



Mobile
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Community Paramedic Education

Drives Evidence-based Practice and Health Care Cost Savings

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INTRODUCTION

In an effort to address access to care, Minnesota in 2007, funded a pilot program to educate skilled paramedics to increase their role in providing primary care for needy community members. The training program consists of 144 didactic hours and 196 clinical hours which lead to the attainment of 14 credits toward a degree. Since its inception, Hennepin Technical College has trained over 170 Minnesota Paramedics to this certification and approximately 500 national/international candidates.

METHODS

One of the programs was conducted by North Memorial Health Care (NMHC) in Minneapolis, Minnesota. The program started in 2012 and ten paramedics were certified to the level of Community Paramedics (CPs). The NMHC clinic is housed in a chemical dependency treatment center providing patient care 8 hours a day, 5 days a week. Patient numbers range from 12 – 16 per day. These CPs see “High Medical Risk Recall Patients” with 10 or more medications, at least 3 chronic diseases, medications with a tight therapeutic window (Coumadin, Digitalis, etc.), and mental health-related comorbidities. The NMHC program served 455 patients with 4,500 total visits. The payer mix consisted of 85% public sources, of which 50% came from Medicaid. Diagnoses of patients seen included: stroke, behavioral health, congestive heart failure, and diabetes. Referrals came from multiple care team members and settings: emergency departments (ED), home care, and primary care.

RESULTS

Analysis of North Memorial EMR data from October 2012-13 shows that CPs reduce utilization of hospital emergency care for patients selected for the program because of ED over-utilization. Comparison of utilization 8 and 12 weeks before and after initiation of CP intervention shows up to a 50% reduction in inpatient/ED utilization. Applying national average cost data for inpatient/ED allows a conservative cost savings of \$8,500 per patient (based on fewer readmissions/ED visits) within the specified time frame.

CONCLUSION

Community paramedic education and targeted interventions can produce substantial cost savings while serving the needs of high-needs patient populations. Limitations of the study that constitute challenges for expansion to other locales include: identifying the “right” patients, determining the “right” level of resource, and defining the value of the program.

References

1. Alfero C, Barnhart T, Bertsch D, et al. The Future of Rural Health. Kansas City, MO: National Rural Health Association; February 2013
2. *Community Paramedic Services*(Rep.). (2012). MN: Minnesota Department of Human Services. doi: <http://mnemsc.org/wp-content/uploads/2012/03/Community-Paramedics-Legislative-Report.pdf>
3. Dickson L, Yahna RM. Report on Community Health Worker Programs. Grand Forks, ND: Center for Rural Health and the University of North Dakota School of Medicine and Health Sciences; June 2012.
4. Emerging Health Professionals. (n.d.). Retrieved from <http://www.health.state.mn.us/divs/orhpc/workforce/cp/index.html>
5. Erich, J. (2013, April). How Minnesota Got Its Community Medics Paid. Retrieved from <http://www.emsworld.com/article/10913443/how-minnesota-got-its-community-medics-paid>
6. HRSA Data Warehouse. Designated Health Professional Shortage Areas Statistics. Washington, DC: U.S. Department of Health & Human Services, Health Resources and Services Administration, Bureau of Clinician Recruitment and Service;2013.
7. International Roundtable on Community Paramedicine. IRCP Vision and Mission Statements. 2013, Available at: <http://www.ircp.info/>.
8. Minnesota Community Paramedic Program Keeps Patients Out of Hospitals. (2012, December 31). Retrieved from <http://www.jems.com/articles/2012/12/minnesota-community-paramedic-program-ke.html>
9. Munjal K, Carr B. Realigning Reimbursement Policy and Financial Incentives to Support Patient-Centered out-of-Hospital Care. JAMA. Feb 20, 2013;309(7):667-668.
10. National Conference of State Legislatures. Home and Community-Based Services: Meeting the Long-Term Care Needs of Rural Seniors. Washington, DC: NCSL;2011. Rural Health Connection brief.
11. *National Consensus Conference on Community Paramedicine: Summary of an Expert Meeting*(Rep.). (2012). Agency for Healthcare Research and Quality. Retrieved from http://depts.washington.edu/uwrhrc/uploads/CP_Report.pdf
12. National Governors Association. Strategies for States to Encourage and Fund Community Care Teams. Washington, DC: NGA Center for Best Practices; January 8, 2012.
13. Patterson DG, Skillman SM. A National Agenda for Community Paramedicine Research. Seattle, WA: University of Washington, WWAMI Rural Health Research Center; February 2013.
14. Wingrove G, Laine S. Community Paramedic: A New Expanded EMS Model. Domain3. 2008(Fall):32-37.