



Health Services Program Evaluation

Program Evaluation Question(s)

1. What type of statistics does SSD keep with regard to health services?
2. How do we monitor for quality health services?

I. Program/Service Information

1. Name of Program or Services:
Health Services Program
2. Personnel Responsible for Evaluation and Program (list):
 - a. Sue McKee, Ph.D., RN, NCSN (Program and Eval.);
 - b. James Cahalin, MD (District Consulting Physician – Eval.);
 - c. Sue Hallemann, RN (Eval.); and,
 - d. Deborah Artman, RN, BSN, NSCN (Eval.).
3. Demographic Description of Program:

Location(s) Eight SSD building health offices; ten 1 on 1 sites in 5 partner districts (Pattonville = 1; Rockwood = 3; Parkway = 3; Brentwood = 2; and Normandy = 1); ECSE sites throughout the county.

Number of staff: 28 RNs, 1 Health Room Assistant; 1 Lead Nurse (30 staff)

Participants: Nurses, Lead Nurse, Partner District Nurses, District Consulting Physician.

Length of program/service:
School calendar year (ESY not included)
4. Date of Evaluation (Year/Duration):
June 2005-March 2007
5. Goal/Objective of Program/Services:
To provide quality health care services for the purpose of improving and/or maintaining health or wellness in order for students to receive optimal benefit from the education experience.
6. Brief description of relationship between program goals, CSIP and MSIP Standards:
In accordance with MSIP item 8.11.1: this evaluation process reviewed RN adherence to Board-approved health-related policies and regulations regarding administration of medications; contagious and infectious diseases, immunizations for school children; confidentiality of health records; and child abuse/neglect reporting. The evaluation process also reviewed procedures for first aid and emergency care; maintenance of health records; the provision of comprehensive screenings (with appropriate referrals); and the procedures for monitoring students' chronic health problems. The National Association of School Nurses' (NASN) *Standards of School Nursing** (attached) and the Missouri State



Health Services Program Evaluation

Nursing Practice Act were also utilized to review health services practices regarding nursing care provided to students.

II. Evaluation Criteria for Programs/Services Offered (check type utilized)

The evaluation procedures and the criteria are used to evaluate program goals and objectives.

What data are you going to use to answer your evaluation questions?

1. Quantitative evidence of the health care services the nurses provide was obtained from the Monthly Report forms. This information is reviewed monthly by the Lead Nurse and is totaled annually. (Appendix B).
2. Quality of health care services rendered was evaluated by committee review of the nurses' documentation of care provided per student visit for a health-related complaint; and review of the nurses' written Individualized Healthcare Plans (IHP - Appendix C) and the {Individualized} Emergency Care Plans (ECP – Appendix D). (Sample forms attached). Data were gathered through Lead Nurse site visits with each SSD nurse in November, 2006; and again in January, 2007.

III. Description of Stakeholders Engagement in Program Evaluation:

Name of committee member and his/her role or title

Describe the ways of communication and involvement of stakeholders

Sue E. McKee, Ph.D., RN, NCSN – Lead Nurse – SSD.

Dr. James K. Cahalin, MD – District Consulting Physician

Suzanne Hallemann RN, BA, NCSN – Director of Health Services - Mehlville School District (ret. 2006)

Deborah Artman, RN, BSN, NCSN – Lead Nurse – Lindbergh School District

Communication was via personal visits, meetings, phone conversations, emails.

Involvement was based on knowledge of and experience in health, health care, and nursing – particularly, school nursing.

IV. Results

In order to determine if the district nurses are providing “quality” nursing services, it is necessary to first delineate what services are currently being provided. This information was gathered from the Monthly Reports that are submitted to the Lead Nurse monthly and totaled annually. Although this information was collected from the 2005/2006 school year, it is representative of a typical school year for SSD nurses. SSD nurses are required to provide more involved clinical nursing services than are our colleagues in general education schools. The physical and emotional health of our student population is generally more fragile than those students in our partner districts. Attached is a summary (Appendix E) of the (selected) types of services SSD nurses are providing – and the frequency of those services. These services were selected for this report due to the fact that they represent the more-specialized nursing services provided in the schools (taken



Health Services Program Evaluation

from the Monthly Report – copy attached). As is evident, our nurses spend the majority of their time with students – providing nursing interventions that help to maintain health which allows the students to remain in the buildings, potentially learning under optimal health conditions.

The quality of these services is reflected in the nurses' documentation of the nursing care each provides, through the quality of the IHPs, and the accuracy and effectiveness of the ECPs. The SSD Health Services Program (HSP) includes four types of school health practice: early childhood special education (5 RNs); school age (11 RNs); technical high schools 2 RNs; 1 aide); and 1 on 1 nursing care (one RN dedicated to providing nursing services to one student- generally in a partner district - at present, SSD employs ten 1 on 1 RNs). Each practice differs somewhat from the others. The itinerant ECSE nurses provide more case management and possibly less actual nursing care for their students; school age nurses actually provide most of the involved nursing services; and the technical high school nursing practice is more along the lines of general education nurses – providing first aid and emergency care for students; plus monitoring chronic conditions. The 1 on 1 practice has been addressed above. (All nurses are required to maintain a health file for each student on their case load).

Nursing standards and district protocol require that nurses document, in writing, each interaction with a student or staff member when it relates to health. The nurse must determine what actions to take based on the data she gathers through a physical assessment of the body systems indicated by the complaint. This assessment must include subjective data (the complaint, how the student appears, when symptoms began, what preceded the symptoms [if anything, and so on]); and, objective data (bleeding wounds/injuries [describe size, location, color, edema, etc.]), temperature, respiratory rate and pattern, pulse rate and rhythm, blood pressure, and pain (on a scale of 1-10) etc. The nurse must then determine what interventions to apply in this specific situation. At present, most documentation reviewed was thorough and included enough specific details that would indicate the care provided was appropriate according to nursing standards and district protocols. However, approximately eighteen percent of the nurses need to improve the *consistency* of their documentation skills. Out of 28 nurses, 72% (n = 23) of them document with enough detail virtually all the time; 18% (n = 5) of the nurses need to be more consistent with appropriate details in their documentation. Each time a nurse documents information gathered via her nursing assessment, she should include objective data, subjective data, the nursing intervention provided, and the resolution of the interaction (see above). The nurses initially document all health room visits and nursing assessments in a Log Book; then transcribe significant data to the student's permanent SSD health record – in alignment with Missouri's Public School Record Retention Schedule (Carnahan, 2004). Data was gathered from random review of documentation entries in the nurse's Log Book during site visits with each of our nurses during November and February of this school year.



Health Services Program Evaluation

The IHP is written by the nurse for the nurse (or substitute nurse) in order to allow for continuity of care between the physician, school, and home. It should include a brief history of the child's illness, a medical diagnosis of the concern, physician orders, and nursing goals and interventions. The IHP needs to be reviewed at least annually. The nurses gather data from the parents, physician(s), other health care providers, and the student if possible. All IHPs that were reviewed were complete and appropriate, and included specific health information from physicians and parents.

Any student who has a health concern that might potentially threaten his/her life or safety should have an Emergency Care Plan written by the nurse. Again, these plans are written based on health needs, physician orders, and nursing education and knowledge. Our ECPs include emergency care instructions for situations occurring in the building (where a nurse is present) and for field trips, CBI, Special Olympics, etc.; in which case, a non-medical person may need to render care or call for help. All ECPs reviewed were accurate and gave specific instructions for emergency care in the building and out of the building.

1. Strengths of program/service
 - a. Based on data gathered through site visits, review of documentation, IHPs, and ECPs- it appears that the nurses are providing quality care for our students. The data indicate an adherence to nursing standards and district policies and regulations which is a strong indicator of quality.
2. Concerns regarding program/service
 - a. As stated earlier, 18% (n = 5 RNs) of the nurses (n = 28) need to be consistent in documentation practices.
3. Recommendations regarding program/service

Because we cannot compromise on nursing standards, nor on district protocols, it is unacceptable that 18% of our nurses need to be more consistent in their documentation skills. This will become a priority issue. Documentation skills were discussed during a Nurses' Meeting in February, 2005, using a module from the University of Colorado - Office of School Health. Also, I have individually coached some of the nurses in documentation techniques. All of our nurses document appropriately most of the time – the 18% need to be more consistent.

It is possible that electronic documentation may allow for more consistent data entry. Some of the Health Services Program software that is available to schools include codes for complaints and interventions, and the capability of adding



Health Services Program Evaluation

necessary narrative text. At present, the nurses have one screen in Power School for demographic information only – with the exception of the Tech school nurses who use SIS. Speaking from a solid working knowledge of SIS, it is a very sound system for recording school health information.

Person responsible to champion action plan
Dr. Sue E. McKee, Ph.D., RN, NCSN

Timeframe for reporting updates to Board of Education
1st Update: November, 2007
2nd Update: October, 2008

Sue E. McKee, Ph.D., RN, NCSN

4/10/07

*National Association of School Nurses. (2005). *School nursing: Scope and standards of practice*. Silver Spring, MD: American Nurses Association.



Health Services Program Evaluation

APPENDIX

STANDARDS OF SCHOOL NURSING PRACTICE

STANDARDS OF PRACTICE

- Synthesizes available data, information, and knowledge relevant to the situation to identify patterns and variances.
- Documents relevant data in a retrievable format.

School Nursing is a specialized practice of professional nursing that advances the well-being, academic success, and lifelong achievement and health of students. To that end, school nurses facilitate positive student responses to normal development; promote health and safety; intervene with actual and potential health problems; provide case management services; and actively collaborate with others to build student and family capacity for adaptation, self-management, self-advocacy, and learning. (NASN 1999b)

STANDARD 2. DIAGNOSIS

The school nurse analyzes the assessment data to determine the diagnoses or issues.

Measurement Criteria:

The school nurse:

- Derives the nursing diagnoses or issues based on assessment data.
- Validates the nursing diagnoses or issues with the client, family, school staff, school community, and other healthcare providers when possible and appropriate.
- Documents nursing diagnoses or issues in a manner that facilitates the determination of the expected outcomes and plan.
- Uses standardized language or recognized terminology to document the nursing diagnosis in a retrievable form.

STANDARD 1. ASSESSMENT

The school nurse collects comprehensive data pertinent to the client's* health or the situation.

Measurement Criteria:

The school nurse:

- Systematically compares and contrasts clinical findings with normal and abnormal variations and developmental events in forming a nursing diagnosis.
- Involves the client, family, school staff, other healthcare providers, and school community, as appropriate, in holistic data collection.
- Prioritizes data collection activities based on the client's immediate condition, or anticipated needs of the client or situation.
- Uses appropriate evidence-based assessment techniques and instruments in collecting pertinent data.
- Uses analytical models and problem-solving tools.

* Client is used in these standards to better reflect the diversity of the recipients of school nursing practice. The client can be a student, the student and family as a unit, the school population, or the school community, including faculty and staff. The focus of care may shift from individual needs to the needs of a group.

STANDARD 3. OUTCOMES IDENTIFICATION

The school nurse identifies expected outcomes for a plan individualized to the client or the situation.

Measurement Criteria:

The school nurse:

- Involves the client, family, school staff, and other healthcare providers in formulating expected outcomes when possible and appropriate.
- Derives culturally appropriate expected outcomes from the diagnoses.
- Considers associated risks, benefits, costs, current scientific evidence, and clinical expertise when formulating expected outcomes.
- Defines expected outcomes in terms of the client, client values, ethical considerations, environment, or situation with such consideration as associated risks, benefits and costs, and current scientific evidence.
- Includes a time estimate for attainment of expected outcomes.
- Develops expected outcomes that provide direction for continuity of care.
- Modifies expected outcomes based on changes in the status of the client or evaluation of the situation.
- Documents expected outcomes as measurable goals.
- Uses standardized language or recognized terminology to document the outcome in a retrievable form.

STANDARD 4. PLANNING

The school nurse develops a plan that prescribes strategies and alternatives to attain expected outcomes.

Measurement Criteria:

The school nurse:

- Develops an individualized healthcare plan considering the client characteristics or the situation (e.g., age and culturally appropriate, environmentally sensitive), with appropriate strategies for health promotion and disease prevention.
- Develops the plan in conjunction with the client, family, school community, and others, as appropriate.
- Creates individual healthcare plans as a component of the program for clients with special healthcare needs.
- Provides for continuity within the plan.
- Incorporates an implementation pathway or timeline within the plan.
- Establishes the plan priorities with the client, family, school community, and others as appropriate.
- Utilizes the plan to provide direction to other members of the school team.
- Defines the plan to reflect current statutes, rules and regulations, and standards.
- Integrates current trends and research affecting care in the planning process.
- Considers the economic impact of the plan.
- Uses standardized language or recognized terminology to document the plan in a retrievable form.

STANDARD 5. IMPLEMENTATION

The school nurse implements the identified plan.

Measurement Criteria:

The school nurse:

- Implements the plan in a safe and timely manner.
- Documents implementation and any modifications, including changes or omissions, of the specified plan.
- Utilizes evidence-based interventions and treatments specific to the diagnosis or problem.
- Utilizes community resources and systems to implement the plan.
- Collaborates with nursing colleagues and others to implement the plan.
- Provides interventions in compliance with these standards of practice and professional performance.
- Uses standardized language or recognized terminology to document implementation of the plan in a retrievable form.

STANDARD 5A: COORDINATION OF CARE

The school nurse coordinates care delivery.

Measurement Criteria:

The school nurse:

- Coordinates creation and implementation of the individual health-care plan.
- Documents the coordination of the care.

Measurement Criteria for the Advanced-Practice Registered Nurse:

The advanced practice registered nurse:

- Provides leadership in the coordination of multidisciplinary health care for integrated delivery of client care services.
- Synthesizes data and information to prescribe necessary education and healthcare system and community support measures, including environmental modifications.
- Coordinates education and healthcare system and community resources that enhance delivery of care across continuums.

STANDARDS OF PRACTICE

STANDARD 5B: HEALTH TEACHING AND HEALTH PROMOTION The school nurse provides health education and employs strategies to promote health and a safe environment.

Measurement Criteria:

The school nurse:

- Provides general health education to the student body at large through direct classroom instruction or expert consultation.
- Provides health teaching that addresses such topics as healthy lifestyles, risk-reducing behaviors, developmental needs, activities of daily living, and preventive self-care as appropriate to client developmental levels.
- Uses health promotion and health teaching methods appropriate to the situation and the client's developmental level, learning needs, readiness, ability to learn, language preference, and culture.
- Promotes self-care and safety through the education of the school community regarding health issues.*
- Promotes health principles through the coordinated school health program for all in the school community.
- Seeks opportunities for feedback and evaluation of the effectiveness of the strategies used.
- Participates in the assessment of needs for health education and health instruction for the school community.*
- Provides individual and group health teaching and counseling for and with clients.*
- Participates in the design and development of health education materials, and other health education activities.*
- Participates in the evaluation of health curricula and health instructional materials and activities.*
- Acts as a primary resource person to school staff (and others as appropriate) regarding health education and health education materials.*

STANDARD 6. EVALUATION

The school nurse evaluates progress towards attainment of outcomes.

Measurement Criteria:

The school nurse:

- Conducts a systematic, ongoing, and criterion-based evaluation of the outcomes in relation to the structures and processes prescribed by the plan and the indicated timeline.
- Includes the client and others involved in the care or situation in the evaluative process.
- Evaluates the effectiveness of the planned strategies in relation to client responses and the attainment of the expected outcomes.
- Documents the results of the evaluation.
- Uses ongoing assessment data to revise the diagnoses, the outcomes, the plan, and the implementation as needed.
- Disseminates the results to the client and others involved in the care or situation, as appropriate, in accordance with client and parent directions, and state and federal laws and regulations.



SSD HEALTH SERVICES MONTHLY REPORT

Submitted by _____ Month/Year _____
 School/Area _____ Attendance days _____
 # Students _____ # Sites _____

<u>Health Room Visits</u>	<u>Referrals</u>	<u>Screenings</u>	<u>Referrals</u>
Illness _____	_____	Vision _____	_____
Injury _____	_____	Hearing _____	_____
Personal/Emo _____	_____	Lice _____	_____
Dental _____	_____	Hts/Wts _____	_____
Abuse/Neglect _____	_____	Scoliosis _____	_____
Incident Forms _____	_____	Nutrition _____	_____

MEDICATION

Rx _____
 PRN _____

STAFF VISITS

Illness _____
 Injury _____

REFERRALS

SPECIALIZED HEALTH CARE TX

BP _____
 Bl. Sugar _____
 Cath/Colost _____
 Resp. Tx _____
 Oral Suction _____
 Trach Suction _____
 Tube Fdgs. _____
 Other _____

OTHER

Hepatitis A Vaccine _____
 Hepatitis B Vaccine _____
 BB Path Referrals _____
 Worker's Comp _____
 PPD _____

EMS CALLS AND REASONS

CASE /OFFICE MANAGEMENT

Review or Create Health Record _____
 Individualized Healthcare Plans _____
 Emergency Healthcare Plans _____
 IEP/Care Tm. Meetings _____ / _____
 Delegation Training _____
 Home Visits _____

SUPPORT ROOM

BUS RIDES _____

SENT HOME _____

<u>CONTACT</u>	<u>PHONE</u>	<u>WRITTEN</u>	<u>VISIT</u>
Parent _____	_____	_____	_____
Physician _____	_____	_____	_____
Social Worker _____	_____	_____	_____
Teacher _____	_____	_____	_____
Administrator _____	_____	_____	_____
Outside agencies _____	_____	_____	_____

NOTE: This is a sample care plan developed for a pretend student. The nurses can select from over 130 health conditions care plan templates that can be adapted to child-specific needs.

Classroom Health Care Plan

Name: Tom Jones
Parent:
Doctor:
Special Ed: ___ 504 ___
Bus: ___ yes ___ no

Effective Date:
School:
School Nurse:
DOB:

Asthma is a chronic lung disease which is characterized by attacks of breathing difficulty. It is caused by spasms of the muscles in the walls of the air passages to the lungs. It is not contagious and tends to run in families. Asthma can be aggravated by allergy to pollen or dust, viral illness, cold, emotions, or exercise. There is no cure but asthma can be controlled with proper diagnosis and management.

Treatment consists of avoiding known triggers, recognizing early symptoms, monitoring with a peak flow meter, and medication to reduce or prevent symptoms. Some children who are allergic to specific substances may benefit from desensitization shots.

Problem: Breathing difficulty

Goal: Avoid attacks and maintain airway.

Action:

1. Tom's known triggers include:
 - pollen, dust, and dirts.
 - a. Tom should avoid these triggers.
2. Symptoms of an asthma attack include:

Coughing	Tightness in chest
Wheezing	Gasping for air
Prolonged expiration	Color changes (pale or blue).
3. If symptoms of an attack are present or Tom states he/she feels an attack coming on:
 - a. Administer medication by nebulizer as prescribed.
 - b. Reassure Tom and attempt to keep him/her calm and breathing slowly and deeply.
 - c. Tom should respond to treatment within 15 - 20 minutes.
 - d. If **NO** change or breathing becomes significantly worse, contact parent immediately.
 - e. Most asthma attacks can be successfully managed in this manner. If you feel he/she is getting rapidly worse and you have exhausted the suggested treatment call for emergency assistance (911).

Problem: Nebulizer treatment

Goal: Administrate medication safely at school.

Action:

1. Measure prescribed dose, Albuterol 0.5ml , of medication in dropper and place in plastic medication chamber. Add diluent if prescribed, sterile water, salt water, etc.
2. Attach chamber to nebulizer and turn machine on. Make sure it is plugged in.

3. Have Tom breathe through face mask slowly and deeply until all liquid is gone from medication chamber.
4. Have Tom remain sitting and resting until symptoms subside.
5. Wash chamber and face mask after each use.
6. Tom can receive nebulizer treatments with Albuterol medication every 4-6 hours. Check home/school notebook to see if he received treatment at home and at what time to avoid over medicating.
7. Document all treatments given on school medication log and home school notebook.

Problem: Inhaler treatment

Goal: Safe administration of medication at school

Action:

1. A metered dose inhaler is a device to give medication directly into the lungs.
2. Remove cap and hold inhaler upright with mouthpiece below chamber.
3. Shake well.
4. Have student tilt head slightly back and breathe out.
5. Position inhaler one to two inches from mouth or use spacer.
6. Press down on the inhaler to release medication (you will hear a hissing noise) and have the student breathe in slowly (three to five seconds) and deeply. This is referred to as a PUFF.
7. Have student hold breath for 10 seconds to allow medication to stay in lungs.
8. **Wait** one minute between prescribed puffs. Repeat as directed.
9. Tom should continue sitting up right and resting until medication takes effect (can be up to twenty minutes).
10. Tom may require Ventolin by inhaler every 4-6 hours. Document on the school medication log and home school notebook.

Problem: Medication side effects

Goal: Early recognition and reporting of side effects

Action:

Tom is medicated as needed with **Ventolin (albuterol)**.

- a. Albuterol opens the air passages of the lungs. It is taken by oral inhalation to treat the symptoms of asthma. It relieves coughing, wheezing, shortness of breath, and troubled breathing by increasing the flow of air through the bronchial tubes.
- b. Side effects that require immediate medical evaluation include: blue color to skin, lips or fingernails, dizziness, fainting, increased breathing rate, increased pulse (heart) rate, skin rash and swelling of face, lips or eyelids.
- c. More common side effects that usually do not require intervention unless troublesome or worrisome include: nervousness, restlessness, and trembling.
- d. Symptoms of overdose may include: chest pain, chills, fever, seizures, fast or slow heartbeat, severe muscle cramps, severe nausea or vomiting, unusual paleness, and coldness of skin or severe weakness. Any of these symptoms require calling parent or nurse unless student is unconscious or having seizures. It is extremely rare to need immediate emergency intervention (911).

School Registered Nurse

Date _____

Parent/Guardian

Date _____

Emergency Care Plan effective _____ to _____ Review date _____

Student name _____ School year _____

Parent phone _____ Parent cell _____

Alternate contact (name & relationship) _____ Phone _____

Primary physician (name) _____ Phone _____

STUDENT SPECIFIC DATA FOR CLASSROOM

If you see this:

Do this:

STUDENT SPECIFIC DATA FOR COMMUNITY

If you see this:

Do this:

Additional comments:

School Nurse

Phone
Rev. 1/28/05

SUMMARY OF SELECTED HEALTH CARE SERVICES PROVIDED BY THE NURSES
2005/2006 School Year

HEALTH SERVICE (2005-2006 DATA)	SCHOOL AGE 11 RNs + 5 1on1 RNs 914 Students	TECH 2 RNs 1843 Students	ECSE 4 itinerant RNs, 4 1on1 RNs, 1 RN - PECC 762 Students	TOTALS	COMMENTS
Student Visits: illness; injury; emotional; dental (% referred)	12,504 (7%)	8356 (8%)	1080 (21%)	21,940 (8.5%)	
Screenings: vision; hearing; lice; hts./wts.; scoliosis; nutrition	1216 (7%)	744 (3%)	2553 (7%)	4513 (7%)	
Medications: Rx & PRN	29,567 - 1396	531 - 220	32 - 48	30,130 - 1664	
Staff Visits: illness/injury	1044 (20%)	175 (30%)	191 (31%)	1410 (23%)	
Specialized treatments: cath; colostomy; suction; neulizer; tube fogs; glucometer; BP	23,257	1205	630	25,092	
EMS calls	63	7	5	75	
IEP/Care Team	154/177	37/7	152/77	343/261	
Individualized Healthcare Plans/ Emergency Care Plans	109/103	29/54	138/60	276/217	
Contacts: written; phone calls, personal visit - parent; teacher; SW; MD; outside agency; admin	17,667	3703	11,277	32,647	

April, 2007