Connecting Social Care Data to Z Codes:
Research Brief #2 - Analysis by Insurance Type

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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, a Centers for Medicare and Medicaid study reported that less than 2% of 2019 Medicare claims included at least one Z code. Healthcare providers can address the root causes of health disparities and work towards a more equitable healthcare system through the use of Z Codes to track social drivers of health and health-related social needs.

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 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.
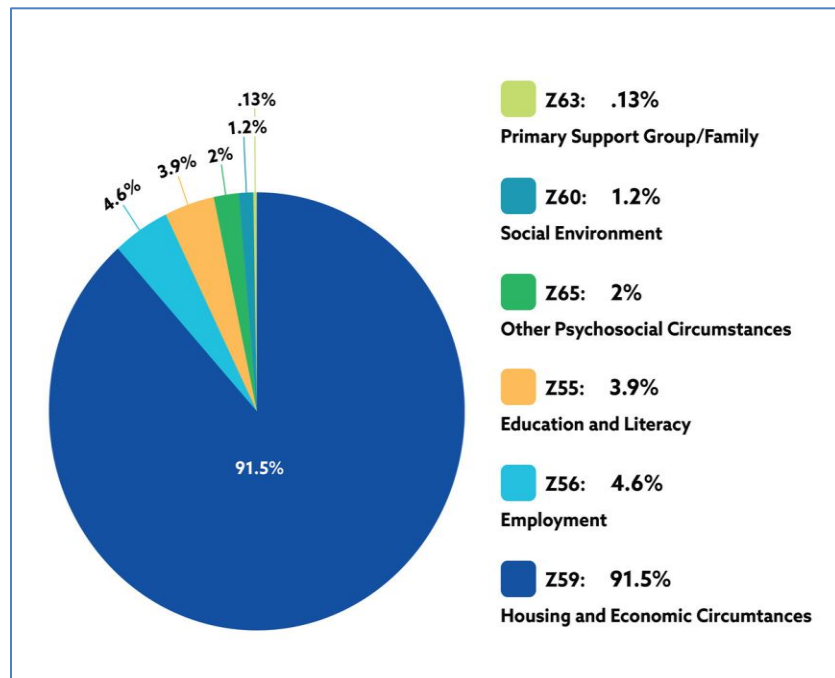

Z code similarities and differences were noted between patients based on the type of insurance.
Beacon's crosswalk mapping analysis included an analysis by insurance type category. Four categories are reported here:
- Medicaid (67% of Beacon clients)
- Medicare (24% of Beacon clients)
- Private Insurance (4% of Beacon clients)

- Uninsured (4% of Beacon clients)

Less than 1% were enrolled in insurance through the Veterans Administration, so results are not reported for this subgroup.
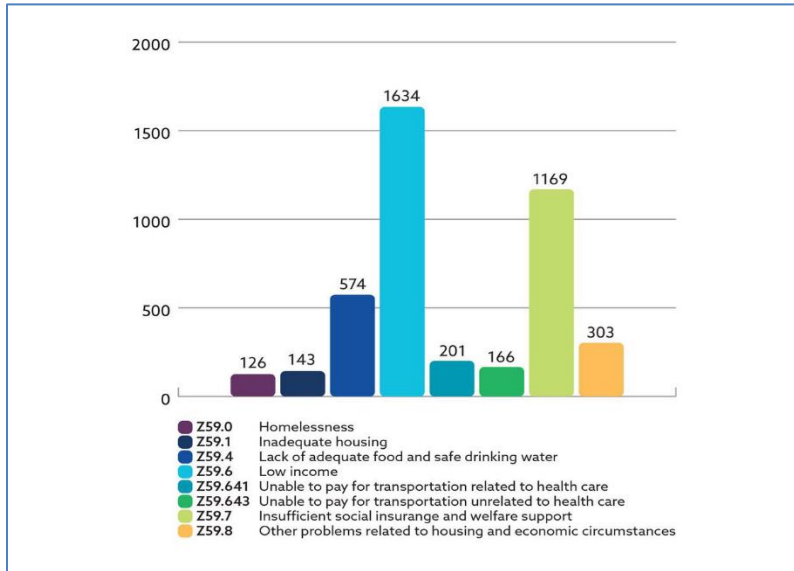
The most common Z codes for all insurance types continued to be low income (Z59.6), inadequate social insurance or welfare support (Z59.7), and food insecurity (Z59.4). Each insurance type had unique features, which are illustrated in the figures below.

Medicaid: Clients enrolled in Medicaid tied for the highest rates of employment needs (Z56) at 5%. Despite enrollment in Medicaid, almost 1 in 4 (23%) of this subgroup had additional Z59.7 code needs (insufficient social insurance or welfare support), which could be SNAP (food assistance) or other public assistance programs.

Medicare: Almost 1 in 5 (18%) Medicare clients have food insecurity (Z59.4) which was the highest for any insurance type. 11% of Medicare clients also had transportation needs (Z59.641 and Z59.643). Food insecurity, coupled with limited access to transportation, makes these senior citizens more vulnerable to malnutrition and food-related medical conditions.

Private: 45% of Beacon clients with private insurance had identified needs of low income. Typically, this is considered less than 200% above the poverty line. This high percentage correlates with Louisiana's ALICE report (cite), which indicates that 51% of Louisiana citizens struggle to make ends meet and are considered the "working poor." It is also of note that the percentage of private insurance with a Z59.6 code is higher than the percentage of Medicaid clients with an identified Z59.6 code.

Uninsured: 41% of those without health insurance had Z59.7 code (Insufficient social insurance and welfare support). This may relate to a need for Medicaid or Medicare enrollment. Clients enrolled who were uninsured tied with Medicaid clients for the highest rates of employment needs (Z56) at 5% of clients.

Table of Top Z Codes by Insurance Type

Z Code	Medicaid	Medicare	Private	Uninsured
Z56	137	6	0	8
Z59.0	77	15	2	5
Z59.1	50	65	10	2
Z59.4	296	154	18	21
Z59.6	992	297	69	45
Z59.641	83	95	5	1
Z59.643	62	31	4	1
Z59.7	564	143	35	67
Z59.8	55	16	3	3
Z59.89	14	1	0	0
Z60	19	16	2	1
Z65.3	45	9	4	5

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

While analysis by insurance type or other categories can be illuminating, the focus should remain at an individual level. Caution must be exercised to avoid assigning Z codes to certain insurance types because of the insurance type. Beacon hopes that this information may be used to talk more openly with patients about their potential health-related social needs. For example, ask all seniors about their ability to procure food for themselves since a high number of seniors may experience food insecurity (Z59.4).
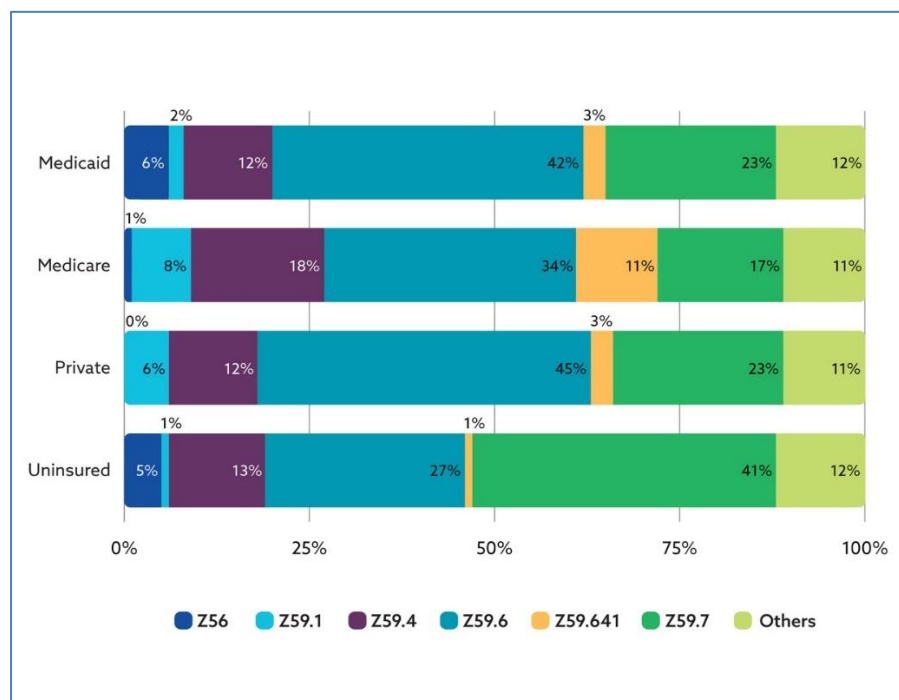
Current healthcare applications of Z codes include identifying patients at risk for certain health outcomes due to their social circumstances. For example, a patient who has experienced chronic food insecurity may be at risk for chronic health conditions such as diabetes and hypertension. By using Z 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.

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.