do you think the country should pursue? Remember, none of these policies is a perfect solution, and some may have costs and trade-offs that you will not like.

Check only one answer.

- ☐ A. Expand the current system slightly by offering medical benefits to more low-income people. That's really all we can afford right now.
- ☐ B. Set up a national insurance system paid for by taxes. This would give all Americans insurance coverage and equal access to health care.
- ☐ C. Require all employers to provide health insurance for their workers or pay extra taxes, and have government provide insurance for everyone who doesn't get it at work.
- ☐ D. Not sure

LOCAL QUESTIONS

20. Overall, how satisfied are you with health care in Kansas?

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Not Sure
Access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. In order to provide a basic standard of care for all Kansans, would you be willing to support options that:

	Yes	No	Not Sure
Limit your access to expensive medical technology or procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Limit your choice of physician or hospital	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increase your general taxes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increase your own out-of-pocket expenses for health care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Place a "special purpose" tax on items such as cigarettes and alcohol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Create a special fund by taxing hospitals and physicians	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

My zip code is _____

Mark your ballot and send it in by December 11.

Fold, tape, affix stamp and mail by December 11



Condition Critical
Kansas Commission on the Future of Health Care
Landon State Office Building
900 SW Jackson, Suite 1003
Topeka, Kansas 66612-1290

Affix
Stamp
Here

RETURN THIS BALLOT BY DECEMBER 11

CONDITION CRITICAL

The American Health Care Forum

At its best, America's health care system is the finest in the world. Our medical technology is the envy of patients everywhere — allowing doctors to routinely perform such miracles as saving two-pound babies and using lasers to restore sight. We have more doctors, hospitals and equipment per person than virtually any country in the world, and most of us have almost unlimited freedom to choose our own doctors, specialists and hospitals. Not surprisingly, if you ask people how they feel about the quality of their health care, a large majority say they are very satisfied.

At the same time, it seems that nearly everyone is unhappy with our *system* of health care. Doctors, hospitals, insurers, employers, officials in local, state, and national government, and a majority of the public have all expressed serious concerns about the way our health care system is currently working.

The debate on America's health care system is heating up, and **CONDITION CRITICAL: The American Health Care Forum** is your chance to join it. It's *your* opportunity to learn more about the problems we're facing and to consider the pros and cons of various ideas for addressing them.

America's Health Care System: In the Pink or in the Red?

Why is everyone so unhappy with America's health care system? For one thing, health care costs are spiraling higher every year. In 1991, America's health care bill was close to \$750 billion — more than twice what the country spent on defense or education. What's more, health costs are rising at *twice* the rate of inflation. By the year 1995 — just three years away — experts estimate that our national health bill could reach \$1.1 *trillion*.

Millions Left Out

Despite what we spend, 35.7 million Americans — mainly the working poor and their children — are currently unin-

sured. Unless they can find the money to pay the full cost of their care themselves, their only option when they get sick is to get care at overcrowded public hospitals and emergency rooms.

In addition, millions more Americans who *are* insured have such limited coverage that they face serious financial hardship, even bankruptcy, if they are unlucky enough to get a disease like AIDS or muscular dystrophy.

*America
spends twice
as much on
health care as
we spend on
defense or
education.*

So Why Does Health Care Cost So Much?

Everybody agrees that cost and coverage are problems. But people disagree about what's causing these problems or what we should do about them. Later in this piece, **CONDITION CRITICAL** looks at some proposed solutions.

But first, let's look at some of the causes for the skyrocketing rise in health care costs:

■ Reason #1: Because We're Wasteful?

Many people believe the U.S. health care system is very wasteful. They point to overtesting and unnecessary procedures, cumbersome paperwork and bureaucracy, high salaries and profits for those involved in health care.

But others believe the amount of waste that could be cut from health care — without risking the quality of patient care or making radical changes in our system — is greatly exaggerated. A key question in the current debate is just how much waste there *really* is, and equally important, whether it is possible to get rid of it without changing the things that Americans like about their health care.

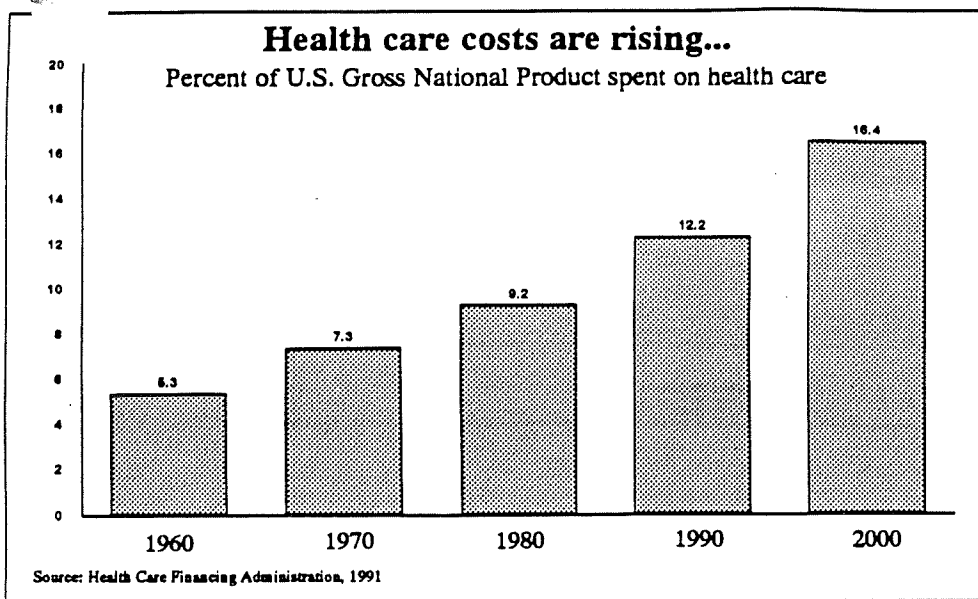
■ Reason #2: Because We're Not Getting Any Younger

The impact of aging on the country's health care bill is virtually undisputed. As a nation, America is aging. And it's just a fact of life that as we get older, we need more health care. People 65 and older make up only one-eighth

House Public Health & Welfare

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choice has its own solutions to the problems facing our system: soaring costs and millions of people uninsured.

CHOICE ONE: MAKE A GOOD SYSTEM BETTER

For many Americans, the strengths of our health care system — high quality care, new technology, almost unlimited choice of doctors and hospitals — far outweigh its defects. They say the problems we face — high costs and people without insurance — are flaws in a system that serves most of us very well.

of the population, but they account for more than one-third of the nation's health care costs. As the "Baby Boom" becomes the "Senior Boom" over the next 20-30 years, we'll use more health care.

■ Reason #3: Because We Can

New medical technology offers many benefits — more accurate diagnoses, more effective treatments, and speedier recoveries. But progress often comes with a hefty price tag. In 1950, cataract surgery as we know it did not exist. In 1991, using lasers and advanced surgical techniques, doctors saved the sight of over one million Americans, but at a cost of over 3 billion dollars. Cataract laser surgery is just one of hundreds of remarkable advances in medicine. We can *do* more, but it costs *more*.

Guess Who's Paying for This?

When the cost of food goes up, there's no question who pays for it. *You* do. If you're insured, what you pay out-of-pocket is only a fraction of what you actually spend. In addition to out-of-pocket costs, the average family spends over \$2,000 in federal, state and local taxes (for Medicare for the elderly, Medicaid for the poor, etc.). Add to that another \$700 for the insurance premiums you pay yourself. Meanwhile your employer probably spends over \$2,200 to insure you and your family — money that's not available for raises or other benefits. Taken together, that's over \$5,000 a year, every year, and it's going up.

No Easy Answers

Almost everyone agrees our health care system needs some changes. But there's plenty of disagreement on how to reach this goal. Many ideas have been proposed. **CONDITION CRITICAL** looks at three of the most fiercely-debated choices policymakers are now considering. Each

People holding this point of view support changes designed to reduce the waste and greed that are driving up costs. And they support creating a better "safety net" for the uninsured. But they oppose changing the system so radically that "the cure is worse than the disease."

Proponents of this choice say we should:

- Cut administrative costs by having insurance companies use common procedures for handling patient claims and paying doctors and hospitals.
- Force hospitals to share expensive, high-tech equipment like CAT scanners and MRIs, instead of allowing hospitals to compete with each other by purchasing the newest machines.
- End wasteful "defensive medicine" (doctors ordering tests and procedures to protect themselves in case they are sued) by reforming malpractice laws, including limiting multi-million dollar awards.
- Offer additional tax breaks to small employers who provide health insurance to their workers.
- Make Medicaid what it was supposed to be — a program that provides health insurance for all Americans below the poverty line (estimated nationally at \$13,359 for a family of four).

What critics say:

- Is spending so much money really buying us better health. People in countries like Germany, France, and Canada — countries that spend far less than we do — live longer.

■ Isn't it time to make sure *all* Americans have some kind of health insurance? Giving small employers bigger tax breaks and expanding Medicaid may help, but millions of Americans will still be left uninsured.

■ Do we really want to limit what patients can recover when they've been hurt by incompetent doctors?

■ Will streamlining administration and making hospitals share equipment really save enough money to help?

CHOICE TWO: ESTABLISH A NATIONAL INSURANCE PROGRAM THAT COVERS EVERYONE EQUALLY

A growing number of people say that all Americans — rich or poor — should have equal access to health care through a single public insurance system. They often point to Canada, where the government provides medical insurance for everyone, as an example we might follow. Supporters of this choice stress that America is one of only two industrialized countries (South Africa is the other) that don't provide health insurance for all its citizens.

They believe the country would *save* money by eliminating private insurance and having every American part of a single public insurance system. And they say we should stop spending money on virtually hopeless attempts to extend life for a few days or weeks, often just prolonging the suffering of dying patients and their families. Instead, we should agree on humane and reasonable guidelines for the kinds of care we make available to everyone.

Proponents of this choice say we should:

■ Adopt a Canadian-style public insurance system — paid for by taxes — that would provide health insurance for all Americans. Doctors and hospitals would still be private, but instead of getting paid by insurance companies when they provide care, they would be paid by the government — much the way Medicare now pays for the elderly.

■ Preserve what many Americans like best about our system by letting patients continue to choose their own private doctors and hospitals.

■ Have government bargain with doctors and hospitals to set annual budgets and fees for health care.

■ Decide what the nation can afford to spend, and to develop thoughtful guidelines for what we can afford to give every American and what we can't. This would be better than the kind of "rationing" we do now — based primarily on the patient's ability to pay.

What critics say:

■ Do we really want government running the health insurance system?

■ Do we really want to promise coverage for an additional 35.7 million people and then gamble that the U.S. government will be able to save enough in administrative costs to pay for it?

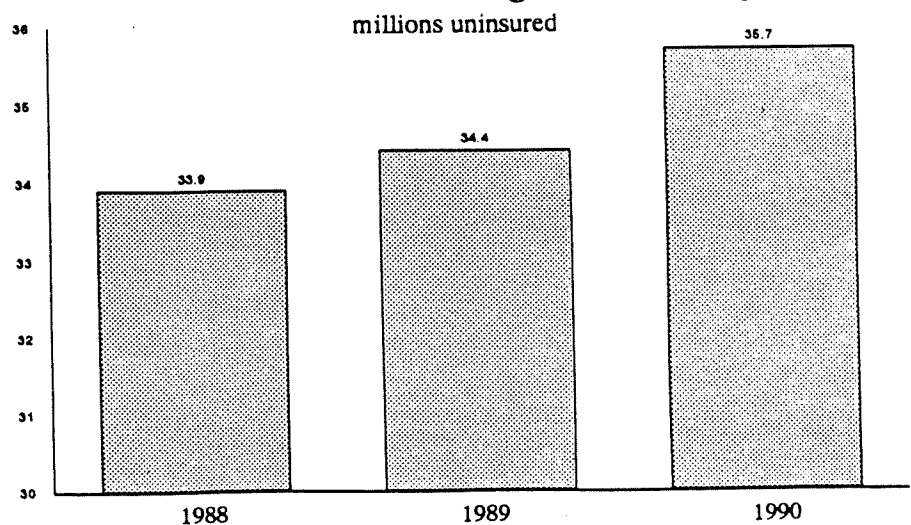
■ Do we really want to limit care for anyone — even for a patient whose chances for survival don't seem very good? Shouldn't we make every effort to save a life — regardless of cost?

■ Do we really want government bureaucrats looking over the shoulders of doctors and surgeons?

CHOICE THREE: MAKE EMPLOYERS PROVIDE INSURANCE FOR THEIR WORKERS AND HAVE THE GOVERNMENT INSURE EVERYONE ELSE

Supporters of this choice believe two things: everyone should have insurance, and that government should *not* have the primary responsibility for providing it. Instead of throwing out our current system, these people say we

...and the number of Americans without health coverage is increasing



Source: Employee Benefit Research Institute tabulation of the current population survey, March '89, '90, '91

should expand employer coverage to include *all* working Americans and set up a government program to cover everyone else.

To hold down costs, these people say employers should negotiate with doctors and hospitals to get the best prices, and then send their employees to the ones willing to provide good care at the most reasonable cost.

Proponents of this choice say we should:

■ Require all employers either to provide health insurance for their workers, or pay additional taxes to be used for government-funded health insurance. This is often called the “play-or-pay” plan.

■ Have the government insure everyone who does not get insurance on the job.

■ Make greater use of “managed care” plans that require patients to use doctors and hospitals that employers believe will provide the best care at the best prices.

What critics say:

■ Won't forcing businesses to shoulder an even greater burden for health care cripple many industries. Won't this make large corporations even less competitive abroad — something our economy surely doesn't need? And many small businesses might have to close down altogether.

■ Do we really want business choosing the doctors and hospitals we should use, particularly if cost is a major consideration?

■ Won't this force doctors and hospitals to put cost ahead of quality? If they get patients by offering the lowest prices — as opposed to the best care — won't the quality of American health care slowly but surely decline?

■ Isn't this the worst of both worlds. It keeps the cum some duplication and bureaucracy of the private health insurance system. And it takes away something most Americans value greatly — the ability to go to any doctor they choose whenever they choose.

Tough Choices on Health Care. Don't Be Left Out of the Debate.

For most Americans, good health care is a top priority, and America's health care system is facing enormous problems — problems that cannot be easily or quickly solved. All of the solutions we've looked at have risks or trade-offs. But so would doing nothing. What do you think we should do? Which ideas do you think will work? Which options simply won't solve our problems, or might even make them worse? Which trade-offs are unacceptable to you?

CONDITION CRITICAL is your opportunity to think about these important questions. The decisions our country makes about health care will affect you, your family, and your community for years to come.

CONDITION CRITICAL: THE AMERICAN HEALTH CARE FORUM is a project of the Public Agenda Foundation in association with WGBH Boston and California Health Decisions. Conducted in cooperation with the National Issues Forums and TV stations, newspapers, and educational organizations across the country, **CONDITION CRITICAL** is intended to help citizens understand and take part in the debate on the country's health care system.

Research assistance was provided by the Employee Benefit Research Institute (EBRI) in Washington, DC.

Support for this project comes from Baxter International, New Jersey Citizens Committee for Bio-Medical Ethics, Georgia Health Decisions, Metropolitan Life Foundation, and WGBH Boston.

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Kansas Commission on the Future of Health Care, Inc.

KANSAS HEALTH VALUES FORUMS

DEMOGRAPHIC INFORMATION

Please answer the following questions so that we can get an idea of who participated in these public meetings about health care.

AGE: ☐ Under 30 ☐ 30-39 ☐ 40-49 ☐ 50-64 ☐ 65 or older

SEX: ☐ Male ☐ Female

LEVEL OF EDUCATION: ☐ Grade School
☐ Some High School
☐ High School Graduate
☐ Vocational/Technical
☐ Some College
☐ College Graduate
☐ Post-Graduate School

EMPLOYMENT STATUS: ☐ Unemployed ☐ Employed ☐ Homemaker ☐ Student ☐ Retired

OCCUPATION: _____

COMBINED HOUSEHOLD INCOME: ☐ Under \$15,000 ☐ \$50,000-74,999
☐ \$15,000-29,999 ☐ \$75,000-100,000
☐ \$30,000-49,999 ☐ Over \$100,000

ETHNIC BACKGROUND: ☐ Caucasian ☐ Asian/Pacific Islander
☐ African American/Black ☐ Native American
☐ Hispanic/Latino ☐ Other _____

DO YOU HAVE HEALTH INSURANCE? ☐ Yes ☐ No

If yes, what type?

☐ Medicare ☐ Medicaid ☐ Self-Pay ☐ Employer-based
☐ Other _____

ZIP CODE: _____

Kansas Public Health & Welfare

Attachment 6

Oct 1, 1993



ALLOCATION OF CARE
KANSAS HEALTH VALUES FORUMS
EXERCISE #1

Instructions: Please read the seven cases below. As a group, prioritize the seven cases from 1 (first) to 7 (last) in the order your group would fund each case. Assume all cases will receive the money needed. This is not an exercise in health care rationing. The purpose is to identify your values and priorities through open discussion. The order in which cases are listed is random and does not intend to imply priority rank.

John is 39 years old and has suffered with schizophrenia since he was 24. He has been in and out of psychiatric institutions for a number of years and no longer has mental health insurance coverage. He is now in a state hospital. He has been treated with several medications which have not been effective and have many side effects. His doctor says that a new medicine will give John the opportunity to rejoin his family and live as part of the community. This medication would cost \$4,000 to \$6,000 each year. It costs \$80,000 each year for John to stay in the state hospital.

Paula has kidney failure as a result of pregnancy complications. Three times a week she goes to the hospital for kidney dialysis. Each treatment costs \$130, for a total cost of \$20,280 each year. A kidney transplant would cost \$37,000. Medicine and care after the transplant would cost \$6,000 each year. After one year Paula would have a three out of five chance of surviving. If the kidney fails, Paula will go back on dialysis.

Jimmy was born nine weeks early and had serious breathing problems. He has a one out of five chance of living. An experimental operation would increase his chances of survival to four out of five. The cost is \$75,000. If Jimmy has the operation and survives, he has a one out of two chance of being mildly to severely retarded.

Edward is a 62 year old widower with cancer. Though surgery was successful in removing the cancer, he slipped into a coma after the surgery. His heart has stopped twice in three weeks. Both times he was revived, but remained unconscious. His medical costs are \$30,000 over what his insurance will pay. Edward believes life is sacred and every minute worth living.

Margaret is a 45 year old, married mother of three. Her children, ages 11, 14, and 17 enjoy her health energy and are proud of her achievements at work. Margaret has never had a mammogram (to detect breast cancer), even though her older sister had surgery for breast cancer. If Margaret has a mammogram every other year for the next five years, and then every year afterward, she can greatly reduce her chance of dying from breast cancer. The cost of these tests and follow-up care for the next 25 years is \$8,000.

George makes \$12,000 a year at a small company. He can't afford health insurance. The youngest of his three children has a heart defect. The child is sick a lot and can't do many things that other children can. Surgery to correct the defect would cost \$20,000 or more. If the surgery is provided, the child could live a normal life. The child will probably live another two years before permanent damage is done that would require emergency care.

Ruth is 16 years old and curious about sex. A friend of her older sister became pregnant and dropped out high school. Ruth's parents have avoided the topic with Ruth. Ruth believes most of her friends are sexually active. If Ruth, her parents, and peers participated in school-based, comprehensive teenage health program her chances of having sexual intercourse early and becoming pregnant would be reduced by almost half. The cost of such a program would be \$310,000 for 300,000 pupils.



Characteristics of Your Ideal Health Care System

Kansas Health Values Forums

Exercise #2

Importance of Each Characteristic

(Check 5 in Each Column)

Letter	Characteristics	Definition	Importance of Each Characteristic	
			Top 5	Last 5
A	Affordable	Control cost of health care in the U.S.		
B	Health care for all	Basic level health care services available to everyone, regardless of ability to pay		
C	Environmental protection	Taking care of our water, air, food; providing high safety standards		
D	Accessible care	Basic health services reachable within reasonable traveling time		
E	Nursing home care	Long-term care outside of the home available to everyone, regardless of their ability to pay		
F	Short waiting time	Reasonable waiting time for physician visits, elective surgery, etc.		
G	Health promotion	Accurate, useful information about ways to promote health and prevent illness		
H	Access to experimental treatment	Access to not yet proven treatment options, often not currently covered by health insurance		
I	Standard price	Set prices charged for procedures or treatment		
J	Life-style incentives	Health cost discounts for leading a healthy life (for example, not smoking)		
K	High technology	Access to special equipment and procedures (for example, heart transplants)		
L	Postpartum home visits	Visits by health workers to homes of new mothers for education		
M	Quality of life emphasis	Emphasis on care that results in an improved quality of life rather than prolongation of life		
N	Choice of doctor	Ability to choose doctor, hospital, or other provider		
O	Culturally sensitive	Ability of health workers to understand how culture and racial background influence health		
P	Right to sue	Right to sue doctor/hospitals for malpractice		
Q	Assured quality	Ensuring the competence of health care providers and institutions		
R	Access to social services	Assistance in identifying, locating, and receiving services that promote recovery or maintenance of health		
S	Right to decide care	Right to make decisions about treatment options including refusal of treatment		
T	Non-traditional care	Access to non-traditional care (for example, herbal treatment, acupuncture, faith-healing)		



Kansas Commission on the Future of Health Care, Inc.

TESTIMONY TO HOUSE PUBLIC HEALTH & WELFARE COMMITTEE

on October 1, 1993

by
Barbara E. Langner, R.N., Ph.D., Executive Director
Kansas Commission on the Future of Health Care, Inc.
and
Myra Christopher
Executive Director, Midwest Bioethics Center and
Vice Chair, Kansas Commission on the Future of Health Care, Inc.

The Kansas Commission on the Future of Health Care, Inc. was created by the enactment of Senate Bill 403 during the 1991 legislative session.

The legislative charge to the Commission is four-fold:

- 1) Develop a long-range health care policy plan, including both short- and long-term strategies.
- 2) Identify social values of Kansans
- 3) Provide a forum for Kansans to participate in the development of health policy.
- 4) Report periodically, but not less than semi-annually to the Governor and to the Joint Legislative Committee on Health Care Decisions for the 1990s.

The 11 person multidisciplinary Commission includes:

Board of Directors

Larry Anderson, M.D.
Myra Christopher, V Chair
Barbara J. Gibson
Myron Leinwetter, D.O.
Betty Jean McElhaney, R.N.
Joe Pucci
Stan Regehr
William R. Roy, Sr., M.D., J.D.
Doug Walker
Merrill Werts
Azzie Young, Ph.D.

Appointed by/Representing

Governor/ Kansas Medical Society
Governor
House Minority Leader
Governor/Kansas Assn of Osteopathic Medicine
Governor/Kansas State Nurses Assn
Governor/AFL-CIO
Governor/Kansas Hospital Assn
Speaker of the House
Senate Minority Leader
Governor/Chamber of Commerce
President of Senate

Dr. Bill Roy, Sr., a former United State Congressman, is Chair of the Commission.

To fulfill our legislative charges two and three, to identify social values and provide a public forum for Kansans, the Commission devised a multistage community interaction strategy utilizing three discrete types of statewide public meetings; Critical Issues Health Forums, Kansas Health Values Forums, and Plan Refinement Meetings.

Barbara E. Langner

Oct 1, 1993

Attachment 6 - 4

Critical Issues Health Forums: A Town Meeting Project

The Kansas Commission on the Future of Health Care, Inc. has completed its Critical Issues Health Forums: A Town Meeting Project. The goals of this project were to help average Kansas citizens identify and better understand critical health care issues, to establish a mechanism for their community-based participation in the health care discussion and debate of alternatives, and to include them in the development of solutions to health care problems faced by Kansans. This project was made possible by a grant from the United Methodist Ministry Fund, contributions from a variety of individuals and professional organizations, and the invaluable support of the print and electronic media.

The project began with a two week media information campaign anchored by the Wichita Eagle/KSNW-TV/KNSS-AM and the Topeka Capital Journal/KSNT-TV/KTPK-FM collaborative efforts. In addition print and electronic media statewide participated in this project. Active local information campaigns were implemented by the Atchison Daily Globe, Emporia Gazette, Garden City Telegram, Great Bend Tribune, Hutchinson News, Iola Register, Southwest Daily Times, Manhattan Mercury and the Winfield Daily Courier. Through these statewide information campaigns the key issues related to health care reform were outlined.

Subsequent to the media information campaign, the Kansas Commission on the Future of Health Care, Inc. held twenty-five town meetings across the state to provide public forums for grassroots discussion of health care issues in Kansas. Town meetings were held in the following locations:

Wichita, Winfield, Salina, Lawrence, Atchison, Manhattan, Topeka, Hutchinson, Hays, Garden City, Iola, Dodge City, Pittsburg, Great Bend, Independence, Emporia, Overland Park, Colby, Pratt, Phillipsburg, Liberal, Concordia, Kansas City, and Leavenworth.

Two Commissioners moderated each of the twenty-five Town meetings utilizing a structured format. Citizens attending those meetings had the opportunity to weigh the advantages and drawbacks of various proposals for change. The meetings were designed to promote dialogue within the community about the challenges facing our health care system and to encourage participants to examine their values and preferences. Attendance at Town meetings ranged from 25 in Leavenworth to 375 in Topeka. Both audience size and provider-consumer ratios were closely correlated to level of local media involvement as reflected by the 290 person attendance in Iola, a town of a little over 6,000 people. In total over 3000 people attended the Town meetings. In addition over 3500 newspaper ballots have been mailed to the Commission office, many accompanied by written comments. Preliminary meeting data indicates strong support by Kansans for universal access to basic health care for all Kansans, and a preference for allocating more resources to health promotion and prevention activities. The total data has been analyzed and is summarized in the document Critical Issues Health Forums: A Town Meeting Project, Report on Phase I: Quantitative Data Findings. The information gained from this Town Meeting Project validated the Commission's proposed inclusion criteria.

INCLUSION CRITERIA

- | | |
|--------------------------------------|---|
| 1. UNIVERSAL
COVERAGE | Access to a basic standard of health care is a fundamental right and barriers which produce inequities in access to such care should be eliminated. |
| 2. COMPREHENSIVE
BENEFITS | All citizens should be assured access to a basic level of health care services with emphasis on health promotion and disease prevention. |

- | | | |
|-----|---|--|
| 3. | EQUITABLE FINANCING | Financing of health care should be broad-based and equitably shared. |
| 4. | INCENTIVES FOR EFFICIENCY AND EFFECTIVENESS | Providers and consumers have shared responsibility for prudent utilization of health care resources. |
| 5. | COST CONTAINMENT | The current trend of rapid escalation in health care spending is unsustainable and cost control strategies aimed at slowing the rate of growth in health care costs must be employed. |
| 6. | CONSUMER CHOICE OF PROVIDER | Individual choice is an inherent American value and should be an important component in any health care plan. |
| 7. | ADMINISTRATIVE SIMPLICITY | The administrative structure of the health care system should facilitate ease of operation. |
| 8. | FLEXIBILITY | The diversity of clients served, the presence of regional variation, and the rapidity of change within the health care field necessitates that the delivery system have the ability to accommodate plural approaches and support innovation. |
| 9. | GENERAL ACCEPTABILITY TO PROVIDERS AND CONSUMERS | Health care reform must be congruent with the social values of Kansans and based on public and professional input. |
| 10. | FISCAL RESPONSIBILITY | A health care reform plan must be fiscally responsible and recognize competing social claims. |

The Commission viewed the Town Meeting Project as just the beginning in what we hoped and has proven to be a sustained interchange between the public and the Commission, with the public providing vital input essential to the completion of the Commission's primary task--the development of a workable health care reform plan for Kansas. The Commission returned to local communities to hold Kansas Health Values Forums in the Spring of 1993.

KANSAS HEALTH VALUES PROJECT

The Commission conducted Health Values Forums across the state in Phase I of the Kansas Health Values Forums Project. These forums were patterned on the Georgia Health Decisions Project model. The Georgia group spent a year developing and piloting materials designed to elicit information about social values related to health from their citizens and then over 250 meetings attended by over 4600 citizens were held across Georgia.

The purpose of the Kansas Health Values Project was to find out what values and principles Kansans believe should underlie our health care system. The 25 forums were structured using a small group format to provide ample opportunity for all to participate in this important discussion.

Exercise 1: The 70 groups, composed of 7 to 10 people, which prioritized resource allocations identified on the exercise demonstrated the following rankings with #1 being the most important and #7 being the least important.

John	4.09
Paula	4.30
Jimmy	5.86
Edward	6.91
Margaret	2.19
George	1.77
Ruth	2.91

Rationale provided by groups for putting certain cases as higher priorities were cost-benefit, proven therapy, quality of life, prevention, early intervention, and years of productivity.

Exercise 2: The 70 groups, composed of 7 to 10 people, developed consensus on most desirable attributes of an ideal health care system.

Most Desired by the Groups

(B) Health Care for All	62 groups
(A) Affordable	55 groups
(Q) Assured Quality	33 groups
(N) Choice of Doctor	32 groups
(M) Quality of Life	30 groups
(S) Right to Decide	29 groups
(D) Accessible Care	16 groups
(G) Health Promotion	14 groups
(C) Environmental Protection	10 groups
(J) Life Style Incentives	7 groups
(E) Nursing Home	5 groups
(I) Standard Price	3 groups
(R) Access to Soc Scvs	3 groups
(F) Short Wait	2 groups
(P) Right to Sue	1 group
(K) High Tech	1 group

Least Desired by the Groups

(T) Non Traditional	69 groups
(H) Experimental	51 groups
(P) Right to Sue	46 groups
(O) Culturally Sensitive	36 groups
(L) Home Postpartum Visits	20 groups
(F) Short Wait	16 groups
(I) Standard Price	11 groups
(K) High Tech	10 groups
(J) Life Style Incentives	6 groups
(E) Nursing Home	4 groups
(R) Access to Soc Scvs	4 groups
(C) Environmental Protection	3 groups
(N) Choice of Doctor	3 groups
(D) Accessible Care	2 groups

Continued Input: Participants at the Kansas Health Values Forums took home the values exercises to use with other existing groups in their community and the Commission continues to receive mailed input from a variety of groups.

- The Commission continues to gain public input related to the values and principles which Kansans believe should underlie their health care system to supplement that information acquired through the Kansas Health Values Forums. Most recently on July 21, 1993 a Multicultural Health Values Forum held in Wichita was attended by 125 AfricanAmericans. These individuals, like those attending the previous 25 Health Values Forums, expressed strong preferences for the values of; Health Care for All, Affordable, Choice of Provider, and Assured Quality.
- A Values Forum was held in Salina attended by parents of children in the Head Start Program and community leaders. Results on both exercises were similar to those previously mentioned.

In October we hope to begin the second phase of the Health Values Project replicating the scientific portion of the Georgia Health Decisions Project, convening 40 focal groups to gain indepth information on health values from a representative sampling of the Kansas population.

In late October the Commission will be holding the third in the triad of community meetings. The purpose of this final series of meetings is to gain public feedback on the draft long-range health care policy plan.

CITIZEN INPUT MEETINGS

CITY	DATE	LOCATION
Hays	October 25, Monday	Ft Hays State Black & Gold Auditorium
Garden City	October 26, Tuesday	Garden City CC Science Lecture Hall
Wichita	October 27, Wednesday	Machinist Hall 3830 S Meridan
Iola	October 28, Thursday	Bowlus Fine Arts Center 205 E Madison
Salina	November 1, Monday	Salina Central HS Auditorium
Topeka	November 2, Tuesday	Pozez Education Center Auditorium, 1505 SW 8th
Kansas City	November 3, Wednesday	City Council Chambers 701 N 7th

Facts About Secondhand Smoke

Some of the key facts about secondhand tobacco smoke and its dangers are summarized below. Use them to inform your family and friends and to work for smoke-free policies in your community.

General

Secondhand smoke is a cause of disease, including lung cancer, in healthy nonsmokers. Each year secondhand smoke kills an estimated 3,000 adult nonsmokers from lung cancer.

Secondhand smoke causes 30 times as many lung cancer deaths as all regulated air pollutants combined.

Secondhand smoke causes other respiratory problems in nonsmoking adults: coughing, phlegm, chest discomfort, and reduced lung function.

For many people, secondhand smoke causes reddening, itching, and watering of the eyes. About eight out of 10 nonsmokers report they are annoyed by others' cigarette smoke.

More than 4,000 chemical compounds have been identified in tobacco smoke. Of these, at least 43 are known to cause cancer in humans or animals.

At high exposure levels, nicotine is a potent and potentially lethal poison. Secondhand smoke is the only source of nicotine in the air.

Nonsmokers exposed to cigarette smoke have in their body fluids significant amounts of nicotine, carbon monoxide, and other evidence of passive smoking.

Three out of four nonsmokers have lived with smokers, and nearly half (45 percent) are worried that secondhand smoke might cause them serious health problems.

More than 90 percent of Americans favor restricting or banning smoking in public places.

46 states and the District of Columbia in some manner restrict smoking in public places. These laws range from limited prohibitions, such as no smoking on school buses, to comprehensive clean indoor air laws that limit or ban smoking in virtually all public places.

Laws restricting smoking in public places have been implemented with few problems and at little cost to state and local government.

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Smoking policies may have multiple benefits. Besides reducing exposure to secondhand smoke, such policies may alter smoking behavior and public attitudes about tobacco use. Over time, these changes may contribute to a significant reduction in U.S. smoking rates.

Children

Each year, exposure to secondhand smoke causes 150,000 to 300,000 lower respiratory tract infections (such as pneumonia and bronchitis) in U.S. infants and children younger than 18 months of age. These infections result in 7,500 to 15,000 hospitalizations yearly.

Chronic cough, wheezing, and phlegm are more frequent in children whose parents smoke.

Children exposed to secondhand smoke at home are more likely to have middle-ear disease and reduced lung function.

Secondhand smoke increases the number of asthma attacks and the severity of asthma in about 20 percent of this country's 2 million to 5 million asthmatic children.

Each year, U.S. mothers who smoke at least 10 cigarettes a day can actually cause between 8,000 and 26,000 new cases of asthma among their children.

A recent study found that infants are three times more likely to die from Sudden Infant Death Syndrome (SIDS) if their mothers smoke during and after pregnancy. Infants are twice as likely to die from SIDS if their mothers stop during pregnancy and then resume following birth.

Workplace

Workers exposed to secondhand smoke on the job are 34 percent more likely to get lung cancer.

The simple separation of smokers from nonsmokers within the same airspace may reduce, but cannot eliminate, the exposure of nonsmokers to secondhand smoke.

There is no safe level of exposure to a cancer-causing substance.

Survey responses indicate that at least 4.5 million American workers experience great discomfort from exposure to secondhand smoke.

The best method for controlling worker exposure to secondhand smoke is to eliminate tobacco use from the workplace and implement a smoking cessation program to support smokers who decide to quit.

About 85 percent of businesses had adopted some form of smoking policies in 1991, up from 36 percent in 1986.

Smoking in the Workplace: Ventilation

An interview with
James L. Repace,
Physicist, Indoor Air
Program, U.S.
Environmental
Protection Agency

Q: Where does one begin in efforts to maintain clean indoor air?

A: The best and most effective way to maintain indoor air quality is by controlling the source of the pollutant. In the case of environmental tobacco smoke, this means restricting smoking to separately ventilated spaces, or banning smoking indoors, a less costly alternative.

Q: How would you rate smoking as a pollutant source in indoor environments?

A: It is a major source of indoor air pollution. Smoking produces about 4,000 chemicals in the particle phase and about 500 chemicals in the gas phase. The tar particles contain most of the cancerous substances in tobacco smoke. The gases contain most of the irritating substances.

In particular, cigarettes, pipes, and cigars produce tremendous clouds of respirable tar particles when they are smoked. These tar particle clouds easily predominate over background levels of particulate air pollution in buildings. When these particles are inhaled and deposited in the nonsmoker's lungs, they may remain for months.

Q: Don't the ventilation standards proposed by ASHRAE (the American Society of Heating, Refrigerating, and Air Conditioning Engineers) control tobacco smoke in buildings?

A: No. The ASHRAE ventilation standards are not health-based standards designed to limit cancer risk or eye irritation to acceptable levels. They are designed only to limit dissatisfaction with tobacco smoke *odor* to a maximum of 20 percent for visitors (mixed smokers and nonsmokers) to a building where smoking occurs. Currently ASHRAE recommends 20 cubic feet of outdoor ventilation air per occupant (CFM/occ) for this purpose.

Q: Will an increase in building ventilation eliminate indoor air quality problems due to smoking?

A: No. Providing a level of ventilation that would produce only 20 percent dissatisfaction in a group of *nonsmokers* requires in excess of 100 CFM/occ—substantially beyond the maximum capacity (60 CFM/occ) of typical mechanical ventilation systems at typical design occupancy. Further, ventilating a building to reduce cancer risk to a level that would meet one proposed standard would create a virtual windstorm indoors, requiring 5,400 CFM/occ.

Q: If a special smoking area is established in a building, what ventilation issues are raised?

A: Establishing a physically distinct smoking area within a building is a workable, although often expensive, source control option *provided* it is ventilated independently from the rest of the building. This area should be under negative pressure relative to the nonsmoking areas of the building and should be ventilated at the maximum capacity of the ventilation system. Special smoking areas in existing buildings may require structural or mechanical system modification. In new buildings they may be designed and installed at less cost.

Q: When one is unable to eliminate the source or separately ventilate the workspace, how successful are other approaches to handling cigarette smoke? Will the use of an air cleaning device or desktop smokeless ashtrays effectively reduce the problem?

A: No. First, to be at all effective in reducing the concentration of smoke in a space, any air cleaner must process many room air volumes per hour. This requirement rules out desktop devices. Second, even large, expensive air cleaners with high efficiencies for

**Smoking
Policy:
Questions
and
Answers**

No. 5 in
a series

captured particles are capable of reducing, but not eliminating the environmental tobacco smoke tar particles in room air, and are not at all effective for gases, which contain most of the irritants. Third, even expensive particulate air cleaners cannot remove enough tar particles in room air to eliminate the cancer risk from environmental tobacco smoke. In general, filtration of indoor air to remove environmental tobacco smoke contaminants is futile—like trying to filter a lake to control water pollution.

Q: What about the separation of smokers from nonsmokers who share the same space?

A: Simply separating smokers from

nonsmokers within a room cannot keep tobacco smoke from diffusing throughout the space and is effective only in reducing peak, not average, smoke concentrations. This action obviously is better than nothing for short-term exposures in restaurants and airplanes. But for effective control of exposure to environmental tobacco smoke in the workplace, the only viable approach is *source control*: restricting smoking to separately ventilated smoking areas or banning smoking entirely.

For more information about tobacco use and advice on smoking cessation, call the Cancer Information Service at 1-800-4-CANCER (in Hawaii on Oahu call 524-1234; call collect from neighboring islands).

NATIONAL
CANCER
INSTITUTE

This Q&A sheet was produced by the National Cancer Institute in cooperation with the Smoking Policy Institute (P.O. Box 20271, Seattle, WA 98102, phone 206-324-4444).

SMOKING
POLICY
INSTITUTE 

October 1, 1993

Classification of Homes for Children

I. BY STATUTE.

A. Boarding Homes for Children (65-503).

1. A place maintained by a person who has control or custody of one or more children under 16 years of age not related to the person;
2. a children's home, orphanage or any day nursery or other institution determined by the secretary of health and environment to require regulation under K.S.A. 65-501 et seq.;
3. an association, organization or individual engaged in receiving, caring for or finding homes for children under 16 years of age who are orphans, children in need of care, deprived children or children who need day care, or a place maintained by such association, organization or individual for the purpose of caring for children under 16 years of age; or
4. any receiving or detention home for children under 16 years of age provided or maintained by, or receiving aid from any city or county or the state.

B. Family Day Care Home (65-517).

1. A place maintained for providing children with food or lodging, or both, away from the children's home for less than 24 hours a day, except that the home may not care for more than six children less than 16 years of age or care for more than three children less than 18 months of age.
2. Children of persons maintaining a family day care home court toward these limitations if the children are cared for at the place.
3. If only related children are cared for, the care would not constitute a family day care home.

II. BY RULES AND REGULATIONS.

- A. Day Care Home (28-4-113). This is the premises in which care is provided for a maximum of 10 children under 16 years of age with a limited number of children under Kindergarten age.

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- B. Group Day Care Home (28-4-113). The premises in which care is provided for a maximum of 12 children under 16 years of age with a limited number of children under Kindergarten age.
- C. Child Placing Agency (28-4-170). An association, organization or corporation receiving, caring for, or finding homes for orphans or deprived children who are under 16 years of age.
- D. Group Boarding Home (28-4-268). A nonsecure facility providing residential care for not less than 5 nor more than 10 persons unrelated to the caregivers and includes emergency shelters and maternity homes.
- E. Family Foster Home (28-4-311). A private home in which care is given for 24-hours a day for a small number of children away from their parent or guardian.
- F. Detention Center (28-4-350). A juvenile detention facility as defined under K.S.A. 38-1502(i) and K.S.A. 38-1602(f) which requires licensure under K.S.A. 65-501 et seq.
- G. Child Care Center (28-4-420). This is a facility which provides care and educational activities for 13 or more children two weeks to 16 years of age for more than three hours and less than 24 hours per day; or which provides before and after school care for school-aged children.
- H. Preschool (28-4-420). A facility which provides learning experiences for children who have not attained the age of eligibility to enter Kindergarten and who are 30 months of age or older; which conducts sessions not exceeding three hours per session; which does not enroll any child more than one session per day; and which does not serve a meal.

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ROLYN WEINHOLD
REPRESENTATIVE, SIXTY-NINTH DISTRICT
SALINE COUNTY
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TOPEKA

HOUSE OF
REPRESENTATIVES

COMMITTEE ASSIGNMENT
ENERGY & NATURAL RESOURCES
STATE & FEDERAL
MEMBER: CHILDREN & YOUTH ADVOCACY
COMMITTEE OF THE CORPORATION
FOR CHANGE

TESTIMONY
for
HOUSE PUBLIC HEALTH AND WELFARE COMMITTEE
October 1, 1993

Thank you for permitting me to testify in favor of HB 2136 which would prohibit smoking in the physical confines of any family day care home when unrelated children are in care. This legislation would not prohibit smoking outside of the home, such as porches, front or back yards, or garages not used for child care.

This would be a compromise so that providers or their family members could legally smoke without leaving the premises, but it would still offer protection for children from second hand smoke.

One of the main purposes of licensing and registering family day care homes in Kansas is to require those homes to meet certain minimal standards for health and safety. If we continue to permit smoking in these homes, we are not meeting those standards and therefore not protecting the health of our most vulnerable citizens.

There are presently many more Kansas children being cared for in family day care homes than in child care centers. We do not permit smoking in child care centers, so it seems reasonable that we should have some consistency on this important health issue.

This legislation would serve as an important educational tool for many providers and parents who do not recognize the dangers of second hand smoke. As far as enforcement, it would work much like speeding on the interstate; only a percentage of the law breakers would be caught, but over time, education would influence many providers to stop smoking by choice.

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State of Kansas

Joan Finney, Governor



Department of Health and Environment

Robert C. Harder, Secretary

TESTIMONY

Presented to

The Committee on Public Health and Welfare

Thank you for inviting me to testify today on the issue of smoking tobacco in child day care facilities. The Department currently regulates 12,718 child care facilities and agencies including 24 hour care and day care for children and youth. 10,481 of these facilities are child day care with a capacity to provide care for 150,000 children at any one time. (1,227 Child Care Centers and Preschools with a capacity to care for 81,700 children and 9,235 registered and licensed day care homes with a capacity to care for 68,300 children.) When turnover and part time attendance is taken into consideration, it is estimated that over 250,000 Kansas children under 12 years of age are in day care. National estimates indicate 60% of children under 5 are in day care.

With so many children in day care, including infants and toddlers, the concern of health risks from second hand smoke is obvious. The special health hazards pertaining to children breathing second-hand smoke has been the subject of numerous studies and articles including the December 1992 issue of EPA Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders:

Each year, exposure to second-hand smoke causes 150,000 to 300,000 lower respiratory tract infection (such as pneumonia and bronchitis) in U.S. infants and children younger than 18 months of age. These infections result in 7,500 to 15,000 hospitalizations yearly. Second-hand smoke increases the number of asthma attacks and the severity of asthma in about 20 percent of this country's 2 million to 5 million asthmatic children. Chronic cough, sneezing, and phlegm are more frequent in children whose parents smoke. Children exposed to second-hand smoke at home are more likely to have middle-ear disease and reduced lung function. Each year U.S. mothers who smoke at least 10 cigarettes a day can actually cause between 8,000 and 26,000 new cases of asthma among their children.

Children model behavior of adults. Over 65% of Kansas youths under 18 years of age indicated they had smoked cigarettes within the previous 30 days. It is estimated that 30 young people in Kansas start smoking everyday. If we add yesterday's 30 to today's 30 and tomorrow's 30, and so on; the numbers amount to an alarming 11,000 youth per year. By banning smoking in child care facilities we can encourage these young people not to start this life-threatening habit.

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The Department supports a statutory prohibition on smoking in all day care facilities. A statutory prohibition will give additional support to the Department in regulating this health concern. The Department, through regulation, currently prohibits smoking in a vehicle while transporting children in all child care facilities. Smoking while providing direct physical care to children is prohibited in licensed day care homes and group day care homes. There are no regulations prohibiting smoking in registered day care homes. Smoking is prohibited in child care centers and preschools.

When child care is provided in a family home setting such as in a registered family day care home, licensed day care home and group day care home, governmental regulation is sometimes viewed as interference, limiting parents' rights to choose who they want to care for their children as well as the care provider's family's rights. However, when an individual chooses to operate a child care business and open the family home to the public, they agree to abide by the minimum standards to operate a child care business. These standards are not meant to be burdensome, but are designed to provide a safe and healthy environment for children.

With the research that is now available on the effects of second-hand smoke, it is clearly a health risk to children and adults to be in a smoke filled environment. A ban on smoking in the day care facility would help protect children and adults from exposure to this deadly environmental substance.

A ban on smoking would also support parents that are reluctant to require day care homes be smoke free because child care is difficult to find. If the law states that all child care facilities are smoke free, it will not be an issue.

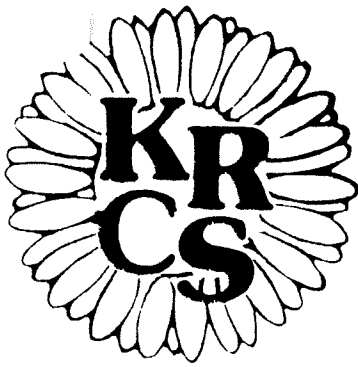
The City of Topeka passed a no smoking ordinance which applies to enclosed public places about 6 years ago. In the last 2 to 3 years this ordinance has been enforced on family day care homes through the provision of education and information. The Topeka-Shawnee County Health Agency reports no reduction in the availability of child care providers because of the ordinance, supervision issues related to the provider going outside to smoke has not been brought to the health agency's attention and there has been no formal resistance to the smoking prohibition.

RECOMMENDATIONS

The Department supports a statutory ban on smoking inside the day care facility during the hours of operation and when children who are not related by blood, marriage or legal adoption to the person who maintains the facility are in care. The ban should include all inside rooms, whether or not they are used for child care, as smoke travels through the ventilation system. Further the child care facility should post a no smoking statement in a conspicuous place so that parents know that smoking is prohibited.

Presented
by: Christine Ross-Baze, Director
Child Care Licensing and Registration
Bureau of Adult and Child Care

Date: October 1, 1993



**Kansas
Respiratory
Care
Society**

On behalf of the Kansas Respiratory Care Society, I am happy to be able to appear before you today to participate in the discussion of smoking in day care facilities.

I am submitting to you facts from various sources about the effect of smoking on children in day care facilities as well as children in general. Of particular interest is the study published just in May of this year in the American Journal of Pediatrics. One of the results of this study was that in the third year of life, a child's risk of wheezing lower respiratory infection in the presence of a smoking caregiver was more than threefold for those in another residential home setting. The study goes on to conclude that the majority of infants in their third year of life in another home setting with a caregiver who smoked was also with a caregiver who smoked in their second year of life. This suggests that prolonged exposure to environmental tobacco smoke may increase the risk of wheezing of lower respiratory infections. It also states that over the first three years of life, approximately 1/5 of infants of non-smoking mothers were in a case setting with a smoking caregiver. The infants of mothers who smoke were found by the researchers more likely to be placed in a child care setting with a smoking caregiver compared with infants of nonsmoking mothers.

Asthmatic children who breathe environmental tobacco smoke (ETS) have much higher concentrations of nicotine in their systems and more trouble breathing, reported a study in the June 10th New England Journal of Medicine. Tests of 200 children with asthma uncovered strong direct evidence that exposure to ETS causes or worsens the condition in children.

The new study used methodology different from that of earlier studies. In the past, people were asked to estimate how much youngsters had been exposed to ETS. In this study, led by Dr. Barbara Chilmonczyk of the Foundation for Blood Research in Scarborough, Maine, urine samples for 199 children were tested for levels of cotinine, a nicotine marker.

When doctors counted the asthma attacks each child had suffered during the preceding year, they found that children exposed to the most ETS (as identified by levels of cotinine) had 70 percent more attacks than those with little or no exposure. The doctors concluded "the evidence for ETS causing asthma-related illness is sufficiently strong, and the amount of illness it causes is sufficiently severe that systematic efforts to reduce inhalation are warranted for children with asthma."

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Attachment II

October 1, 1993

This factual information in conjunction with the increased number of reported cases of asthma necessitates the discussion and deliberation being held today. Attached you will find a copy of the major conclusions of the Environmental Protection Agency's report earlier this year on the effects of passive smoking.

It has been my personal experience and observation from smoking cessation efforts at Riverside Hospital in Wichita and here in the Statehouse that they are most successful if they are phased stages of change from a smoking to a smokeless environment. Tobacco contains the powerful addictive drug of nicotine and its addictiveness needs to be recognized and understood.

The Kansas Respiratory Care Society is willing to provide any additional information to the Committee and will support efforts to remove smoking from day care facilities.

Respectfully submitted,

Cheryl DeBrot, BS, RRT
Director at Large
Kansas Respiratory Care Society

1. SUMMARY AND CONCLUSIONS

1.1. MAJOR CONCLUSIONS

Based on the weight of the available scientific evidence, the U.S. Environmental Protection Agency (EPA) has concluded that the widespread exposure to environmental tobacco smoke (ETS) in the United States presents a serious and substantial public health impact.

In adults:

- ETS is a human lung carcinogen, responsible for approximately 3,000 lung cancer deaths annually in U.S. nonsmokers.

In children:

- ETS exposure is causally associated with an increased risk of lower respiratory tract infections (LRIs) such as bronchitis and pneumonia. This report estimates that 150,000 to 300,000 cases annually in infants and young children up to 18 months of age are attributable to ETS.
- ETS exposure is causally associated with increased prevalence of fluid in the middle ear, symptoms of upper respiratory tract irritation, and a small but significant reduction in lung function.
- ETS exposure is causally associated with additional episodes and increased severity of symptoms in children with asthma. This report estimates that 200,000 to 1,000,000 asthmatic children have their condition worsened by exposure to ETS.
- ETS exposure is a risk factor for new cases of asthma in children who have not previously displayed symptoms.

- The total cost to the nation for COPD amounted to over \$12 billion in 1988—direct health-care costs of \$5.5 billion, plus indirect costs of \$6.5 billion.

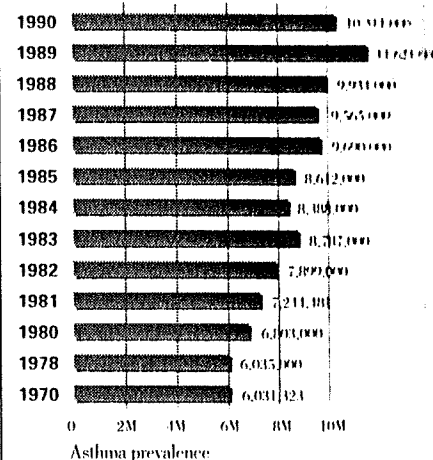
Asthma

- An estimated 10.3 million Americans suffer from asthma. The number has increased by 71 percent since 1970.
- Proportionately more blacks than whites have asthma. In 1990, the prevalence rate among blacks was 13.8 percent higher than among whites.
- **The annual number of deaths due to asthma rose by 33 percent between 1979 and 1989; the increase in the age-adjusted asthma death rate during that decade was 56 percent.**
- In 1989, the age-adjusted asthma death rate for blacks was 3.3 per 100,000, almost three times the rate reported for whites.
- Asthma is the fourth-ranking cause of hospitalization among children under the age of 15.
- Asthma costs Americans \$6.2 billion a year and accounts for nearly 1 percent of all health-care expenses. These costs include \$1.1 billion for medicines, \$345 million in lost work time, \$900 million in lost school time, and \$295 million in emergency-room visits.
- People with asthma experience well over 100 million days of restricted activity annually, and nearly 20 percent of them suffer some limitation in their daily activities.
- Asthma is one of the leading causes of school absenteeism.

Pneumonia and Influenza

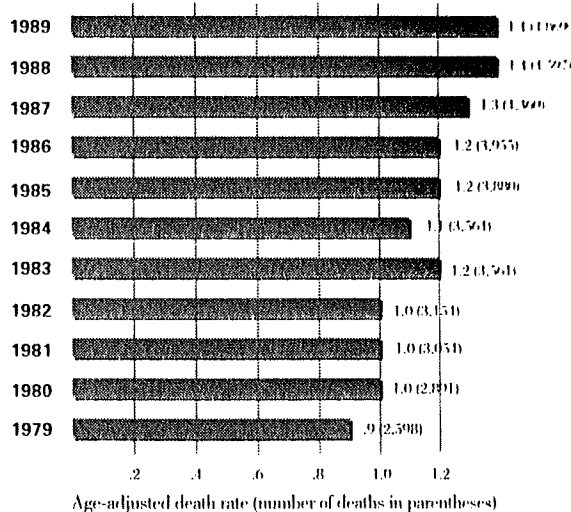
- In 1990, approximately 107 million episodes of influenza were reported; they were responsible for 383.4 million restricted-activity days and 217 million bed days. (In many instances, of course, a physician is not consulted, and the episodes are unreported.)
- In 1990, 3.9 million episodes of pneumonia were reported; they resulted in 56.8 million restricted-activity days and 33.8 million bed days.

Asthma: number of reported conditions, 1970-1990



Source: National Center for Health Statistics, National Health Interview Survey, 1970, 1978, 1980-90.

Asthma: age-adjusted mortality rate (per 100,000 population), 1979-89



Source: National Center for Health Statistics, NVSR Advance Report of Final Mortality Statistics, 1979-89.

Child Day Care, Smoking by Caregivers, and Lower Respiratory Tract Illness in the First 3 Years of Life

Catharine J. Holberg, MSc*; Anne L. Wright, PhD*†§; Fernando D. Martinez, MD*†§;
Wayne J. Morgan, MD*†§; Lynn M. Taussig, MD*†§; and Group Health Medical Associates

ABSTRACT. *Background.* Day-care attendance has been associated with an increased risk of hospitalization for lower respiratory tract illnesses (LRI). This study examines, in a health maintenance organization population of children, the associations between child day care and the occurrence of LRI in the first 3 years of life. Smoking by caregivers and a possible protective effect of longer day-care enrollment in relation to LRI are also addressed.

Methods. Information on day-care arrangements was elicited from 1006 parents of infants for five age intervals in the first 3 years of life: birth through 3 months, 4 to 6 months, 6 to 12 months, 1 to 2 years, and 2 to 3 years. Data on LRI in the first 3 years of life were recorded by pediatricians at the time of the acute illnesses.

Results. After controlling for other risk factors, the presence of three or more unrelated children in the care setting was associated with significant risks of LRI of up to twofold or more from 4 months of age to 3 years. Type of care setting was not a significant risk factor during this time period. In the third year of life, the risk of wheezing LRI in the presence of a smoking caregiver was more than threefold for those in another residential home setting. No significant protective effect against LRI in the third year of life associated with longer prior day-care enrollment was demonstrated.

Conclusion. The presence of three or more unrelated children in the care setting and the presence of a smoking caregiver were significant independent risk factors for LRI during the first 3 years of life. Prolonged day-care did not protect against LRI in the third year of life. *Pediatrics* 1993;91:885-892; *day-care centers, respiratory tract infections, passive smoking.*

ABBREVIATIONS. LRI, lower respiratory tract illness; CRS, Children's Respiratory Study; HMO, health maintenance organization; OR, odds ratio; CI, confidence interval.

Lower respiratory tract illness (LRI) is one of the main causes of morbidity in infancy and early childhood in the United States, accounting for a substantial proportion of office visits to pediatricians¹⁻³ and hospitalizations.^{3,4} Up to one third of children de-

velop LRI in the first year of life.⁵⁻⁷ Some studies have suggested that LRI in childhood may predispose to the subsequent development of chronic obstructive airway disease.^{8,9}

Day-care use has risen in recent years¹⁰ and is being increasingly implicated as a risk factor for respiratory and other illnesses in infancy and early childhood.¹¹⁻¹⁹ Despite evidence for a day-care role in upper respiratory tract illnesses, relationships with LRI have been less convincing.^{13,14,20} Evidence has been contradictory and most studies have not dealt specifically with LRI.^{17,21,22} A case-control study by Anderson et al²³ was the first to document an association between regular attendance in a day-care center and hospitalization specifically for LRI independent of other potential risk factors. Prospective studies have generally been lacking,¹¹ and those that do exist have not controlled simultaneously for other risk factors.^{21,22,24,25} Also, no previous study to our knowledge has examined the issue of smoking by caregivers in the day-care setting. Finally, while a protective effect of prior time spent in day care has been demonstrated for respiratory illnesses in general,^{22,26,27} it is not clear whether this finding can be extended to LRI.

The aims of the present investigation are threefold. First, the possible associations between child day-care arrangements and the occurrence of LRI during the first 3 years of life are examined. Second, possible associations between smoking by caregivers in the child care setting and LRI are evaluated. Third, the issue of a protective effect of prolonged prior child care experience in relation to subsequent LRI is assessed.

METHODS

The Tucson Children's Respiratory Study (CRS) is a prospective study of respiratory illness in childhood investigating the risk factors for acute and chronic respiratory disorders.^{5,28} Eligible participants were healthy infants born to parents who planned to use the pediatricians of a large health maintenance organization (HMO) in Tucson. A total of 1246 infants were enrolled at birth between May 1980 and October 1984 and were followed for LRI in the first 3 years of life. Mothers and fathers of enrollees had mean ages of 27 and 30 years, with mean years of education of 14 and 15, respectively. Study participants were more likely to be Anglo than the general Tucson population.²⁸ This number (1246) represents those who were followed by the HMO pediatricians for LRI during all ($n = 1022$) or part of their first year of life, as described previously.⁵ Follow-up for the second and third years of life was assigned to those children whose parents cited an HMO pediatrician on a questionnaire completed in the child's third year of life (mean age 2.9 years, SD 0.5 year). If parents no longer used the HMO pediatricians at the time of this questionnaire, the last

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health supervision visit to the HMO during the second or third year of life was used to assign follow-up for those years. There were 1052 and 888 children who were followed for LRIs by the HMO pediatricians in the second and third years of life. Use of the HMO pediatricians was an enrollment requirement for the CRS and for LRI follow-up, but changing health care providers did not preclude continued participation in the study.

All LRIs were diagnosed by the HMO pediatricians at the time of the office visit for the illness, according to criteria agreed on by the pediatricians and the investigators.²⁶ Briefly, these were a history of acute cough or wheeze with positive physical findings, acute inspiratory stridor not explained by anything but croup, radiographic evidence of pulmonary changes, or, for infants younger than 6 months of age, a history of prolonged cough or wheeze with positive physical findings. Information on child care arrangements in the first 3 years of life was obtained retrospectively from 1006 parents using a questionnaire administered from 1988 to 1990, when enrollees were from 3 to 10 years of age (mean and median age 6.5 years, SD 1.5 years). Identical questions were asked for five distinct age intervals in the first 3 years of life: birth through 3 months, 4 to 6 months, 6 to 12 months, 1 to 2 years, and 2 to 3 years. Questions elicited information on three types of care setting (home with parent or other caregiver, other residential home, and nonresidential day-care center), the number of unrelated children present, and the presence of persons who smoked in the child care location. Information was also collected concerning the time spent in each child care setting, except in cases where the child was cared for at home by a parent. All child day-care characteristics were assessed in analyses, and a specific definition of what constitutes day-care attendance, for example in terms of number of children present or hours of attendance, has not been used.

Other information was obtained from questionnaires completed by parents at the child's enrollment into the study, namely maternal education and smoking habits, the number of persons sharing the child's bedroom, gender, and ethnic group. (Children with one or both parents of Anglo ethnicity were considered Anglo vs other ethnic groups, mainly Hispanic.) A follow-up questionnaire in the child's second year of life (mean age 1.6 years, SD 0.35 year) provided information on the number of siblings. Responses to a question at this time, which asked "Does this child spend nine or more hours per week in the company of other children (excluding siblings), such as at a babysitter's home or in day care?" were compared with parental recall of child care arrangements during the second year of life, from the child care questionnaire completed in the current analysis. Further information on maternal smoking was obtained from questionnaires administered during the enrollees' second and third years of life. Breast-feeding status was derived from a combination of data from two sources, prospectively from health supervision visits, and retrospectively from a follow-up questionnaire, as described previously.²⁹⁻³¹

Statistical Analysis. Evaluation of relations between child care and LRIs was conducted within the five age intervals and included only those subjects who were followed by HMO pediatricians during the relevant age interval. LRI measures initially included the occurrence of any LRI and both wheezing and nonwheezing LRIs. A wheezing LRI required wheeze to be noted and recorded by the pediatrician at the time of the office visit. To ensure comparability of rates between the five age intervals, which were of different lengths, rates are expressed as percent LRIs per month for each age interval. Mantel-Haenszel estimates of adjusted odds ratios (ORs) and 95% confidence intervals (95% CIs) were calcu-

lated.³² The χ^2 distribution was used to assess statistical significance both bivariate and after stratification.

Logistic regression models were used to assess the risk of LRI associated with child care parameters after controlling for the following set of possible risk factors: maternal education (≤ 12 years vs >12 years), the number of others sharing the child's bedroom (≤ 1 vs ≥ 2), parental childhood respiratory trouble before age 16 years,³³ number of other siblings (none vs ≥ 1 , or <2 vs ≥ 2), breast-feeding (<1 month vs ≥ 1 month), ethnicity (Anglo vs other ethnic groups), maternal smoking of 20 or more cigarettes per day, presence of smokers who smoked in child care setting, and gender. Additional reduced models included only those factors which were statistically significant or of borderline significance. Results are expressed as ORs with 95% CIs. For logistic regression analyses, individual cases were aggregated into groups of cases for all possible combinations of risk factors to provide the appropriate degrees of freedom for the Pearson χ^2 goodness-of-fit test.

To address the question of a possible protective effect of prior child care experience, LRI rates in the third year of life were assessed in groups with differing child care experiences from birth. Survival analysis examined cumulative LRI incidences and hazard rates from birth to 3 years in groups of infants with differing longitudinal child care experience. The Lee-Desu statistic was used to assess statistical significance of differences in cumulative LRI incidence in these groups.³⁴

An α level of <0.05 (two-tailed) was considered statistically significant, unless noted otherwise. The study was approved by the Human Subjects Committee of the University of Arizona. Informed consent was obtained from parents at the time of enrollment.

RESULTS

Of the 1246 infants enrolled in the CRS, 191 had dropped out of the study or were lost to follow-up at the time of administration of the day-care questionnaire. Of the 1055 remaining, 1006 (95%) parents returned completed day-care questionnaires. Table 1 compares the characteristics of these groups. Infants of parents who completed the questionnaire were significantly more likely to be Anglo, and mothers of these infants were more likely to be married, to have more years of education, and to be nonsmokers. There were no significant differences between the three groups in terms of parental respiratory trouble before age 16,³³ whether or not the mother anticipated working outside the home when asked at the birth of the enrollee, the infant's gender, or the number of other siblings.

Concordance was 75% between child care information gathered prospectively in the second year of life, and responses obtained from the child care questionnaire. Concordance was unrelated to the child's age at the time of completion of the child care questionnaire. The child's sex or birth month was not related to type of child care.

TABLE 1. Comparison* of Subjects With and Without Completed Day-Care Questionnaires and Those Who Dropped Out of Study

	Day-Care Questionnaire		Dropped Out of Study	P†
	Completed	Not Completed		
N	1006	49	191	
% Parents married	93	94	80	$<.0001$
% Anglo	84	69	70	$<.0001$
% Maternal education ≤ 12 y	28	47	47	$<.0001$
% Maternal smoking (year 1)	17	31	24	$<.01$

* Significant differences only.

† Comparison of three groups.

During the first year of life 21.4% of those infants followed for the entire year ($n = 1022$) had at least one wheezing LRI. An additional 7.4% had non-wheezing LRIs, and 4.3% had LRIs for which there was no information on wheezing. Of those infants followed in the second ($n = 1052$) and third ($n = 888$) years of life, 12.6% and 8.7% had wheezing LRIs, 8.4% and 8.8% had nonwheezing LRIs, while 6.0% and 6.1% had LRIs with no wheezing information. Results were similar for both wheezing and non-wheezing LRIs, except when considering smoking by the caregiver. Where findings were similar, results are presented for any LRI only.

Of the 1006 subjects with child care information, 996 were followed by the HMO pediatricians up to 3 months of age, 985 up to 6 months, and 916 for the entire first year of life. During the second and third years of life, 934 and 809 were followed. Not all individuals had complete sets of information on all variables considered.

Child Care Setting, Presence of Unrelated Children, and LRIs

For each age interval, LRI rates were higher when there were unrelated children in the child day-care setting. However, there were no consistent trends toward increasing LRI rates in the presence of increasing numbers of unrelated children, beyond three or more. Subsequent analysis used a dichotomous category of less than three vs three or more unrelated children present in the child care setting. The LRI rate increased significantly in association with the presence of three or more unrelated children in each age interval ($P < .01$), except birth through 3 months, which was of borderline significance ($P < .06$). Table 2 shows LRI rates for those with less than three vs three or more unrelated children in three types of care setting. Odds ratios and 95% CIs, ad-

justed for care setting (home, other home, day-care center), for having an LRI in association with the presence of three or more unrelated children are shown. The increase in LRI rate in the presence of three or more unrelated children persists within the three different child care settings. There were no significant differences, in any age interval, between LRI rates in the three care settings, when there were three or more unrelated children present.

Presence of Unrelated Children in Care Setting, Siblings, and LRIs

From birth through 3 months of age and 4 to 6 months of age only, LRI rates increased in the presence of increasing numbers of siblings (trend $P < .001$ and $P < .01$, respectively). However, in no age interval was there any significant difference in LRI rates between those infants with no siblings and those with one sibling. Since only 9% of children had three or more siblings, a dichotomous category of <2 siblings vs ≥ 2 was used. Table 3 shows the LRI rates, ORs, and 95% CIs for those with less than three vs three or more unrelated children in the care setting by number of siblings. From 4 months of age, there are significant risks associated with the presence of three or more unrelated children in the care setting which are independent of the number of siblings. The presence of two or more siblings was associated with significant ORs in the first 6 months of life only, independent of the number of unrelated children in the care setting. In the second and third years of life, having two or more siblings had a tendency to become a protective factor, although not statistically significant.

Multivariate Analysis

After controlling for the risk factors mentioned above, and child care location, increasing LRI risks

TABLE 2. Percent (No.) of LRIs per Month by Less Than Three or Three or More Unrelated Children Present and by Type of Care Setting*

Age interval†	Home‡ (With Parent or Other)		Other Home		Day-Care Center§	OR (95% CI) for $\geq 3 $
	<3¶	$\geq 3¶$	<3¶	$\geq 3¶$		
Birth-3 mo	1.93 (730)	5.55 (18)	3.60#,, (118)	3.15 (87)	3.95 (19)	1.25 (0.61-2.56)
4-6 mo	3.60 (610)	9.40 (16)	4.25 (165)	8.50 (147)	13.05 (23)	2.35** (1.26-4.40)
6-12 mo	2.85 (508)	5.22 (16)	3.05 (164)	4.10 (175)	4.02 (29)	1.57‡‡ (0.97-2.53)
1-2 y	1.87 (442)	2.78 (21)	2.60#,, (157)	3.07 (193)	2.14 (74)	1.35 (0.90-2.03)
2-3 y	1.68 (336)	2.08 (28)	1.38 (115)	2.36 (159)	2.89 (121)	1.69‡‡ (1.05-2.73)

* Abbreviations: LRI, lower respiratory tract illness; OR, odds ratio; CI, confidence interval.

† To obtain percent LRIs per age interval, multiply by number of months in age interval (4, 2, 6, 12, and 12 months, respectively).

‡ There was no significant difference in LRI rates for care at home with a parent or care at home with another caregiver; these categories have been combined.

§ All day-care centers included three or more children; $\geq 90\%$ included six or more.

|| Adjusted for setting.

¶ No. of unrelated children present.

$P < .05$ compared with fewer than three unrelated children in home setting.

** $P < .01$.

‡‡ $P < .05$.

‡‡ $P < .05$ (one-tailed).

TABLE 3. Percent (No.) of LRIs per Month by Less Than Three or Three or More Unrelated Children Present in Care Setting and by Number of Siblings*

Age interval†	0-1 Sibling		≥2 Siblings		OR (95% CI) for ≥3 Unrelated Children‡	OR (95% CI) for ≥2 Siblings§
	<3	≥3	<3	≥3		
Birth-3 mo	1.83 (578)	2.15 (81)	2.98 (227)	6.58¶,†† (38)	1.75 (0.97-3.15)	2.00** (1.26-3.17)
4-6 mo	3.00 (530)	8.45¶, # (124)	6.05 (214)	10.20 (49)	2.60** (1.62-4.19)	1.82†† (1.15-2.88)
6-12 mo	2.83 (460)	3.72 (148)	3.30 (192)	5.28 (60)	1.54†† (1.06-2.25)	1.31 (0.92-1.89)
1-2 y	2.25 (392)	2.84 (211)	1.84 (181)	2.98¶, †† (70)	1.52†† (1.12-2.08)	0.86 (0.61-1.20)
2-3 y	1.78 (291)	2.66¶, ** (229)	1.43 (145)	2.23 (71)	1.73** (1.23-2.44)	0.77 (0.52-1.14)

* Abbreviations: LRI, lower respiratory tract illness; OR, odds ratio; CI, confidence interval.

† To obtain percent LRIs per age interval, multiply by number of months in age interval (4, 2, 6, 12, and 12 months, respectively).

‡ Adjusted for siblings.

§ Adjusted for three or more unrelated children.

|| No. of unrelated children present in child care.

¶ Compared with fewer than three unrelated children.

$P \leq .001$.

** $P \leq .01$.

†† $P \leq .05$.

with increasing numbers of unrelated children present, beyond three, were not observed. LRI risk associated with child care locations (other home, day-care center, vs at home as the reference group) did not reach statistical significance in any time period, and subsequent models used the dichotomous child care category of at home (with parent or other caregiver) vs other home and day-care center combined.

From birth through 3 months, after controlling for other risk factors, no LRI risk was found to be associated with the presence of any number of unrelated children. However, at this time, the risk of having an LRI associated with care locations other than the infant's home was 2.13 (95% CI 1.10 to 4.13) ($P < .05$).

Table 4 shows ORs and 95% CIs indicating that the presence of three or more unrelated children in the child care setting is associated with significantly increased LRI risks from 4 months of age, after control-

ling for other risk factors. Care setting was not a significant risk factor in any age interval from 4 months of age to 3 years. No statistically significant LRI risk was associated with interactions between the number of unrelated children present and either the type of care setting, the number sharing the child's bedroom, or siblings (either none vs ≥ 1 , or < 2 vs ≥ 2) in any age interval. After controlling for other risk factors, the number of siblings was a significant independent risk factor for LRI with ORs of 2.0 (95% CI 1.0 to 4.2) ($P < .05$) for one or more siblings from birth through 3 months, and 2.1 (95% CI 1.2 to 3.8) ($P < .01$) for two or more siblings from 4 to 6 months, only.

Results were virtually identical in reduced models, which included only those risk factors that were statistically significant or of borderline significance. Additional logistic models indicated that the LRI risk associated with presence of three or more unrelated

TABLE 4. Odds Ratios (95% CIs) for any LRI Associated With the Presence of Three or More Unrelated Children in the Child Care Setting, Controlling for Other Risk Factors Using Logistic Regression*

	Age Interval			
	4-6 mo	6-12 mo	1-2 y	2-3 y
OR for any LRI	2.23§ (1.33-3.74)	1.65 (1.09-2.51)	1.58§ (1.13-2.20)	2.04‡ (1.39-2.99)
No. of LRI cases	80	141	213	151
Total N	802	756	778	619
P value for χ^2 goodness of fit†	.40	.19	.10	.57
df	213	216	158	145

* Other risk factors included in models: ethnicity, maternal education, number sharing same bedroom as child, siblings, parental childhood respiratory trouble, maternal smoking, smoking in care setting, breast-feeding (for age intervals in first 12 months), gender. Not all cases had complete sets of information on these variables; total N's are reduced by deletion of cases with a missing value for any variable (listwise deletion). Abbreviations: LRI, lower respiratory tract illness; OR, odds ratio; CI, confidence interval.

† P values indicate there are no significant differences between the observed and logistic model predicted frequencies.

‡ $P \leq .001$.

§ $P \leq .01$.

|| $P \leq .02$.

children was similar after controlling for the length of time spent in the care setting.

Smoking in the Care Setting

The percent of caregivers smoking in each child care setting was similar in each age interval. From birth to 3 years overall, the mean percent of caregivers, other than a parent, who smoked in the child's home (26.5%) or in another home setting (26.5%) was greater than the percent of smoking mothers (16.9%) who were at home with their child ($P < .01$). Less than 1% of caregivers smoked in day-care centers. Overall, 5.5% of parents did not know whether there was anyone who smoked in the care setting. These responses were combined into the no-smoking category. Infants of smoking mothers were more likely to be in a care setting with a caregiver who smoked—27% compared with 21% for infants of nonsmoking mothers ($P < .05$). Overall, only 3% of mothers who smoked 20 or more cigarettes a day placed their child in a care setting where there was no smoking.

Evaluation of relations between LRIs and smoking by caregivers was conducted for the other home type of setting only, because essentially no caregivers in day-care centers smoked, and few children were at home with a caregiver other than a parent (between 5% and 8% from birth to 3 years). Table 5 shows, for the third year of life, a significantly increased rate of wheezing LRIs in those infants in another home care setting with a caregiver who smoked. Trends are the same regardless of maternal smoking status, and the OR after adjusting for maternal smoking is greater than threefold. After controlling for other risk factors using logistic regression, including both maternal smoking (either any smoking, or 20 or more cigarettes per day) and three or more unrelated children present, the presence of a smoking caregiver was associated with an increased risk of a child's having a wheezing LRI (OR = 3.57; 95% CI 1.21 to 10.54; $P < .05$).

Children did not spend more time in the other home care setting in the third year of life compared with their second year. However, 68% of those who in their third year were with a caregiver who smoked were also with a smoking caregiver in their second year. In addition, 9 of the 11 subjects experiencing wheezing LRIs in their third year, who had a caregiver who smoked, were also with a smoking caregiver in their second year.

Prior Child Care Experience

Table 6 presents the LRI rates per month in the

TABLE 6. Percent LRIs per Month in the Third Year of Life by Child Care Experience From Birth to 3 Years*

Group	N	% LRI/mo in 3rd y of Life	OR (95% CI) Compared With No Others
No unrelated children 0-3 y	315	1.58	1.0
0-2 Unrelated children year 3†	152	1.64	1.05 (0.64-1.70)
3+ Unrelated children year 3‡	208	2.28	1.60 (1.06-2.43)
3+ Unrelated children from ≤ 4 mo of age	121	2.82	2.18§ (1.36-3.48)

* Abbreviations: LRI, lower respiratory tract illness; OR, odds ratio; CI, confidence interval.

† This group includes those with one or two unrelated children beginning in year 3 ($n = 27$) and those with zero to two unrelated children in year 3 with some previous child care experience ($n = 125$), whose LRI rates per month were not significantly different (1.85 and 1.60, respectively).

‡ This group includes those with three or more unrelated children beginning in year 3 ($n = 49$) and those with three or more unrelated children in year 3 with some previous child care experience ($n = 159$), whose LRI rates per month were not significantly different (2.04 and 2.36, respectively).

§ $P < .001$.

|| $P < .05$.

third year of life for four mutually exclusive categories of longitudinal child care experience. ORs and 95% CIs are shown with reference to those who have never been with unrelated children in a child care setting from birth to 3 years. The rate of any LRI in the third year of life in those with the most prolonged child care experience (those with three or more unrelated children from ≤4 months of age) is slightly higher, but not significantly different, compared with the LRI rate for those who are with three or more unrelated children in their third year but without prolonged child care experience (2.8% vs 2.3% per month). However, rates in both of these groups are significantly higher than those in the other two categories ($P < .003$). After controlling for the risk factors listed previously, including child care setting, the risk of having any LRI in the third year of life, for those who had been with three or more unrelated children from an early age, was similar to that for those who were with three or more unrelated children in their third year without prolonged child care experience (OR = 2.84; 95% CI 1.41 to 5.73, vs OR = 2.25; 95% CI 1.19 to 4.24, both $P < .02$), compared with the reference group. LRI rates for each group decreased from birth to 3 years. However, the LRI rate for those with three or more unrelated children from 4 months of age or less was higher than for the

TABLE 5. Percent (No.) of Wheezing LRIs per Month in the Third Year of Life for Those in Another Home by Caregiver and Maternal Smoking Status*

	Total	Mother's Smoking Status		OR (95% CI) for LRI With Smoking Caregiver†
		Yes	No	
Caregiver smokes	1.48 (62)‡	1.57 (16)	1.19 (42)§	3.37 (1.27-8.97)§
Nonsmoking caregiver	0.38 (200)	0.69 (36)	0.34 (147)	

* Thirteen LRI episodes with unknown wheezing status are excluded from this analysis. Abbreviations: LRI, lower respiratory tract illness; OR, odds ratio; CI, confidence interval.

† Adjusted for maternal smoking.

‡ $P < .002$.

§ $P < .05$.

other groups in the first ($P < .0002$) and second ($P < .02$) years of life also.

Cumulative LRI Incidence

The cumulative incidence distributions of first, second, and third LRIs were compared in six mutually exclusive subgroups based on child care experiences in the first 3 years of life. Of the 1006 completed questionnaires, 990 cases had sufficient information to describe their child care experience throughout the first 3 years of life. We included the entire set of 990 cases for each cumulative LRI analysis, reasoning that having two or more LRIs is a condition distinct from having had one LRI or none at all. Table 7 displays cumulative first LRI incidence rates at 36 months of age and hazard rates (person-time incidence rates) for specific time intervals from birth to 36 months. For all groups the hazard rate increases after the first interval and then tends to decrease with time. The highest LRI incidence rate (8.6% per month) is seen from 3 to 6 months in those infants with three or more unrelated children from 4 months of age or less (group 6). In the third year of life, those infants who were with no unrelated children before 12 months of age (group 3) had the highest incidence rate (2.9% per month), although not significantly different from the rate for group 6 (2.0% per month) ($P < .4$). The Figure plots the cumulative LRI incidence distributions from birth to 3 years for the first, second, and third LRIs for group 1 and group 6 only. These two extremes of child care experience have the lowest and highest cumulative LRI incidences, respectively, at 36 months, for the first (50.6% vs 71.3%), second (22.2% vs 43.4%), and third LRI (10% vs 26%).

DISCUSSION

This study has shown that the risk of LRI increases up to twofold or more for children, between 4 months and 3 years of age, who are in child care situations involving the presence of three or more unrelated children. The association is independent of other implicated risk factors, including type of and

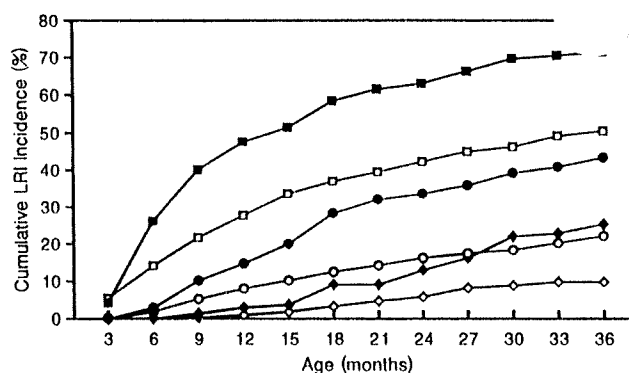


Figure. Cumulative lower respiratory tract illness (LRI) incidence for first, second, and third LRIs by child care experience from birth to 3 years, group 1 and group 6 only (see Table 7). The cumulative incidence distributions of groups 1 through 6 are significantly different for the first LRI ($P < .0001$), second LRI ($P < .0004$), and third LRI ($P < .0004$) using the Lee-Desu statistic; groups 1 through 5 are not significantly different. Three or more unrelated children ≤ 4 months to 3 years: ■, first LRI; ●, second LRI; ◆, third LRI. No unrelated children 0 to 3 years: □, first LRI; ○, second LRI; ◇, third LRI.

time spent in the child care setting, maternal education, number of others sharing the child's bedroom, having other siblings, parental history of respiratory trouble, maternal smoking, smoking in the child care setting, gender, and ethnicity. Beyond the threshold of three or more unrelated children in the child care setting, there is no evidence in this population to suggest that increasing numbers are associated with increased LRI risk. Prior to 4 months of age, an increased risk associated with the number of others present is not apparent. At this younger age, the risk is associated simply with being in any child care setting other than at home.

A case-control study²³ has shown a risk of greater than twofold for LRIs requiring hospitalization, in infants and children younger than 2 years of age, whose care situations involved the presence of more than six children. Another study reported that the size of the day-care group (less than six vs six or more) was not associated with different risks for se-

TABLE 7. Cumulative Lower Respiratory Tract Illness (LRI) Incidence at 36 Months (First LRI) and Hazard Rates for Time Intervals

Child Care Group	Hazard Rate, %/mo (SE)					Cumulative Incidence Rate at 36 mo*
	0-<3 mo	3-<6 mo	6-<12 mo	12-<24 mo	24-<36 mo	
1. No unrelated children 0-3 y (n = 383)	1.88 (0.4)	3.23 (0.6)	2.86 (0.4)	1.87 (0.3)	1.21 (0.2)	50.56
2. No unrelated children 0-2 y (n = 97)	1.77 (0.8)	5.56 (1.5)	2.88 (0.8)	1.47 (0.5)	1.96 (0.6)	56.11
3. No unrelated children 0-12 mo (n = 114)	1.49 (0.7)	3.54 (1.1)	3.05 (0.8)	2.82 (0.6)	2.92 (0.8)	66.11
4. No unrelated children 0-≤6 mo (n = 151)	1.13 (0.5)	3.38 (0.9)	2.81 (0.6)	3.20 (0.5)	0.82 (0.3)	55.09
5. 1+ unrelated children 0-3 mo (n = 107)†	3.61 (1.1)	6.06 (1.5)	3.05 (0.8)	1.47 (0.5)	1.79 (0.6)	58.87
6. 3+ unrelated children from ≤4 mo (n = 138)	1.48 (0.6)	8.58 (1.6)	5.72 (1.0)	2.87 (0.6)	2.03 (0.6)	71.33
P value	.2	.001	.06	.03	.05	.0004

* LRI follow-up ranged from 0.5 to 36 months (mean = 33 months, SD = 8 months); this analysis included 33 children with < 1 year follow-up in their first year (median = 9 months) who were assigned follow-up in their second (n = 13) and third (n = 20) year. The maximum follow-up time was used for these cases. Removing these cases from analysis did not change the results.

† Group 5 had varied child care experiences after the first 3 months— 50% spent ≥ 1 subsequent time period with no unrelated children and 50% spent ≥ 1 subsequent time period with one or two unrelated children.

infectious illness.¹⁷ Our findings are derived from an HMO population of infants who were healthy at birth when enrollment into the CRS took place. Only 12 of 1150 LRIs identified in the first 3 years of life were associated with hospitalization.

After controlling for other risk factors, the presence of siblings was associated with risks of LRI of similar magnitude to those of exposure to unrelated children in the child care setting, but only in the first 6 months of life. This would imply that although the nature of the risk associated with unrelated children or other siblings is similar, the source of the contacts is associated with a different risk profile. Thus, our results suggest that while there is a constant ongoing risk associated with exposure to unrelated children, in the first 3 years of life, the LRI risk associated with having other siblings is present only during the first year, and then it decreases, possibly becoming protective in the second and third years of life. This suggests there is a more limited exposure to infection associated with the presence of the same group of children, since the total number of contacts is reduced. Others have shown similar independent risks of child care with one or more unrelated children, and older siblings, respectively, from 6 weeks to 17 months, and a protective effect of older siblings from 3 to 5 years of age.²⁷

The implications of these findings are that a more stable child care setting, in terms of child turnover, may pose less of an LRI risk than a setting where the turnover of children is higher. Unfortunately, we have no information on the rate of child turnover in the care settings for our population. In addition, there may be other intrinsic epidemiologic characteristics of different child care settings. For example, the majority of day-care homes are unregulated¹³, and generally lack sick-child policies,²⁰ while day-care centers may cater to a wider age range, may be more likely to accept drop-in children, and have more personnel.^{16,19,22} Such differences could contribute to different disease rates over and above the effect of differing numbers of children.

The risk of LRIs in infants with smoking mothers has been documented now by numerous studies,^{35,36} including the CRS.³⁷ After controlling for other risk factors, including maternal smoking, the present study has further demonstrated an increased risk for wheezing LRIs of up to threefold or more in the third year of life in those infants who are in a child care setting with a smoking caregiver. To our knowledge, this is the first demonstration of a passive smoking effect in children attributable to sources outside of the home environment. The reason why this effect would be seen in the third year of life is not apparently due to an increase in the amount of time spent in the care setting, as we had initially thought. However, the majority of infants in their third year of life in another home setting with a caregiver who smoked were also with a caregiver who smoked in their second year of life. This suggests that prolonged exposure to environmental tobacco smoke may increase the risk of wheezing LRIs.

Over the first 3 years of life approximately one fifth of infants of nonsmoking mothers were in a care

setting with a smoking caregiver. Also, we find that infants of mothers who smoke are more likely to be placed in a child care setting with a smoking caregiver compared with infants of nonsmoking mothers. There were relatively few heavily smoking mothers who placed their child in a care setting where there was no smoking. We have previously shown, in Anglo infants, that the risk of LRI in the entire first year of life associated with heavy maternal smoking in the absence of day care is greater than the risk associated with day-care use.³⁷

Some studies have demonstrated a protective effect of prolonged child care experience in relation to respiratory illness in general.^{22,26,27} However, none has dealt specifically with LRI. We find the LRI prevalence rate in the third year of life in those children with the longest day-care experience is not significantly different from the rate in those with equivalent child care in their third year, but without prolonged experience. The LRI risk in the third year of life for both these groups, after accounting for other potential risk factors, is greater than twofold, compared with those who have never been in child care with unrelated children. It appears that the risk of LRIs increases with exposure to care situations involving the presence of three or more unrelated children. However, prior exposure to such situations does not appear to offer protection against subsequent LRIs, at least up to 3 years of age. The cumulative LRI incidence rates (first, second, and third LRIs) in the first 3 years of life for those infants with the longest day-care experience are significantly higher than those for other child care experience groups. This supports the finding of increased risk associated with care in the presence of three or more unrelated children and the lack of detection of a protective effect of prolonged day-care experience when the data are examined cross-sectionally.

Since enrollees in the CRS planned to use the participating HMO, which serves an employed population, extreme upper and lower socioeconomic status groups may be underrepresented.²⁸ However, in the present study demographic characteristics associated with children attending day care are comparable with those of other studies.^{21,27} In addition, our data show that 51% of 2- to 3-year-olds are in some type of care outside of the home, which compares well with national statistics showing that 54% of 3- to 5-year-olds are in some form of preprimary school.¹⁰

Information on child care arrangements in the first 3 years of life was obtained retrospectively from parents 3 to 10 years after entry into the CRS. The accuracy of parents' recall is a possible source of bias. Concordance between information concerning day care gathered in the child's second year of life and the retrospective information for the second year of life was 75%. More importantly, concordance was no better for children who were younger at the time of completion of the day-care questionnaire. This suggests that, rather than recall, discordant cases are more likely due to other reasons, such as dissimilarity of questions, and the fact that the prospective information referred to a discrete time point, whereas the retrospective questionnaire enquired about an

entire time period. Only 5.5% of parents stated they "didn't know" about caregiver's smoking, which gives some confidence in the parents' recall. These responses were combined with those of the no-smoking group. Any misclassification would bias results toward the null hypothesis of no effect. It has been suggested that parents of children in day care may be more likely to take their child to the physician,²¹ in the belief that earlier intervention may result in fewer days of absenteeism from their workplace. However, such a bias would be unlikely to relate to the number of children in the child care setting.

Given the continued widespread utilization of child day-care, the findings of this study suggest that the risk of LRIs would be reduced in care settings involving fewer than three unrelated children. This could be particularly relevant in the first 6 months of life, when the incidence of LRI is highest. In addition, child day-care in the absence of environmental tobacco smoke would decrease the risk of LRIs.

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Tobacco Free Kansas

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Testimony in support of prohibiting smoking in family day care homes.

Presented to the House Public Health and Welfare Committee

Friday, October 1, 1993

by Brian Gilpin

Tobacco Free Kansas Coalition

5375 SW 7th Street

Topeka, KS 66606

913-272-7056

And is not peace in the last analysis, basically a matter of human rights - the right to live out our lives without fear of devastation - the right to breathe air as nature provided it - the right of future generations to a healthy existence?

John F. Kennedy

Former U.S. President

Secondhand smoke is toxic to children and I believe it is a form of "child abuse." Nine million American children under the age of five live in homes with at least one smoker and are exposed to secondhand smoke almost the entire day.

C. Everett Koop, M.D.

Former U.S. Surgeon General

On behalf of the Tobacco Free Kansas Coalition I ask you to please support the measure to prohibit smoking in all family day care homes. Smoking is currently prohibited in licensed day care facilities or centers but not in family or group day care homes. It is a proven fact that secondhand smoke is harmful, especially to children. We believe that this legislation is vital for the health and welfare of our children.

Children and Secondhand Smoke

In January 1993, the Environmental Protection Agency (EPA) released a report classifying secondhand smoke as a Group A human carcinogen. This category includes only the most potent cancer-causing agents, like benzene, vinyl chloride, arsenic, and asbestos.

In the same report, the EPA reported that secondhand smoke was even worse for children than previously thought. It concluded that secondhand smoke contributes to as many as 300,000 respiratory infections in babies, resulting in up to 15,000 hospitalizations annually. It triggers up to 26,000 new cases of asthma in previously uninfected children and makes symptoms worse in as many as 1 million children.

The EPA report also reported the following:

Chronic cough, wheezing, and phlegm are more frequent in children who are regularly exposed to secondhand smoke. Children regularly exposed to secondhand smoke at home are more likely to have middle-ear disease and reduced lung function. Secondhand smoke increases the number of asthma attacks and the severity of asthma in about 20 percent of this country's 2 million to 5 million asthmatic children.

Studies have found that smoking by the mother doubles the risk that her baby will die from Sudden Infant Death Syndrome (SIDS). Smoking may be the single most important preventable risk factor in SIDS. It is also very important to note that one third of all SIDS deaths occur in day care.

House Public Health & Welfare

Attachment 12

(October), 1993

Simply stated, no one should smoke in the presence of babies and small children. Although exposure to cigarette smoke is dangerous to everyone, children are at a greater risk because they have less developed immune systems, smaller lungs, and faster rates of breathing. Very young lungs are especially vulnerable to assaults by pollutants because young children and babies breathe more rapidly than adults. Because of this higher breathing rate, they inhale more air--and more pollution--relative to their total body weight. In addition, the immune systems of young children are not fully developed.

What if parents know their children's day care is not smoke-free but choose that home anyway?

Parents often times may not be aware of the dangers of secondhand smoke or may have other considerations in choosing day care or may not have any other choice. However, when parents choose any licensed day care facility, they should be guaranteed that their children will be in a safe and healthy environment. They should not have to balance the dangers of secondhand smoke against other factors such as cost, convenience, availability and provider expertise.

Should government regulate private behavior in people's own homes?

This measure would regulate smoking in family day care homes. However, this smoking prohibition would apply only during hours of operation. Licensed day care homes have already agreed to abide by numerous regulations in their home. Licensing is not intended to be an excessive burden to day care providers. It is designed to ensure a safe and healthy environment for children in day care.

Please realize that we are only asking that smoking be prohibited in the enclosed home area. Smoking directly outside the home would still be allowed.

How can you enforce this measure?

Laws in day care homes are like many other laws, they are difficult to enforce. For instance, regulations state that children must have outdoor play and nutritious meals and snacks every day. These are impossible to enforce without daily monitoring; therefore, education is the logical answer. Prohibiting smoking in day care homes not only protects children but educates adults to the dangers of secondhand smoke. If violations and/or complaints are called in, they are investigated, otherwise, there is a good faith attitude that providers are following the regulations between annual licensing visits. Registered homes are not visited unless there is a complaint or a city ordinance requires it.

What's wrong with letting people smoke in the back room of a day care home during hours of operation?

To allow smoking in a back room would muddy the regulations of smoking in day care homes. Second, and most importantly, ventilation systems in homes cannot filter and circulate air well enough to eliminate secondhand smoke. Blowing smoke away from children, going into another room to smoke, or opening a window may help reduce children's exposure but will not protect them from the dangers of secondhand smoke. Prohibiting smoking in day care homes during hours of operation is the simplest and clearest way to establish a smoking policy that cannot be easily misinterpreted or infringed upon unknowingly.

-end-

EFFECTS OF PASSIVE SMOKING ON CHILDREN

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I. PARENTAL SMOKING AND RESPIRATORY ILLNESS

A. Weitzman et al

1. According to substantial literature, passive smoking by children is associated with an increased incidence of lower respiratory illness and diminished pulmonary function. This article concludes that maternal smoking is associated with higher rates of asthma, an increased likelihood of using asthma medications, and an earlier onset of the disease.

II. SMOKING AND SIDS

A. Mitchell et al

1. Maternal smoking is known to be a risk factor for SIDS. This study looked at the effects of passive smoke on the incidence of SIDS. Infants of mothers who smoke have a 4 times greater risk of death than infants of mothers who did not smoke. Smoking by other members of the household increased the risk even more. The more exposure, the higher the risk.
2. Some researchers estimate that the SIDS mortality rate could be halved if no mother smoked.

III. CIGARETTE SMOKE = RADIATION HAZARD

A. Evans - commentary

1. Smokers of 1-2 packs/day expose themselves to the equivalent radiation of 250-300 chest X-rays per year. Cancer can then be expected to follow such an exposure. The effects of this radiation on the children exposed to it are not entirely known but further studies may show an association with a childhood cancer.

House Public Health & Welfare
Attachment # 13
Oct. 1, 1993

IV. PASSIVE SMOKING AND OTITIS MEDIA

A. Etzel et al

1. Children with exposure to nicotine had a longer average duration of middle ear fluid than those with no exposure

These children were in a smoke-free environment for 8 hours each day so otitis media would be increased if exposed all day.

2. Children who are exposed to cigarette smoke also have an increased incidence of otitis media

- ##### B.
- Otitis Media with effusion is the most common illness diagnosed in US pediatricians offices. It is estimated that 1-2 billion dollars are spent on otitis media each year in the United States. Prevention of even a small proportion of illness-days by limiting the exposure of children to environmental tobacco smoke could have a large public health impact.

V. CONCLUSION

Passive smoking may be the most important source of environmental contamination and is the etiology for some of the most common childhood illnesses I see. If it is possible to discourage caregivers from smoking while young children are present then we, as society, should try to accomplish that goal.

Maternal Smoking and Childhood Asthma

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ABSTRACT. According to a substantial literature, passive smoking by children is associated with an increased incidence of lower respiratory illness and diminished pulmonary function. The relationship between passive smoking and childhood asthma, however, is not clear. Data from the Child Health Supplement to the 1981 National Health Interview Survey were analyzed with information about 4331 children aged 0 to 5 years to study the relationship between maternal smoking and (1) the prevalence of childhood asthma, (2) the likelihood of taking asthma medication, (3) the age of onset of children's asthma, and (4) the number of hospitalizations among children with and without asthma. An odds ratio for asthma of 2.1 was shown by multivariate logistic regressions among children whose mothers smoke 0.5 packs of cigarettes or more per day compared with children of nonsmokers ($P = .001$). In similar analyses maternal smoking of 0.5 packs per day was identified as an independent risk for children's use of asthma medications (odds ratio 4.6, $P = .0006$) and for asthma developing in the first year of life (odds ratio 2.6, $P = .0006$). Maternal smoking is also associated with increased numbers of hospitalizations by its association with an increased risk of asthma as well as by contributing to hospitalizations independently of a child having asthma. Among children with asthma, however, maternal smoking is not associated with increased numbers of hospitalizations. It was concluded that maternal smoking is associated with higher rates of asthma, an increased likelihood of using asthma medications, and an earlier onset of the disease. These findings have implications for renewed efforts to discourage smoking in families, especially during pregnancy and the first 5 years of children's lives. *Pediatrics* 1990;85:505-511; *maternal smoking, asthma, passive smoking.*

passive smoking²⁻⁵ have recently come to be recognized as major public health problems. Estimates vary, but children living in temperate climates spend 60% to 80% of their time indoors⁶ and approximately 70% of all children in the United States live in homes where there is at least one adult smoker.^{5,7} According to a growing literature, increased childhood respiratory symptoms and altered respiratory function are associated with parental smoking. In general, it has been found in these studies that maternal smoking is more strongly correlated with children's respiratory dysfunction than is paternal smoking.⁸⁻¹³ The most frequently offered explanations for this finding are that fathers spend less time at home than do mothers and that children spend more time with their mothers than their fathers. Hence, children are more likely to be exposed to passive smoke if their mothers smoke than if their fathers smoke. In at least two recent articles, however, it was suggested that maternal smoking during pregnancy may have independent effects on children's pulmonary structure and function.^{14,15}

Among preschool children, the finding most frequently documented to date is an increased rate of lower respiratory infection and respiratory symptoms in children less than 2 years of age whose mothers smoke.^{12,13,16-18} In most studies this association was shown to weaken or disappear as children grow older.^{12,16-18} It was demonstrated in a further series of studies that maternal smoking is associated with diminished lung size¹⁹ and decreased pulmonary function as measured by forced expiratory volume in 1 second, forced vital capacity, or forced expiratory flow, mid-expiratory phase among older children, thus suggesting long-term negative effects on children's pulmonary function.^{8-11,20-26}

Although the consensus of the literature is that passive smoking is harmful to children, the rela-

The contribution of cigarette smoke to indoor air pollution¹ and the adverse health consequences of

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tionship between parental smoking and the prevalence and severity of childhood asthma remains unclear. There are few studies of childhood asthma and maternal smoking in which large population-based data sets were used, and none that we are aware of in which a nationwide sample was used. Previous studies have been fairly evenly divided between those in which an increased prevalence of childhood asthma or chronic wheeze associated with parental smoking^{8,10,22,27-29} was demonstrated and those in which it was not.^{12,16,30-34}

We analyzed data from the Child Health Supplement to the 1981 National Health Interview Survey to study the relationship between maternal smoking and (1) the prevalence of childhood asthma among children aged 0 to 5 years, (2) the likelihood of taking asthma medications prescribed by a physician, (3) the age of onset of children's asthma, and (4) the numbers of overnight hospitalizations.

METHODS

In the National Health Interview Survey, a complex, multistage probability sampling design was used to provide a representative sample of the civilian noninstitutionalized population of the United States. In the 1981 survey there was a Child Health Supplement in which data were collected concerning one randomly chosen child in each eligible household. The supplement included 15 416 children aged birth to 17 years, of whom 4331 were aged 0 to 5 years, and contained data concerning maternal smoking. All information was derived from parent reports; there were no medical examinations of children or reviews of medical records. The interview contained a series of questions concerning family sociodemographic characteristics and a list of 59 chronic health conditions, including asthma, that children might have. Parents were asked if the index child had ever had asthma, if the asthma lasted for at least 3 months, whether the child still had asthma or if it has been cured, and how old the child was when asthma was first noticed. Children were categorized as having asthma if their parents reported that it was present at the time of the interview, had been present for more than 3 months, and had not been cured. Parents were also asked a series of questions about the age of the child at onset of asthma. In a separate series of questions, parents were asked whether the child had taken an asthma medication prescribed by a physician in the past 2 weeks. Children reported as having taken such medication for asthma were categorized as current users of asthma medications.

Questions were also asked about maternal smoking during pregnancy for all sample children aged

0 to 5 years. In other studies it has been indicated that women who smoke during pregnancy tend to continue to smoke following pregnancy.³⁵ Thus, the measure of maternal smoking used in these analyses includes both prenatal and postnatal exposure. No questions were asked about paternal smoking.

In previous studies^{36,37} it was found that parent reports tend to overestimate the prevalence of clinically diagnosed chronic conditions; however, this overreporting tends to decline with the severity or perceived stigma of the conditions. The majority of population-based studies of childhood asthma have relied on parent reporting for the identification of children with asthma. Some authors³⁸ believe that exclusive dependence on physician reporting results in significant underreporting of childhood asthma. In one study³⁸ 96% of school-aged children with asthma could be identified by parent reporting, in another³⁹ parent reports of children's asthma were confirmed in 94% of patients,³⁹ and in another⁴⁰ it was shown that parent reports of childhood asthma are a good indicator of impaired ventilatory function.

Statistical Analysis

All survey responses were weighted when we calculated means and proportions using the weights provided by the National Center for Health Statistics, which reflect the probability of selection, non-response, and poststratification adjustments. *T* tests were used to evaluate differences in means and χ^2 tests were used to measure differences in proportions. Logistic regressions were also estimated when the dependent variable was dichotomous using the PC SAS CATMOD program. The coefficient estimates can be interpreted as odds ratios associated with the predictor variable. Multivariate linear regressions were used when the dependent variable was the number of overnight hospitalizations.

Estimates of statistical significance were made assuming simple random sampling. The actual sampling design was stratified, multistage, and clustered, and the assumption of simple random sampling in this case will result in overestimates of statistical significance. We expect that design effects will be as great as 1.5. For this reason, we only discuss associations significant at the .01 level or less.

RESULTS

As shown in Table 1, 26% of children's mothers reported smoking during pregnancy. Of these, 13% smoked less than a half-pack of cigarettes per day and 13% smoked a half-pack or more per day. Rates

and intensity of maternal smoking were substantially different for different subsets of women. Less educated women and women who report lower incomes were more likely to smoke and were more likely to smoke a half-pack of cigarettes or more per day than were more educated or more affluent women.

Asthma was reported as being present in 2.3% of children whose mothers did not smoke, 2.6% of children whose mothers smoked less than a half-pack of cigarettes per day, and 4.8% of children

whose mothers smoked a half-pack or more per day ($P = .001$, Table 2). In Table 3, the relative odds ratio for asthma among children aged 0 to 5 years is shown according to maternal smoking behavior. Compared with mothers who did not smoke, the odds ratio for children whose mothers smoked less than a half-pack per day is 1.1 and the comparable ratio for children whose mothers smoked a half-pack of cigarettes or more per day is 2.1 ($P = .001$). When we used a multivariate analysis with a logistic regression model controlling for sex, race, presence

TABLE 1. Maternal Smoking During Pregnancy, 1981 National Health Interview Survey (n = 4838)*

	No. of Mothers	No Smoking	Smoke <1/2 Pack/Day	Smoke ≥1/2 Pack/Day
Race				
Black	632	74	18	8
White	3555	73	13	14
Other	144	90	9	**
Family income (\$)				
<10,000	1053	64	19	17
10 000-25 000	1868	75	13	12
25 000+	1139	80	9	10
Maternal education				
<High school	1033	62	19	19
High school	1930	71	15	14
Some college	756	84	9	7
College	598	92	5	3
All children	4331	74	13	13

* Sample sizes will vary because of missing data. Results are given as percentages.

† Estimate not reported because number in cell is less than five observations.

TABLE 2. Prevalence of Asthma and Current Use of Asthma Medications Among Children Aged 0 to 5 Years by Maternal Smoking Status, 1981 National Health Interview Survey (n = 4331)

Maternal Smoking Status	No. of Mothers	Prevalence of Asthma (%)	P Value	% of Children Currently Using Asthma Medications	P Value
No maternal smoking	3210	2.3		0.5	
Maternal smoking <1/2 pack/d	574	2.9	.68	*	
Maternal smoking ≥1/2 pack/d	547	4.8	.001	2.0	.0003
All children	4331	2.7		0.7	

* Estimate not reported because number in cell is less than five observations.

TABLE 3. Relative Odds Ratio for Asthma and Current Use of Asthma Medications Among Children Aged 0 to 5 Years by Maternal Smoking Status, 1981 National Health Interview Survey (n = 4331)

Maternal Smoking Status	Bivariate Analysis				Multivariate Analysis*			
	Asthma	P Value	Use of Asthma Medication	P Value	Asthma	P Value	Use of Asthma Medication	P Value
No maternal smoking	1.0		1.0		1.0		1.0	
Maternal smoking <1/2 pack/d	1.1	.68	†		1.2	.55	†	
Maternal smoking ≥1/2 pack/d	2.1	.001	4.1	.0003	2.1	.005	4.7	.0006

* Control variables include sex, race, presence of both parents, family size, and number of rooms in household.

† Estimate not reported because number in cell is less than five observations.

of both biologic parents, family size, number of rooms in household, and maternal education, the odds ratios are 1.2 and 2.1, respectively ($P = .005$, Table 3). Family income did not add significantly to this equation at $P < .05$.

We examined the relationship between maternal cigarette smoking and the prevalence of children reported as using a physician-prescribed asthma medication in the past 2 weeks. Overall, 7 per 1000 children 0 to 5 years of age were reported to be using asthma medications. The prevalence of asthma medication use was strongly associated with maternal smoking: the odds of a child using asthma medication was 4.1 times greater if the mother smoked a half-pack or more of cigarettes per day compared with nonsmokers ($P = .0003$, Table 3). When multivariate controls were introduced to control for potential confounding variables, the odds ratio was 4.7 ($P = .0006$). Control variables included sex, race, presence of both biologic parents, family size, number of rooms in the household, and maternal education. Family income did not add explanatory power to this equation.

We also estimated the association between cigarette smoking of the mother and the reported onset of asthma in the first year of the child's life. The prevalence of onset of asthma in the first year of life was 4.5% if the mother smoked a half-pack or more per day, and 1.6% if she did not smoke ($P = .0001$). Multivariate logistic regressions indicated an odds ratio of 2.6 if the mother smoked a half-pack or more of cigarettes per day ($P = .0006$, Table 4).

Because of concern that parents might mistakenly report respiratory illnesses associated with wheezing as asthma among children less than 2 years of age, we investigated the relationship between maternal smoking and asthma and use of asthma medications among children aged 2 to 5 years. With multivariate analyses, again controlling for sex, race, presence of both biologic parents, family size, number of rooms, and maternal education, we saw an odds ratio of 1.9 for asthma ($P = .003$) and 3.6 for the use of asthma medications ($P = .01$) for children whose mothers smoke a half-pack of cigarettes or more per day compared with children whose mothers do not smoke.

We also examined the reported number of overnight hospitalizations among children and their relationship to maternal smoking. There was a strong relationship of hospitalizations to maternal smoking (Figure). For children without asthma this relationship was highly statistically significant ($P = .0001$) and changed little when controls for socioeconomic variables were introduced. For the children with asthma, the relationship between mater-

nal smoking and number of hospitalizations was not statistically significant.

DISCUSSION

These data from the population-based Child Health Supplement to the 1981 National Health Interview Survey indicate that maternal cigarette smoking is associated with higher rates of asthma, an increased likelihood of using asthma medications, and an earlier onset of the disease among children 0 to 5 years of age, independent of a number of other potentially confounding variables. Children whose mothers smoke one half-pack of cigarettes or more per day are twice as likely to have asthma and are four times as likely to use asthma medications as are children whose mothers do not smoke. The data also demonstrate that 26% of American children live in households with mothers who report smoking during pregnancy. Currently 26% of American adults smoke (*Time*, April 18, 1988:71-90); thus, rates of prenatal and early childhood passive exposure to maternal cigarette smoke are comparable with rates of active smoking among adults in the United States.

All information in this study is based on parent reports of asthma and smoking; hence, the results should be interpreted with some caution. Questions

TABLE 4. Relative Odds Ratio for Onset of Asthma in the First Year of Life by Maternal Smoking Status, 1981 National Health Interview Survey (n = 4331)*

Maternal Smoking Status	Onset of Asthma in First Year of Life	P Value
No maternal smoking	1.0	
Maternal smoking <1/2 pack/d	.85	.39
Maternal smoking ≥1/2 pack/d	2.6	.0006

* Control variables include sex, race, presence of both parents, family size, number of rooms in household, and maternal education.

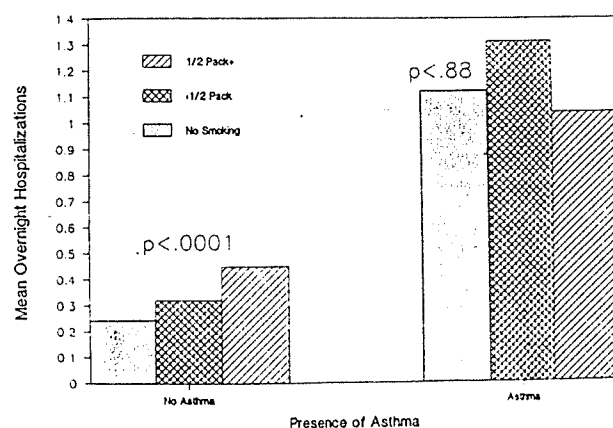


Figure. Hospitalizations by maternal smoking and asthma, children ages 0 to 5 years, 1981.

about maternal smoking were only asked in families with children aged 0 to 5 years; therefore, it is not possible to generalize these results to older children or to investigate whether more prolonged childhood exposure is associated with still higher rates of asthma or increased asthma-associated morbidity. Also, no information is available concerning maternal respiratory symptoms. In previous studies,^{16,41} an increased incidence of respiratory symptoms was shown among adult smokers, and other studies have indicated that parent reports of their children's respiratory symptoms are influenced by their own respiratory symptoms. Physical examinations would not necessarily have resulted in more accurate reporting of children with asthma, because signs and symptoms of asthma are often intermittent and many children with asthma have normal baseline respiratory status between attacks. Similarly, information from medical records is notoriously incomplete.

The lack of a relationship between passive exposure to maternal cigarette smoke and hospitalizations among children with asthma in this study is puzzling. Although in occasional studies⁴² there is failure to demonstrate increased bronchial reactivity among children with asthma exposed to passive smoke, in the majority of laboratory studies to date increased bronchial reactivity seems to be a fairly consistent response to passive smoking by asthmatics. The studies provide a physiologic basis for the belief that passive smoking exacerbates childhood asthma. There is surprisingly little clinical or population-based data, however, to support this belief. According to O'Connell and Long,⁴³ parents reported that their smoking aggravated their children's asthma and that the children's asthma improved when they stopped smoking. Murray and Morrison¹¹ reported 47% more symptoms among children with asthma whose mothers smoked. Tsimoyianis et al²⁴ found increased cough reported among 12- to 17-year-old nonsmoking athletes who had parents who smoked cigarettes. None of these studies, however, specify number of bed days or hospitalizations. Fergusson and Horwood¹² and Dodge²⁷ found no association between passive smoking and exacerbations of children's asthma. Evans et al⁴⁴ reported a 63% increase in emergency room use by children with asthma associated with smoking by one or more family member; however, they failed to demonstrate an association between passive smoking and days with asthma symptoms, hospitalization rates, or pulmonary function. The findings from the National Health Interview Survey also do not demonstrate an association between maternal smoking and increased hospitalizations among children with asthma. This finding must be

viewed with particular caution, however, because with only 117 children with asthma in the sample, its statistical power is low. For example, to detect a difference in hospitalization rates of 10% (with 80% power and an α of .05), a sample three times larger than the present one is required.

The mechanism by which maternal smoking is associated with an increased prevalence of childhood asthma is currently not known. In most studies to date children's respiratory symptoms, asthma, and lung growth were correlated with postnatal passive smoking, but in several recent studies it was suggested that antenatal exposure to tobacco smoke might have separate, independent effects on pulmonary development and function. Collins et al¹⁴ provided rat model data that suggest that maternal cigarette smoking during pregnancy is characterized by fetal lung hypoplasia with decreased lung volume and decreased numbers of alveoli. In another study¹⁵ it was demonstrated that maternal smoking during pregnancy is associated with elevated cord blood IgE among newborns of nonallergic parents and a fourfold increased risk of the development of atopic disease (asthma, eczema, urticaria, or food allergy) before 18 months of age, suggesting that maternal smoking during pregnancy predisposes even low-risk infants to subsequent sensitization, probably in synergy with a subsequently acquired mucosal damage that would facilitate penetration of foreign matter. The estimate of children's exposure to cigarette smoke in the current study is crude, based on parent reporting of smoking during pregnancy. It seems reasonable to assume that for most mothers smoking habits remain relatively stable from pregnancy through early childhood and there is at least one study³⁵ to support this contention. Our data are certainly consistent with earlier findings indicating prenatal and postnatal effects on pulmonary structure and function, but it was not possible to differentiate prenatal from postnatal maternal smoking effects on the prevalence of childhood asthma.

IMPLICATIONS

In three landmark reports by the Surgeon General^{2,3} and the National Academy of Sciences¹ and the recent article by Fielding and Phenox⁵ similar conclusions were presented about the adverse effects of passive smoking. Although passive smoking appears to present smaller risks than active smoking, the number of people injured by passive smoking is much larger than the number injured by other environmental agents that are already widely regulated. The American Academy of Pediatrics Committee on Environmental Hazards⁴⁵

has stated that passive smoking may be the most important source of environmental contamination and some believe that it is the most important environmental factor involved in the etiology of early asthma.⁴⁶ It is extremely unlikely that we will ever be willing or able to regulate the smoking of adults in their own homes; therefore, we must employ strategies other than coercion to help parents decrease their smoking, both for their own health as well as for their children's well-being.

The findings of this study should encourage renewed efforts to discourage smoking in families, especially during pregnancy and the first 5 years of children's lives. It is suggested that pediatricians may actually be able to help prevent childhood asthma if they can help parents stop smoking. Strategies that may be useful include explaining the environmental hazards of smoking to children, especially the association between maternal cigarette smoking and the increased risk of a child having asthma; encouraging parents not to smoke; and referring parents who smoke to smoking cessation programs. Low-cost smoking cessation programs for pregnant women have been shown to be effective,⁴⁷⁻⁴⁹ but such programs have not been widely implemented or used. Two barriers to their use are the fact that insurance carriers and Medicaid generally do not pay for these programs, and physicians do not tend to refer patients to them.

The Committee on Environmental Hazards of the American Academy of Pediatrics⁴⁵ suggests that physicians routinely inquire about parental smoking habits when caring for children with chronic or recurrent respiratory symptoms. The data reported in this paper, when viewed in the context of other recent studies, suggest that this advice is not broad enough. Parents should be encouraged not to smoke, irrespective of their child's current respiratory status, or their smoking may result in the development of asthma in their children.

ACKNOWLEDGMENTS

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FANNY FARMER DIDN'T COOK UP THIS HASH

Hashing - basically an excuse to run on a surprise-filled trail and finish with beer, food and song - has reached the U.S. after years overseas, mostly in the Far East. Based on the 18th-century English school-boy game called hares and hounds, hashing was dreamed up in the 1930's by two Englishmen and an Australian living in what is now Malaysia. The trio sought to shed some pounds and shrug off a few hangovers by running around a Kuala Lumpur park.

But mere running was little dull. So the trio decided to take turns laying trails - littered with false leads - through jungles and rice fields. After navigating the course, they rewarded themselves, rather to the detriment of their original purpose, with beer in their quarters next to a club nicknamed the Hash House. (As some hashers tell it, the club barred the sweaty runners because they didn't meet its dress code.) And the hash was born.

In the ensuing decades, hashing spread among international bankers, military personnel, diplomats and others who tended to find themselves in places like Brunei with nothing to do. Now there are 80 000 hashers in more than 700 clubs in 126 countries on every continent except Antarctica.

Stout H. Following the flour is a popular sport for folks on the run. *The Wall Street Journal*. October 11, 1989.

Smoking and the Sudden Infant Death Syndrome

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ABSTRACT. *Objective.* Maternal smoking has been shown to be a risk factor for sudden infant death syndrome (SIDS). The effect of smoking by the father and other household members has not previously been examined.

Methods. A large nationwide case-control study. Four hundred eighty-five SIDS deaths in the postneonatal age group were compared with 1800 control infants.

Results. Infants of mothers who smoked during pregnancy had a 4.09 (95% confidence interval [CI] = 3.28, 5.11) greater risk of death than infants of mothers who did not smoke. Infants of mothers who smoked postnatally also had an increased risk of SIDS compared with infants of nonsmokers and, furthermore, the risk increased with increasing levels of maternal smoking. Smoking by the father and other household members increased the risk (odds ratio [OR] = 2.41, 95% CI = 1.92, 3.02 and OR = 1.54, 95% CI = 1.20, 1.99, respectively). Smoking by the father increased the risk of SIDS if the mother smoked, but had no effect if she did not smoke. In analyses controlled for a wide range of potential confounders, smoking by the mother and father was still significantly associated with an increased risk of SIDS.

Conclusion. Passive tobacco smoking is causally related to SIDS. *Pediatrics* 1993;91:893-896; *sudden infant death syndrome, tobacco smoking, case-control study.*

ABBREVIATIONS. SIDS, sudden infant death syndrome; OR, odds ratio; CI, confidence interval.

While smoking by the mother has been shown to be a risk factor for the sudden infant death syndrome (SIDS or cot death),¹⁻⁴ it has been uncertain whether maternal smoking is detrimental because of the effects on the baby in utero or because of the effects of passive smoking after the child is born. Both effects are likely to be operational, but because so few mothers smoke during pregnancy but not after the birth of the infant, or alternatively, do not smoke during pregnancy but take up smoking after the birth of the infant, it would be difficult if not impossible to separate the two effects. It is, nonetheless, well established that maternal smoking lowers the infant's

birth weight,⁵⁻⁷ and low birth weight has been identified in many studies to be a risk factor for SIDS; thus an indirect effect of smoking in utero can be expected. However, most studies that have controlled for birth weight find that maternal smoking remains a risk factor for SIDS.

One way to assess the importance of passive smoking is to examine the effect of smoking by the father and other household members on the risk of SIDS. This paper reports the effects of maternal smoking during pregnancy and the effects of smoking by the mother, father, and other household members after the infant's birth.

METHODS

The New Zealand Cot Death Study has been described in detail previously.^{4,8} In brief, it is a large, multicenter, case-control study that covered 78% of all livebirths in New Zealand over a 3-year period from November 1, 1987, to October 31, 1990. There were 716 postneonatal deaths. The study's cases comprised 485 deaths for which the agreed diagnosis by the regional pathologist and pediatrician was SIDS. The pathology protocol has been described previously.⁴ Autopsies were carried out in 474 (97.7%) of the 485 SIDS cases.

The cases were compared with 1800 control infants, which were randomly selected from all births in the study regions, except home births (less than 1%). The following method was used: (1) a date of interview (nominated date) was randomly selected from all 1096 days in the study period; (2) the control infant was then randomly allocated an age at which the parents were to be interviewed; (3) the date of birth was calculated from age and date of interview; (4) an obstetric hospital was randomly chosen in proportion to the number of births in 1986; and (5) random numbers were used to select a particular infant from those born on the date of birth in the nominated obstetric hospital.

Obstetric records were examined. In addition, data were collected by a comprehensive questionnaire answered by parents of infants who had died of SIDS within a month (mean 38 days, SD 46.5) of the death and for control infants within a week (mean 6.1 days, SD 13.3) of the nominated day.

The following questions related to tobacco smoking were covered at the interview: (1) number of months and average amount per day smoked by mother during pregnancy; (2) amount smoked by mother in the previous 2 weeks; (3) amount smoked by father (or partner) in previous 2 weeks; (4) number of smokers, including parents, living in the house in the previous 2 weeks. Data on maternal smoking during pregnancy were also obtained from the obstetric records.

Relative risks were estimated by calculation of odds ratios (ORs). The univariate ORs have confidence intervals (CIs) calculated by the method of Cornfield. The multivariate ORs were obtained from unconditional logistic regression modeling as were their CIs. Our approach to multivariate modeling is that advocated by Rothman,⁹ which was to estimate ORs associated with smoking after controlling for other possible confounders.

Ethical approval for this study was obtained from each of the local ethics committees.

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RESULTS

Subject ascertainment was high. Obstetric records were examined in 465 (96%) of the cases and 1762 (98%) of the controls. Parental (guardian) interviews were completed in 393 (81%) of cases and 1592 (88%) of the controls.

Maternal smoking during pregnancy was recorded prospectively in the obstetric records. Obstetric records were examined and compared with retrospective data (interview of parent) in Table 1. There was close agreement (κ 0.79 and 0.83 for cases and controls, respectively). Furthermore, maternal smoking behavior tends to be consistent between the pregnancy and during the first year of the infant's life, with fewer than 10% changing their smoking behavior (both cases and controls).

Univariate relative risk of SIDS associated with maternal and paternal smoking variables is shown in Table 2. Infants of mothers who smoked during pregnancy had a fourfold greater risk of SIDS than infants of mothers who did not smoke. Infants of mothers who stopped smoking during pregnancy had a lower risk of SIDS, but this was not statistically significant. Infants of mothers who smoked in the previous 2 weeks had an increased risk of SIDS compared with infants of nonsmokers. Furthermore, the risk increased with increasing levels of maternal smoking (Table 2). Similarly, infants of fathers who smoked in the previous 2 weeks had an increased risk of SIDS, but a dose effect was not evident. The number of smokers in the house (parents and other household member) also increased the risk of SIDS, as did the presence of smoking by other household member, excluding the parents.

The relationship of maternal smoking status with other variables was examined in the control group. As expected, maternal smokers as a group were significantly more likely to be of lower socioeconomic status, Maori, of lower educational level, unmarried, younger at first pregnancy, younger at the birth of the infant, late attenders at antenatal classes, and nonattenders at antenatal education classes; to have infants of lower birth weight; not to breast-feed; and to share the bed with their infant. Maternal smokers

did not differ from nonsmokers for infant's sex, number of previous pregnancies, gestation, admission to neonatal unit, season, and infant's sleeping position.

Because of the possibility that the smoking behaviors of parents are related, the effect of parental smoking behavior on the risk of SIDS was examined in more detail (Table 3). After controlling for region, time of day, season, marital status of mother, socioeconomic status, ethnic group of infant, mother's age at birth of infant, infant's sex, birth weight, age of infant, breast-feeding, sleep position, and infant sharing bed with another person, we found that maternal smoking was still significantly associated with an increased risk of SIDS (OR = 1.65; 95% CI = 1.20, 2.28), as was smoking by the father (OR = 1.37; 95% CI = 1.02, 1.84).

The number of smokers in the household was associated with a significantly increased risk of SIDS after control for potential confounders (1 household smoker OR = 1.12, 95% CI = 0.77, 1.63; 2 smokers OR = 1.75, 95% CI = 1.23, 2.48; 3+ smokers OR = 2.07, 95% CI = 1.26, 3.41). The presence of smoking by others in the house (excluding parents) was not a significant risk factor after smoking by the mother and father and other potential confounders were controlled.

Table 4 shows the OR for maternal smoking by smoking status of the father. The effect of smoking by the father increased the risk of SIDS if the mother smoked, but not if she did not smoke.

Finally, we looked to see if maternal smoking modified the beneficial effects of breast-feeding on the risk of SIDS (Table 5). Maternal smoking increased the risk to the baby substantially, but lack of breast-feeding had a further and independent effect.

DISCUSSION

One concern with this study is the accuracy of self-reported smoking. We found that self-reported smoking during pregnancy was similar whether the information was collected prospectively (from obstetric records) or retrospectively (by interview). It is possible that mothers smoked, but denied it on both occasions, as there was no objective measure made of maternal smoking, such as measuring cotinine in urine or serum.¹⁰ However, the level of agreement for cases and controls was similar, suggesting that there was no differential recall bias in this study.

Many studies have shown that maternal smoking in pregnancy decreases the birth weight of the infant.⁵⁻⁷ As low birth weight is a risk factor for SIDS, the detrimental effect of smoking may, in part, operate by lowering the birth weight. However, studies controlling for birth weight have found that smoking persists as a risk factor for SIDS, which indicates that the risk from smoking cannot entirely be explained by the lower birth weight.^{1-4,8}

Smoking by the mother has been shown to be a risk factor for SIDS in previous studies. Some of these studies have, in addition, controlled for potential confounders such as socioeconomic class. As smoking and socioeconomic class are associated, it is not unexpected that the strength of the association between maternal smoking and SIDS is decreased in analyses controlling for socioeconomic status.

TABLE 1. Agreement Between Obstetric Records and Parental Interview for Maternal Smoking in Pregnancy for Cases and Controls*

	Cases†: Obstetric Records	
	Nonsmoker	Smoker
Parental interview		
Nonsmoker	112 (30.8)	10 (2.7)
Smoker	26 (7.2)	216 (59.3)
	Controls‡: Obstetric Records	
	Nonsmoker	Smoker
Parental interview		
Nonsmoker	972 (65.6)	74 (5.0)
Smoker	34 (2.3)	401 (27.1)

* Values represent No. (%).

† κ = 0.79.

‡ κ = 0.83.

E 2. Number (Percentage) and Univariate Odds Ratios (95% Confidence Intervals) Related to Smoking

	Case	Control	Odds Ratio
Mother smoked while pregnant (obstetric records)			
No	155 (35.2)	1140 (69.0)	1.00
Yes	285 (64.8)	512 (31.0)	4.09 (3.28, 5.11)
Mother smoked while pregnant (parental interview)			
(No. of cigarettes/day)			
0	132 (33.6)	1089 (68.4)	1.00
1-19	182 (46.3)	388 (24.4)	3.87 (3.00, 4.98)
20+	79 (20.1)	114 (7.2)	5.72 (4.07, 8.02)
Duration of smoking in pregnancy			
0	132 (34.2)	1089 (70.0)	1.00
1-8 mo	53 (13.7)	112 (7.2)	3.90 (2.69, 5.67)
Throughout	201 (52.1)	354 (22.8)	4.68 (3.65, 6.02)
Mother smoked in last 2 weeks (No. of cigarettes/day)			
0	131 (33.3)	1081 (68.0)	1.00
1-19	174 (44.3)	387 (24.3)	3.71 (2.88, 4.79)
20+	88 (22.4)	123 (7.7)	5.90 (4.25, 8.20)
Father smoked in last 2 weeks (No. of cigarettes/day)			
0	176 (45.7)	1053 (67.0)	1.00
1-19	132 (34.3)	324 (20.6)	2.44 (1.88, 3.15)
20+	77 (20.0)	195 (12.4)	2.36 (1.74, 3.22)
No. of smokers in household, including parents			
0	86 (21.9)	712 (45.0)	1.00
1	92 (23.4)	396 (25.0)	1.92 (1.40, 2.65)
2	148 (37.7)	378 (23.9)	3.24 (2.42, 4.35)
3+	67 (17.0)	97 (6.1)	5.72 (3.90, 8.39)
No. of smokers in household, excluding parents			
0	285 (72.5)	1271 (80.3)	1.00
1+	108 (27.5)	312 (19.7)	1.54 (1.20, 1.99)

TABLE 3. Univariate and Multivariate Odds Ratios (95% Confidence Intervals) for Maternal, Paternal, and Other Household Smokers

	Univariate	Multivariate*
Maternal smoker	4.09 (3.28, 5.11)	1.65 (1.20, 2.28)
Paternal smoker	2.41 (1.92, 3.02)	1.37 (1.02, 1.84)
Other household smokers	1.54 (1.20, 1.99)	1.17 (0.84, 1.63)

* Controlling for the following variables: region, time of day, baby's age, marital status of mother, baby's sex, socioeconomic status, birth weight, baby's race, season, mother's age at birth of infant, sleeping position, sharing bed with another person, breast-feeding, maternal smoking in pregnancy, and paternal and other household smokers in the previous 2 weeks.

TABLE 4. Odds Ratios (95% Confidence Intervals) for Maternal Smoking in Past 2 Weeks by Smoking Status of the Father

Mother Smokes	Father Does Not Smoke	Father Smokes
0	1.00	1.00 (0.64, 1.56)
1-19	2.56 (1.73, 3.75)	4.40 (3.26, 5.95)
20+	3.43 (2.04, 5.77)	7.40 (4.92, 11.13)

This study has shown that maternal smoking is a risk factor for SIDS after controlling for a wide range of potential confounders, including socioeconomic status and birth weight. Furthermore, we were able to show a biological gradient: the more the mother smoked, the greater the risk to the infant. A biological gradient was also seen with the number of smokers in the house and possibly with duration of smoking in pregnancy.

We and others have previously shown that breast-feeding lowers the risk of SIDS. We were concerned that breast-feeding might be detrimental if the mother breast-fed her infant, as metabolites from tobacco smoking cross into breast milk. Fortunately,

this was not seen. The effects of smoking and breast-feeding appear to be independent of each other.

The effect of smoking by the father has not been examined in detail previously. Although one study has shown smoking by the father to be a risk factor for SIDS, that study did not control for maternal smoking.¹¹ This is essential as we have shown that maternal and paternal smoking behaviors are related. We found that the increased risk of SIDS from paternal smoking persisted after controlling for maternal smoking and their potential confounders. We were unable to demonstrate a dose-response curve for paternal smoking. This may have occurred because much of the father's smoking is done away from the house. But when the combined effects of parental smoking are considered, it appears that the father's smoking increases the risk of SIDS when the mother smokes, but not if she does not smoke. We did not expect the lack of effect of father's smoking when the mother is a nonsmoker, but it may be that a nonsmoking mother is more likely to insist that a smoking father smoke away from the infant. Observation of this finding in other studies would help confirm this relationship. Infants of mothers who smoke 20 or more cigarettes per day and fathers who are smokers have more than sevenfold increased risk of SIDS compared with infants of nonsmoking parents.

Finally, we address the central question: "Is smoking causally related to SIDS?" Criteria for causation in an observational study such as this are as follows¹²:

- Temporal relationship where the putative risk factor precedes the event. This criterion is obviously fulfilled, particularly since information on smoking during pregnancy was collected in obstetric records prior to the death.

TABLE 5. Univariate and Multivariate Odds Ratios (95% Confidence Intervals) for Maternal Smoking in Past 2 Weeks by Breast-Feeding in Past 2 Days

Nonsmoker	Breast-Feeding	Case (n)	Control (n)	Univariate	Multivariate†
Yes	Yes	85	784	1.00	1.00
Yes	No	45	293	1.42 (0.96, 2.08)	1.36 (0.89, 2.07)
No	Yes	115	261	4.06 (2.97, 5.56)	1.84 (1.24, 2.72)
No	No	147	246	5.51 (4.07, 7.46)	2.51 (1.70, 3.70)

† Controlling for the following variables: region, time of day, baby's age, marital status of mother, baby's sex, socioeconomic status, birth weight, baby's race, season, mother's age at birth of infant, sleeping position, sharing bed with another person, and paternal smoking in the past 2 weeks.

- Consistency of the findings. Maternal smoking has been identified as a risk factor for SIDS in many studies.
- Strength of association. The stronger the association, the more likely the risk factor is causally related. In this study different measures of maternal smoking have ORs greater than 4, which is moderately strong.
- Biological gradient. In this study a biological gradient was seen for the amount the mother smoked, the number of smokers in the household, and, possibly, the duration of smoking in pregnancy.
- Biological plausibility. Smoking during pregnancy reduces birth weight, a risk factor for SIDS. Furthermore, maternal smoking in pregnancy may contribute to chronic fetal hypoxia, which may predispose to SIDS.¹³ Passive smoking in the infant's first year of life increases the risk of respiratory infections.^{14,15} Infections may result in pyrexia and lead to hyperthermia if the infant sleeps prone or is excessively dressed.¹⁶ An alternative hypothesis is that maternal smoking may damage the fetal brainstem, resulting in an abnormal respiratory response to noxious stimuli, hence increasing the risk of SIDS. This has some support from an animal model.¹⁷

Thus all the major criteria for causation are met.

It has been argued that it is not the smoking itself that is harmful, but the smoker's unique constitution that is responsible.^{18,19} Smokers are more likely to be less educated and unmarried, are less likely to breast-feed their infants, and are poor users of health care services. We have addressed this issue by controlling for a wide range of potential confounders, including sociodemographic variables, infant care practices, and use of obstetric services, and we found that maternal smoking still remains a significant risk factor.

Stopping smoking is clearly advisable at any time, but especially so in pregnancy and during the infant's first year of life, when every cigarette affects not only the mother but her child as well. We conclude that smoking is causally related to SIDS. Population attributable risk suggests that in New Zealand, where just over 30% of mothers smoke during pregnancy and during the infant's first year of life, the SIDS mortality rate could be halved if no mother smoked.⁸ In New Zealand, parents and prospective parents are being firmly advised not to

smoke during this critical period as part of the National Cot Death Prevention Programme.²⁰

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Passive Smoking and Middle Ear Effusion Among Children in Day Care

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ABSTRACT. One hundred thirty-two children who attended a research day-care center were studied to determine whether passive tobacco smoke exposure was associated with an increased rate of otitis media with effusion or with an increased number of days with otitis media with effusion during the first 3 years of life. Based on preliminary studies, a serum cotinine concentration of ≥ 2.5 ng/mL was considered indicative of exposure to tobacco smoke. Otitis media with effusion was diagnosed using pneumatic otoscopy by nurse practitioners and pediatricians who reviewed the children's health status each weekday. The 87 children with serum cotinine concentrations ≥ 2.5 ng/mL had a 38% higher rate of new episodes of otitis media with effusion during the first 3 years of life than the 45 children with lower or undetectable serum cotinine concentrations (incidence density ratio = 1.38, 95% confidence interval 1.21 to 1.56). The average duration of an episode of otitis media with effusion was 28 days in the children with elevated cotinine concentrations and 19 days in the children with lower cotinine concentrations ($P < .01$). It is estimated that 8% of the cases of otitis media with effusion in this population and 17.6% of the days with otitis media with effusion may be attributable to exposure to tobacco smoke. *Pediatrics* 1992;90:228-232; otitis media, passive smoking, tobacco, day care.

Numerous studies have shown that infants with smoking mothers have a greater risk of lower respiratory illness in the first year of life.¹⁻⁶ It is unclear, however, whether exposure to environmental tobacco smoke increases children's risk of upper respiratory illness including otitis media with effusion (OME).

An association has been reported between chronic middle ear effusion and tobacco smoke exposure. Two case-control studies^{7,8} found that elementary school children who underwent tympanostomy tube placement were more likely to have lived in households where cigarettes were smoked. Neither study evaluated the relationship between passive smoking and frequency of OME or any measure of OME burden during the first 3 years of life. Also, in these studies, the estimate of a child's passive tobacco smoke exposure was based on parents' self-reports of their usual cigarette consumption. This may be an imprecise estimate, however, because the amount of to-

bacco smoke products actually absorbed by the child could vary considerably depending on the amount of smoke present in the environment, the child's proximity to the source of the smoke, and the room's ventilation characteristics. In the current study, a biochemical measure of exposure to tobacco smoke, serum cotinine concentration, was used.

The present study was designed to determine whether the children in a day-care center with elevated serum cotinine concentrations had more episodes of middle ear effusion in the first 3 years of life or more days with middle ear effusion than the children with absent or lower concentrations of cotinine in serum. Our a priori hypothesis was that children with serum cotinine concentrations ≥ 2.5 ng/mL would have an increased rate of OME in the first 3 years of life compared with children with serum cotinine concentrations < 2.5 ng/mL.

METHODS

Study Setting

Children were selected from those enrolled in the day-care project of the Frank Porter Graham Child Development Center, a multidisciplinary research program.⁹ Research on respiratory health has been an integral aspect of the day-care center's program since its inception in 1964, and general aspects of infection and illness documentation have been described previously.¹⁰⁻¹² Children were generally admitted to this day-care project as soon as possible after 6 weeks of age. They spent 8 hours a day, 5 days a week at the center and returned to their homes each evening. Smoking was not permitted in child-care areas of the center.

Study Design

We identified study children from among the 200 who had entered the center between 1964 and 1983. Children who were eligible for inclusion in this study met the following four criteria: (1) enrolled in the day-care center before 6 months of age, (2) remained at the day-care center for 18 months or more during the first 3 years of life, (3) spent no more than 4 consecutive months away from the day-care center during the first 3 years of life, and (4) had serum available for analysis. These eligibility criteria ensured that the children in the study were all under observation during the period of greatest risk for OME.¹³

One hundred thirty-two children met the eligibility criteria for this study. Of the 61 children who were ineligible, 27 entered after age 6 months, 30 were enrolled for less than 18 months prior to their third birthday, 4 were absent for more than 4 consecutive months, and 7 had no serum available for analysis because it had already been used for other purposes.

Detection and Diagnosis of Otitis Media With Effusion

Children's health status was reviewed each weekday by a full-time nurse on site at the day-care center; physical examinations were performed by pediatricians or nurse practitioners when any symptoms or signs of respiratory illness were present.

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Middle ear effusion, the outcome of interest, was measured using pneumatic otoscopy. Clinicians made the diagnosis when the mobility of the tympanic membrane was markedly reduced or absent or when middle ear fluid was seen. Precise differentiation between purulent and nonpurulent effusions was not possible because tympanocenteses were not performed. An episode of OME was defined as a new effusion in one or both ears previously documented to have been free of fluid. All children in whom otitis media with effusion was diagnosed were treated with antibiotics by the nurse practitioners and pediatricians staffing the day-care center. Physical examinations were performed biweekly after diagnosis of middle ear effusion until the effusion had cleared. The shortest interval between two new onsets of OME was 2 weeks.

In this study, pneumatic otoscopy was not reinforced by tympanometry. Observer variability was controlled by limiting the number of clinicians who performed the examinations to two pediatricians and two nurse practitioners, all of whom were specially trained in pneumatic otoscopy.

Diagnosis of Respiratory Infection

Cultures of the upper respiratory tract for the detection of viruses and bacteria were obtained at the onset of each respiratory illness throughout the study period (1964 through 1983). Samples of respiratory secretions were obtained by performing a saline nasal wash and a throat swab. For this study, we were primarily interested in infection with three viruses (respiratory syncytial virus, adenoviruses, and influenza viruses) and colonization with two bacteria (*Haemophilus influenzae* and *Streptococcus pneumoniae*), because these had been demonstrated in a previous study¹⁴ to be linked epidemiologically to the occurrence of OME. Viral infection (the percent of first illness cultures positive for adenoviruses, respiratory syncytial virus, or influenza viruses) and bacterial colonization (the percent of first illness cultures positive for *S pneumoniae* or *H influenzae*) rates were calculated for each child.

Measurement of Exposure

The measure of exposure to tobacco smoke was the child's serum cotinine concentration. Cotinine, the major metabolite of nicotine, is specific for tobacco exposure, is produced only in vivo, has a circulating half-life of 19 to 40 hours,^{15,16} and can be measured by radioimmunoassay at very low concentrations.¹⁶ In a previous study of a subset of these children, the serum cotinine concentration was significantly associated with a history of smoking in the home.¹⁷

As part of ongoing studies of respiratory diseases, each of the children enrolled in the day-care center had venous blood drawn in the spring and again in the fall of each year and placed in storage at -20°C . To determine each child's exposure to tobacco smoke, the serum sample drawn nearest the child's first birthday was thawed, an aliquot removed, and the sample shipped to the American Health Foundation in Valhalla, NY, where a radioimmunoassay for cotinine was performed without knowledge of the child's exposure status or illness history.¹⁸

On the basis of these serum cotinine concentrations, the 132 children were separated into two groups. Receiver operator characteristic curve analysis¹⁹ of data obtained from our previous studies^{17,20} had determined that a cutoff point of 2.5 ng/mL would minimize the sum of the false-negative and false-positive test results when using the serum cotinine to differentiate the children living in homes with at least one smoker from those who were living in homes where no one smoked. Therefore, those children with serum cotinine concentrations ≥ 2.5 ng/mL were classified as "exposed," and those with serum cotinine concentrations less than 2.5 ng/mL were classified as "unexposed" to tobacco smoke.

Measurement of Extraneous Variables

Each child's medical record was reviewed to obtain information on potential confounding variables including prematurity, congenital anomalies, breast-feeding (defined as one or more days of breast-feeding), socioeconomic status (as measured by the Hollingshead index),²¹ atopic family history (as measured by parental report at admission examination of asthma or hay fever in immediate family), and history of OME prior to day-care center enrollment.

Statistical Tests

During the time OME is present, a child is not at risk of developing OME. For that reason, the incidence density was used to measure the frequency of OME. The incidence density of OME was calculated by dividing the total number of new cases of OME during the period of observation by the total number of child-days at risk during that period.²² This denominator was calculated by subtracting from each child's total time under observation the number of days with OME. To test the null hypothesis that there was no association between exposure to tobacco smoke and the incidence density of OME, a large sample χ^2 test was constructed by using the normal approximation to the binomial distribution.²³ We used the test-based confidence interval suggested by Miettinen²² to calculate the confidence intervals around the point estimate of the incidence density ratio. To test the overall association, stratified by potential confounding variables, the Mantel-Haenszel test statistic for density follow-up studies was used.²² A one-tailed Kolmogorov-Smirnov two-sample test was used to test whether the distributions of otitis media incidence or prevalence rates were higher in the exposed than in the unexposed children.²⁴ Linear regression analysis was performed to identify significant predictors of the duration of otitis media.

RESULTS

The 132 children in this study included 71 boys and 61 girls; there were 100 blacks, 30 whites, and 2 children of mixed race. During the first 3 years of life, these 132 children were enrolled in the Frank Porter Graham Child Development Center for an average of 984 days (range 568 to 1075 days). The total length of time the children in the exposed and unexposed groups were enrolled in the day-care center between entry and age 3 was not significantly different (1001 days vs 976 days in the exposed and unexposed groups, respectively, $P = .15$). However, their child-days at risk differed significantly (752 vs 845 in the exposed and unexposed groups, respectively, $P = .01$).

Seventy-eight (59%) of the 132 children had detectable cotinine in their blood. The age at which the blood was drawn ranged between 4 months and 6.5 years with a mean age of 1.4 years. The cutoff point of 2.5 ng/mL resulted in the classification of 45 children as exposed and 87 children as unexposed to tobacco smoke.

Blood samples were obtained during the colder months (September through February) from 24 exposed children (53%) and 58 unexposed children (67%). Blood samples were obtained during the warmer months (April through August) from 21 exposed children (47%) and 29 unexposed children (33%).

Occurrence of Otitis Media With Effusion

Overall, in both groups combined, study children had an average of 7.78 (SD = 4.55) new episodes of OME per child in 984 days (2.9 episodes per year). Only one child (in the unexposed group) experienced no episode of OME in the first 3 years of life. The 45 exposed children experienced an average of 8.7 episodes of OME in the first 3 years of life, while the 87 unexposed children experienced 7.3 episodes in that period ($P = .08$).

Table 1 shows the incidence density of OME in the exposed and unexposed groups. The 45 exposed children experienced 393 episodes of otitis media in the first 3 years of life (incidence density = 0.0119/child-day), and the 87 unexposed children experienced 634

episodes in that period (incidence density = 0.0086/child-day). The resulting incidence density ratio was 1.38 (95% confidence interval 1.21 to 1.56). During the first year of life, the incidence density ratio for OME was 1.39 with a 95% confidence interval extending from 1.15 to 1.69 (Table 2).

The Figure illustrates the incidence density ratios and 95% confidence intervals for each of the first 3 years of life. Tobacco smoke exposure seemed to have its greatest effect in the first 2 years of life.

To examine further the differences in OME experience between exposed and unexposed children, a second, more conservative approach (a one-tailed Kolmogorov-Smirnov two-sample test) was used. This nonparametric test is used to test the hypothesis that two groups of observations have identical distributions. The distribution of otitis media attack rates in the exposed children was not significantly different than the distribution of otitis media attack rates in the unexposed children ($P > .05$).

Duration of Middle Ear Effusion

Consistent recording of OME duration data was initiated in 1968; 106 children had complete data on this variable. The 41 exposed children had a mean

TABLE 1. Incidence Density for Otitis Media With Effusion During the First 3 Years of Life According to Tobacco Smoke Exposure

	Exposed (n = 45)	Unexposed (n = 87)	Total (n = 132)
New episodes of otitis media with effusion	393	634	1 027
Child-days at risk	33 036	73 328	106 364
Incidence density	0.0119	0.0086	0.0097

Incidence density in exposed/incidence density in unexposed = 1.38 (95% confidence interval 1.21 to 1.56). Incidence density in exposed - incidence density in unexposed = 0.003 (95% confidence interval 0.002 to 0.005).

TABLE 2. Incidence Density for Otitis Media With Effusion During the First Year of Life According to Tobacco Smoke Exposure

	Exposed (n = 45)	Unexposed (n = 87)	Total (n = 132)
New episodes of otitis media with effusion	168	279	447
Child-days at risk	8 877	20 535	29 412
Incidence density	0.0189	0.0136	0.015

Incidence density in exposed/incidence density in unexposed = 1.39 (95% confidence interval 1.15 to 1.69).

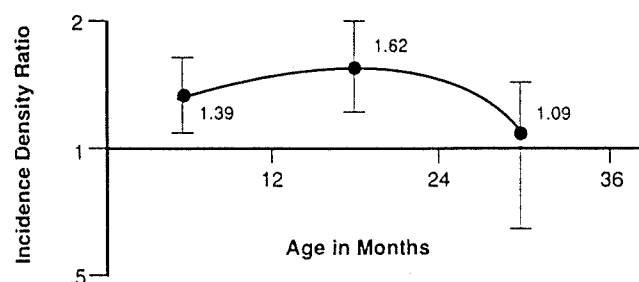


Figure. Incidence density ratios (logarithmic scale) and 95% confidence intervals for otitis media with effusion during each of the first 3 years of life.

total duration of 268 days (an average of 28 days per effusion) while the 65 unexposed children had a mean total duration of 170 days (an average of 19 days per effusion) ($P < .01$). The distribution of total otitis media durations for the exposed children was significantly longer than that for the unexposed children ($P < .05$ by one-tailed Kolmogorov-Smirnov two-sample test).

Using linear regression analysis, we identified two significant predictors of the duration of middle ear effusion in this sample of 106 children: the child's cotinine concentration ($P = .0001$) and the age at which the child's first episode of OME occurred ($P = .03$). Those children with higher cotinine concentrations and earlier first episodes tended to have longer durations of middle ear effusion.

Because the highest frequency of middle ear effusion occurred in the 18 months between 6 and 24 months of age, and because all 132 children were enrolled during that time, subsequent analyses were restricted to this interval. Furthermore, because the discrepancy in duration of middle ear effusion could inflate the incidence density ratio, for all further analyses a standard duration of 7 days was subtracted for each episode of OME in children in both the exposed and unexposed groups.

Table 3 shows the incidence density of OME in the exposed and unexposed groups. The incidence density ratio is 1.24 with a 95% confidence interval extending from 1.07 to 1.43. This point estimate is slightly lower than that during the first year of life (1.39) and the second year of life (1.62) because of the different way in which the denominator was calculated. The point estimate of 1.24 is almost certainly an underestimate because of the use of the standard duration.

Potential Confounding Variables

Analyses were performed after stratifying for each potential confounding variable.²⁵ Mantel-Haenszel test statistics and P values were computed for each stratum. The overall association between serum cotinine concentration and OME remained significant after controlling individually for each of these potential confounding variables: gender, race, viral infection rate, bacterial colonization rate, coryza rate, atopic disease, breast-feeding, kerosene heater use in home, woodstove use in home, diagnosing clinician, and documentation of tympanic membrane mobility. Be-

TABLE 3. Incidence Density for Otitis Media With Effusion (Age 6 Months Through 24 Months) According to Tobacco Smoke Exposure

	Exposed (n = 45)	Unexposed (n = 87)	Total (n = 132)
New episodes of otitis media with effusion	318	504	822
Child-days at risk†	21 909	43 035	64 944
Incidence density	0.0145	0.0117	0.013

Incidence density in exposed/incidence density in unexposed = 1.24 (95% confidence interval 1.07 to 1.43). Incidence density in exposed - incidence density in unexposed = 0.003 (95% confidence interval 0.001 to 0.005).

† Standard duration of 7 days subtracted for each episode of otitis media with effusion.

cause only one child in the study group had tympanostomy tubes placed, this variable was not included among the potential confounding variables.

Population Attributable Fraction

The information in Table 3 can be used to calculate the fraction of OME cases in the population ("population attributable fraction") that might be preventable by eliminating children's tobacco smoke exposure. The risk difference of 0.003 is multiplied by the prevalence of smoking (which was about 38% in North Carolina at the end of this study) to derive the population attributable risk of 0.001. From the same table, the total rate of OME is seen to be 0.013. Hence the population attributable fraction is estimated to be $0.001/0.013$ or 8%.

Likewise, we can estimate the number of days with otitis media which may have been preventable. An estimated 3565 days, or 17.6% of the total days with OME, may have been prevented if tobacco smoke exposure were eliminated.

DISCUSSION

The children in this study with elevated serum cotinine concentrations had a longer average duration of middle ear effusion than those with absent or lower serum cotinine concentrations. The difference in OME duration is especially notable insofar as the duration of illness may be a better measure of the burden of otitis media than the number of discrete episodes.

This study is unique with respect to both the measurement of exposure to tobacco smoke and the measurement of otitis media with effusion. The use of serum cotinine concentration, an objective measure of tobacco smoke exposure, may have avoided the potential misclassification inherent in parental reporting of smoking behavior. The prospective documentation of OME over the first 3 years of life at the Frank Porter Graham Child Development Center is also independent of the parental decision to bring the child to a clinician for a physical examination.

Our findings are consistent with the findings of Iversen et al,²⁶ who studied children between 0 and 7 years of age in Danish day-care centers and demonstrated an overall odds ratio of 1.6 (95% confidence interval from 1.00 to 2.5) for parental smoking and middle ear effusion as measured by tympanometry. That study reported point prevalence data in relation to parental reports of smoking behavior and estimated the overall fraction of middle ear effusion attributable to parental smoking to be 15%. Strachan et al²⁷ estimated that about one third of the cases of middle ear effusion in 6- to 7-year-old schoolchildren were attributable to passive smoking. The current study, using incidence density data, estimates the attributable fraction to be 8% in preschool children in day care.

When interpreting these results, it should be noted that because the children in this day-care center were in a smoke-free environment for 8 hours each day, our estimate of the difference in OME risk related to tobacco smoke exposure is likely to be an underestimate of the risk in the home setting. Had we compared children being cared for at home by smoking

parents to those living in smoke-free homes, we might have demonstrated an even larger risk difference.

It is important to note that the use of the incidence density ratio does not take into account the fact that episodes of otitis media experienced by an individual child are not independent of one another. A more conservative test, the Kolmogorov-Smirnov test, did not verify that the difference between the distributions of attack rates in exposed and unexposed children was significant. In view of these conflicting results, we believe that any difference in the number of episodes of otitis media with effusion is probably small. However, the Kolmogorov-Smirnov test provided additional evidence that the difference in duration of otitis media between the exposed and unexposed children was significant.

The possibility of misclassification bias must be addressed. Since the pediatricians and nurse practitioners who diagnosed and treated each episode of otitis media were unaware of the study hypothesis, it is very unlikely that diagnosis of OME would have differed according to the exposure status of the child. Also, there had been no literature suggesting an association between tobacco smoke exposure and middle ear disease until 1983,⁷ and data collection took place between 1964 and 1984. Furthermore, even if the clinicians had been aware of that potential association, they were unaware of the child's exposure status unless they were familiar with the child's parents' smoking habits. Although misclassification of exposure may have occurred on the basis of a single cotinine determination, it is very unlikely to have differed according to the disease history of the child. Our estimates of duration of OME were based on biweekly examinations of the study children after diagnosis. Although this is a somewhat imprecise measure, it is not likely to have differed according to the exposure status of the child. All of these possible sources of misclassification would have made it less likely that this study would demonstrate a difference between the exposed and unexposed groups, thus serving to strengthen these results.

Other researchers have documented that children in day-care settings have an increased incidence of otitis media.²⁸⁻³² This study was not designed to address that issue. Our results do demonstrate a higher incidence of otitis media than was reported by Teele and his colleagues.³³ They followed 2565 children for the first 3 years of life and found that one third of them had three or more episodes of otitis media, while 29% never had any otitis media in the first 3 years of life. Thus it is doubtful that generalizations can be made from our results to children who are not attending day-care centers. Our study site was chosen for convenience; population-based studies are needed to define further this apparent association.

There are several possible mechanisms by which tobacco smoke might influence the occurrence of middle ear effusion. Experimental data show that smoke exposure can result in goblet cell hyperplasia and mucus hypersecretion in the respiratory tract,³⁴ possibly including the eustachian tube and middle ear. This might lead to functional obstruction of a child's eustachian tube, especially when the exposure

occurs during a symptomatic viral upper respiratory illness, which could result in OME. Another possible mechanism is that tobacco smoke may diminish ciliary function. Some animal evidence indicates that short-term exposure to cigarette smoke causes ciliostasis and decreased mucociliary transport.³⁵ A third possible mechanism is that cigarette smoke and certain viral infections both alter the phagocytic antibacterial defenses of the respiratory tract, perhaps synergistically. This may lead to increased bacterial colonization and subsequently more otitis media.

Otitis media with effusion is an important public health problem. It is the most common illness diagnosed in US pediatricians' offices.³⁶ In 1980, otitis media accounted for 5 million office visits for children younger than age 3 in the United States.³⁷ It is estimated that \$1 billion to \$2 billion are spent on otitis media each year in the United States.³⁷ Since OME is such a common disease, prevention of even a small proportion of illness-days by limiting the exposure of children to environmental tobacco smoke could have a large public health impact.

ACKNOWLEDGMENTS

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COMMENTARIES

Opinions expressed in these commentaries are those of the authors and not necessarily those of the American Academy of Pediatrics or its Committees.

Cigarette Smoke = Radiation Hazard

Recent articles¹⁻⁴ have described the dangers to children and adults of secondhand cigarette smoke. However, it is not widely known that cigarette smoke is substantially radioactive.⁵⁻¹⁴

Tobacco plants in the United States are grown in soils and with high-phosphate fertilizers which are naturally contaminated with the α -emitting radionuclide polonium-210 (^{210}Po).^{13,14} In addition, evidence exists that other atmospheric radon-222 (^{222}Rn) daughter products are also incorporated into the plant.^{10,15} The average cigarette contains 0.3 pCi of ^{210}Po ,⁷ which is melted, vaporized, inhaled, and ultimately deposited along the tracheobronchial epithelial linings of smokers.¹⁶⁻¹⁹

In 1 year, a smoker of 1 to 2 packs per day will irradiate portions of his or her bronchial epithelium with about 8 to 9 rem.^{8,16,18} This dose can be contrasted with that from a standard chest x-ray film of about 0.03 rem.²⁰ Thus, the average smoker absorbs the equivalent of the dosages from 250 to 300 chest x-ray films per year. Worse, that energy is deposited along the short radiative tracks of the α particles emitted, resulting in damage, destruction, mutation, or all of these to adjacent bronchial epithelial cells.²¹⁻²⁴ Studies^{7,25,26} have been inconclusive in answering whether cigarette filters are substantially effective in removing radioactive particles from mainstream smoke.

Considering that the average smoker will absorb approximately 80 rem into the lung epithelial lining in about 10 years, cancer can be anticipated as a prominent result of the habit.

Tobacco's radioactive content was first described in the mid-1960s.^{8,16-18} Subsequent studies^{27,28} suggested lesser dosage rates than those mentioned here. However, these rates were proved to be erroneous.^{18,19} Despite initial interest, little has been published on the subject in recent years, and the radioactive risks to children from secondhand smoke remain unknown.

Studies must be undertaken to quantify ^{210}Po deposition in children of smoking parents. Until then, smokers should be informed that they spend their days in radioactive clouds and that they, their families, and friends are at potential risk from those clouds of smoke.

I have observed that many parents who smoke, on hearing of their unexpectedly large exposure to radiation from smoking, have found the strength and motivation to quit the habit. I hope that as this information becomes more widely known, fewer children will suffer the ill effects of secondhand cigarette smoke and that this potential clinically significant exposure to radiation will be eliminated.

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Legislators:

October 1, 1993

Regarding "no smoking"

I have been a family child care provider for over 26 years, and mostly in Shawnee County. In the earlier years, parent-clients and visitors would walk into our home with cigarette in-hand. Later I put a "no-smoking" sign on the front door, and required all guest to extinguish before entering. That meant business clients but also our family guest and friends of our four children. A few years ago, when the city "no smoking" ordinance #15584 went into effect for business operators, I welcomed that assistance and installed a permanent door plate near my front door.

Usually when potential families inquire about my day care services, parents will ask or else I'll tell them that our house is smoke free. As often however, parents will ask about pets and animals and my home is also pet free.

I'm particularly sensitive to the smell of smoke. When a child comes to my door smelling of smoke, it is very hard to welcome their attendance. I often take their coat from the clothes rack and set it outside to air. I can only imagine the air the child has been breathing, which can not be healthy.

When I walk into another providers or families' home that have smokers, I can tell even though they've made attempts to disguise the smell. When the smoking is allowed in a designated smoking area, the smoke easily flows throughout the house and contaminates the air that children and adults are breathing.

I realize that the monitoring of the compliance of a no-smoking regulation will be another impossible task for licensing surveyors. The facility that is smoked in during non-business hours will always smell of smoke. However by having a no-smoking regulation, parents will feel more comfortable in helping monitor the air their children breathe while in a day care facility. One reason licensed and registered providers choose to become regulated is to obtain the state and federal monetary benefits, and I feel providers then need to follow high standards for a healthy environment.

If lighted tobacco is prohibited, that will clearly send the message to parents and providers of children, that a smoke filled room is not healthy for breathing. I applaud any bill that helps educate parents and caregivers of children.

Sincerely,

Kharon Hunter

Kharon Hunter, provider
NAFDC Accredited & NAEYC CDA Credential

House Public Health + Welfare
Attachment #14
Oct. 1, 1993

LORRIE O'NEIL
Licensed Daycare Home
1509 SW 23rd Park
Topeka KS 66611
(913) 232-3786

Legislators:

October 1, 1993

Regarding "no smoking"

My name is Lorrie O'Neal. I have been a daycare provider for one year. I am a smoker. However, I do not smoke inside my home.

Two of my children have asthma. Over the last two years since our home became a non-smoking household, I have found that my children are healthier, my plants are healthier, and I don't smoke nearly as much as I used to (especially in the wintertime.)

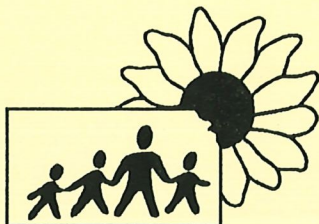
I haven't experienced any problems with my daycare related to my smoking. When I go outside to smoke, the children inside can still be seen and/or heard.

Sincerely,

Lorrie O'Neil

Lorrie O'Neil, Provider

House Public Health + Welfare
Attachment # 15
October 1, 1993



KAEYC

Kansas Association for the
Education of Young Children

Testimony
on
Prohibiting Smoking in Licensed and Registered Child Care Homes

Presented by
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Representing the Kansas Association for the Education of Young Children
131 NW Greenwood
Topeka, Kansas 66606-1225
Ph. 913/232-3206
October 1, 1993

The Kansas Association for the Education of Young Children (KAEYC) is an organization of over 1000 members who provide early childhood education and safe and nurturing care to thousands of Kansas children who are away from their parents for part or all of the day.

Members of KAEYC strongly support the prohibition of smoking in licensed and registered family child care homes. One of the major responsibilities of child care providers is to assure a healthy and safe environment for the children in their care. Smoking in the children's environment does not support this goal, since the hazards of second hand smoke are well known.

Smoking is prohibited in all other categories of out-of-home care regulated by the Kansas Department of Health and Environment pursuant to K.S.A. 65-501 et. seq. Extending this prohibition to family child care will provide this same protection to thousands of children who are provided child care in family homes.

Concern has been expressed that prohibiting smoking in a family home is an intrusion on the right of family members to do what they wish in their own homes. It is our belief that once a family home is licensed or registered by the state, the home is no longer a private home, but a business with a public license granting permission to care for children unrelated to the providers. As such, the home is subject to the statutes and regulations of the state governing out-of-home child care. Prohibiting smoking in **all** out-of-home care is in the best interests of Kansas children.

We urge this committee to recommend the passage of legislation prohibiting smoking in family child care homes, both licensed and registered.

Thank you.

Shirley Norris

*House Public Health & Welfare
Attachment # 16*

Oct. 1, 1993