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Volunteer contributions in the emergency department: A scoping review

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Abstract

The objective of this scoping review was to identify published and unpublished reports that described volunteer programs in the emergency department (ED) and determine how these programs impacted patient experiences or outcomes. Electronic searches of Medline, EMBASE, Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic Reviews and CINAHL were conducted and reference lists were hand-searched. A grey literature search was also conducted. Two reviewers independently screened titles and abstracts, reviewed full text articles, and extracted data. The search strategy yielded 4,589 potentially relevant citations; 87 reports were included in the review. Volunteer activities were categorized as non-clinical tasks (e.g., provision of meals/snacks, comfort items and mobility assistance), navigation, emotional support/communication, and administrative duties. 52 (59.8%) programs had general volunteers in the ED and 35 (40.2%) had volunteers targeting a specific patient population, including pediatrics, geriatrics, patients with mental health and addiction issues and other vulnerable populations. 18 (20.6%) programs included an evaluative component describing how ED volunteers affected patient experiences and outcomes. Patient satisfaction, follow-up and referral rates, ED hospital costs and length of stay, subsequent ED visits, medical complications, and malnutrition in the hospital were all reported to be positively affected by volunteers in the ED. These findings demonstrate the important role volunteers play in enhancing patient and caregiver experience in the ED. Future volunteer engagement programs should be formally described and evaluated to share their success and experience with others interested in implementing similar programs in the ED.

Keywords

Volunteers, patient experience, emergency department

Introduction

Volunteers have had a longstanding presence in healthcare¹ and hospitals have come to rely on the contributions of volunteers for a wide range of programs and services. Patient-focused, non-clinical volunteer services (e.g., providing emotional support, meal assistance) increase the capacity of hospitals to meet patient needs, which in turn has the potential to improve patient experience. Volunteer programs provide many benefits to their recipients, including improved wellbeing and reduced social isolation.² Babudu et al. (2016)³ found that volunteers affected patient experience, mood, anxiety levels, nutrition and hydration, and released nurse time for other care activities. Volunteer support for administrative tasks allows employees more time to focus on clinical

duties, reducing care costs and improving the quality of patient care. Handy and Srinivasan (2004)⁴ found that volunteers in 31 hospitals in Toronto, Canada provided \$6.84 in services for every dollar spent, a 684% return on investment. While volunteer activities can benefit patients and improve efficiency in the health system, their contributions to improving patient experience and system efficiency are often under-utilized, un-accounted for or under-recognized.¹

The emergency department (ED) is one clinical setting that has increasingly engaged volunteers. Schultz and Stratton (2007)⁵ noted that volunteers in the ED provide similar supports as in other hospital departments; they provide patient navigation, comfort and support, and assistance with the provision of meals and blankets.

Wolford (1995)⁶ found that employees awarded high ratings to ED volunteers assisting in communication with patients' families and traffic control. Although volunteer programs are perceived to have a positive impact on both patients and the healthcare team in emergency settings, knowledge regarding the variety of roles volunteers play in the ED, and the potential impact they have on patient experience, is less prevalent. The objective of this scoping review was to understand the extent and nature of volunteer engagement in EDs, and how these programs impact patient experiences or outcomes.

Methods

Literature Search Strategy

Drawing from methods outlined by Levac, Colquhoun and O'Brien's advancement of Arksey and O'Malley's methodological framework, a scoping review was conducted.⁷ Electronic searches of Medline, EMBASE, Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic Reviews, PsycINFO and CINAHL were conducted by a research librarian. A sensitive search strategy included a combination of subject headings and free-text terms using various spelling and endings such as, but not limited to, emergency service, hospital or emergency department, unit, room or ward and volunteer programs, initiatives, services, or hospital volunteers/auxiliaries. A grey literature search was also conducted (Web of Science, ProQuest, Canadian Business and Current Affairs Database ProQuest Dissertations and Theses Global). The searches were restricted to studies published in the English language, with no limitations related to publication date. Reference lists of relevant retrieved articles and reviews were also hand-searched for other relevant citations. The authors independently screened the search output to identify potentially eligible articles, the full texts of which were retrieved and assessed for inclusion.

To be eligible for inclusion, articles of any type (peer reviewed research studies, conference proceedings, theses, case reports) had to describe programs or services delivered by volunteers in the ED. We excluded articles where volunteers' activities were focused solely on patient recruitment to research studies. Two reviewers independently screened titles and abstracts, reviewed full text articles, and extracted data. Any discrepancy was resolved by consensus or by a third reviewer. Using a standardized data collection form, one reviewer extracted data on volunteer program characteristics, including program purpose and primary recipient, geographic location, description of setting, volunteer characteristics, program outcomes of interest, and data regarding program evaluation.

Results

The search strategy yielded 4,589 potentially relevant citations. After eliminating duplicate citations and articles that did not meet eligibility criteria, 87 reports were included in the review (Figure 1). Characteristics of the included articles can be viewed in Table 1. Of the included reports, 59 were magazine or newspaper articles, 18 were peer-reviewed articles, 6 were conference proceedings, 4 were graduate dissertations or theses. Publication date ranged from 1973 to 2018, with the majority of articles published over the last two decades. The articles described programs delivered in hospitals around the world, including the United States (n=44), Canada (n=23), Europe (n=6), and Australia (n=5).

Volunteer characteristics and activities

The majority of included articles (n=87) did not provide characteristics of the volunteer workforce, nor outline specific requirements of individuals to volunteer within the ED. Of those that reported volunteer characteristics, eleven programs looked for specific characteristics in their volunteers. Four programs only accepted volunteers that were students,⁸⁻¹¹ two required their volunteers to have past volunteer experience,^{12,13} two accepted only adult volunteers,^{14,15} two programs selected volunteers who were "mature, responsible, articulate, polite and helpful",^{13,16} and one program that solely looked for volunteers who could speak a second language because the aim of the program surrounded early literacy for children in the ED.¹⁷

Table 2 outlines volunteer activities provided in the emergency department, including emotional support/communication (counselling, communication with families, liaison, bereavement support),^{12, 18-40} navigation (greeting patients, providing directions),^{13-14,16,41-48} non-clinical tasks,^{15,49-57} and administrative duties (stocking supplies, filing/photocopying, running errands for ED personnel).^{8,9,58-63} Ten programs were specifically aimed at decreasing the amount of time healthcare providers spent completing non-clinical tasks, such as provision of comfort items and assistance with meals, hydration, mobility and transportation once they were ready for ED discharge.^{15,49-57} The majority (n=52; 59.8%) of described programs had general volunteers in the ED, while 35 (40.2%) had volunteers targeting a specific patient population, including pediatrics,^{17,42, 64-76} geriatrics,^{25, 38-39,49-52,77} patients with mental health and addiction issues^{18,22-24,35,40,78} and other vulnerable populations.^{10,79-80} Table 3 contains examples of some of these targeted programs.

Figure 1. Flow diagram of included articles

Outcomes measured within evaluated programs

Some of the articles specified what specific patient need the programs were intended to address. Twenty-one programs were designed to provide comfort and support to patients while decreasing their stress and anxiety.^{11,15,33,35,38,39,43,45,46,51,55,56,58,65-67,69-70,73,76,81} Seven programs aimed to increase patient satisfaction,^{12,13,20,21,31,41,82} six articles specifically mentioned the purpose of the volunteers in the ED was to reduce crowding and improve flow.^{16,28,36,42,47,48} Four programs^{12,49,52,83} focused on preventing medical complications related to hospitalization, such as falls, delirium, hypertension, depression and anxiety, and two programs had a primary aim of cost savings.^{19,77} To that end, one such program described savings of \$17,064 in personnel salaries in one year,¹⁹ while another estimated overall savings \$6.7 million in the healthcare system due to volunteers.⁷⁷

18 (20.6%) programs included an evaluative component describing how ED volunteers affected patient experiences and outcomes. 12 programs used quantitative methods, including a number of randomized clinical trials,^{18,19,24,26,37,40,42,50,52,53,77,79} four programs used qualitative methods^{12,13,20,25} and two programs did not specify the type of evaluation used^{23,31}. Of those that

reported a focus on particular outcomes, patient satisfaction,^{12,13,20,31} follow-up and referral rates,^{25,40,79} ED and hospital costs and length of stay,^{19,42,77} subsequent ED visits,^{26,37} medical complications,^{50,52} mental health,^{18,23,24} and malnutrition⁵³ in the hospital were all reported to be positively affected by volunteers in the ED. Many of the evaluations of programs took the form of surveys and questionnaires from the perspectives of patients and hospital staff.

Discussion

The objective of this scoping review was to examine published reports of volunteer programs in EDs to determine the role of volunteers and to understand how these programs affected patient experiences or outcomes. Volunteers were reported to play important roles in enhancing the patient experience and assisted with non-clinical tasks. Their activities fell into four main categories: emotional support, navigation, non-clinical tasks and administrative duties. This aligns with broader literature on hospital volunteerism activities.

The majority of articles included in this review described general volunteers in the ED, while a smaller set described

Table 1. Characteristics of included articles

Article Characteristics (n=87)		Number (%)
Type of Article	Peer-reviewed manuscript	18 (21%)
	Conference proceeding	6 (7%)
	Magazine or newspaper	59 (68%)
	Dissertation or theses	4 (5%)
Program Location	Canada	23 (26%)
	United States	44 (51%)
	Europe	6 (7%)
	Australia	5 (6%)
	Other	9 (10%)
Time of Implementation or Publication	Before 1990	8 (9%)
	1990-2000	18 (21%)
	2000-2010	32 (37%)
	After 2010	28 (32%)
	Unknown	1 (1%)
Patient Population	General	52 (60%)
	Specialized	35 (40%)
	Homeless	2 (2%)
	Geriatrics	8 (9%)
	Paediatrics	15 (17%)
	Mental Health	5 (6%)
	Substance Use	2 (2%)
	Other	3 (3%)
Evaluation of Program	Yes	18 (21%)
	No	69 (79%)

volunteers who have completed specialised training to support a specific population, such as children, the homeless, the elderly and those with mental health or substance use disorders. No articles however, assessed which type of volunteer (general vs. specialised) is most useful in EDs. Future research evaluating the strengths and limitations of each type of volunteer program would be beneficial for hospital administrators and program developers. Furthermore, very few included articles of either type (empirical or grey literature) contained descriptions of ED volunteer characteristics; the majority of included articles did not report on demographics such as age, professional experience, or previous volunteer

experience. This was particularly noteworthy given previous research regarding volunteer characteristics and work performance. Fitzsimons et al. (2014)⁸⁴ found that volunteer demographics are relevant in the context of anticipated turnover rate and interpersonal skills; younger volunteers are more likely to have other commitments leading to a higher turnover rate, and may be shy when interacting with patients.

Despite the widespread engagement of volunteers, only 21% of the programs reported evaluation processes and results. Evaluations focused on patient and staff perspectives focusing on specific program outcomes, such

Table 2. Volunteer duties and activities as described from included articles

Duties and activities	Number (%)
Emotional support/communication (counselling, communicating with families, liaison, bereavement support)	24 (27.6%)
Pediatric support (assemble activity bags, distribute teddy bears and toys, read to children, entertain siblings, provide relief for parents)	15 (17.2%)
Navigation (greeting patients, providing directions)	11 (12.6%)
Non-clinical tasks (provision of meals/snacks, comfort items and mobility assistance, assist patients returning home from ED)	10 (11.5%)
Administrative duties (stocking supplies, filing/photocopying, running errands for ED personnel)	8 (9.2%)
Bring companion animals to the ED	1 (1.1%)
HIV point of care testing	1 (1.1%)
Assist patients to navigate public resources and provide onsite legal and social work referrals	1 (1.1%)
Advocate for victims of domestic violence	1 (1.1%)
Create hand-painted tiles on the ceiling of the ED	1 (1.1%)
Other (did not specify)	14 (16.1%)

as patient satisfaction with service, follow-up and referral rates, ED and hospital costs and length of stay. The lack of program evaluation, and heterogeneity regarding the outcomes of interest, may limit transferability of programs from one clinical setting to another by limiting knowledge about the impact of specific programs on patient experience and outcomes. However, Handy and Srinivasan (2004)⁴ and Hotchkiss et al. (2009)⁸⁵ found that contributions of hospital volunteers are perceived to improve care quality, regardless of which type of services provided. Whether these positive effects are maintained is an important area of future research, given that it has been difficult to demonstrate that volunteer contributions create lasting improvements in the clinical outcomes and health status of the service recipients.^{86,87}

The distribution of article type is an important study result. The majority of included articles were retrieved from the grey literature, with only about 25% of articles being peer-reviewed research studies. This is notable given the large number of volunteers already working in EDs around the world, and the evidence-informed culture of health care settings. Health care providers base clinical decisions on

evidence, while accounting for patient factors and clinical experience.⁸⁸ Despite volunteers being prevalent in clinical practice, we found very little empirical evidence to underpin volunteer engagement in the ED setting. Without empirical literature examining the impact of volunteer services on patient experience and outcomes, it may be difficult to assess the value of volunteers and for programs to advocate for increased programs and services.

Limitations

The review was limited to articles published in English. While the search strategy used for the electronic database searches could be replicated, the search of the grey literature may not be as easily reproducible due to hand searching of article reference lists and availability of program reports found online. In addition, there were some articles which described programs that still had ongoing research, and therefore those study results were not included in this scoping review.

Table 3. Specialised volunteer program for targeted populations

Targeted Population	Example of Article
Homeless	Homeless patients in the ED at Wellesley Hospital in Toronto were randomly assigned to receive compassionate care from trained volunteers versus usual care. Study showed that the patients receiving compassionate care had a decrease in returning visits to the ED. ²⁶
Geriatrics	<i>Care and Respect for Elders in Emergencies Program</i> at Mount Sinai Medical Center in New York City that uses volunteers to engage with older (over 65), higher-risk individuals in the ED where volunteers have social conversations with patients and assist with activities to help prevent falls, delirium, and functional decline. ⁵⁰
Paediatrics	Volunteers at Joe DiMaggio Children's Hospital in Florida hand out bags of several activities, including coloring books, crayons and puzzles for children who are waiting in the department. ⁶⁴
Mental Health	A program at St. Vincent's Hospital and Medical Centre in New York have volunteers offering counselling to patients who are victims of sexual abuse coming into the emergency department. ⁷⁸
Substance Use	The Cleveland Metropolitan General Hospital has volunteers provide a safe space to counsel patients suffering from alcohol use disorder who present to the emergency room. ²²
Other	A student volunteer program offering HIV testing at triage through John Hopkins University Student Outreach Resources in Maryland, and linking positive HIV patients to follow up care. ¹⁰

Conclusions

This scoping review demonstrates the important role volunteers play in enhancing patient and caregiver experience in the ED and identified gaps in the literature surrounding implementation and evaluation of these volunteer programs. Altogether, without the contributions of volunteers, the workload of hospital employees would significantly increase, hospitals would suffer higher financial costs, and support would be lost for both patients and their families. Future volunteer engagement programs implemented in the ED should be formally described and evaluated to share their success and experience with others interested in implementing similar programs in the ED.

References

1. Garrison M, Wolf J. The role of the volunteer in improving patient experience. *The Beryl Institute: White Papers*. 2016. <https://www.theberylinstitute.org/store/ViewProduct.aspx?id=6373089>
2. Mundle C, Naylor C, Buck D. Volunteering in health and care in England. *The King's Fund*. 2012.
3. Babudu P, Trevithick E, Spath R. Measuring the impact of helping in hospitals. *TSIP The Social Innovation Partnership*. 2016.
4. Handy F, Srinivasan N. Valuing volunteers: An economic evaluation of the net benefits of hospital volunteers. *Nonprofit and Voluntary Sector Quarterly*. 2004;33:28-54. doi: <https://doi.org/10.1177/0899764003260961>

5. Schultz C, Stratton SJ. Improving hospital surge capacity: a new concept for emergency credentialing of volunteers. *Ann Emerg Med.* 2007;49(5):602-9.
6. Wolford S. Emergency department patient liaison volunteers: A cost containment and visitor satisfaction strategy. *Journal of Emergency Nursing.* 1995;21:17-21. <https://www.ncbi.nlm.nih.gov/pubmed/7776570>.
7. Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. *Implement Sci.* 2010;5:69-78.
8. Bernstein J, Dumont JA, Goldfrank L. Project health care at Bellevue Hospital. *Urban Health.* 1983;12(3):45-8. <https://www.ncbi.nlm.nih.gov/pubmed/10260559>.
9. Copp C. High school students get hands-on learning in health care; The QEII high school co-op volunteer program gets students learning outside of the classroom. *Chronicle – Herald.* 2014; A20.
10. Saleh AM, Haider S, Signer D, et al. Student volunteers as a supplementary workforce for an integrated ED HIV testing model with fourth-generation and point-of-care testing. *Am J Emerg Med.* 2017;35(1):184-185. doi: 10.1016/j.ajem.2016.10.023.
11. Gordon A. An ER where students are practicing the ceiling arts: Colourful scenes painted on tiles give patients a room with a view. *Toronto Star.* 2017; A.1.
12. Munn AM, Takeno J. Volunteer patient advocates in the emergency department. *J Emerg NursJ.* 1996;22(5):427-8. <https://www.ncbi.nlm.nih.gov/pubmed/8997969>.
13. Fortin I. Using volunteers at triage in the emergency department: one successful program. *J Emerg Nurs.* 2006;32(4):340-2. doi: 10.1016/j.jen.2006.04.017.
14. Aquacise – Home Care. *Prince Albert Daily Herald.* 2014; A5.
15. Wisdom E. Angels among us: program places volunteers in Heartland's emergency room. *St. Joseph News – Press.* 2008.
16. Volunteers wanted. *Chatham Daily News.* 2003.
17. Shaw A. CHEO program brings child literacy to the ER. *The Ottawa Citizen.* 2005; A13.
18. Ting SM, Li P, Lau FL, et al. Acute bereavement care in the emergency department: does the professional-supported volunteers model work? *Eur J Emerg Med.* 1999;6(3):237-43. <https://www.ncbi.nlm.nih.gov/pubmed/10622390>.
19. Wolford S. Emergency department patient liaison volunteers: a cost containment and visitor satisfaction strategy. *J Emerg Nurs.* 1995;21(1):17-21. <https://www.ncbi.nlm.nih.gov/pubmed/7776570>.
20. Johnson MF, Heinzerling SB, Mattison K, McGurn J, Rock P, Smith-McMahon D. Emergency department volunteer liaison family communication program. *J Emerg Nurs.* 1993;19(1):34-37. [https://www.jenonline.org/article/0099-1767\(93\)90024-N/abstract](https://www.jenonline.org/article/0099-1767(93)90024-N/abstract).
21. Sahnd S. Making the ED waiting game a little easier to play. *RN.* 1991;54(1):19-20. <https://www.ncbi.nlm.nih.gov/pubmed/1989052>.
22. Collins GB, Barth J. Using the resources of AA in treating alcoholics in a general hospital. *Hosp Community Psychiatry.* 1979;30(7):480-2. <https://www.ncbi.nlm.nih.gov/pubmed/447233>.
23. Termansen PE. Hospital program uses nonmedical volunteers to talk down drug users. *Psychiatric Services.* 2006;24(6):384-387. <https://doi.org/10.1176/ps.24.6.384>.
24. Law YW, Yip PS, Lai CC, et al. A pilot study on the efficacy of volunteer mentorship for young adults with self-harm behaviors using a quasi-experimental design. *Crisis.* 2016;37(6):415-426. doi: 10.1027/0227-5910/a000393.
25. Lowthian JA, Lennox A, Curtis A, et al. Hospitals and patients working in unity (HOW R U?): telephone peer support to improve older patients' quality of life after emergency department discharge in Melbourne, Australia – a multicentre prospective feasibility study. *BMJ Open.* 2018; 8(6). doi:10.1136/bmjopen-2017-020321.
26. Redelmeier DA, Molin JP, Tibshirani RJ. A randomised trial of compassionate care for the homeless in an emergency department. *Lancet.* 1995;345(8958):1131-4. <https://www.ncbi.nlm.nih.gov/pubmed/7723543>. Accessed June 19, 2018.
27. Pedrotti KS. Hospital official seeks to take some pain out of visits to ER. *The Atlanta Journal the Atlanta Constitution.* 1997; XJK, 1:2.
28. Sulski J. Volunteer's can-do spirit is a plus in emergency room: emergency room volunteer has spirit. *Chicago Tribune.* 1995; 129.
29. Volunteer brings calm to emergency room. *Dayton Daily News.* 2009; RA.2.
30. Grossman M. High point hospital seeks volunteer help/ high point regional hospital is looking for 50 adult volunteers to work in the emergency room waiting area. *Greensboro News Record.* 1998; B1.
31. Dickens S. New role for volunteers in the emergency department at CMH. *Campbellford EMC.* 2015; A.19.
32. Quinn K. Kids can volunteer. *Sunday News.* 1998; G-5.
33. Friends scheme at hospital is working well. *Timaru Herald.* 2005; 3.
34. Kelley A. At area hospitals, volunteers are key. *The Journal News;* 2002; B.5.
35. Gordon S. Looking trauma straight in the eye // volunteers: a Corona group seeks people to help those experiencing violence or sudden loss. *The Press – Enterprise.* 2007; B01.
36. Volunteer positions at city hospital. *Sun Times.* 2011; 10.
37. Papp L. Compassion helps heal homeless, MD says: Hospital reports fewer repeat visits. *Toronto Star.* 1995; A.1.

38. Seniors participate in health care panel. *Toronto Star*. 1988; C3.
39. Hochman JI. Turning good into great; a research grant is helping the QEII's emergency department find a more effective way to care for an aging population TRIC grant. New York Hospital. 2014.
40. Houston MG. Battered women in the emergency room. *ProQuest Dissertations Publishing*. 1987; 1332920.
41. System launches 3-level plan to cut ED crowding. *Healthcare Benchmarks Quality Improv*. 2004;11(1):6-7. <https://www.ncbi.nlm.nih.gov/pubmed/14708486>.
42. Hung GR, Whitehouse SR, O'Neill C, Gray AP, Kissoon N. Computer modeling of patient flow in a pediatric emergency department using discrete event simulation. *Pediatric Emerg Care*. 2007;23(1):5-10. doi:10.1097/PEC.0b013e31802c611e.
43. Volunteer helps in busy emergency room. *The Record*. 2006;17.
44. Hook DJ. Caring touch in hospital emergency rooms is provided by volunteers. *Edmonton Journal*. 2004; A19.
45. Hodges C. Volunteers help calm patients and families emergency – room volunteers help families wait in peace when their loved ones are rushed to the hospital. *Greensboro News Record*. 2001; R1.
46. Emergency department volunteers needed. *Oakville Beaver*. 2005; 23.
47. Volunteers. *Times Daily*; 2009.
48. Volunteer entertainers needed at health centre. *The Macleod Gazette*. 2011; A.10.
49. Charity volunteers to help 29 A&E hospital departments. *The Guardian*. 2015. <https://www.theguardian.com/society/2015/feb/05/charity-a-and-e-hospital-age-uk-red-cross-royal-voluntary-service-nhs-england-budget>. Accessed June 19, 2018.
50. Sanon M, Baumlin KM, Kaplan SS, Grudzen CR. Care and respect for elders in emergencies program: a preliminary report of a volunteer approach to enhance care in the emergency department. *J Am Geriatr Soc*. 2014;62(2):365-70. doi: 10.1111/jgs. 12646.
51. Trigg N. Providing comfort and support to older people. *Emerg Nurse*. 2012;20(6):10-3. doi:10.7748/en2012.10.20.6.10.c9344.
52. Arnold J, Sanon M, Chun A. Care: a volunteer approach to reducing delirium in the emergency department. *J Am Geriatr Soc*. Conference: 2012 Annual Scientific Meeting of the American Geriatrics Society. Seattle, WA United States. Conference Publication: (var.pagings). 60 (SUPPL. 4) (pp S226), 2012. Published April 2012.
53. Roberts HC. Changing the food environment: the effect of trained volunteers mealtime care for older people in hospital. *Proceedings of the Nutrition Society*. 2018;77: 95-99. doi:10.1017/S0029665117002804
54. Ruttan S. Welcome to the Royal Alex emergency room: Downtown hospital to employ volunteer greeters. *Edmonton Journal*. 2004; A2.
55. Adoranti K. Heroes of emergency. *Maribyrnong Leader*. 2013; 8.
56. Leader C. Health: Mardialloc. Royal Melbourne Hospital, Melbourne. 2013.
57. Hundreds of volunteers to help free up beds in over-stretched hospitals. *Telegraph.co.uk*. 2015.
58. Emergency room volunteer: 'My job is just to be nice'. *Press & Sun-Bulletin*. 2014;2.
59. McCann D. Emergency room help a real treat volunteer lends a hand – and a handful of candy. *Chicago Tribune*. 1998; 47.
60. Howell, Mich. Volunteers needed. Mercy Livingston Hospital, Howell and Saint Joseph Mercy Woodland Health Center, Genoa Township. 2007.
61. Akoorie N. Cheery volunteers a boon to hospital. *The New Zealand Herald*. 2012; A.7.
62. The Record Staff. Helping your neighbors. *The Record*. 1999; L08.
63. Irish P. Volunteers honored for labor of love. *Toronto Star*. 1992; SD2
64. Sykes L. Helping hands; volunteers organize drive to keep kids occupied during emergency room visits. *South Florida Sun – Sentinel*. 2002; 1.
65. Farren J. Teddy bears comfort hurt children; Hospital; A Sun City volunteer sews the toys to give little ones something to hold on to. *The Press – Enterprise*. 2003; B03.
66. Bisol AL. Teddies among bear necessities for children in hospital. *Telegram & Gazette*. 2000;
67. Sproul S. Bears bring warmth, joy to those who need it most. *Inland Valley Daily Bulletin*. 2007; n/a.
68. Van Matre L. Assistance league tries filling niches of need in Dupage. *Chicago Tribune*. 1999; 1.
69. Dean J. Stuffed toys soften blows of childhood. *News Sentinel*. 2000; BC1.
70. Espinoza M. Finding comfort in bears: Kaiser volunteer knits unique teddy bears to brighten spirits for kids in ER. *The Press Democrat*. 2010; B.6
71. Cox AM. Volunteers make hospital go. Middletown Regional Hospital, Dayton, Ohio. 2003.
72. Busy bees gather items for children. *Advocate*. 2009; 3.
73. Wright CR. Many agencies have uses for your stuffed menagerie. *Rochester Democrat and Chronicle*. 2003; B.3.
74. Michaels supports youngsters. *St. Lawrence EMC*. 2017; A.23.
75. Volunteers wanted for Northumberland Hills hospital auxiliary. *Northumberland News*. 2018.
76. Volunteers create joy. *Lansing State Journal*. 1999; D.8.
77. Stein M. Therapeutic Value of Volunteers to an Acute Care for Elders (ACE) Program. https://www.cfhi-fcass.ca/sf-docs/default-source/documents/ace/ace-collaborative-prospectus.pdf?sfvrsn=170bd044_8. Accessed June 19, 2018.

78. Sparks, A. Rape crisis program helps restore dignity and control. *Health Prog.* 1988;69(7):68-70, 72. <https://www.ncbi.nlm.nih.gov/pubmed/10288940>.
79. Losonczy LI, Hsieh D, Wang M, et al. The Highland Health Advocates: a preliminary evaluation of a novel programme addressing the social needs of emergency department patients. *Emerg Med J.* 2017;34(9):599-605. doi: 10.1136/emmermed-2015-205662.
80. Our community for 8/31/07. *The York Dispatch.* 2007; n/a
81. Hill M. Volunteer center of RI – Long-term care group seeks assistance. *The Providence Journal.* 2003; L-04.
82. Walsh A, Bloom H, Rappaport J. Patient satisfaction within an emergency department: the impact of a hospital volunteer program. *J Volunt Adm.* 1989;8(1):21-6. <https://www.ncbi.nlm.nih.gov/pubmed/10296178>.
83. Gazette R. Public invited to meet therapy pets. *Journal Reno, Nev.* 2005; K.2.
84. Fitzsimmons B, Goodrich J, Bennett L, Buck D. Evaluation of King's College Hospital Volunteering service. *The King's Fund*>. 2014.
85. Hotchkiss RB, Unruh L, Fottler MD. The role, measurement, and impact of volunteerism in hospitals. *SAGE journals.* 2014.
86. Galea A, Naylor C, Buck D, Weeks L. Volunteering in acute trusts in England. Understanding the scale and impact. *The King's Fund*>. 2013.
87. Naylor C, Mundle C, Weeks L, Buck D. Volunteering in health and care: securing a sustainable future. *The King's Fund*>. 2013.
88. Woodbury MG, Kuhnke JL. Evidence-based practice vs. evidence-informed practice: what's the difference? *Research 101.* 2014.
89. Emergency department volunteers are needed. *Walsall Advertiser incorporating the Great Barr Observer.* 2018; 17.
90. Teens spend summers helping out: program for 13-18 can lead to career. *The News Press.* 2006; L.3.
91. Southern Maryland volunteer opportunities: Organizations seeks short- and long-term help in Calvert, Charles and St. Mary's counties. *The Washington Post.* 2016.
92. Kalaskowski J. Volunteer Center of RI – Mentors needed for women and girls. *The Providence Journal.* 2001; L-04.
93. Center for children, an outpatient. *The Washington Post.* 2011; T.27.
94. Making a difference: Area volunteers needed. *Daily Breeze.* 2010.
95. Riley R. Hospital help. Townsville, Australia. 2015.
96. Volunteer opportunities. *Anchorage Daily News.* 2003.
97. Hospital needs ER volunteers. *Toronto Star.* 1998; 1.
98. Page S. Hospital seeks new volunteers. *Toronto Star.* 1987; E2.