

SHIFT: School Healthcare Information

Framework leveraging Technology

White Paper

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School Healthcare Information Framework leveraging Technology (SHIFT)

6.37 School Health Data and Other Health

6.37.1 Description: School Health Data and Other Health

- School Health data has the potential to offer insights into possible student health and academic advancements and interventions. However, school health data needs to be analyzed and made available to relevant stakeholders based on targeted condition-based inquiries.
- School Health Data (SHd) is predictive of academic outcomes.
- When shd is shared among schools and other health sectors, outcomes improve.
- Statistics reveal the benefit of early health interventions. Those interventions can occur at schools.
- School readiness is a school health issue.
- “Academic health” is a defining term for health in schools.

6.37.2 Definition of Maturity Levels of School Health Data and Other Health

6.37.2.1 Low Maturity

- The school has no SN. A Staff member may field the student’s health concerns and attempt to apply a short-term, ad hoc remedy; contact a parent; or call for an emergency responder.
- The school nurse is reactive to student-health concerns, but is unable to capture data via a means that can cause the health concern to be adjudicated via a best practice approach.
- The school administrator (or school board) fails to recognize the importance of health data and health services with respect to overall student achievement.
- An external clinical professional is unable to access updated student health data.
- A student offers health complaint to a school staff member, but the complaint is misinterpreted or is not addressed.
- School nurse is not able to access health industry data (describing a particular disease, condition, or injury) or relevant student health-history data (e.g., a previous occurrence of the student’s current condition).
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6.37.2.2 Medium Maturity

- The school has a school health information system that is able to disclose (proposed) health-related decision-making components.
- The school health staff is aware that certain student health data exists, but is either unable to access the information or does not have the skills/training to use the data that is accessed.
- The system lacks the ability to predict the risk of academic failure (that stem from student-health concerns).
- A student offers health complaint to a school staff member and is evaluated by the school nurse, but the complaint is misinterpreted or is not fully addressed.

6.37.2.3 High Maturity-

- School health data is used as a predictor of academic outcomes.
- School-level health data is used to inform the need for academic interventions.
- School administrators and school board members value the positive impact that a school nurse has on the student population.
- Cross-sector data sharing is utilized between the education and health sectors.
- Teachers support student health advocacy.
- The School Nurse employs a trauma-informed approach when evaluating a student’s reported concern in lieu of an obvious medical condition.
- The student health information system communicates well with the school information system.

6.37.3 Foundation Components – School Health Program Structural Impacts

- School information systems are ubiquitous; school health information systems are being developed to various degrees. However, the integration of the two systems requires further investigation and innovation.
- The Response to Instruction/Intervention (RTI) / Multi-Tiered Systems of Support (MTSS) approach offers system-based methods of providing academic and behavioral support for students who are experiencing academic difficulties.
- Legal pathways are required for sharing student health information; HIPAA and FERPA are foundational regulatory components.
- MOUs may inform information-sharing pathways between schools and health care provider institutions.
- Consent-to-Treat and Release-Of-Information forms enable students to receive health care interventions and to receive/transmit information regarding the care provided.
- School Administrators and School Boards must provide formal and operational approval and proactive promotion for school health programs and services.
- Health care providers are sometimes required to offer health services to community members in order to maintain non-profit status. Some of those resources could be donated to schools if the schools are prepared to accept the health care provider's services and accommodate their requirements. Outcome measures need to be prepared and transmitted to the health care providers. Those measures need to be automatically and transparently generated and made available to the health care providers. Oversight of the outcomes ought to exist.

6.37.3.1 School System Components

[Describe the conditions, situations, locations, arenas, or systems under which this stakeholder interacts with the student's health.]

- The School Secretary, School Nurse, School Nurse Aide, SBHC (school-based health clinic), FQHC (federally-qualified health center), direct partnership with health care providing organization
- School Administrative Staff; internal or external Social-Emotional health care providers.
- Schools often allocate dedicated offices within buildings for health service encounters. Mobile health centers also offer services that complement services that are offered in the school setting. School Nurses automobiles often serve as mobile health units. Also, School Nurses often provide planned interventions or mobile emergency care in an ad hoc fashion and wherever required.
- School Information Systems and School Health Documentation Systems, Guidelines, Assessments, Consent Agreements, doctor's notes, care plans, medical reports, patient-directed laboratory tests (perhaps via a SBHC and based on policy and/or jurisdictional law).
- The level of care provided is often based on adequate funding or in-kind/donated health care services and resources.

6.37.3.2 School Health Program Infrastructure

[Describe the structural elements that are required to support the stakeholder in this domain.]

6.37.3.3 School Health Context

- FERPA specifies communications with parents (or is mitigated via in loco parentis protocols) regarding student health interventions (especially in emergent situations).
- Certain Social Determinants of Health protocols must be mitigated based on School Policies and Procedures and the School Nurse's constraints, resources, and scope of practice.
- External care providers may be able to coordinate student health surveillance, care, and reporting with school health personnel.
- The School Nurse (and other qualified school staff) are often in a better position to regularly screen and monitor the health status of students (especially those who are at risk for health and social concerns).

6.37.3.4 Student-Health Acuity Levels:

6.37.3.5 Research Considerations

- Categories of Research
 - The correlation between student academic achievement and student health ought to be studied and the results broadly disseminated.

health and safety concerns; HIPAA/FERPA expert; school information system security and risk management regarding data sharing, data exposure, and any technological entry point. Breach of existing data communication protocols and/or technology.

6.37.4 Foundation Components – eHealth Infostructure (Specific to a Domain OR UNIVERSAL)

- Communications technology (wired or wireless); bandwidth service-level agreements, measures, and governance; hardware that stores or process health information (e.g., a copier, printer, fax machine, or laptop computer) must secured and governed (including when the devices are repaired, sold, or repurposed). Information equipment and software services that attempt to de-identify data. Cloud-based information and communication technology must be HIPAA-compliant. Electronic envelopes must be capable of protecting its contents, tracking its uses, and hiding and masking certain portions of its data content based on user-role, time constraint, and/or security token. Data sharing agreements among participating organizations. School health system. School information system. Dashboard that discloses the use (and misuse) of school information. Data warehouse. Catalog that points to all information containers (including geographic locations, location of keys, and identification of the managers, passwords, retention/destruction management protocols, access control protocols and access logs. Technology administrator, implementer, facilitator, and trainer.

6.37.5 Foundation Components - ICT Infrastructure (Specific to a Domain OR UNIVERSAL)

- Information and Communications Technology Infrastructure. Electrical power / backup power protocols. Risk reduction / failover / fraud detection / access control / log management. Hardware/software versioning management protocols.
- Telehealth encounters require many foundational components (e.g., device, lighting, power, noise, camera, microphone, bandwidth, health records, user-roles, student health information, recordkeeping, care coordination with third-parties, assistive (sometimes electronic) medical devices, wireless, Bluetooth, workflow engine, best-practices and clinical decision-making engines, and electronic screening forms).

6.37.6 Goals and Outcomes (Specific to a Domain OR UNIVERSAL)

6.37.6.1 Goals

- Students' health is maximized via a robust blend of student health systems and student information systems. Nurses, academic professionals, and other stakeholders are provided with every means of accomplishing their shared mission.

6.37.6.2 Outcomes

6.37.6.2.1 Successes:

- Using health as a screening agent, students who are at risk for behavioral or academic problems are identified faster than via traditional academic means.
- Pediatrician can see school nurse encounter information in order to make a more accurate diagnosis and treatment plan; the school nurse can see the pediatrician's notes in order to ascertain whether the student has a condition about which the pediatrician is unaware.

6.37.6.2.2 Failures:

- Elementary students are exposed to heavy amounts of lead in the water and in the surrounding environment. Students' behavior is adversely impacted resulting in severe misbehavior and expulsion, long-term neurological damage, and negative academic outcomes. Lack of screening or early detection of environmental causes of adverse behaviors.