

Informatics in Nursing and Healthcare

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**Introduction**

The conditions where people are born, grow, live, work and age involving the complex, integrated economic system and social structure responsible for health inequalities are social determinants of health (SDOH). It is organized by Healthy People 2020 around five key domains including education, health and health care, economic stability, social and community context, and neighborhood and built environment. (Chen et al., 2020) The purpose of this paper is to explain electronic health records as a tool to assess social determinants of health, describe the condition of SDOH, and the positive changes that can be created by the integration of SDOH into EHR.

**SDOH and EHR**

The research was conducted from 13 recent articles between 2017 and 2020 to see if the integration of SDOH in EHR can benefit clinicians in improving risk assessment, prediction, and intervention that focuses on SDOH improving the overall health of patients. All studies except one showed that integration of individual-level SDOH data reported significant improvement in performance whereas one study showed incorporating SDOH in EHR had minimum contribution to predictive performances that were divided into repeat ED visits, hospitalization, and use of health services. (Chen et al., 2020)

**SODH and Nursing Interventions**

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| **Form field** | **SDOH condition** | **Nursing interventions** |
| Economic stability | Medical bills, Income, expenses, and Employment | Nurses can help with applications for public benefits such as food stamps, they can arrange medication delivery in partnership with local pharmacies, provide referrals to social services and housing agencies, and coordinate care among providers. (Moorley, 2021) |
| Neighborhood and  Physical Environment | Housing, safety, Transportation, and Nearby surroundings | Nurses can consult with case managers and social workers about their home safety, transportation and patient need for home health assistance before they are discharged so that everything is arranged before the patient is discharged. Educating patient on how to manage their condition at home and how to voice their safety concern can be done by Nurses. |
| Education access and Quality | Childhood Education, Literacy, Language , Higher education | Using basic language depending on the patient's literacy level. Using printed information while educating patients. If the patient is unable to understand, then nurses can perform a demonstration and ask the patient to return back the demonstration or repeat the information can be done by Nurses. Along with the patient family members and caregivers at home can be educated. |
| Health care access and Quality | Access to healthcare, health Coverage, providers availability | Lack of insurance is one of the reasons for the inability to access health care therefore nurses can bridge this gap. Nurses work in a variety of settings including retail clinics, telehealth, home health, and federally qualified health centers where they can facilitate health service access for individual and families. |
| Social and community context | Community engagement | collaboration and establishing Partnerships with the community and identify patient needs and support them.  Participation in committees at state and national level so that policies, standards for use and sharing of SODH data can be advanced.  . . |

Combining SDOH with Electronic health records (EHR) can bring the opportunity to increase the quality, scope as well as timeliness of available data so that planning and interventions targeting SDOH can be done. SDOH accounts for 80% to 90% of modifiable health factors and medical care accounts for only 10–20% of health factors. (Han et al., 2022) Therefore including SDOH in the health care system as well as outside the health care system can bridge the gap in care delivery.

Adequate real-time SDOH information captured in EHR can assist clinical personnel grip the data to deliver quality care as it helps them to make targeted medical decisions, intervene, and offer solutions such as food vouchers, housing, meal on wheels, and other resources to meet patient needs. Clinical personnel can identify micro as well as macro trends in their patient due to this integration. For instance, stratification of risk based on SDOH can assist clinicians in proactively addressing a group of patients that can benefit from a specific preventative intervention for managing chronic conditions such as asthma, mental health issues, diabetes, and opioid addictions. Healthcare utilization can also be influenced by SODH as it improves predictions of 30-day hospital readmissions.

According to Blue Eagle Consulting, “Social Determinants of Health (SDOH) are where health begins” Therefore merging SDOH into EHR can help achieve the goals of improving health, reducing cost, and pushing forward health equity and in order to meet these goals, health systems need an strategy that can leverage risk stratification along with connecting patients with appropriate community services.

**Conclusion:**

Despite much research that demonstrates SDOH contributes to 55% of health outcomes social determinants of health are still undetected and unaddressed (Rogers et al., 2022) Therefore integration of SODH into EHR is essential to make it more noticeable and achieve patient-centered goals.

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