Report to the McKesson Foundation
December 2007

In response to requests for help and information from the school based health center
(SBHC) field, the National Assembly on School Based Health Care (NASBHC) secured
support from the McKesson Foundation to determine the current capacity, issues and
needs of SBHCs related to health information technology (HIT) particularly management
information systems (MIS), electronic medical records (EMR), data collection and
reporting. In the proposal we planned to do this by:
o Engaging in focused conversations with providers, sponsors and funders to better
determine the current state and future needs of SBHCs related to information
technology;
o Hosting an invitational meeting of approximately ten to twelve representatives
from the SBHC field, State Departments of Health, SBHC sponsors, funders and
other key stakeholders;
o Analyzing the current School Based Health Center Census data and describe data
elements SBHCs report currently collecting, and compare those with existing
recommendations for data collection regarding quality improvement, cost
reporting and productivity;
o Determining the potential of the Census to collect essential information needed
to improve practice and support SBHCs;
o Developing new resources for SBHCs including recommendations for a standard
set of data elements to be included in an MIS system used by a SBHC, a list of
priority data elements to be included in SBHC reporting to funders and
recommendations for SBHCs related to the use of new technology and;
o Identifying future opportunities to further support the centers in their use of
information technology.

In November 2006, NASBHC received funds from the McKesson Foundation. In January
of 2007, NASBHC hired Tiffany Clarke, MPA as a Program Associate and she and Linda
Juszczak DNSc, MPH, CPNP the Deputy Director of NASBHC continue to serve as staff
responsible for achieving these objectives. The following progress report is organized
into two categories, summary of the conversations and meeting and data capacity and
analysis. There is still work in progress. We expect to successfully meet all of the
objectives by October 2007. This interim report and a proposal for additional support
identify future directions and activities for NASBHC relating to health information
technology and school based health centers.

Conversations and Meeting Summary
Prior to an invitational meeting in the spring of 2007, NASBHC staff conducted fourteen
in depth interviews with key informants in the school based health center field. The
informants represented the experiences and perspectives of administrators, primary care
providers, State Health Department staff, and those in the field who were known to be
early adopters of health information technology. The interviews were used as the basis to
compile an overview of the issues facing the field, generate interest in the meeting and
frame the agenda. As awareness increased that NASBHC staff were exploring this topic

interest from the field was evident and requests were received to attend the meeting as well as for related technical assistance and networking opportunities.

The findings from key informant interviews described an environment in which sponsoring organizations of SBHCs are moving forward with new MIS and EHR systems often without considering the needs and capacity of the SBHCs. The result is a system which does not meet reporting or billing needs of the centers. SBHC representatives shared a belief that they are at risk of being left out of any information technology improvements occurring in the sponsoring agency or will be the last to receive the technology. Constraints were identified by key informants as financial, technical and legal.

The key informants identified challenges related to the new technology including the need to maintain systems, multiple data collection, confidentiality, inadequate staffing to change systems and maintain systems, changes in
the clinic culture and cost and maintenance of a new system. One informant stated *"The number of hours needed administratively and pulling staff out of clinics to prepare for the EMR, results in a loss in productivity I don't have the resources to make up for"*.

Informants also identified opportunities associated with adopting the new technology. In some systems where the transition has already occurred, despite the difficulties with implementation which continue, the overall assessment was positive and the potential exciting. Opportunities included improving the quality of care through more effective monitoring, using technology to close the gap between the evidence base and practice, never having lost charts, improved communication between health care sites and increased opportunity for improving patient continuity especially when patients are seen elsewhere in the sponsors system.

Experiences of the key informants were used to inform an invitational
meeting that included representatives from state health departments, clinicians, managers, information technology staff, researchers, and Dr. David Kaplan the originator of School Health on Line and Clinical Fusion (see attachments for list of attendees).

The group came together to discuss the future of SBHCs related to a paperless environment. The objectives of the workgroup (see attachments for Agenda) were to:
o Identify opportunities and challenges for SBHCs in converting from paper to an EMR;
o Determine the basic requirements for an MIS /EMR system within SBHCs;
o Provide recommendations for the field on how to deal with data collection, confidentiality, staffing and change in culture;
o Explore education and health care policies and finance mechanisms that support the conversion to EMR;
o Respond to a proposed set of common data elements for SBHCs; and
o Identify resources, training and the infrastructure needed by SBHCs and sponsoring organizations to respond to the need to convert to EMR.
The workgroup attendees concluded that many SBHCs need formal guidance on either

selecting an EMR/MIS system or approaching their sponsoring agency regarding their needs and constraints. Several participants agreed to share their assessments and materials with NASBHC for broader dissemination.

State Health Departments are also asking for guidance on data to be collected and reported in order to evaluate SBHC performance. There was agreement among workgroup attendees that a significant number of programs are unlikely to make the transition to newer systems either because of financial constraints or other capacity issues (e.g. no or slow Internet access, limited number of computers).

Recommendations: The following recommendations are a result of the meeting:

o NASBHC will monitor SBHCs need for resources, training and infrastructure related to the conversion to an EHR system;

o NASBHC will communicate that EMR/MIS systems in SBHCs need to interface with Clinical Fusion if they are not collecting data needed by SBHCs to report practices;

○ Support optimum billing practices and the ability of SBHCs to track value added services;

○ Enable SBHCs to issue timely reports to their states and sponsoring organizations;

○ Support tracking of users risk factors identified at the time of a visit;

o NASBHC will publish on www.nasbhc.org an overview of the current state of SBHCs and HIT (issues/opportunities and recommendations);

o NASBHC will support sharing information & experiences of systems developing or assessing HIT products used in SBHCs (i.e. LA, ME, NM. MI);

o State Health Departments, which have significant investments in SBHCs, are central to discussions on this topic and NASBHC will continue to include them in dissemination of the recommendations and related work;

o There is a compelling need for Clinical Fusion to exist however billing capabilities need to be developed in order for SBHCs to continue using it. NASBHC will explore with Dr. Kaplan developing support for this.

Data Collection and Analysis

The Evaluation and Quality Panel of NASBHC met in late January 2007 and drafted a standard set of data elements to be included in an MIS system used by SBHCs. These data elements are intended to serve as NASBHC's recommended priority data elements to be included in SBHC reporting to funders to describe SBHC practice for evaluation and advocacy purposes. The current Census of SBHCs was analyzed and data from it and the previous Census were used to inform the discussion.

In 2001, 80% or more of the SBHCs surveyed reported collecting data on enrollment, visits and diagnosis. They most frequently reported the data to funders, the school and policy makers. In Census 2004-05 we queried respondents regarding the data elements they were currently collecting and more than 60% of the programs reported collecting data on gender, date of birth, provider type, race/ethnicity, insurance status, enrollment information , grade and billing codes (ICD9 and CPT). The conclusion reached after reviewing the available data was that the beginning of a core data set existed for school based health centers however it was incomplete.

Recommendations: The following data elements will be included in a recommendation from NASBHC concerning the collection of data for reporting and evaluation purposes in SBHCs:

o Date of Birth
o Gender
o Race/Ethnicity (needs to be compatible with how education data is reported)
o Provider type
o CPT codes
o ICD 9 codes
o Insurance status at visit
o Referrals (internal or external)
o Sponsors registration information (may include some of the other elements such as DOB)
o Student disposition (sent back to class, home, ER, other)
o Communication with parent (elementary and middle school)
o Primary language spoken in the home
o Risk Factors *(list needs to be generated for those not already ICD or CPT Codes)*
o Enrolled Student, if not:
      Student from other school
      Out of school youth
      Faculty/School Personnel
      Family of student user (sibling/parent/infant of student)
      Other person from the community
      Other (describe):_____
o If SBHC is the primary care provider(PCP) or not
o If communication occurred between SBHC and PCP

Health Information Technology Expansion
In the fall of 2007 NASBHC attended the Health Resources Services Administration (HRSA) Health Information Technology Grantee Meeting. The goals of he meeting were to promotes collaboration to further the adoption of HIT; provide practical tools for moving through the HIT continuum; and enhance partnership to advance current and future HIT initiatives. The NASBHC staff not only participated in the conference but facilitated a workshop entitled; Moving HIT Into School. The goal of the workshop was to discuss the use of innovative HIT tools including telehealth and electronic health records to improve the health care, sustainability, and accountability of the school-based health center. NASBHC is actively becoming a voice in the SBHC field and taking an active role in making connections.

Next Steps:
In addition the recommendations identified in this report, NASBHC needs to publish its recommendations and develop a dissemination plan for sharing them with stakeholders. There are additional activities not supported in this last year which can support an ongoing

body of work at NASBHC regarding HIT and SBHCs. These include:

1.Identify and collaborate with 15-20 SBHCs currently engaged in the process of selecting electronic health records (EHR) and disseminating their experiences to the field.
2. Develop 3-5 new survey questions related to the use of health information technology (HIT) for the next nationwide Census of SBHCs.
3. Conduct an interactive web conference for fifty attendees in 2008 on HIT.
4. Conduct a workshop at the NASBHC National Convention for 30 participants on electronic health records and management information systems (MIS).
5. Publish a document identifying opportunities, challenges, and best practices for electronic data sharing between school-based health centers and schools.
6. Facilitate 3-5 SBHCs replicating or joining the federal Department of Health's Health Resources Services Agency's Health Center Networks.

NASBHC's short-term objectives include:
1. Improving and expand networking opportunities, connectedness and use of health information technology within the school-based health center (SBHC) community.
2. Increasing learning opportunities and resources for SBHCs regarding the use of HIT in their programs.

NASBHC's long-term objectives include:
1. Tracking progress of the SBHC field in adopting HIT.
2. Moving SBHCs along the health information technology (HIT) continuum from exploration to adoption.