SUPPORTIVE EVIDENCE FOR CHILD CARE HEALTH CONSULTATION

Introduction:

This document describes several examples of child care health consultation models which have been implemented in Nebraska. The purpose of the document is to represent the diversity of models which might be called "child care health consultation", and to provide discussion on any objective findings or evaluation data that provide evidence or insight into one of two issues of interest to policy makers and advocates:

- Findings that demonstrate that health and safety issues are a concern in child care settings; or
- Findings that demonstrate that intervention by a child care health consultant can produce measureable improvements in health and safety of child care.

In addition to the Nebraska projects discussed, the document closes with an overview of literature analysis on the influence of child care health consultants in promoting children's health.

For more information about the Child Care Health Consultation Workgroup and Together for Kids and Families, contact Lynne Brehm, Penny Gildea, or Kathy Karsting.

Project #1: Nebraska Midwest Quality Rating System Pilot Study

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Source documents: Findings from the Nebraska Midwest Quality Rating System (QRS) Pilot Study Year I Results (July 2007).

Findings from the Midwest Child Care Research Consortium Quality Rating System (QRS) Pilot Project Year 2 Results (October 2008).

Description:

The pilot study involved voluntary participants recruited from the urban area of Lancaster county and rural areas in 10 counties across north eastern Nebraska. It was designed to collect program and staff data during two time points approximately a year apart and ratings were given based on the QRS criteria. At the first time point, twenty-six urban family child care homes, 21 rural family child care homes, 22 urban centers, 12 rural centers and a subset of 10 Spanish-speaking urban family child care homes participated in the study. During the second round of data collection a year later, a reduced number of 27 urban and rural centers, and 27 family child care homes participated in the study. The most frequent reason given for this attrition was closure of programs.

The pilot study did not utilize licensed nurses or any personnel with an assigned title of "child care health consultant". The study is reviewed here because of the insight it provides into measurement or assessment of health and safety issues in child care.

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The study assessed health and safety as one of five component domains of quality. The Environment Rating Scale (ERS) Personal Care Routines was one criterion within the health, safety and nutrition domain. The scale rates program features on a 1-7 scale, with 5 and above typically considered "good", scores 3-4.99 considered "mediocre" and scores below 3 considered "poor".

The QRS awards "stars" on the basis of quality factors in various domains over and above the minimal level of licensure (automatically awarded one star). A second star is awarded in the health, safety and nutrition domain for minimal procedures and scheduling for sanitation and safety practices, and participation in the USDA child and adult food program. A third star is awarded when the child care setting achieves a score of 4 or above on the environment rating subscale for health and safety and meets training criteria. Four stars incorporate all previous items, a score of 5 or greater on the health and safety ERS subscale, self-assessment activities and oral hygiene procedures for all children over the age of 2. Five stars are awarded when a program achieves all previous criteria and is accredited.

Findings:

The year 1 pilot study found that the average Environment Rating Scale for the Personal Care Routines subscale was 2.92 for family child care homes, indicating "poor" quality in the health and safety area. For centers, the average score was 4.15, or "mediocre". In year 2 of the pilot study, this average ERS subscale score increased to 3.37 for homes and 5.45 for centers

The pilot study identified that the average Health, Safety and Nutrition "star" rating of family child care homes was 1.49 and 1.79 for centers in round one; and the average "star" rating of family child care homes was 1.94 and 2.76 for centers for round two of the pilot study. On average, child care settings in the pilot study of all types and in all locations achieved relatively little beyond the minimal level of licensure in the health and safety arena and qualified poorly on the star rating system for this area. Researchers identify that these low scores were due in part to the low scores on the Personal Care Routine subscale and in part because many homes and centers did not have or use the Health and Safety manual and checklist. (Participants could request these materials from the Early Childhood Training Center). Participants did make improvements in overall quality and in the area of health and safety. These observations were attributed to changes in participation in the project and feedback but among home providers, greater training hours improved their ratings compared to those with fewer training hours.

In year one, parents in focus groups reported that one area care providers needed to improve was health and safety. No parent focus groups were conducted during the second round of the study but most of the EC professionals who participated in the first round also participated the second time. The second year focus group respondents showed an adhesion to the belief that QRS is a positive step for the field of early childhood education.

The average ERS score for the Personal Care Routines subscale increased to 3.37 for homes and 5.45 for centers. While more improvements in this area are needed, the data may

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indicate that health and safety practices improve as a result of knowledge and experience with the QRS focus on health and safety.

In Nebraska, many programs in the study improved in quality through participation that included feedback on initial QRS ratings, access to a toll-free number staffed by someone who could answer questions about the ratings and refer the provider to resources for program improvement. Other states provided on site consultation to improve quality and this was associated with higher ratings in both centers and homes. Although there seems to be a boost in quality that comes from participation in the QRS per se, training and on-site consultation appear to add additional quality gains above simply participating in QRS, though the augmentation appears to be a function of state context.

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Project #2: Douglas County Health Department Healthy Child Care

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Description:

This program utilized Child Care Nurse Consultants to visit child care centers on a weekly to monthly basis during the period of 1988 to 2003. Centers caring for a majority of low income, high risk children, with child care subsidized by Title 20, were the focus of the nursing program. The total number of centers served was 60.

In the beginning, the program relied on PHN's (Public Health Nurses) to make visits to the centers. As the program developed over 15 years, emphasis was placed both on in-person visits and on making sure child care providers were aware of and utilizing community resources to improve health and safety. A significant development in the project was the relationship and rapport that emerged between nurse and child care provider. Providers began to disclose concerns about ill or possibly abused and neglected children directly to the nurse. When the nurse was not present at the center, however, the providers also needed to be equipped with the capacity to utilize resources of their own initiative. The Child Care Nurse Consultants created manuals that gave the providers information on policies and procedures regarding health and safety (PEP – Providers Exploring Policies) and an Infectious Disease Manual giving pertinent information on common child hood diseases.

Project nurses also delivered training to child care providers in group settings on health and safety topics using the PEP Manual and Infectious Disease Manuals as teaching tools.

Once a rapport between the child care provider and nurse was established, nurses noted a demand for more assistance from child care providers to respond effectively to head lice infestations, assess a sick child, confirm if a child has a communicable disease, provide teaching on medication, provide training for procedures for special needs children, etc.

Recently (within the last 5 years), the program has moved away from direct visits to telephone consultations with nurses, initiated by child care providers. Activity in the child care consultation area has significantly declined. Current funding limits the availability of nursing resources to accept calls, or to make visits to child care settings. Cultivation of an ongoing relationship between nurse consultant and the child care provider was seen as key to building and sustaining the capacity of child care providers to monitor and improve health quality in the center. Funding constraints have weakened the means for nurses to create and build these relationships.

Findings:

Initial data in the project focused on measuring the volume of services provided to child care providers by nurses. Following initial program development, an evaluation component was developed to assess the level to which child care centers developed and implemented health and safety-related policies for the center. The expectation was that if providers implemented policies related to health and safety, evidence was available that positive improvement was institutionalized in the center practices, with presumed sustained impact. Examples of areas of policy development include hand washing (for children and staff), diapering, food safety, medication administration, excluding sick children, a "sip, swish, swallow" routine for dental health and others.

No quantitative data is available at this time.

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Project #3: Nebraska Early Childhood Education Grant Programs

For more information contact:
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http://www.nde.state.ne.us/ECH/ECH.html

Source Document: Nebraska Early Childhood Education Grant Program: Annual Evaluation Report (July 1, 2006 – June 30, 2007). By Barbara Jackson, Ph.D. & Lisa St. Clair, Ed.D.

Description:

The Nebraska Early Childhood Education (ECE) Grant Program awards state funds to public schools or Educational Service Units (ESUs) to assist in the operation of comprehensive early childhood education programs intended to support the learning and development of children aged 0 – 5, or kindergarten entry. The Nebraska ECE Grant Program provides high quality early childhood education program experiences to assist children in reaching their full learning potential and increase the likelihood of their later success in school. ECE grant-funded programs are required to serve children in inclusive classrooms representing a range of abilities and disabilities of children and the social, linguistic, and economic diversity of the community.

Services and consultation related to health and safety topics are provided by staff trained in early childhood education. As programs are offered by schools and ESUs, most but not all offer school nurse support in the event nursing consultation is needed. Because programs take place in local school districts, many are influenced by local school policies related to health and safety.

The ECE grant programs target prekindergarten-age children:
1. whose family income qualifies them for participation in the federal free or reduced lunch program,
2. who reside in a home where a language other than spoken English is used as the primary means of communication,
3. who were born prematurely or at low birth weight as verified by a physician, or
4. whose parents were younger than eighteen or who had not completed high school.

In the 2006-2007 year, Nebraska Department of Education (NDE) provided grant funds to 38 districts or Educational Service Units across the state to operate early childhood education programs. Programs have been funded from two to fifteen years in duration. In 2006-07, a total of 1,618 children were served across the 38 funded programs. The majority of the children were four-year-olds from families that were eligible for free and/or reduced lunch. Four-year-old children were the largest age group represented, followed by three-year-olds. The single largest racial/ethnic group reported was White not Hispanic, followed by Hispanic.

Findings:

Program quality is evaluated using the *Early Childhood Environment Rating Scale-Revised (ECERS-R).*. Sub-categories with mean scores for each, aggregated for all programs in the state, are shown below. All classrooms observed met the state quality criteria of an overall rating of 5 or greater by the end of the program year.

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In the area "Personal Care Routines", the following areas are assessed: greeting/departing, meals/snacks, rest/naps, toileting/diapering, health practices, safety practices. The range of scores for this data was 2.40 – 7.00.

ECERS-R Sub-scores and Overall Score

Year	*n*	Space & Furnishings	Personal Care Routines	Language-Reasoning	Learning Activities	Interaction	Program Structure	Parents & Staff	Overall Rating
2006-2007	51	6.09	5.96	6.40	5.77	6.68	6.80	6.56	6.31
2005-2006	28	5.92	5.94	6.09	5.39	6.60	6.46	6.17	5.98
2004-2005	22	6.03	6.18	6.41	5.62	6.75	6.49	6.48	6.17
1 = inadequate 3 = minimal 5 = good 7 = excellent									

Related Findings:

The Midwest Child Care Research Consortium has additional, earlier published studies on child care quality research, as well as several research areas that are ongoing. Find out more about the Midwest Child Care Research Consortium at http://ccfl.unl.edu.projects/current/ecp/mwcrc.php.

In one such study, available at http://public.iastate.edu/-shegland/icaaho.pdf, the authors describe (in the format of power point slides) the findings of a large-scale study in Iowa that involved an initial sample base of 10,000 licensed child care providers. Approximately 20% of the sample was selected for telephone interviews, and in some cases follow-up interviews. Direct observation of a subset of 365 child care settings also was included in the study. This study found that Iowa family and group child care homes were rated as "poor quality" in the areas of diapering and toileting, nutrition, safety, and personal cares and grooming.

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Project #4: Lincoln-Lancaster County Health Department Children's Environmental Health Program

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Description:

The purpose of the Children's Environmental Health (CEH) Program at LLCHD is to prevent and eliminate health and safety risks posed by the practice of child care through permitting, regulation, inspection and education. The CEH program issues permits to child care operators caring for 3 or fewer children from more than one family in their home (Lincoln Small Family Child Care Home) and Certificates of Compliance to child care programs that provide care for thirteen or more children, including child care centers or school-aged child care programs in the City of Lincoln and its 3 mile limit. Staff conduct plan reviews for newly constructed or remodeled facilities, review police records, conduct inspections, investigate complaints, conduct enforcement actions, provide consultation and education, investigate disease outbreaks, and maintain a child care referral service. The Child Care Health Consultation (CCHC) Program is one aspect of the CEH Program.

Child Care Health Consultation in the local health department was initiated in 2002 as a pilot project targeting low-income, high-risk children with child care subsidized by Title 20. The program has evolved to also include: centers requesting assistance; centers which have had a reportable illness in the setting; or on referral from state licensing. The Child Care Health Consultant position is staffed by an Environmental Health Educator and has varied from being a full time position to its current status of thirty hours per week (due to funding constraints). The CCHC is in contact with approximately 20 centers monthly.

The CCHC program uses a standard assessment instrument called "Child Care Health and Safety Assessment." The CCHC provides recommendations for policies and staff procedures based on the assessment. The CCHC and child care director work to develop mutual goals, priorities, methods, timelines, and evaluation plans to address the facilities needs and assessment results. The CCHC provides on-site and telephone consultation services. Follow up visits are conducted by the CCHC to review progress using an evaluation plan.

The CCHC program delivers group training events using six health and safety modules, each repeated twice a year. Component modules are: Basic Health and Safety Policy; Handling Stress; Infectious Disease Control; Safe Environments; Care for the Mildly Ill Child, Medication, and Asthma; and Food Safety. Specialized training topics such as communicable disease prevention, playground safety and emergency preparedness are also available. Translation services are available for Spanish, Arabic and Vietnamese.

In 2006, the Lincoln Municipal Codes 8.12 and 8.14 were updated to include changes to rules and regulations; requiring health and safety training; requiring Level III Food Handlers Permit for the person in charge of food preparation or center operator; and setting fees for child care centers and the Lincoln Small Family Child Care Home. The CCHC program now offers a standard Child Care Health and Safety Training curriculum. (Child care center staff are not required to participate in the LLCHD Child Care Health and Safety Training to comply with Code 8.14, however it is one option for compliance.) The Small Family Child Care Home operator is required to attend the LLCHD training

before a certificate is issued per code 8.12. These local regulations have resulted in a huge jump in training volume.

The CCHC model at LLCHD provides a team approach, collaborating with resources within LLCHD and in the community to provide technical assistance and follow-up visits. Having the CCHC program imbedded in the local health department allows the CCHC to access public health resources as needed in any given situation. Having CCHC training services connected with the licensing and permitting functions of the health department provides a comprehensive service to child care providers.

Findings:

Since the required training has been established no communicable disease outbreaks have occurred in the child care center community (this does not include single cases).

100% of the facilities participating in the consultant program have implemented or updated their illness exclusion policy to monitor the health status of children and staff and help reduce and prevent the spread of illnesses. The most common recommendations and actions involved: daily health check procedures, illness exclusion, medicine administration, supervision, proper diapering, emergency planning, proper bio-hazardous fluids handling, hand washing, food safety, sanitizing and disinfecting procedures, transportation and vehicle safety, safe sleep, first aid kits, field trip safety procedures, parent involvement, lost/missing child and facility security, facility safety inspection, child abuse awareness/documentation, staff training issues, and staff/parent manual development.

Data are available on participant evaluations of training as well as summary activity data:

LLCHD CCHC Training Data

Training Type	Year	Total Attendance	Average evaluation: 1-5 scale
Topic Specific Health & Safety Training Modules ex. safe child care environments	2002	57	4.8
Topic Specific Health & Safety Training Modules	2003	189	4.8
Topic Specific Health & Safety Training Modules	2004	226	4.8
Topic Specific Health & Safety Training Modules	2005	338	4.8
Topic Specific Health & Safety Training Modules	2006	279	4.8
Topic Specific Health & Safety Training Modules	2007	139	N/A
LLCHD Health and Safety Training	2007	896	4.8

LLCHD CCHC Visit Data

Year	Children Served Start/End	Staff Served Start/End	# staff and children ill Start/End	# of days absent due to illness (includes children and staff's absent days) Start/End	# CCHC Recommendations	# CC Actions
2004	1395/1494	363/324	65/45	94/69	305	N/A
2005	1360/1343	298/351	48/65	91.5/94	305	N/A
2006	1541/1429	381/384	59/46	119/80	299	55
2007	1624/1719	442/460	68/85	107.5/149.5	258	58
2008	1262/1247	292/309	39/75	71/154	127	128

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Project #5: The Influence of Child Care Health Consultants in Promoting Children's Health and Wellbeing: A Report on Selected Resources (August, 2006)

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Source Document: Healthy Child Care Consultant Network Support Center. The Influence of Child Care Health Consultants in Promoting Children's Health and Wellbeing: A Report on Selected Resources (August, 2006). http://hcccnsc.edc.org.

Description:

This summary presents the key findings from a synthesis of 79 published and unpublished resource documents—evaluations, presentations, monographs etc.—related to health consultation to early care and education (ECE) programs. The full Report on Selected Resources on which this summary is based seeks to map the current landscape of child care health consultant (CCHC) services and to identify CCHCs' impact on ECE programs' health and safety practices and child health outcomes. The report is not a meta-analysis. It was beyond the scope of the authors' task to screen the included documents for rigor of methodology. Consequently, the report and this summary make no representation as to the generalizability of the findings presented.

Findings:

Effective Outcomes and Impact of CCHC Services: What Works

Evidence that demonstrates the impact of child care health consultation on the quality of child care is emerging. Findings that are consistent across multiple studies show positive outcomes in the following five areas:

1. Policy

Child care health consultation appears to have a positive impact on the development and use of standards-based health and safety policies in ECE programs.

ECE Program Policies

ECE programs that have active health consultants were more likely to have written health and safety policies that are consistent with the national standards set forth in Caring For Our Children.

2. Practice

Child care health consultation appears to be effective in promoting specific health practices in ECE programs including nutrition and safe food handling, infection control (hand washing, diapering, and toileting procedures), infant sleep position, and safe and active play.

Specific Health and Safety Practices

ECE programs that receive health consultation showed improvements in health and safety practices in areas including safe and active play, sanitation, and infection control. ECE providers also reported increased confidence and self-efficacy in several areas as a result of receiving health consultation.

Prevention of Communicable Disease

Training ECE providers on proper hand-washing and other sanitation practices reduced the rate of respiratory and diarrheal illness.

Reducing the Risk of Sudden Infant Death Syndrome (SIDS)

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Researchers found that targeted training for ECE providers about infant sleep practices increased the number of children providers put to sleep on their backs, thereby reducing the risk of SIDS.[26]3

Absences
After receiving CCHC services, programs report that enrolled children experience fewer absences.

3. Regular Source of Care

Relatively few evaluations link enrollment at an ECE program that receives CCHC services to specific child health improvements. However, several reports articulate a promising theme that demonstrates that programs with CCHCs show an increased number of children with up-to-date immunizations and a regular source of medical care.

Immunizations/Regular Source of Care
ECE programs that receive health consultation had improvements in the percentage of enrolled children with up-to-date immunizations, as well as children with a medical home, dental home, and a well-child physical exam on file.

4. Specialty Consultation

Health consultation to child care appears to be beneficial in a number of specialty areas including mental health, nutrition and physical activity, and oral health.

Mental Health Consultation
A research synthesis of 31 evaluations of mental health consultation to ECE programs shows a variety of positive findings.

- Child Outcomes: Increases in social skills, improved behavior and resilience scores, decrease in problem behaviors, and retention of children at risk of expulsion.
- Staff Outcomes: Consistent findings of increased staff confidence and improvements in self-efficacy.
- Mixed results with respect to the impact of mental health consultation on overall program quality as measured by the Early Childhood Environment Rating Scale (ECERS-R).

5. Process of Consultation

A collaborative relationship between the ECE program director and CCHC or specialty area consultant appears to facilitate the effectiveness of consultation.

Consultant Relationships with Director and Staff
"Lessons learned" from multiple consultation sites suggest that a trusting, mutually respectful relationship between a consultant and the ECE program director is a critical element in effective consultation practice.