Connecting Social Care Data to Z Codes: Research Brief #4
Analyses by Gender and Race

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Understanding Z codes and the role of social care is key.
Z Codes were introduced with the International Classification of Disease, Tenth Revision, to identify socioeconomic and psychosocial circumstances and their impact on healthcare. However, recent research shows limited use of Z codes by health systems and healthcare providers. Healthcare providers can address the root causes of health disparities and work towards a more equitable healthcare system by using Z Codes to track social drivers of health and health-related social needs.

Z Code Categories

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. Social care is limited to 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 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 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 used crosswalk mapping analysis to link its social care need categories to 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. The figures below illustrate an overview of the results.
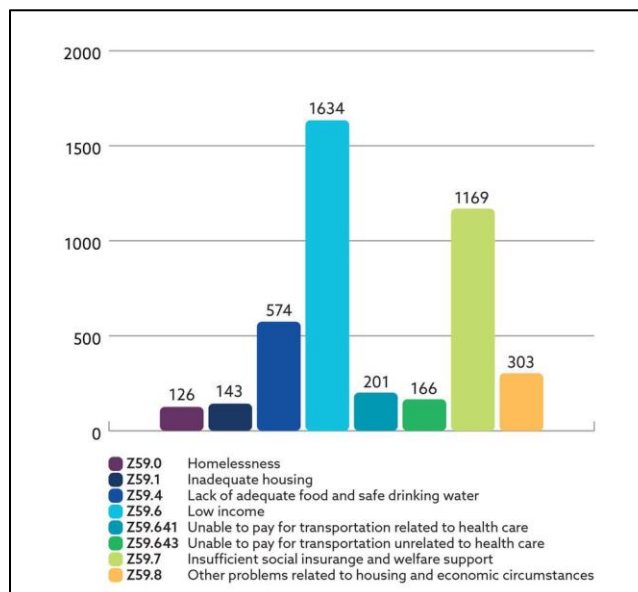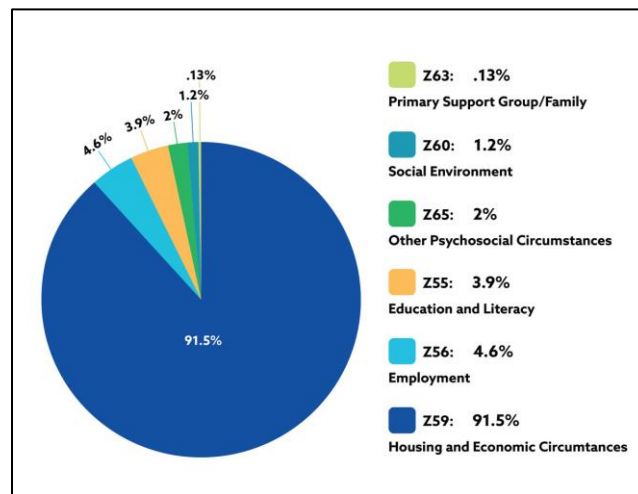
An analysis by gender revealed Z code similarities and differences among patients. When looking at Z codes according to gender, there was little significant difference between needs identified for males and females. The top three categories remained low income (Z59.6), problems related to housing and economic circumstance (Z59.7), and lack of adequate food (Z59.4) for both males and females. More males than females had needs related to employment (Z56), and more females indicated needs for transportation (medical and non-medical) (Z59.641 and Z59.643). Due to the small number of non-binary individuals in this sample (less than 10), an analysis cannot be completed. In this sample, 55% (N=2,360) of clients were female, and 45% (N=1,969) were male. See figures below for more details.
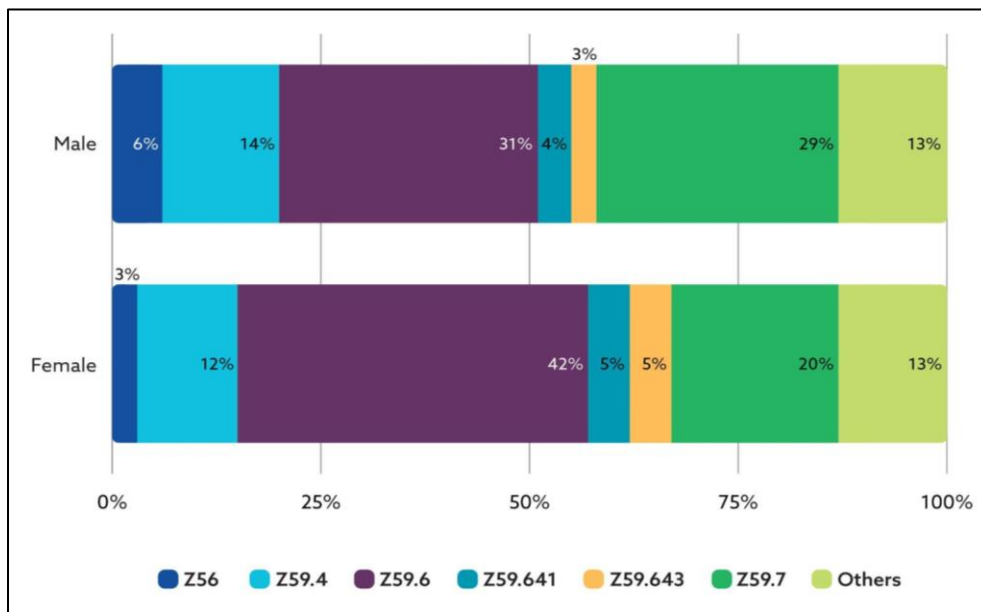

Table of Top Z Codes by Gender

Z Code	Male	Female
Z56	122	81
Z59.0	62	56
Z59.1	89	53
Z59.4	277	282
Z59.6	609	999
Z59.641	82	111
Z59.643	56	108
Z59.7	576	483
Z59.8	20	66
Z59.89	12	8
Z60	9	44
Z65.3	35	44

A limited analysis by race revealed Z code similarities and differences among patients. Until 2022, Beacon did not record the race and ethnicity of its clients in our electronic social care record. Therefore, only 1,012 records of race and ethnicity were captured. Due to small amounts (less than 50) of clients, analyses were not reported for Asian, Hispanic/Latino, and clients with multi-races. 518 (51%) clients stated Black as their race, and 436 (43%) stated White as their race. All other races/ethnicities had a combined total of 58 clients (6%).

Table of Top Z Codes by Race

Z Codes	Black	White
Z56	41	28
Z59	4	0
Z59.0	8	14
Z59.1	22	16
Z59.4	67	64
Z59.6	198	139
Z59.641	19	13
Z59.643	13	16
Z59.7	121	130
Z59.8	16	6
Z65.3	7	7

A continued pattern of low income (Z59.6), problems related to housing and economic circumstance (Z59.7), and lack of adequate food (Z59.4) being the top Z codes continued with this analysis by race and ethnicity. Subtle differences emerged with some Z Codes. Black clients had slightly higher needs related to employment (Z56) and other needs related to housing or economic circumstances (Z59.8). White clients had slightly higher needs related to homelessness (Z59.0) or for nonmedical transportation (Z59.643). Further, White clients are more likely than Black clients to have insufficient social insurance or welfare support needs identified. See below for more details.

Z Codes are a critical tool in building healthcare and social care systems for positive patient outcomes for all demographics.
While analysis by gender, race/ethnicity, and other demographic categories can be illuminating, the focus should remain at an individual level. Caution must be exercised to avoid assigning Z codes to patients because of demographic characteristics. Beacon encourages healthcare professionals to use this information to talk more openly with patients about their potential health-related social needs.
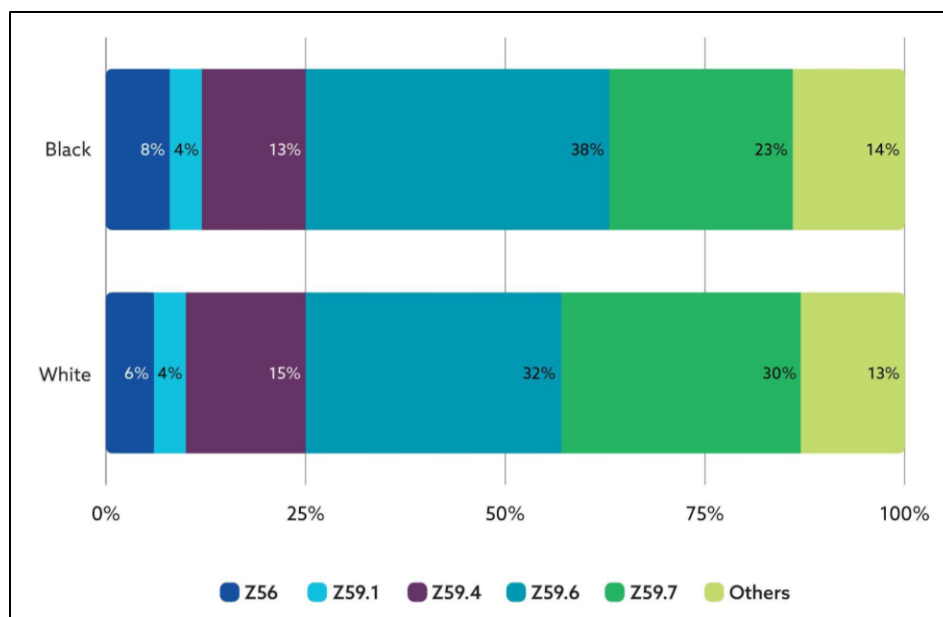
Z Codes can also be used as a tool to identify health inequities as well as monitor progress toward health equity. The COVID pandemic exposed many long-standing health inequities and generated a call for change. Healthcare providers who assign Z codes can use that data to look for health inequities within their practice, clinic, and healthcare facility. Z code analysis by race and gender can also be a tool to measure the impact of health equity reforms on target patient populations.

Further, healthcare providers can work with community-based organizations like Beacon to address specific patient 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.

As healthcare professionals and administrators increase their identification and response to health-related social needs through the use of Z codes, it will be imperative for health organizations to collaborate with community-based organizations to address social care needs. Collaboration can ensure that patients receive the care and support they need to live healthy, fulfilling lives. Through strong patient-focused partnerships, we can build a healthcare system that prioritizes social care and works towards a future where everyone can thrive.