

From The National Perinatal Information Center: Do You Know Your Community? NICU Care within the Lens of Social Determinants of Health

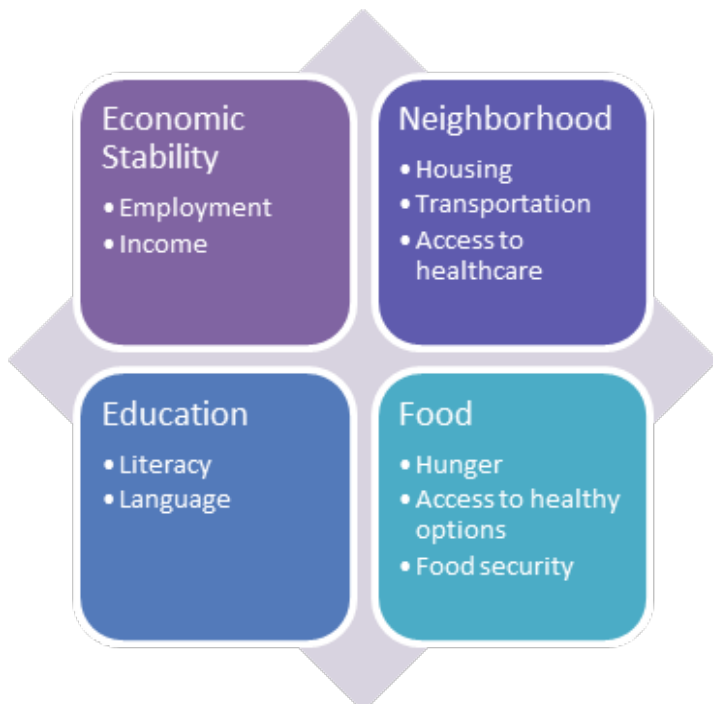
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The National Perinatal Information Center (NPIC) is driven by data, collaboration and research to strengthen, connect and empower our shared purpose of improving patient care.

For over 30 years, NPIC has worked with hospitals, public and private entities, patient safety organizations, insurers and researchers to collect and interpret the data that drives better outcomes for mothers and newborns.



Social Determinants of Health (SDOH) are the conditions in which individuals are born into, live, grow and work. These include areas such as education, economic stability, neighborhood, safety, and food availability. (1) Understanding these facets of care is critical in any care setting, but particularly the NICU, which provides a unique lens into those social determinants which can yield significant hardship for parental bonding and involvement. Examples of Social Determinants that can impact NICU families include:



Over the past several years, Social Determinants of Health (SDOH) have been of keen interest to clinicians and researchers alike, endeavoring to discern opportunities to positively influence care in clinical settings such as the NICU as well as in communities in which families and newborns live. However, understanding the community influences on prematurity and maternal health cannot be overstated as these forces are inextricably linked. Recognition of community and social influencers on care is a starting point, but only if those influencers are identified during care. Of late, there has been tremendous emphasis on Social Determinants of Health, particularly from a documentation standpoint. In ICD-10, there is a category known as Z-Codes, specifically Z-Codes 55-65, Persons with Potential Health Hazards related to Socioeconomic and Psychosocial Circumstances. It is important to note that the American Hospital Association in 2019 clarified that all coding professionals could use documentation from providers and clinicians (nurses, case managers, discharge planners, etc.) to facilitate documentation of social determinants. (2) Several examples of these SDOH include:

- Z55: Problems related to education and literacy
- Z56: Problems related to employment and unemployment
- Z55.0: Illiteracy and low level literacy
- Z59.0: Homelessness
- Z59.1: Inadequate housing
- Z59.4: Lack of adequate food and safe drinking water
- Z59.6 Low income
- Z62.810: Personal history of physical and sexual abuse in childhood
- A full listing of the current Z-Codes can be found at <https://www.icd10data.com/ICD10CM/Codes/Z00-Z99/Z55-Z65>

While the Social Determinants of Health may not be directly related to the newborn, the mother's social determinants may create barriers to her ability to bond and be present for her baby in the NICU. For example, homelessness is a tremendous challenge that impacts new mothers across the nation. Compared to women who were not homeless, homeless women were 2.9 times more likely to have a preterm delivery and 6.9 times more likely to have a baby with low birth weight even after applying other risk adjustment factors. (3) Two studies exploring newborns and homelessness (4-5) revealed increased

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incidences of respiratory infection, hospitalization and overall higher healthcare costs after discharge to shelters. Adequate screening during pregnancy and the postpartum period can ensure social needs are identified and addressed prior to delivery and during hospitalization. Long hospitalizations in the NICU may require frequent social assessments as situations may change over time, particularly for mothers and families at risk. More importantly, documentation of these determinants can provide critical information that can drive population analyses to inform health policy.

The National Perinatal Information Center (NPIC) has been reviewing aggregated Social Determinants data from the NPIC Perinatal Center Database and has initiated conversations with member hospitals on the importance of Social Determinants documentation to better identify and respond to the community needs of mothers and newborns. This discussion will use the aggregated data from July 1, 2018 – June 30, 2019. Review and verification of coded data is essential and should be standard practice to ensure accurate reporting of diagnoses and conditions.

During this time, there were 378,857 MDC-14 discharges, and there are several observations that deserve mention:

1. Z59, Problems related to housing and economic circumstances: 586 reports, including 507 reports of homelessness.
2. Z62.810: Personal history of physical and sexual abuse during childhood: 397 patients reported abuse in their history.
3. A total of 1,815 Social Determinants Z Codes were abstracted from patient charts, including events such as unemployment, deployment of family member, or problems with a spouse.
4. It is also important to note that there were situations in which a single patient reported more than one (1) health-related social circumstance during their care.

Within the NICU, these and other identified social determinants could have tremendous impact on the engagement of parents and discharge plan for a newborn, particularly a newborn discharged with complex healthcare needs. There continues to be conversation surrounding frequency and prevalence of Social Determinants. Even if 10% of the general population met at least one (1) health-related social circumstance, this would yield approximately 37,000 events in this particular cohort. If this is true, then the SDOH challenges from this particular population are grossly underrepresented and under reported. Collaboration among caregivers to complete social assessments are critical, particularly in situations that include NICU care. Transportation, parking, meals and childcare can place a heavy burden on families who find themselves the parent(s) of a newborn with complex health challenges.

So, back to the question, “Do you know your community?” Here are several opportunities to better inform care and policy that can drive community resources closer to home:

1. Utilize Z-Codes in documentation. While reimbursement does not yet exist broadly for SDOH, population health studies and capturing data to support local and national decisions is critical.
2. Documentation of Z-Codes is a team sport. Provide awareness and education for Z Codes, and create policies that support the utilization of both provider and clinician reports of social determinant challenges included in documentation.
3. Community resource availability. Greater understanding of Z-codes will also generate discussion of what types of resources exist—and don't exist—within a community. Population data can support the necessity for new and innovative programs to meet the needs of families where they are, particularly in rural and access-challenged areas.

However, there are important considerations for initiating or broadening the screening for Social Determinants. Garg and colleagues (6) caution that screening in isolation and without a plan for referral and appropriate treatment is ineffective and “arguably unethical.” Screening for Social Determinants should always include the patient and family in the process of referral and to engage in shared decision-making when offering referral options. In addition, screening must include all patients and not exclude populations based upon assumptions. Situations that negatively impact the health of a mother carry tremendous risk to negatively impact the health of a newborn, particularly a sick newborn.

Achieving health equity, access to care and guiding teams to fulfilling their mission of service to families and communities will require a robust approach and a community of caring—both inside and outside the walls of the NICU.

Resources

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The author has no conflicts of interests to disclose.

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