

MIHP Healthy Moms, Healthy Babies Pilot: Z Code Analysis

YOUTH POLICY LAB

ROBIN JACOB & ZAIYI JIANG

MIHP Healthy Moms, Healthy Babies Pilot: Z Code Analysis

In conjunction with the Maternal Infant Health Program (MIHP) Healthy Moms, Healthy Babies (HMHB) pilot program evaluation report, the University of Michigan Youth Policy Lab (YPL) has prepared this brief to share findings of an analysis of Z codes associated with Care Coordination (CC) claims for HMHB pilot services provided between June 1, 2021 and December 31, 2023.

Background

The International Classification of Diseases Clinical Modification (ICD-10-CM) official guidelines define Z codes (Z00-Z99) as “factors influencing health status and contact with health services.”¹ Over the years, these codes have been utilized in a medical setting to provide additional information regarding a patient’s encounter with a health provider.² To better identify a wide range of social determinants affecting patient health, a new subset of Z codes (Z55-Z65) was made available in 2016.³ Despite somewhat low levels of use, recent studies have shown that Z codes can help document important social, economic, and environmental needs that impact health-related outcomes.^{4 5}

As part of the Healthy Moms, Healthy Babies Initiative, MDHHS piloted an enhanced version of MIHP to explore whether offering expanded home visiting services for which provider agencies could bill would more effectively address social determinants of health (SDOH) for Michigan families with high level of needs. In the HMHB pilot, home visitors were asked to assign specific billing codes (Z codes) to each additional service they provided to document the social determinants of health that the program addressed. This brief focuses on the Z codes used in conjunction with care coordination services.

¹ Centers for Medicare and Medicaid Services & National Center for Health Statistics (2024). *ICD-10-CM Official Guidelines for Coding and Reporting FY 2024*. <https://www.cms.gov/files/document/fy-2024-icd-10-cm-coding-guidelines-updated-02/01/2024.pdf>

² Wolf, L. (2023, Aug 31). Your guide to ICD-10-CM Z Codes: Don't sleep on this important data! Wolters Kluwer. <https://www.wolterskluwer.com/en/expert-insights/guide-to-icd-10-cm-z-codes>

³ American Hospital Association. (2022, January). ICD-10-CM Coding for Social Determinants of Health. <https://www.aha.org/system/files/2018-04/value-initiative-icd-10-code-social-determinants-of-health.pdf>

⁴ Bensken, W. P., Alberti, P. M., Stange, K. C., Sajatovic, M., & Koroukian, S. M. (2022). ICD-10 Z-Code Health-Related Social Needs and Increased Healthcare Utilization. *American Journal of Preventive Medicine*, 62(4), e232–e241. <https://doi.org/10.1016/j.amepre.2021.10.004>

⁵ Adams, A., Dongarwar, D., Shay, L., Baroni, M., Williams, E., Ehieze, P., Wilson, R., Awoseyi, A., & Salihu, H. M. (2022). Social Determinants of Health and Risk of Stillbirth in the United States. *American Journal of Perinatology*. <https://doi.org/10.1055/s-0042-1756141>

Analysis

As shown in Figure 1, the Z codes most used by home visitors were codes that capture general need rather than specific SDOH. These general need codes account for almost 66% of all CC claims. The individual code used most frequently was Z91.89 “Other personal risk factors, not elsewhere identified,” followed by Z59.6 “Low income,” Z63.79 “Other stressful life events affecting family and household,” and Z60 “Problems of adjustments to life-cycle transitions,” appearing in approximately 26%, 15%, 14%, and 11% of claims respectively (Figure 2).

Figure 1. Proportion of Z Code Use

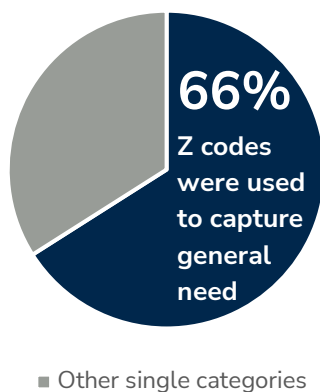
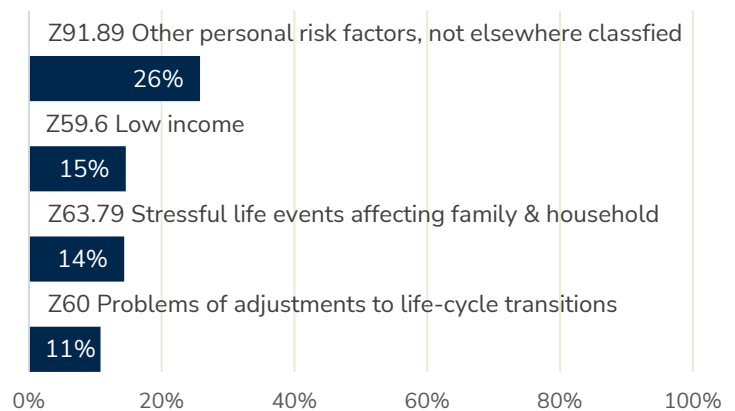


Figure 2. Top Four Most Used Z Codes



The Z codes used most frequently suggest that there are varied needs among this population which may not easily fall under a single category such as housing, transportation mental health, or domestic abuse.

Beyond the four Z code categories highlighted above none of the remaining 33 categories of Z codes used by home visitors comprises more than 5% of the total Z codes associated with CC claims. See Appendix Table 1 for more detail.

The relative popularity of the generic “catch-all” codes may indicate that the current set of Z codes does not adequately capture the specific issues faced by HMHB-eligible families. Given the current advocacy for detailed Z codes reporting for medical claims, our findings may also provide insights for future use of these codes as part of the medical billing system.

MIHP Healthy Moms, Healthy Babies Background

As part of Governor Whitmer's Healthy Moms, Healthy Babies Initiative, the MDHHS began piloting an enhanced version of MIHP in June 2021 to explore whether offering expanded home visiting services for which provider agencies could bill would more effectively address social determinants of health for Michigan families with high level of needs. Infants and pregnant individuals served by approximately half of MIHP agencies were eligible for enhanced services, including complex home visits, additional home visits, care coordination and a discharge visit. The University of Michigan Youth Policy Lab has been evaluating the impact of the pilot on outcomes for families and agencies. The HMHB pilot concluded in December 2023. Funding to expand the pilot services to full scale was included in Governor Whitmer's Fiscal Year 2024-2025 budget, which was signed into law in July 2024. Starting on October 1, 2024, Medicaid will reimburse all MIHP providers for enhanced services, including additional home visits, care coordination, and discharge visits.

Appendix

Table 1. Frequency of Z code use in HMHB Treatment Group

Diagnosis Code and Description	Frequency	Percent
Z91.89 Other specified personal risk factors, not elsewhere classified	759	26%
Z59.6 Low income	430	15%
Z63.79 Other stressful life events affecting family and household	423	14%
Z60.0 Problems of adjustment to life-cycle transitions	318	11%
Z63.72 Alcoholism and drug addiction in family	150	5%
Z59.1 Inadequate housing	123	4%
Z59.41 Food insecurity	92	3%
Z63.0 Problems in relationship with spouse or partner	82	3%
Z59.5 Extreme poverty	78	3%
Z55.0 Illiteracy and low-level literacy	68	2%
Z56.0 Unemployment, unspecified	53	2%
Z77.22 Contact with and (suspected) exposure to environmental tobacco smoke (acute) (chronic)	52	2%
Z72.0 Tobacco use	42	1%
Z91.410 Personal history of adult physical and sexual abuse	41	1%
Z62.810 Personal history of physical and sexual abuse in childhood	39	1%
Z62.21 Child in welfare custody	23	1%
Z59.00 Homelessness unspecified	22	1%
Z62.811 Personal history of psychological abuse in childhood	22	1%
Z72.4 Inappropriate diet and eating habits	19	1%
Z62.0 Inadequate parental supervision and control	18	1%
Z63.5 Disruption of family by separation and divorce	15	1%
Z65.3 Problems related to other legal circumstances	12	0%
Z63.1 Problems in relationship with in-laws	11	0%
Z56.3 Stressful work schedule	10	0%
Z77.29 Contact with and (suspected) exposure to other hazardous substances	9	0%
Z65.4 Victim of crime and terrorism	7	0%
Z77.011 Contact with and (suspected) exposure to lead	5	0%
Z56.1 Change of job	4	0%
Z60.5 Target of (perceived) adverse discrimination and persecution	4	0%

Z59.0 Homelessness	3	0%
Z59.4 Lack of adequate food and safe drinking water	3	0%
Z56.2 Threat of job loss	2	0%
Z65.0 Conviction in civil and criminal proceedings without imprisonment	1	0%
Z65.2 High risk homosexual behavior	1	0%
Z72.52 Personal history of nonsuicidal self-harm	1	0%
Z91.51 Personal history of suicidal behavior	1	0%
Z91.52 Problems related to release from prison	1	0%
TOTAL	2944	100%