



Connecting Social Care Data to Z Codes Research Brief #1: Overview of Data

Holly Howat, Ph.D., Beacon Community Connections
Nicole Zirlott, M.S., CRS, SCA, Beacon Community Connections
Cian Robinson, M.S., Robinson Ventures

Understanding social drivers of health, Z codes, and the role of social care is key

Social drivers of health (SDOH) refer to the conditions that shape people's lives, such as where they are born, grow, live, work, and age, and are influenced by the distribution of power, money, and resources. Research shows that SDOH affects 50-80% of an individual's health, so healthcare practitioners and researchers are increasingly interested in understanding these factors. To address health inequities, healthcare providers are implementing new strategies and technologies, including using Z codes.

Z Codes were introduced with the International Classification of Disease, Tenth Revision, to identify socioeconomic and psychosocial circumstances and their impact on healthcare.

However, a Centers for Medicare and Medicaid study reported that less than 2% of 2019



Medicare claims included at least one Z code. This may change in 2023, as the Centers for Medicare and Medicaid require healthcare providers to track and report on social determinants of health for Medicare patients with certain conditions. The Joint Commission on Accreditation of Healthcare Organizations and the Commission on Accreditation of Rehabilitation Facilities have also established new requirements for healthcare

organizations to assess patients' social circumstances. By tracking SDOH, healthcare providers can address the root causes of health disparities and work towards a more equitable healthcare system.



Social care is a new term in American healthcare that refers to supports and services provided to individuals or families to reduce the negative impact of social drivers of health. It differs from social work, which is a profession that promotes social change, cohesion, and the well-being of individuals. Social care focuses on linking people to resources that resolve a specific, non-medical need and helps them access community resources for better health and wellness. For instance, a community health worker who connects a family to a local food bank and assists in applying for Supplemental Nutrition Assistance Program to resolve food insecurity provides social care.

Beacon Community Connections is an innovative leader in providing social care

Beacon Community Connections is a social care organization that addresses social determinants of health needs. Since 2018, Beacon has partnered with healthcare systems and organizations in Louisiana to identify social care needs and connect individuals and families to community resources. So far, Beacon has served over 7,000 individuals and families, with a 91% success rate in resolving at least one social care need. Beacon's Navigation service, which lasts for about 60 days and is conducted telephonically via phone, email, or text, has effectively reduced 30-day hospital readmission rates by 60% at participating hospitals and reduced 30-day Emergency Department revisits by up to 70%, depending on the facility. Beacon's Navigators, certified as community resource specialists and community health workers, work alongside standard healthcare services to provide support and assistance to individuals and families in need.

Beacon began collecting social care needs into its customized Salesforce case management system in 2019 for its navigation services. In 2022, Beacon used crosswalk mapping analysis to link its 100 social care need categories to 79 Z codes for social drivers of health. Demographic data was collected on over 95% of clients. An analysis was completed on the 5,513 needs of clients with active cases between 2020 and 2022. Beacon is working to comply with CMS reporting requirements for social determinants of health and other accrediting bodies' standards and regulations on collecting, reporting, and using Z codes.



BEACON

COMMUNITY CONNECTIONS

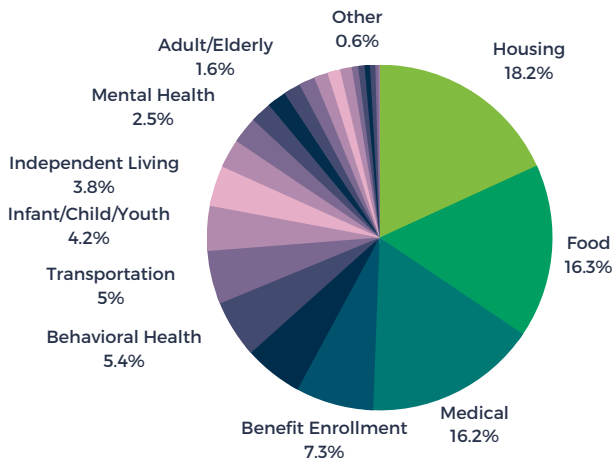
2022 NAVIGATION DATA

ANNUAL NEEDS DATA

Quarterly Needs **Identified**: 3,309

Quarterly Needs **Resolved**: 2,918

Quarterly Needs **Unmet**: 342



TOP FIVE NEEDS

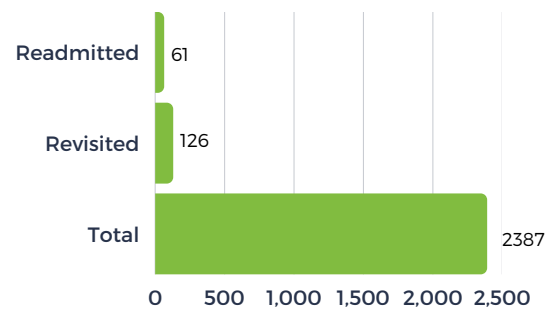
1. Housing: 602 cases (18.2%)
2. Food: 539 cases (16.3%)
3. Medical: 537 cases (16.2%)
4. Benefit Enrollment: 242 cases (7.3%)
5. Financial Assistance: 181 cases (5.5%)

ANNUAL RECONTACTS DATA

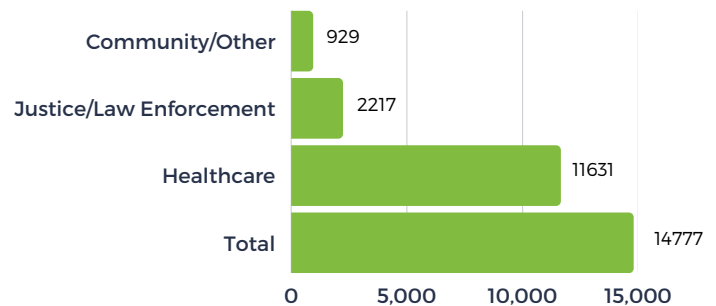
Missing data due to loss of EPIC access

61 cases **Readmitted** within 30 days
(3% of cases)

126 cases **Revisited** within 30 days
(5% of cases)



ANNUAL INTERACTION DATA



2387

of
Referrals

2433

of
Active Cases

93%

Cases with
1+ Needs Met



Social care needs related to housing and economic circumstances are pervasive

Beacon Community Connections' crosswalk mapping analysis revealed that social care needs related to housing and economic circumstances were the most pressing among its clients. Specifically, the Z59 code category, which covers issues related to housing and economic circumstances, accounted for the vast majority of Beacon's identified social care needs. These needs were wide-ranging, including everything from homelessness and unstable housing to clothing needs, durable medical equipment, and childcare supplies like diapers and formula. Among these needs, Beacon's clients' highest needs were linked to Z Codes for low income, insufficient social insurance, and welfare support, and lack of adequate food. For instance, 30% of Beacon's clients have a Z Code for low income because they live below 200% of the Federal Poverty Line. The 21% of clients with a Z59.7 code are either eligible but not enrolled in public assistance programs like SNAP, or the funds received from these programs are insufficient to meet daily needs. Meanwhile, the code Z59.4 identifies the 10% of Beacon clients with food insecurity and/or lack of access to drinking water. These findings have important implications for healthcare administrators addressing social determinants of health and improving patient outcomes.

Figure: Crosswalk of Z Codes and Social Care Need Categories

Beacon Identified Social Need	Number	Z Code Category
Education and Vocational Training	18	Z55: Education and Literacy
Unemployment	208	Z56: Employment
None	0	Z57: Occupational Exposure Risks
None	0	Z58: Physical Environment
Housing, Basic Supplies, Transportation, Benefit Assistance, Medical Needs, Child Supply Needs, and other financial assistance	4,136	Z59: Housing and Economic Circumstances
Community Connection and Social Isolation	58	Z60: Social Environment
None	0	Z62: Upbring
Family Advocacy	6	Z63: Primary Support Group/Family
None	0	Z64: Psychosocial Circumstances
Disaster, Legal, and Reentry	93	Z65: Other Psychosocial Circumstances

Figure: All Z code categories connected to social care need categories

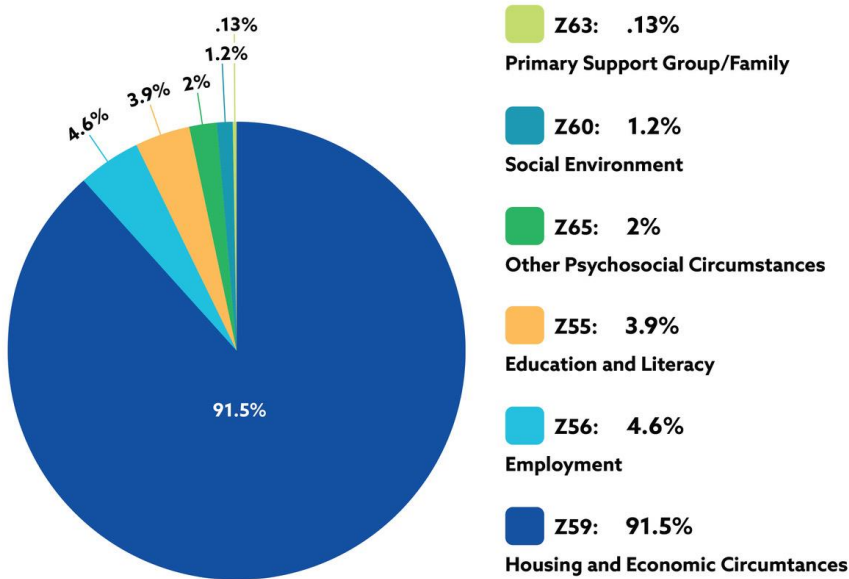
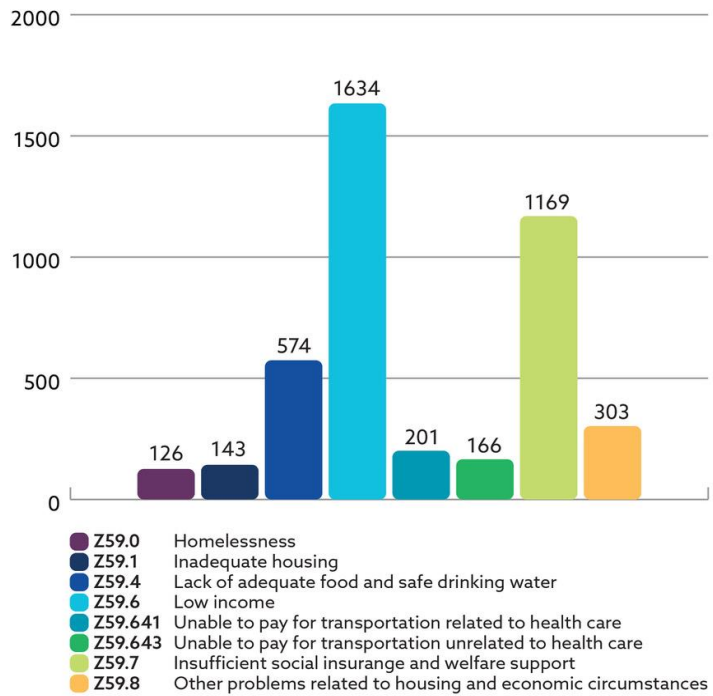


Figure: Z59 subcodes and their frequency





Z Codes are a critical tool in building healthcare and social care systems for positive patient outcomes

Current healthcare applications of Z codes include identifying patients at risk for certain health outcomes due to their social circumstances. For example, a patient who has experienced chronic food insecurity may be at risk for chronic health conditions such as diabetes and hypertension. By using Z codes to identify these patients, healthcare providers can work with community-based organizations like Beacon to address their specific needs and provide appropriate interventions. Z codes can also be used to track and monitor SDOH-related health outcomes. By including information about a patient’s social circumstances in their health records, healthcare providers can track the impact of social care on their health outcomes over time. This information can be used to identify successful interventions in reducing health disparities

Beacon continues refining its identification and classification of social care needs in 2023 based on improved Z Code collection, reporting, and user guidance. For example, Beacon is completing an additional crosswalk between Z Codes and the AHC Health-Related Social Needs Screening Tool. Beacon is also working with its healthcare system partners to provide specific Z code analysis to them to improve patient care and health outcomes.

As healthcare professionals and administrators work with each other and community-based organizations to leverage Z codes to address social care needs, they can ensure that patients receive the care and support they need to live healthy, fulfilling lives. With continued collaboration and innovation, we can build a healthcare system that prioritizes social care and works towards a future where everyone has the opportunity to thrive.