

Reach, Effectiveness, and Connections

The Case for Partnering with 2-1-1 to Eliminate Health Disparities

Matthew W. Kreuter, PhD, MPH

Disparities in health status by socioeconomic position are pervasive in the U.S. Information and communication alone will not solve the problem, yet both are essential parts of any serious public health effort to eliminate health disparities. Their impact can be seen and measured in at least three ways: (1) expanding the *reach* of information into vulnerable populations and information-poor communities; (2) increasing the *effectiveness* of information by making it meaningful in the context of people's lives; and (3) making *connections* that link people with tangible services they need. Few, if any, health or social service organizations are better suited to deliver on the triad goals of *reach–effectiveness–connections* than the 2-1-1 system. Because of that, 2-1-1 is poised to be an integral part of our nation's strategy to address health disparities.

The 2-1-1 system is a three-digit telephone information and referral service that connects people to health and social services available in their community. The attraction of 2-1-1's *reach* lies in its unique mix of numbers (16–17 million interactions per year); places (available in 50 states); and people (callers are disproportionately low-income, low-education, unemployed, uninsured). While many researchers, healthcare providers, and prevention specialists grouse about the difficulty of reaching and engaging the most vulnerable patients and populations in our communities, 2-1-1 specialists are busy listening to, talking with, and helping them. Not just a few, but by the millions, and in interactions that are initiated by those affected, not solicited by outreach specialists. These are literally calls for help, rising from the community.

A quick look at why people call 2-1-1 speaks volumes about the fundamental challenges of disease prevention in individuals and families living in poverty. The overwhelming majority of 2-1-1 callers are seeking assistance with basic human needs—finding or paying for shelter, heat, electricity, or food. Others call looking for a job or job training or

getting a mattress or clothing for a child. In the face of these acute life challenges, it is easy to see how getting a mammogram might not be a woman's highest priority. And indeed, though 15% of the calls to 2-1-1 are health-related, requests for preventive health services are rare.

But the nature and manner of delivery of 2-1-1 services open the door to new possibilities for health improvement in callers. When callers dial 2-1-1, they talk with real people—empathic and professionally trained information specialists—and come away with concrete information about places to go or agencies to call in their community that might be able to help them. This combination of caring people trying to understand their personal situation and providing assistance makes 2-1-1 a trusted resource for callers, and is at the root of 2-1-1's *effectiveness* as a service agency.

For the 2-1-1 information specialists who take these calls, learning about each caller's life circumstances often provides insights into possible needs beyond those expressed by the caller. Thus, 2-1-1 specialists might leverage this trusting relationship and their own insight into caller needs to proactively make *connections* and referrals that will link callers with a wider set of health resources. And to the extent that 2-1-1 referrals help address a caller's unmet basic needs, callers may be able to shift their focus to improving health.

There are many ways the information gained from the 2-1-1 system can contribute to research and programmatic efforts to eliminate disparities, as illustrated throughout the papers in this supplement to the *American Journal of Preventive Medicine*.^{1–17} First, 2-1-1 systems have a wealth of information about the populations they serve. This knowledge is both anecdotal, based on thousands of hours of hearing rich and detailed first-person accounts of the challenging life circumstances of those living in poverty, and systematic, based on data routinely collected about each call and caller. Both sources of information are currently underutilized. The qualitative data captured in just 1 day of standard 2-1-1 service across the U.S. would greatly expand and enrich the body of such work published to date on similar populations. How can this information be harnessed to guide the development of strategies to eliminate disparities? The quantitative data can be extremely helpful for surveillance and planning, as illustrated in the paper by Bame et al.⁴ But its utility

From the Health Communication Research Laboratory, Washington University in St. Louis, St. Louis, Missouri

Address correspondence to: Matthew W. Kreuter, PhD, MPH, Health Communication Research Laboratory, Campus Box 1009, Washington University in St. Louis, 700 Rosedale Avenue, St. Louis MO 63112-1408. E-mail: mkreuter@gwbmail.wustl.edu.

0749-3797/\$36.00

<http://dx.doi.org/10.1016/j.amepre.2012.09.024>

will never be realized fully until it is available readily to a wide range of stakeholders in real time and in a form that is easy to access and understand. Could an online data dashboard be developed to share what 2-1-1s know about caller needs in specific communities?

Second, although 2-1-1 systems serve a diverse cross section of vulnerable populations, the overwhelming majority of callers are women, and most of them have children. Thus, 2-1-1 systems would seem to be especially well positioned to identify and address health issues affecting low-income women, their children, and families. The papers by Savas et al.⁷ and Roux and colleagues⁸ are two examples that are relevant for this population, but many other potential topics also would be appropriate. For example, callers may benefit from addressing issues like child obesity, violence and injury, secondhand tobacco smoke exposure, breast feeding, parenting skills, or child development and enrichment, even though few call 2-1-1 expressing needs in these areas.

Finally, and perhaps most importantly, 2-1-1 systems can become fully integrated partners in existing health and social service systems. The paper by Rodgers and colleagues⁹ describes one such effort in San Diego, and the commentary by Oberlander and Perreira¹³ suggests multiple roles 2-1-1 systems might play in helping carry out the healthcare reforms that are expected to occur with full implementation of the Affordable Care Act.

The 2-1-1 system is not perfect. To take full advantage of these opportunities, 2-1-1 leadership may need to organize in different ways. For example, while collaborations between individual 2-1-1s and local partners are fairly common, systemwide partnerships with federal or national agencies are not. Yet broader partnerships are both promising and potentially quite impactful. Engaging in such partnerships would require individual 2-1-1 systems across the country to be better connected in a true “system” and to adopt uniform standards for data collection and reporting. The closing article by Hall and colleagues¹⁷ provides specific recommendations that would move 2-1-1 systems closer to this ideal.

The 2-1-1 system and the health science community can work together to address these issues. If 2-1-1 systems see value and opportunity in integrating health into their data-collection and client service efforts, healthcare providers and other organizations working to eliminate health disparities will line up to partner with them. With their high volume of calls from disadvantaged populations, nearly nationwide coverage, and established infrastructure of call centers and professional staff, 2-1-1 systems offer unique access and capacity to large-scale efforts to improve population health.

and Prevention (P50-CA095815; IU48DP001903). Publication of this article was supported by funding from the National Cancer Institute (NCI) and the Office of Behavioral and Social Science Research (OBSSR) of the NIH (HHSN261201100469P).

No financial disclosures were reported by the author of this paper.

References

1. Linnan LA. Research collaboration with 2-1-1 to eliminate health disparities: an introduction. *Am J Prev Med* 2012;43(6S5):S415–S419.
2. Shank NC. A review of the role of cost–benefit analyses in 2-1-1 diffusion. *Am J Prev Med* 2012;43(6S5):S497–S505.
3. Shah DV, McLeod DM, Rojas H, et al. Public broadcasting, media engagement, and 2-1-1: using mass communication to increase the use of social services. *Am J Prev Med* 2012;43(6S5):S443–S449.
4. Bame SI, Parker K, Lee JY, et al. Monitoring unmet needs: using 2-1-1 during natural disasters. *Am J Prev Med* 2012;43(6S5):S435–S442.
5. Paradis A. Managing Toronto citywide health crises through 2-1-1 services. *Am J Prev Med* 2012;43(6S5):S464–S468.
6. Cortino AA, Glazier RH, Caidi N, Andrews G, Herbert-Copley M, Jadad AR. Toronto’s 2-1-1 healthcare services for immigrant populations. *Am J Prev Med* 2012;43(6S5):S475–S482.
7. Savas LS, Fernández ME, Jobe D, Carmack CC. Human papillomavirus vaccine: 2-1-1 helplines and minority parent decision-making. *Am J Prev Med* 2012;43(6S5):S490–S496.
8. Roux AM, Herrera P, Wold CM, Dunkle MC, Glascoe FP, Shattuck PT. Developmental and autism screening through 2-1-1: reaching underserved families. *Am J Prev Med* 2012;43(6S5):S457–S463.
9. Rodgers JT, Purnell JQ. Healthcare navigation service in 2-1-1 San Diego: guiding individuals to the care they need. *Am J Prev Med* 2012;43(6S5):S450–S456.
10. Kreuter MW, Eddens KS, Alcaraz KI, et al. Use of cancer control referrals by 2-1-1 callers: a randomized trial. *Am J Prev Med* 2012;43(6S5):S425–S434.
11. Eddens KS, Alcaraz KI, Kreuter MW, Rath S, Greer R. A 2-1-1 research collaboration: participant accrual and service quality indicators. *Am J Prev Med* 2012;43(6S5):S483–S489.
12. Alcaraz KI, Arnold LD, Eddens KS, et al. Exploring 2-1-1 service requests as potential markers for cancer control needs. *Am J Prev Med* 2012;43(6S5):S469–S474.
13. Oberlander J, Perreira K. Navigating healthcare reform: a role for 2-1-1. *Am J Prev Med* 2012;43(6S5):S506–S508.
14. Bennett GG. Connecting eHealth with 2-1-1 to reduce health disparities. *Am J Prev Med* 2012;43(6S5):S509–S511.
15. Daily LS. Health research and surveillance potential to partner with 2-1-1. *Am J Prev Med* 2012;43(6S5):S422–S424.
16. Eddens KS. Guiding principles for collaborative research with 2-1-1. *Am J Prev Med* 2012;43(6S5):S512–S517.
17. Hall KL, Stipelman BA, Eddens KS, et al. Advancing collaborative research with 2-1-1 to reduce health disparities: challenges, opportunities, and recommendations. *Am J Prev Med* 2012;43(6S5):S518–S528.

Research leading to this article was supported by funding from the National Cancer Institute and U.S. Centers for Disease Control