A Look At The Benefits Of Integrating Oral Health Into
Connecticut's Health Information Exchange

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INTRODUCTION

Integrating oral health into larger health information systems is critical to the goal of a better oral health care system for all. One of the most important things that a State Health Information Exchange does is make it easier for healthcare professionals to exchange vital medical data and easily share it with patients. Currently, there is often a lack of oral health data being represented in Health Exchange Systems. To close this gap and improve overall care, this report advocates for the Connecticut Health Information Exchange (CONNIE) framework's oral health data to be prioritized during implementation.

A person's oral health is essential to their overall health since it affects not just how well their mouth functions but also their overall health. However, oral health data is usually isolated, making it difficult for both patients and health providers to access and include it in comprehensive medical records. Connecticut can develop a more comprehensive picture of a patient's health profile by expanding the CONNIE database to include oral health data. This will help medical practitioners make better decisions and deliver personalized care.

HEALTH INFORMATION EXCHANGE

Electronic health information exchange (HIE) is a technology that enhances the efficiency, effectiveness, safety, and affordability of patient care by enabling secure electronic sharing of critical medical information between medical practices and other health disciplinarians. It may also allow patients to access all their medical information including medical, oral, and behavior health on a secure platform at any time. (1)

HIE can significantly increase the accuracy of patient records, allowing physicians to make more informed decisions at the point of care, reduce readmissions, prevent pharmaceutical mistakes, enhance diagnosis, and reduce the frequency of duplicate testing. There are three primary approaches for exchanging health information: directed exchange, query-based exchange, and consumer-mediated exchange. (1)

HIE improves patient care quality and safety, encourages consumer awareness, increases efficiency by removing unnecessary paperwork, provides clinical decision support tools, and reduces costs associated with healthcare. It also promotes effective care by enabling automated prescriptions and appointment reminders and has the potential to lower costs and enhance health outcomes by reducing time for patients and healthcare professionals. (1)

CONNIE – CONNECTICUT HEALTH INFORMATION EXCHANGE

In 2019, the Connecticut Health Information Exchange (Connie) was established by Connecticut law to facilitate the sharing of patient health data, improve care coordination, reduce costs, support public health reporting, and provide patients with access to their health information.

State law charged the Connecticut Office of Health Strategy, in collaboration with the Department of Social Services, to establish and oversee the implementation of CONNIE by the Health IT Advisory Council. The nonprofit organization Health Information Alliance managed the services, with key members including the University of Connecticut Analytics and Information Management Solutions, the University of Connecticut Health Center, and the Health Information Technology Officer, serving as a board chair. (2) (3)

01 Connie serves as a technical bridge for secure health data sharing among healthcare professionals, prioritizing data from labs and healthcare organizations.

02 Patient consent, except for certain cases, is crucial for privacy and HIPAA compliance.

03 Connie engages patients through virtual listening sessions facilitated by the Connecticut Office of Health Strategy, ensuring compliance with consent regulations, and benefiting healthcare in the state.

04 Overall, Connie plays a critical role in facilitating the exchange of patient data while adhering to privacy and security regulations, ultimately benefiting healthcare professionals and patients in Connecticut.

CASE STUDY: HEALTH INFORMATION EXCHANGE USE DURING DENTAL VISITS

The study led by Heather L. Taylor, Joshua R. Vest, and Nate C. Apathy from Indiana University investigates the use of query-based Health Information Exchange (HIE) in dental visits at two community health centers in Rochester, New York.

It underscores the significance of electronic data exchange between dental and medical professionals for holistic patient care. Findings indicate a low HIE utilization rate (0.17%) during dental visits, influenced by factors like directed HIE availability and patient characteristics. The study recommends tailored interfaces and careful process design to boost HIE engagement in dental settings and calls for further research on HIE usage across diverse patient types and environments, including private dentistry practices, along with exploring perceived benefits for dental clinicians. (4)

HIE USAGE BY OTHER STATES

Examples of other states implementing Health Information Exchanges (HIE) for oral health:

- Colorado's Contexture and the Colorado Dental Association, which offer real-time online patient medical summaries to dental professionals. (5)

- North Carolina's HealthConnex used by the North Carolina Dental Society allows physicians to confidentially analyze and exchange patient health information, with records for over 8 million residents. (6)

- CRISP, a nonprofit regional health information exchange, facilitates electronic data exchange for population health and public health reporting across Maryland and five other states through shared services partnerships. In Maryland, CRISP enhances technical skills for effective information sharing. (7)

- The Oregon Health Authority and HIO Oversight Council have entrusted the HIE Workgroup to improve HIE throughout Oregon. (10)

- OneHealthPort uses a hub-and-spoke model, connecting providers individually to facilitate data flow to the Washington State Department of Health systems. With over 300 contracted organizations, approximately 120 are actively submitting data from over 2,000 facilities. (8)

- Texas Patient Unified Lookup System for Emergencies (PULSE) and HIE Connectivity Project aim to boost HIE adoption among Medicaid providers using strategies like Emergency Department Encounter Notifications and improved infrastructure. (9)

CONNIE AND ORAL HEALTH IN CONNECTICUT

Within Connecticut, as of 10th, October 2023, CONNIE's vision of dental services to dentists include challenge lists, prescription management, and appointment updates. An allergy list is now being created, and a dental scan exchanging facility is currently under consideration. PCPs will be able to use the new eReferral service to send patients to dentists in instances where they do not currently have a dental provider on their care team. 424 dentists have signed the Commitment to Connect form, and 125 dentists completed the necessary legal documentation. However, dentists are not transmitting or receiving data.

CONNIE, the Health Information Exchange for Oral Health in Connecticut, enhances patient satisfaction and healthcare outcomes by facilitating the exchange of vital oral health information among healthcare professionals. It provides quick access to information, reducing treatment times and improving results while avoiding redundant tests and unnecessary treatments. With strict security measures and HIPAA compliance, only authorized experts can access patient data. Beyond improving population health and reducing administrative procedures, CONNIE data supports research and public health activities.

CONNIE's Patient and Family Advisory Committee (PFAC) invites interested parties to join, offering the opportunity to influence healthcare direction and improve patient services, especially in terms of making medical data more easily accessible. PFAC members can receive $500 annually for attending meetings, and accommodation is provided for participants with specific needs.

RECOMMENDATIONS TO SUPPORT CONNIE

By facilitating information exchange between various healthcare systems and assuring patient-centered, cost-effective, and efficient services, HIE initiatives should enhance care coordination. Enhancing providers' timely access to relevant data at the point of care while addressing social service demands and fragmented delivery of healthcare must be the aim.

Health systems and other data contributors may choose not to participate in HIE solutions because of healthcare leaders' and providers' inadequate awareness of Health Information Exchange (HIE) and its roles within the healthcare system. Leaders and providers must be familiar with the benefits of HIE, to encourage involvement.

Connecticut should use its laws to boost participation in Health Information Exchange (HIE). Priority should be given to uniform data quality procedures in line with federal guidelines for all HIE solutions. It's important to integrate patient portals, personal health records, and encourage patients to share data through healthcare providers and plans.

CONCLUSION

An important innovation in technology that improves patient care is health information exchange (HIE), which makes safe electronic sharing of medical records possible. For the benefit of patients and medical professionals, Connecticut's Health Information Exchange (CONNIE) has effectively closed information gaps between dental and medical records. The successful implementation of CONNIE for oral health is advised to focus on standardizing data quality methods and increasing awareness of the advantages of HIE.

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