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Valuing Volunteers: An Economic Evaluation of the Net Benefits of Hospital Volunteers

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NOTE: At the time of publication, author Femida Handy was affiliated with York University. Currently, January 2007, she is a faculty member in the School of Social Policy and Practice at the University of Pennsylvania.

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Abstract

The use of volunteers in hospitals has been an age-old practice. This nonmarket community involvement is a distinctive aspect of North American life. Hospitals may be attracted to increase the use of volunteers, both to provide increased quality of care and to contain costs. Hospitals rely on the use of professional administrators to use the donated time of volunteers efficiently. This study examines the benefits and costs of volunteer programs and derives an estimate of the net value of volunteer programs that accrue to the hospitals and volunteers. In particular, the costs and benefits to hospitals are detailed. Using 31 hospitals in and around Toronto and surveying hospital volunteer administrators, hospital clinical staff members, and volunteers themselves, a striking pay-off for hospitals was found: an average of \$6.84 in value from volunteers for every dollar spent—a return on investment of 684%. Civic and community participation is indeed valuable.

Keywords

volunteers, economic valuation, costs and benefits, hospital

Disciplines

Econometrics

Comments

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Valuing Volunteers: An Economic Evaluation of the Net Benefits of Hospital Volunteers

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The use of volunteers in hospitals has been an age-old practice. This nonmarket community involvement is a distinctive aspect of North American life. Hospitals may be attracted to increase the use of volunteers, both to provide increased quality of care and to contain costs. Hospitals rely on the use of professional administrators to use the donated time of volunteers efficiently. This study examines the benefits and costs of volunteer programs and derives an estimate of the net value of volunteer programs that accrue to the hospitals and volunteers. In particular, the costs and benefits to hospitals are detailed. Using 31 hospitals in and around Toronto and surveying hospital volunteer administrators, hospital clinical staff members, and volunteers themselves, a striking pay-off for hospitals was found: an average of \$6.84 in value from volunteers for every dollar spent—a return on investment of 684%. Civic and community participation is indeed valuable.

Keywords: *volunteers; economic valuation; costs and benefits; hospital*

1. INTRODUCTION

Universal health care is a distinguishing feature of Canadian culture. Major trends in the past decade include a sharp increase in the demand for health care services based on demographic and economic shifts and uncertainty (and decreases) in the level of funding from all levels of government (Canadian Healthcare Association, 1999). Hospitals in Ontario have been subject to major cutbacks in their budgets in the 1990s and have been asked to do more with fewer resources.¹ Although, traditionally, hospitals have relied on private donations of money and time, there is a greater need now for these resources to make up for the shortfalls in hospital funding. Professional fund-raisers and administrators have been hired by many hospitals to increase donations and manage volunteers efficiently. However, we do not know the financial implications of the donation of time that volunteers are currently providing to the hospitals. Historically, the dominating influence of volunteers has been in hospital auxiliaries who were responsible for fund-raising, running gift shops, and providing assistance with patients. Now, the focus of volunteerism in hospitals has turned toward services, governance, and fund-raising with a distinct delineation of responsibilities between each of these three areas. This article deals with volunteerism in the service area where volunteers now take on very different roles from those taken in the past by auxiliaries. Rather than leaving volunteers to organize themselves as they had done in the past, large hospitals hire professional managers to run most volunteer programs (Ontario Association for Volunteer Administrators, 2000). Such professionalization provides the necessary supervision that helps protect hospitals

from risks associated with the use of unpaid nonprofessionals in health care settings. Although there are many aspects to volunteerism in hospitals, this research study focuses on the assessment of the benefits and costs that accrue to hospitals by using volunteers. A primary calculation is the return on investment of volunteers. We also investigate the net benefits to volunteers and the role volunteers play in meeting an important mission of the hospitals: improving the quality of care.

1.1 BACKGROUND

Volunteerism is an important part of Canadian life; 6.5 million Canadians volunteered in 2000 for a total of 1.05 billion hours. This reflects a drop in the number of volunteers and total hours volunteered from 1997. Despite the shrinking of the volunteer pool and total number of hours contributed in 2000, more volunteering events and volunteer hours were directed toward health care organizations than in 1997 (Bowen, 1997; Hall, McKeown, & Roberts, 2001). This is not surprising. As health care costs go up, an important cost attractive resource for hospitals is the use of volunteers in providing services to improve the quality of care. It has been recognized by hospitals that the many nonmedical services such as providing information, emotional support, and reassurance to patients and their families can positively affect the quality of care. Hospitals are increasingly relying on volunteers to provide these nonmedical services to thereby positively affect the quality of care while holding down costs, because volunteers are not on the payroll.

Major trends in the past decade that affect volunteers in health care include (a) a substantial shift in the volunteer base, (b) younger people replacing older volunteers with a corresponding decrease in long-term commitments (Dow, 1997), (c) more educated and skilled health care volunteers with identifiable goals for themselves besides community contribution, (d) volunteers with an increased expectation for interesting and varied assignments, and (e) volunteers who are not willing to make long-term commitments but prefer to give short, well-defined periods of time (LaPerriere, 1998). Also, given Canada's immigration policies, there is an increase in diversity of cultures among the volunteers. Furthermore, high school graduation in Ontario requires volunteer hours in community organizations, and this has increased the supply of student volunteers. On the other hand, hospitals are faced with increasing costs and must balance the use of volunteers with liability, accountability, and labor union considerations. A blurring between paid and unpaid work can lead to friction in unionized environments (Macduff, 1997; Zahnd, 1997). Overall, it has been recognized that there is an increasing incentive to use volunteers in the health care system because of the increasing need for cost containment (Tuckman & Chang, 1994). If nonmedical services can be obtained for free, why spend money to procure these services from paid hospital employees? However, volunteers are not totally free; hospitals incur costs in recruitment, administration, liability, supervision, and recognition. Currently, with a few exceptions, these costs are neither quantified nor explicitly recognized in the literature (Sues & Wilson, 1987).

Most economic studies of the labor supply of volunteers either ignore the demand for volunteer labor or, at best, assume that it is unlimited at a price of zero (Freeman, 1997; Menchik & Weisbrod, 1987; Vaillancourt, 1994; Van Dijk & Boin, 1993) for analytical tractability and simplicity. A recent study by Wolff, Weisbrod, and Bird (1993) described an economic analysis of the supply of volunteer labor to hospitals and found that the supply of volunteers is affected by job opportunities in the labor market and tax rates. In his review, Steinberg (1990) discussed the costs of volunteers, and only one study, that by Emanuele (1996), estimated a downward sloping curve for volunteer labor thereby confirming that volunteers are not free.

An upper limit on the demand side must also be noted. Assuming that the demand for volunteer labor is unlimited and that the differences observed among time volunteered by people is a function of the supply conditions (individuals' attitudes, preferences, opportunity cost, etc.) leads to incorrect conclusions. Our in-depth interviews with volunteer managers revealed that hospitals could not always accommodate everyone who wished to be a volunteer because of their preferences for the type and number of hours they wished to volunteer. Even though hospitals were continuously recruiting volunteers and attempting to place as many volunteers as possible, internal constraints (placing, managing, and supervising) often limited their capability to use all volunteer labor offered. Also, volunteers can only be placed in nonclinical tasks with no threat of potential job losses perceived by the labor unions. In a few cases, administrators also viewed the placing of volunteers as a service offered by the hospital to the community. In this case, volunteers, especially new immigrants, workfare recipients, and students, are given an opportunity to network and learn valuable skills that would be useful in obtaining paid employment later.

Currently, the volunteer labor supply often exceeds demand in many hospitals, especially for short-term volunteers who are willing to commit only a few hours (Culp & Nolan, 2000). A recent survey noted that only 27% are willing to donate more time, whereas 42% indicated they would do so only in the case of an emergency. Lack of free time was given as the reason why 76% of volunteers stated that they would not give more time to volunteering (Hall et al., 2001). Thus, although hospitals may prefer long-term volunteers committing for longer periods of time, they will need to adapt to the changing volunteer pool: individuals who are volunteering in greater numbers albeit for a shorter term and for fewer hours than earlier (Culp & Nolan, 2000).

It is important to reiterate that labor market rigidities inhibit the use of volunteers by the hospital and the tasks done by volunteers, especially as they relate to those done by paid workers and in providing medical care, which requires a license. Volunteers typically work part-time and are sometimes perceived as less dependable than paid workers because of the absence of monetary incentives. Furthermore, volunteers can only be used in nontechnical/nonmedical services and for services that do not use unionized labor for legal and safety reasons. Hence, there is an upper limit to the use of volunteers in hospitals. This may account for hospitals' having fewer volunteers compared

to paid workers than most all other sectors using volunteers (Sharpe, 1993). Volunteer labor, although provided without remuneration, is not without cost to either the volunteer or the hospital. We may assume that the individual volunteer is intentional and rational and has done the necessary private cost benefit analysis in making the decision to volunteer and continues to contribute until it is no longer rational to do so (Wolff et al., 1993). Hospitals, it is assumed, are also rational; they assess the contribution of volunteer labor and balance it with the costs involved. Ideally speaking, hospitals should seek to input volunteer labor until the marginal benefits to the hospital are equal to the marginal costs of volunteer labor. However, this ideal point may not be attained, as (a) volunteers cannot encroach upon clinical and paid staff positions (i.e., upper limit of volunteer-hour usage), (b) market rigidities exist, and (c) accurate measurements of costs and benefits are unavailable. In addition, there is also a spillover benefit to the community that is often ignored in the literature.

It is generally assumed that the benefits of using volunteers far outweigh the costs to hospitals and that hospitals often try to place all the volunteers who apply. However, the quantification of the pay-off is not available in the literature. In terms of total hours contributed by volunteers, the savings to the hospitals, which they would otherwise have to pay for, appear to be immense. The contribution of volunteers results in an increase in the quality of perceived care in hospital settings (even with simple hand holding, information giving, and other nonmedical services). These may be nonclinical and nonunion tasks, but they provide a warm, human dimension during a difficult time for the patients and their families. Anecdotally, during the recent SARS crisis in Toronto, volunteers could not come to the hospitals, and patients and staff members immediately felt the loss of their services. A follow-up survey with hospital CEOs supported this widespread view (Handy & Srinivasan, 2003). In the present study, we explicitly focus on the demand side of the picture and, in particular, estimate the costs and benefits to hospitals using at least 100 volunteers. We explicitly detail the various costs and benefits involved in the use of volunteers by hospitals, and we put an economic value on them. We also determine the benefits and costs incurred by volunteers such as out-of-pocket expenses such as travel, child care, and opportunity cost. The opportunity cost of time is important, as volunteers have high levels of education (Montmarquette & Monty, 1987). Last, we discuss the contributions of volunteers and benefits to volunteers that are not easily monetized.

2. METHOD

We focus on hospitals in and around the greater metropolitan area of Toronto, Canada, for our study and include all hospitals in Region 3, as classified by the Ontario Hospital Association (www.oha.com). Several factors influenced this choice: convenience, cost, and comprehensiveness (serving urban, suburban, and rural populations). It includes the regions of Durham, Metro Toronto, Peel, and York, which house 57 hospitals (some of which, such as the University Health Network, have multiple hospital sites). We limited

our sample to those 35 hospital sites that use at least 100 volunteers and have at least one paid staff member responsible for volunteer administration. This helped ensure that the focus remained on hospitals utilizing a professionally managed volunteer program.

To enhance the meaningfulness of our study and to better understand the field context to improve external validity, we conducted preliminary discussions with the manager of volunteer resources (the title varied from hospital to hospital, but for simplicity, we refer to the individual in charge of volunteer resources as the manager for the rest of this article) at four hospitals. Then, an official letter inviting hospitals to participate in the study was sent, followed by a telephone call to each of the managers. Thirty-one hospitals agreed to participate. Two hospitals were undergoing staffing changes and, hence, they were not able to participate, one did not respond to our invitation, and one hospital withdrew after initially agreeing to participate.

For surveying the managers, we used a modified version of LaPerriere's (1998) instrument. We refined our instruments after a pretest with three managers. It was a structured questionnaire with some open-ended questions.

Most of the interviews lasted well more than 2 hours and provided highly detailed responses. In addition, we intended to survey about 50 volunteers at each site using a self-administered survey. This survey was either mailed to volunteers or conducted on-site with the help of the volunteer manager and our research assistants. Necessarily, volunteers self-selected themselves to answer the questionnaires. We received a total of 805 completed surveys. Besides these two groups, the managers provided two to four names of the medical staff who use the greatest number of volunteers in their hospitals. We used telephone surveys to interview one or two staff members at each site. These interviews were semi structured thereby allowing for open-ended qualitative information. The number of completed staff surveys was 49. This study is rich in that we have data from the managers, the immediate supervisors of the volunteers, and also the volunteers themselves.

3. FINDINGS

3.1 SAMPLE CHARACTERISTICS

Hospitals. Our sample consisted of 31 hospital sites with an average of 468 beds. Nearly two thirds of the hospitals described themselves as acute and general hospitals; others described themselves as providing long-term care, rehabilitation, psychiatric, or other. Because of recent mergers, some hospitals in our sample had more than one distinct location in which they operated. For example, 3 downtown hospitals at different locations were merged into the University Health Network. We used each site as the unit of analysis where each site had separate volunteer programs and a distinct set of volunteers. The number of volunteers ranged from 125 to 3,240 with an average of 700 volunteers at each site. The numbers of paid positions to manage and/or coordinate volunteer resources averaged 3.4 positions per site, and unpaid administrative positions averaged 2.8 positions per site. On average, the manager is well educated with more than 77% having some university-related education

in volunteer administration and 84% having participated in volunteer administration courses or seminars from non university sources.

Volunteers. Table 1 summarizes the characteristics of the volunteers ($N=805$).

Table 1 Volunteer Profiles

Characteristics	Profile	
Gender	26% males 74% females	
Race	76% white 17% Asian 3% Black 4% Other	
Language	85% English 3% Cantonese 1% French 1% Italian 10% Other	
Age	[<20] 17% [21-24] 6% [25-34] 5% [35-44] 6% [45-54] 9%	[55-59] 7% [60-64] 11% [65 -74] 25% [>75] 14%
Household Income	[< \$20,000] 16% [\$20,000 – \$39,999] 26% [\$40,000 – \$59,999] 24%	[\$60,000 – \$79,999] 14% [> \$80,000] 20%
Formal Education	16% Less than High School 34% High School diploma 16% Some post-secondary	13% post-secondary diploma 14% Bachelor’s degree 7% Graduate degree
Labor Status	25% in the labor force 75% out of the labor force	(39% full time, 61% part time) (65% retired, 16% students, 6% looking for work, 6% voluntary, 3% workfare, 4% other)
Average hours volunteered	4.98 hours/week by those ‘working’ 6.44 hours/week, by those ‘not working’ 6.24 hours / volunteer/ week*	
Average hours per week volunteered by age groups	[<20] 8.6 hours** [21-24] 5.3 hours [25-34] 4.6 hours [35-44] 4.7 hours	[45-54] 4.9 hours [55-59] 6.1 hours [60-64] 6.1 hours [65 -74] 6.0 hours [>75] 6.4 hours

* See End Note iii

** In this case 25% volunteered more than 15 or more hours a week suggesting students placements (programs of study requiring students to work in hospitals to gain experience). These numbers distort the mean, the median hours is six hours.

3.2 THE HOSPITAL VOLUNTEER AS COMPARED TO VOLUNTEERS IN ONTARIO

One caution should be noted before comparing our sample of hospital volunteers with Ontario volunteers: Our sample is a convenience sample. Furthermore, our volunteers are those who elect to volunteer at hospitals. We are not surprised that the characteristics may differ from the volunteer population in general in which persons volunteer at diverse settings with differing requirements. However, we are interested in noting the differences and similarities between both samples/types of volunteers.

Hospital volunteers are overwhelmingly female (74%) as compared to the Ontario volunteer (54%), and unlike the average Ontario volunteer (Parmegiani, 1997), females contribute significantly more hours than males. This result is not surprising given that the nature of hospital volunteering is focused on care giving, an activity that attracts more women than men even in the paid labor force. Furthermore, 47% of Ontario volunteers are employed full-time, whereas we find that nearly 75% of hospital volunteers are *not* in the labor force and less than 10% are employed full-time. We find that nearly half of hospital volunteers are retired, and they make up the majority of those not in the labor force who volunteer at hospitals. This suggests that hospitals are attractive places for retired individuals to volunteer.

Certain similarities also exist. In terms of educational background, 51% of all volunteers in Ontario have a postsecondary certificate, diploma, or university degree. In our case, we also find that 50% of individuals had similar qualifications. Additionally, in the Ontario survey, it was found that those volunteers not in the labor force contributed a higher number of average hours annually than those in the labor force; we note a similar finding.

In our research, gender and age were significant in explaining the variation in hours volunteered. Females volunteered more hours than males, as did those younger than 20 years and older than 55 years. In the Ontario sample, those older than 65 years volunteered the highest number of average hours and those aged 25 to 34 volunteered much less than most other age groups. We also find that the 25-to-34 age group contributes the lowest average number of hours. In our findings, there is a statistically significant drop after the age of 20 when the hours begin to rise and a peak in the 75+ age group. This is because of the high school graduation requirement of voluntary service.

4. BENEFITS

Benefits accrue from hospital volunteer programs to both the organization and the volunteers. Although there are benefits to the community at large, the calculation of such benefits is beyond the scope of this article. In Section 4.1, we first examine in detail the benefits to the hospitals followed by the benefits to the volunteers in Section 4.2.

4.1 BENEFITS TO THE HOSPITAL

Volunteers play vital roles in patient care and a variety of support services that contribute to the added comfort and happiness of patients, their families,

and visitors. Volunteers provide the extra pair of hands to alleviate staff workload and thereby effectively supplement the existing staff for nonmedical services. Volunteers assist patients with prompt responses to their nonmedical needs and reduce the anxieties of being vulnerable and alone—a common and significant occurrence. As hospitals grow larger and become more specialized and technologically sophisticated, the effective use of volunteers is vital in maintaining a human and personal touch. Thus, working with patients and with health professionals, volunteers help not only to contain expenses but they also affect the level of care and comfort provided.

To better understand the benefits of the work volunteers do, we asked managers to state what types of work volunteers perform. Managers were asked to indicate the number of volunteers assigned to 26 activities found in the literature. The responses ranged from 3 to 230. We list the seven activities that were reported as using more than an average of 100 volunteers:

1. Accompanying patients on outings.
2. Providing companionship and friendly visiting on a one-to-one basis.
3. Providing support to patients and families in waiting rooms, clinics, support groups, and so forth.
4. Assisting with recreational and social programs.
5. Shopping and doing errands.
6. Taking patients from one facility to another within the site.
7. Assisting with administrative functions.

With the exception of the last activity, all activities suggest direct involvement with patients where volunteers provide a personalized touch to patients and their families. Such interactions help to promote quality of care as well as reduce staff workload.

Some areas in which volunteers contribute to hospitals are behind the scenes and not directly related to patient care. Volunteers facilitate clerical tasks, public relations, and communications within the hospital and in the community and can provide valuable insights into policy making by serving in advisory capacities on boards, committees, and task forces.

Fund-raising efforts by hospitals also benefit from the work done by volunteers who often act as goodwill ambassadors for the hospital in their communities (Wymer, 1999). Another benefit recognized in the literature is the higher propensity among individuals to donate to the organization in which they volunteer. We asked managers about whether their volunteers were also donors; 86% responded “yes,” 3% said “no,” and 10% did not track this and were unsure whether their volunteers were also donors. This information is not sufficient to tell us how much they donated or what the participation rate was, but it supports the general notion that individuals are more likely to donate to organizations for which they volunteer. We also asked volunteers about their giving: 80% of active volunteers donate money, and 46% donate money to the hospital in which they work. Furthermore, 74% of the volunteers donate money to other organizations.

Finally, volunteers also contribute to the relationship between the hospital and local communities. As one volunteer director put it, “An important contribution from volunteers is the impact on community relationships. The hospital tries hard to develop strong relationships in the community to ensure support, donations, volunteers, and to market itself to potential new staff.” As Brudney (1990) has shown, volunteering in the public sector can be a useful and important component of community involvement. Volunteer programs at the hospital raise the profile of the hospital in the community and garner support for many of the outreach programs that hospitals conduct for education, recruitment, and fund-raising purposes.

Thus, the benefits of a volunteer pool to the hospital are both tangible and intangible. However, it is difficult to assess comprehensively using a quantitative approach alone. As a starting point, an easy way to quantitatively measure volunteer contribution is to look at the hours donated by volunteers—a good proxy for assessing the benefits that the hospitals accrue. These hours may start to capture the services provided by the volunteer but will exclude the monetary donations that are motivated by their volunteer work. Hence, it will represent an underestimate of the value of volunteer programs.

Our findings revealed that the average number of volunteers at each site numbered 700 with the number of hours contributed annually ranging from 6,100 to 204,000 at each site. The average number of hours contributed by volunteers at each site for the year 2000 is 70,515 hours. This is an average of 101 hours per volunteer per year or the equivalent of 42 full-time jobs per hospital. ² These numbers were obtained from the survey of managers and do not distinguish between active volunteers and those who are either episodic or less active.

When we look at volunteers’ self-reported hours (a reasonable assumption is that the respondents belong to the more active volunteer group), we find higher values: 325 hours per volunteer per year. Furthermore, we find that nearly one third of them reported volunteering elsewhere, and these hours are not included in our figures. In comparison, Ontario volunteers contributed 146 hours of their time over the course of the year (Hall et al., 1998), and the top 5% averaged 528 hours a year. In comparison, the top 50% of our sample contributed 498 hours annually. We note that the hours volunteered are subject to certain constraints imposed by the organization on how many hours any single volunteer can contribute. Each site had different regulations regarding the minimum and maximum number of hours a volunteer could contribute, which averaged 3 hours per week at the minimum and 23 hours per week at a maximum.

The impact on patient care, as well as supporting some integral functions of the hospital, is not fully captured by the measure of the hours contributed, as it is debatable whether paid employees may or may not provide the care given by volunteers. For example, can the variety of skills and energy provided by 7 or 8 part-time volunteers giving 5 hours a week each be provided by one fulltime employee with one set of skills and who can only be at one place at one time? We will return to the question of impact when we report our qualitative

findings. Nevertheless, for now we measure volunteer contribution by measuring the time donated by the volunteers to the organization.

A straightforward case of substitution value is used for clerical assistance. Managers reported an average use of 2.8 volunteers contributing to administering the volunteer program at each site. If these volunteers were replaced by paid workers at a salary of \$32,376 (the average salary reported for office/clerical help in volunteer administration departments including benefits) this would mean a cost of more than \$90,000 to the hospital.

Valuation of volunteer time. Much of the literature on the valuation of volunteer time has debated how to accurately estimate the value of volunteer hours. From an organizational perspective, it can be argued that the value of volunteer hours should be the amount it would cost the organization to replace volunteers. However, this is not easy or even feasible for several reasons. Volunteers often undertake tasks that are more flexible than paid employees with fewer expectations from the organization and with differing productiveness as compared to paid employees. From the volunteer donor perspective, valuation is more complicated. Would the opportunity cost of time be a good measure? This would entail careful estimates of wages for those who are retired or not in the labor force; clearly their opportunity costs are not zero (Brown, 1999; Independent Sector, 2001; Ross, 1994). Because of these differing perspectives, we quantify the benefits to the hospital of volunteer hours by appraising volunteers' time in multiple ways:

1. Following the study done by Wolff et al. (1993), we asked those volunteers who were also working full-time and part-time (25%) to report their actual wage rate and what wage rate they would view to be reasonable compensation for their volunteering. For the nonworking (those looking for work, not working by choice, retirees, and students; 75%), we asked what they would consider a reasonable compensation for their volunteering time. This self-reporting of wages, earned and expected, gave us an estimate of the marginal opportunity cost of volunteering for each respondent. Those working gave an average of \$16.42 as their earned wages. When asked for an estimate of a reasonable compensation for their time for volunteering, those not working, retired, and students gave an average of \$12.58. (Interestingly, the working group reported that a reasonable compensation for their volunteer time would be \$10.53.) We calculate costs to the hospital of paying wage rates at marginal costs plus 18% benefits: $\$16.42 \times 1.18 = \19.38 for the working volunteer and $\$12.58 \times 1.18 = \14.84 for the nonworking volunteer.

From the manager survey, we calculated the average number of hours received by the hospital per year to be 70,515. We bifurcate this estimate into those contributed by volunteers who are working (4.98 hours/week, or 43.6%) and those who are not working (6.44 hours/week, or 56.4%).³ This works out to 30,745 hours for the employed and 39,770 hours for the unemployed. We assume that the same proportion of working and

nonworking is reflected in the total volunteer pool as in the volunteer survey. Hence, the total value can be computed as $(30,744.54 \times 19.38) + (39,770.46 \times 14.84) = \$1,186,022.80$. (This valuation works out to cost the hospital \$16.82 an hour—a reasonable figure.) This valuation is generally referred to in the economic literature as the opportunity cost. It is assumed that the volunteer would do paid work were she or he not volunteering; hence, it is the forgone income that we refer to as the *W opportunity cost* method.

2. On the other hand, we may value the volunteer hours at the average rate of \$12.11, the amount reported as reasonable compensation for volunteering by the entire sample. In this case, the hospital could compensate individual- at \$12.11 per hour at a cost to the hospital of $\$12.11 \times 1.18 = \14.28 per hour including benefits. Hence, the total value can be computed as \$1,007,645.24.

In our survey of 805 volunteers, most volunteers implied that their volunteering came at the expense of their leisure time. The compensation of \$12.11 per hour can therefore also be seen as the opportunity cost of time that the volunteers feel is a reasonable compensation to forgo leisure to volunteer. We refer to this as the *L opportunity cost* method.

3. A third way to estimate the value of volunteer hours is to use the replacement cost method. This is the method of replacement value, which suggests that if a volunteer is filing papers, regardless of the volunteers' opportunity costs, his or her hours should be valued at the hourly market wage for clerical work. Assuming that the hospital would continue to provide the same level of services currently provided, which would include all the services being provided by volunteers, then using the replacement wage rate as the average hourly wage rate for hospital nonmedical caregivers and clerical staff members would be appropriate. However, it is more than likely that hospitals under financial pressures would not provide many of the services now being provided relatively free by volunteers. Thus, a valuation using replacement wage rates may overestimate the value of the benefits of the services received by the hospital. Nevertheless, using the average wage rate of hospital care workers, that is, the weighted wage for occupations close to the occupations done by volunteers (providing assistance for patient care, clerical, social services, etc.), the cost to the hospital for replacement hours would be \$14.894 plus benefits, which is $\$14.89 \times 1.18 = \17.57 . Using this replacement wage cost, we get the value of volunteer hours to the hospital to be \$1,238,948.50. We refer to this as the *replacement cost* method.⁵

4. Last, we use the *industry wage* method as suggested by Ross (1994). We use the hourly wage, \$19.69 (adjusted for inflation) plus benefits using an appropriate unit of comparison in the paid economy,⁶ and then we get the economic value at \$23.23 per hour of volunteer work at each hospital to be

\$1,638,359.61. This may overestimate the value, as hospitals may not replace all the volunteer labor with paid labor if volunteers were to be paid wages equivalent to the average industry wage.

We believe that the most reasonable estimate for volunteer activity is given in point 2 using the leisure time method, as it does not include any direct market wage for paid labor and hence avoids the problems raised in the other methods. It is also the most conservative estimate. We defend this choice based on the responses we obtained in the volunteer survey when we asked what volunteers saw themselves doing *if* they were not volunteering. More than two thirds of volunteers suggested that they would spend their time “in nonpaid leisure activities.” Only 15% said that they would do paid work-related activities instead of volunteering. Furthermore, when asked what activity they would most likely give up if they wished to volunteer 1 more hour, more than three quarters of respondents suggested that they would give up nonpaid or leisure activities.

This also confirms earlier results by Handy et al. (2000) who argued that volunteering is an activity that comes from an individual’s leisure time and not at the expense of work time. This makes the opportunity cost method not a very accurate way to appraise the costs and benefits of volunteering. To assign a value for leisure time is also problematic; hence, we found that although individuals work on a volunteer basis, the compensation they expect to receive *if* it were paid labor both estimates the value of their time as well as the services they perform. For instance, a highly skilled engineering consultant might volunteer, but when estimating the value of his or her volunteering time, he or she might base it only on the task performed at the hospital and not on his or her usual activity. The estimates of people valuing their own task seem quite reasonable, and we feel that this would be a good estimate. Thus, we suggest that the estimate of \$1,007,645.24 may be the best estimate of the value of volunteer hours per hospital.

4.2 BENEFITS TO THE VOLUNTEERS

Volunteering is not without benefit to volunteers. There is substantial literature that suggests that when an individual volunteers, everyone benefits (Bergel, 1994; Chambre & Lowe, 1983-1984; Day & Devlin, 1998; Freeman, 1997; McFarlane & Roach, 1999). The organization in which the volunteering takes place, the group that is the recipient of the volunteers’ time, and the volunteers themselves benefit from the activity in a variety of different ways. For example, in the latter case, volunteering in hospitals gives young people and new immigrants opportunities to learn new skills and obtain experience to make them more productive members of the community. Social networking among volunteers and with staff members increases the social capital of volunteers.

To understand the benefits individuals obtain from volunteering, we asked volunteers to rate various benefits identified in the literature. The benefits ranked highest by the volunteers were the opportunity to learn new things,

making social contacts, obtaining references for employment, and job and career opportunities. These were ranked on a scale of 1 (*hardly beneficial*) to 5 (*extremely beneficial*). A large majority of the volunteers (60%) ranked these benefits as 4 or 5. Furthermore, volunteers appeared very satisfied with their volunteer experience; on a scale of 1 (*extremely dissatisfied*) to 10 (*extremely satisfied*), volunteers ranked their satisfaction at 8.7, and 88% of volunteers said they would continue to volunteer at the hospital indefinitely. Combining the results on the rankings of benefits and satisfaction with their volunteer experience, it is entirely plausible that volunteers receive intrinsic and extrinsic benefits from their volunteering experience. Furthermore, given that volunteers can choose to vote with their feet if unsatisfied and without penalty, our assumption that volunteers also benefit is justifiable.

To get some idea of how much these benefits were worth to the volunteer, we asked volunteers to estimate how much they value these benefits in monetary terms—in other words, how much they would be willing to pay to get these benefits. Although this is a difficult question to respond to, more than half of our respondents did so, and their answers ranged from zero to the thousands. Ignoring two high-end tail values, which seemed improbable and skewed, the average response was \$179.24 as the amount they would be willing to pay to receive the benefits on an annual basis. Reconciling this with the comments written on the survey instrument, we believe that this is an underestimate of the benefits. Respondents said it was difficult to put a monetary value on many of the benefits volunteers receive, and many (49%), therefore, did not respond to this question. Quantification of intrinsic benefits is difficult, we acknowledge.

5. COSTS

Volunteer programs at hospitals are not without cost. Both hospitals and individual volunteers incur costs as a result of the volunteer program. Hospitals must bear costs of recruiting, training, managing, and supervising volunteers. Volunteers not only forgo income for the time they donate, but they also bear out-of-pocket expenses such as transportation and babysitting services. In Section 5.1, we first examine in detail the costs to the hospitals followed by the costs to the volunteers in Section 5.2.

5.1 COSTS TO HOSPITALS

When organizations measure their costs in providing patient care, a common estimate is accounting for the capital costs and the labor costs. The latter include the costs incurred in recruiting, hiring, training, and compensating personnel. In the case of volunteers, the institution accrues similar costs: recruiting, hiring, training, managing, and compensating volunteers (with the exception that volunteers are usually compensated in ways that do not include wages but with tokens of appreciation generally at annually held events). Although volunteers are not paid wages (hence reducing the cost as compared to paying staff members to perform the same functions), we note that the costs for managing volunteers cannot be insignificant. Many more

volunteers come in for shorter periods (than paid staff workers), and there is ongoing recruitment and training, as retention is more difficult than for paid staff members (who incur financial penalties for quitting). The manager in charge of voluntary programs typically deals with these issues.

Nonlabor costs include costs for the provision of space, computers, refreshments, uniforms, and insurance. Volunteers also must undergo security (police) checks and health testing. Recruiting costs include those incurred in advertising and planning orientation sessions.

To get a full picture of costs, we first consider the labor costs (in hours) of recruiting, orientation, training, and supervision of volunteers done by staff workers in the hospital. Later we will assign monetary values to the costs incurred. Nonlabor costs are contained in the budgets allocated to managers and will be accounted as such with the exception of insurance costs. Insurance costs for volunteers are covered in the general insurance policies of the hospital and could not be estimated and, hence, are excluded. This underestimates the full cost of volunteer programs, but the difference is not expected to be very large.

Recruiting and orientation. Orientation sessions, which are a means of recruiting volunteers, are run about 28 times a year for an average of 2 hours per session. They are generally run by paid managers (87%), often with the help of volunteers. In some cases, other hospital staff members are present, but this is generally not the rule.

Training. Managers provide volunteer training either alone or with the help of other volunteers and staff people. Staff cooperation in the training and supervision of volunteers is important, as this reduces potential conflicts between staff members and volunteers and promotes efficient use of volunteers. Some activities require little training, whereas others require considerable training. For example, working at the information desk requires approximately 9 hours of training, whereas fund-raising requires less than 2 hours of training per volunteer. The total training provided averaged 82 hours for 26 different programs with an average of nearly 3.15 hours per volunteer. Understandably, often more than one volunteer is trained at the same time, but given that often volunteers change programs several times during the year and require subsequent training, we do not think this estimate is overstating the number of hours of training each volunteer received during the year.

Total hours = 3.15×700 (volunteers) = 2,205 hours of training at each hospital. We assign 10% of the time to hospital staff workers, as volunteers, managers, and their other staff members undertake the rest. The value of staff time for training is 20.95 (includes 18% benefits) $\times 220.5 = \$4,619.47$ per year.

Managing and supervision. Volunteers are often supervised on an ongoing basis by the manager or other more senior volunteers and occasionally by staff members in the programs in which they interact with staff workers. The manager or other volunteers do the bulk of the supervision. Costs of supervision done by managers and other volunteers are already accounted for in the costs

attributable to administration costs. In this section, we deal with those supervision costs directly attributable to staff members.

When managers were asked to indicate the time required to supervise volunteers for 26 different activities, the total was 20.83 hours per week per activity requiring supervision (23% of activities).⁷ Only members staff who interacted closely with volunteers in their programs were surveyed. When staff members were asked whether there was any staff supervision of volunteers, only 16% responded “yes” (the implication is that, in 84% of the cases, volunteers were either supervised by others or did not require supervision).

Thus, the annual hours of supervision are $20.83 \text{ (hours)} \times 52 \text{ (weeks)} \times 26 \text{ (programs)} \times 0.23 \text{ (programs with supervision)} = 6,477.30$. We can attribute only a small fraction (0.16) of these hours directly to the staff and further discount it (0.10), as volunteers are generally supervised while staff members are simultaneously undertaking other duties. Thus, the annual hours attributable to costs of supervision by the staff are $0.16 \times 0.10 \times 6477.30 = 103.64$ hours, valued at the wage rate of $\$20.95 = \$2,171.19$. Thus, the costs of staff time in supervision and training are \$6,791 per year.

Administration. Time and effort by managers and their staff and volunteers go into administering all activities related to volunteers. The average number of paid positions is 3.4 and of unpaid positions is 2.8. The salaries for paid staff members run at an average of \$64,216 for directors, \$41,712 for managers, and \$22,169 for other positions. The average total payroll for the manager’s office is \$145,711, which includes benefits.

In assessing the costs of having a volunteer program, we asked all managers to report on the various costs undertaken by them including office supplies, volunteer recognition, travel, technical support, uniforms, printing, catering, training and staff development, advertising, communication, and so forth. We find the average total budget for all such items is \$32,903.

Thus, the total costs to run volunteer programs for each hospital is the sum of payroll and budgets of the office of the manager of volunteer resources and the staff time for training and supervision; respectively, that is $\$145,711 + \$32,903 + \$6,791 = \$185,405$ per year.

5.2 COSTS TO VOLUNTEERS

Volunteers also incur expenses in volunteering for which they are not reimbursed such as transportation, child care, and so forth. These may represent an indirect donation to the hospital that benefits from the work of the volunteers. Ross and Shillington (1989) reported out-of-pocket expenses incurred by volunteers as \$158 per year per volunteer in Canada. We asked our volunteers for ongoing out-of-pocket costs they incurred (such as uniforms, transportation, parking, etc). We calculated the average costs for each category and totaled them to \$315. In comparison, this is far greater than the estimate found by Ross and Shillington (1989) even when adjusted for inflation. Perhaps one reason for this difference is that hospital volunteer programs require uniforms and have ongoing commitments of regular hours that add to transportation costs.

Adding the \$315 out-of-pocket costs and the value of the average hours (324 per year) contributed by each volunteer according to their estimate, the net costs increase. Depending on the value per hour we choose, the net costs vary; nevertheless, they are significant. For example, valuing their time at \$14.28 (the average amount that they were willing to receive for volunteer work plus benefits), the cost of donating their time plus out-of-pocket expenses is \$4,942. We return to this discussion in Section 7.2 to estimate the net costs to the volunteer.

6. IMPACT ON PATIENT QUALITY OF CARE AND STAFF WORKLOAD

One important benefit of having volunteers for the hospital and its patients is that volunteers are able to provide many soft services that are essential to the comfort of the patients. In addition, volunteers may reduce and support staff workload by taking on certain tasks and leaving staff members freer to concentrate on other tasks. Enhancing the quality of care is an essential component of the work undertaken by volunteers, and although it is not quantifiable in the usual way, it needs to be documented. Most of the hospitals had identifiable goals related to the quality of care they provided. Some of the large, major teaching hospitals acknowledge with pride the availability of the finest medical technologies and intervention but hasten to add that they are working on providing excellence in the quality of care. Volunteers often help staff members in their duties by doing the nonmedical parts of their jobs. This reduces the pressure on staff members and favorably affects their workload thereby also contributing to the quality of care.

6.1 WHAT IS QUALITY OF PATIENT CARE?

To understand the elusive concept of quality of patient care, so often found in mission statements and other literature involving health care, we asked managers, staff members, and volunteers for their understanding of quality of patient care. We asked managers to report on the components of the quality of care to which volunteers contribute. The components that most frequently appeared as essential in enhancing the quality of care are given in Table 2. It is interesting to note the similarity of perceptions of what constituted the quality of care among managers, staff members, and volunteers as they list the most important components of the quality of care to which volunteers contribute. From these findings, it is possible to see that quality of care is primarily perceived to be those activities that involve volunteers' having some personal contact with patients and their families.

6.2 IMPACT ON QUALITY OF CARE

To judge volunteer impact, we asked managers a series of questions regarding the impact their volunteers made on the quality of care and staff workload in the 26 different programs. The staff working with volunteers was also asked to evaluate the impact of volunteers in their programs on quality of care and on their own workloads. Finally, volunteers themselves were asked to do a

self-evaluation of their own impact in increasing the care provided to patients. In each of these cases, there may be a bias to aggrandize the impacts. Nevertheless, we believe it is a useful indication of the impact volunteers make. Indeed, a better measure of the impact of volunteers in affecting the patients could be obtained by surveying patients themselves. However, the strict limitations on accessing patients in hospitals to conduct surveys precluded us from doing so, and we rely on the perceptions of the manager, the staff, and the volunteers themselves. Although most hospitals do exit surveys with patients, we did not find any that asked questions related to the impact of volunteers on quality of care.

Volunteer activities contributing to impact on quality of patient care. Managers were asked to rank from 0 to 3 the impact volunteers' contributions make to the quality of patient care for 26 different programs that volunteers generally undertake. The contributions ranged from 3 to 1.2.

The five programs that ranked the highest were the following:

1. Providing personal care 3.00
2. Providing support to patients and families in waiting rooms, clinics, support groups, and so forth 2.84
3. Providing companionship and friendly visiting 2.84
4. Providing telephone support 2.83
5. Providing respite services to families 2.80

The five services that ranked lowest in terms of volunteer impact on patient care were the following:

1. Fundraising and canvassing 1.83
2. Managing volunteer programs 1.80
3. Research assistance 1.80
4. Assessing staff members with educational programs 1.70
5. Working in communications and public relations 1.20

Once again, we note that personal contact plays an important part in the activities chosen to have the greatest impact on the quality of care. This is not to suggest that the services ranked lowest are not important in the whole scheme of managing and running a hospital, but they have only an indirect impact on patient quality of care, and this is evident in the low rankings as compared to the services that rank higher and have a direct impact on patient quality of care.

In those five programs that ranked the highest, managers ranked the overall contribution of volunteers to patient quality of care as 9.0 (on a scale of 1 to 10, where 1 = *not at all* and 10 = *indispensable*). Staff members were also asked to rate the contribution of volunteers in their program and rated volunteers' contributions at 8.43. Volunteers rated their own contribution to the quality of

care at 8.70. The converging values add to the validity of the findings. In their comments, staff members noted that their own increasing pressures, because of changes in the health care system, have meant less time for nonessential and nonmedical interactions. Volunteers mitigated this depersonalization by being “excellent listeners,” “relaxed and not fast paced,” and “safe to speak to and disclose problems.” They have “a calming presence in the hospital” where patients feel very vulnerable, anxious, and often experience considerable discomfort and pain. Staff members overwhelmingly found that the role that volunteers play in anxiety reduction is an important component of quality of care.

Table 2 The Components of ‘Quality Of Care’

Managers	Staff	Volunteers
Time spent with patients and establishing patient trust	Time spent by volunteers with patients and families.	Providing human contact
Anxiety reduction through care, compassion and emotional support	Volunteers’ attitudes, abilities and skills.	Promoting patient satisfaction
Providing information and reduction of staff workload	Reducing staff workload by being available for patients and running errands	Reduce anxiety for patients and families
Support for the family of patients	Reduce anxiety and act as safe non-medical professionals to interact with.	Promptness of service

Staff workload. We investigated what contribution volunteers make on staff workloads given that in the last few years there have been acute shortages in nursing and other professional hospital staff personnel. Hospital staff members repeatedly reported burnout and high levels of stress because of their increased workload pressures. To establish volunteers’ contributions to easing

the staff workload, we asked several questions. Managers were asked to rank the effect volunteers' contributions make on staff workloads for 26 different programs that volunteers participate in on a scale of 0 (*low*) to 3 (*high*). The responses ranged from 2.70 to 2.51 for the volunteer tasks with the largest impact on staff workload.

The six programs that ranked the highest for impact on staff workload were the following:

1. Providing support to patients and families in waiting rooms, clinics, support groups, and so forth 2.70
2. Information desk 2.67
3. Training other volunteers 2.67
4. Managing volunteer programs/units 2.56
5. Assisting with recreational and social programs 2.51
6. Assisting with administrative and clerical work 2.51

Staff members ranked volunteers making a contribution on their workload at 7.91 (where 1 = *not at all* and 10 = *indispensable*). On overall satisfaction with volunteers on their unit, staff members ranked the volunteers on a scale of 1 (*extremely dissatisfied*) to 10 (*indispensable*) at 7.9. The overwhelming message from the staff is that volunteers are essential, appreciated, and well liked. In analyzing their comments, it was clear that the level of commitment and skill that volunteers bring to their assignments impresses the staffs. The following quotes illustrate the sentiment that staff members expressed with respect to volunteers:

“We are so interdependent on our volunteers and value them as our best resources, and we need to give feedback”. “We brag about it”. “We would be paralyzed without volunteers”. “Absolutely could not survive without them”. “I am so pleased with the quality and commitment and seriousness of volunteers for healing hearts.”

7. NET BENEFITS

7.1 NET BENEFITS TO THE HOSPITAL

To estimate the net benefits of the volunteer program, we have to first assess the hours volunteers donate and their value. From this value, we would subtract the costs incurred in recruiting, training, managing, and retaining volunteers. Putting a value on volunteer hours can be done in several ways as seen in Section 4.1 at a constant rate using the opportunity cost method and assessing a multisector wage rate as done by the Independent Sector (2001) and other studies that value volunteer time. An alternate method would be to ascertain how much it would cost the hospital to hire individuals to replace volunteers.

Both methods provide approximate values, as in many cases, it is not clear that the services volunteers provide can be necessarily bought on the market nor would the services be provided by cash-strapped hospitals if it were not

available at zero wages. It also may be the case that volunteers benefit sufficiently in the exchange of their services (learning new skills, getting hospital experience, socializing, flexible commitments) and would be willing to exchange their time for lower-than-market wages. Thus, the opportunity cost method is flawed, as often volunteering itself can be seen as a consumption good in which the individual uses his or her time as an input in this consumption activity.

This article explores different ways of valuing volunteer time. As this article is not set out to reconcile the competing views on how to price volunteer time, the discussion above is to warn against using the figures that follow as definitive values of volunteers' time to hospitals; they are used merely to demonstrate a range of possible values. We used four different ways to calculate the monetary value of volunteer hours: using *W* opportunity costs, *L* opportunity costs, replacement costs, and industry wage. We subtract the annual costs of administering and managing the program as well as ancillary costs of staff resources. In all cases, the benefits that the hospitals accrue are significant and the average net benefits are just more than \$1 million annually (see Table 3).

7.2 NET COSTS TO THE VOLUNTEER

From the perspective of the volunteer, the value of their voluntary participation must be worth enough to induce donation of their time. This would include psychic benefits as well as monetary benefits. The total value of the benefits to them, monetary and otherwise, should, at the margin, be equal to the cost of volunteer participation—the value of time forgone as well as out-of-pocket expenses. Furthermore, individuals choose to participate in the labor force until the point where the marginal value of leisure time is equal to the marginal value of time in the labor force, that is, the wage rate that the individual could earn. However, the wage rate includes a compensatory amount for the stress of the expectations and rigidities inherent in paid employment. The monetary value of voluntary work, which is more enjoyable given the inherent flexibility and choices available to an individual, would be less than the market wage. Our findings are consistent with this explanation because the reasonable compensation chosen by volunteers, who see their volunteering as an alternative to their leisure activities, is \$14.28—well below their labor market earnings.

The costs of volunteer time (valued in four ways) and out-of-pocket expenses given in Table 4 identify the best estimate of the monetary costs to the volunteer. These costs are significantly higher than the benefits volunteers see themselves receiving from donating their time, which suggests that volunteers may see themselves as altruists who assume significant costs in providing services for the common good. It is not surprising that volunteers incur such significant net costs; this fits well with the net cost theory, which posits that the very definition of *volunteers* is predicated on individuals' incurring the net costs of their volunteering activity (Handy et al., 2000). As most volunteers

were unfamiliar with putting monetary values on the benefits of volunteering, it is arguable that the willingness-to-pay estimate response is not accurate thereby inflating the net costs. Nevertheless, the net costs are significant even if we were to double the benefits.

8. CONCLUSION

This study has been an exploration of the scope and value of hospital volunteer programs. We focused on the examination of the costs and benefits that such programs accrue for the hospital and the volunteers themselves. In the 31 hospitals we examined, the contribution of volunteers to the hospitals is significant. Hospital volunteers contribute approximately more than 70,000 hours at each hospital in the current study. This contribution is difficult to quantify in monetary terms, as its monetization cannot measure many of the intangible benefits. However, we chose to go ahead, recognizing that such a

Table 4: Net Costs to the Volunteer

Wages \$/per hour	Volunteer Hours donated/volunteer /year/hospital* (from volunteer survey)	Cots of Volunteering		Benefits /volunteer / year* *	Net Costs
		Value of volunteer hours	Out of pocket expenses		
Leisure Time (LT) \$14.28	324	4627	315	179	4763
Replacement Cost (RC) \$17.57	324	5693	315	179	5829
Opportunity Cost (OC) \$16.82	324	5450	315	179	5586
Industry Wage (IW) \$ 23.23	324	7527	315	179	7663
Average Net Costs to the Volunteer/year					5960

*See End note vii

** Willingness-to-pay estimates

monetary estimate would be an underestimate; to compensate, we provided a brief description of the impact of the volunteers on the quality of care.

The valuation of volunteer hours is debatable and depends on the favored methodology. We tried to be dispassionate and found that estimates using different methods are reasonably close and average to more than \$1 million per hospital per year. We found that the net benefits are upwards of \$31 million annually for the hospitals in the Toronto area—not an insignificant benefit

from volunteer programs. These benefits take into account the costs of recruiting, screening, training, supervising, recognition, and other administrative costs. This implies that volunteers in hospitals represent a valuable resource, both in terms of enhancing the quality of care and also the donation of such valuable time/skills. However, they are not resources to make up for budget uncertainties. Volunteers cannot substitute for paid professional staff members both by union regulations and hospital codes, which do not allow volunteers to take on active roles in the delivery of health care. On the contrary, budget cuts may tend to weaken the volunteer programs as hospital CEOs often cut such soft programs before they touch hard-core programs in essential medical services. These cuts might then lead to cuts in volunteer management and supervision that are essential for a well-run volunteer program.

There are other benefits the hospitals accrue that are not readily monetized. These include the enhancement of the quality of patient care and easing of staff workload. To get a better picture of the impact volunteers make, it would have been ideal to interview patients to establish the contribution of volunteers to the quality of patient care, but hospital protocol does not allow for this. Therefore, we relied on information provided by managers, staff members, and the volunteers to determine the various aspects of contributions volunteers make. As our study finds, volunteers do contribute significantly in enhancing the quality of care in hospitals and are seen by hospital staff members as important resources in providing the personal touch for patients and their families. This personal touch cannot be underestimated, as anyone who has been in a vulnerable situation can attest. Volunteers are also credited with reducing staff workload, as they assist with many of the essential nonmedical interactions with patients. Furthermore, volunteers are also more likely to donate to the hospitals in response to their fund-raising campaigns. Indirectly, volunteers act as goodwill ambassadors for the hospital in their community from which the hospital draws its resources and clients.

We also calculate the benefits to the volunteers, and although they are not as dramatic as the benefits to hospitals, they are nevertheless present as enhancing their skills and resumes thereby providing them with meaningful experiences or meeting requirements through the workfare program or school requirements. Volunteers also incur costs, and these costs exceed benefits to make them volunteers in the true meaning of the word.

The lack of overlap in roles between paid professionals and volunteers is striking. In other words, the current study documents the division of labor between paid professionals and volunteers. Although the paid professionals are more concerned with medical outcomes, volunteers appear to provide the emotional reassurances and support that the paid, licensed medical professionals are unable to provide in the current system. It is clear that volunteers influence the quality of care in that they help the patients and their families feel better about their situations and their medical treatment. The transactions between volunteers and patients are nonmarket and, thus, may have an entirely different meaning to the patient—and the larger hospital community—than the routine interactions between patients and medical

professionals.

Historically, prior to the professionalization of volunteer management, hospital auxiliaries coordinated volunteers at hospitals. Given the demographic and economic changes in the past few decades, combined with changing needs of health care in hospitals, it is not surprising that professional volunteer programs in hospitals are replacing or complementing auxiliaries. No longer is the typical volunteer the well-to-do lady of high social status (historically, this was the spouse of a doctor who was affiliated with the hospital) who is willing to devote a lifetime of service to the hospital. The present-day volunteer is more likely to be retired or a student who is willing to devote a limited number of hours a week for an average of 5 years. New immigrants wanting Canadian labor market experience in the health sector, students fulfilling school requirements, and an increasing number of male volunteers make for a different volunteer pool. Combining this with labor unions, medical liabilities, and other institutional constraints requires that this new volunteer pool be professionally managed, much like the paid employees. They need to be recruited, screened, trained, supervised, retained, and recognized like their counterparts who are paid. We find professional volunteer programs to be an increasingly integral part of providing health care thus entrenching and increasing the costs of volunteer programs. Currently, this is an excellent situation given that the benefits far outweigh the costs: hospitals derive, on average, \$6.84 in value from volunteers for every dollar they spend—a return on investment of 684%!

This research suggests some implications for hospitals and health care professionals. Hospitals with well-managed volunteer programs can leverage resources spent to promote depersonalization in these days of advanced medical technology, which often leave patients underinformed, alienated, and vulnerable. Health care professionals who are strapped for time can partner with volunteers to help with services that require time and promote quality of care. This will be to their advantage as well as to their patients' benefit. This is not to suggest that volunteers replace paid labor; care needs to be taken to balance the services provided by volunteers and paid labor so as not to cause frictions with unions. This research has pointed out, albeit with certain caveats, that an exercise in evaluating the costs and benefits of volunteer programs can begin to ascertain the benefits of professionally managed programs despite the up-front administrative costs. It makes an important case for volunteer administrators who seek resources for their programs and may be marginalized when hospital CEOs make resource allocations between the competing services.

As the allocations of resources (human or otherwise) are finally determined by the CEO, further research is necessary to understand the attitudes and perceptions of the CEOs and boards of hospitals toward their volunteer resources. Although CEOs are keenly aware of and aggressively seek monetary donations, it is not at all clear the importance they give to the donations of time. How the CEO within any given hospital allocates resources will affect the volunteer management and the quality of care provided by the volunteers.

Research is also needed to assess the impact of volunteer programs from the perspective of the recipients and the community at large to complete the picture on the benefits. We see this study as a starting point in assessing costs and benefits of volunteer programs. Whether such valuations can be extended to other sectors and across cultures requires replications in different industries and cultural settings.

Notes

1. Federal funding for health care has been reduced by \$1.7 billion in Ontario since 1995.

Although the provincial government has made up this deficit, it has done so by significantly restructuring the health care provision with cutbacks from traditional hospital services (see <http://www.premier.gov.on.ca/english/speeches/HealthStatement040300.htm>).

2. The number of hours in one average full-time job equivalent is 1,675.2 hours annually in Ontario (Statistics Canada, 1993).

3. From the volunteer survey, we got the estimates of hours per week to be 4.98 and 6.44 for the working and nonworking, respectively. However, we take the total hours received by the hospital from the manager survey for the following reasons: Our survey was mostly administered at the hospitals, and it is possible that more nonworking people found time to return the survey than the working people; hence, it is not representative of all the volunteers in the database. Also, there was a greater probability of surveying a volunteer who did not have a job outside the hospital such as the nonworking group volunteers. We bifurcate the total hours from the manager survey (70,515) into two parts based only on the differential hours contributed per week from the volunteer survey, that is, 30,744.54 and 39,770.46 for the working and nonworking, respectively. Implicit in this is a 50/50 weighting of the two group sizes, which is different from the volunteer survey but is not inconsistent with the National Survey of Giving, Volunteering, and Participating findings on volunteers (Parmegiani, 1997).

4. For the year ending March 31, 2000, the average hourly wage rates in sub sectors in Ontario (Statistics Canada, 2000, Table 281-0022) are weighted to the jobs undertaken by volunteers as per information from managers.

5. Replacement costs as we have suggested may be an overestimate of the benefits, as volunteers are doing jobs the hospitals would not have had done if they had to hire paid labor. Consider the case where hospitals did recruit volunteers to substitute for paid staff members who make \$17.57 per hour and, for the sake of simplicity, the net value of the marginal worker to the hospital. If hospitals hire volunteers up to the point where the marginal benefits are equal to the marginal costs, then the last volunteer is worth exactly what he or she costs. Our calculations suggest that the cost of using an hour of volunteer labor is \$2.63 per hour (costs of managing, recruiting, etc., are \$185,405 per site for an average of 70,515 volunteers hours per site per year). Assuming that productivity falls to zero in a linear fashion, the average volunteer hour is worth \$10.10 ($[\$17.57 + 2.63]/2 = 10.10$) in benefits to the hospital per \$2.63 of costs—a rate of return of 384%. This calculation, we believe, underestimates the true benefits, as it assumes that hospitals can make hiring and recruiting decisions solely on efficiency criteria, productivity that drops to zero, and when there are no positive externalities to the volunteer program. Because this is not the actual case, we simply present this as a conceptual insight and are grateful to one of our anonymous reviewers for pointing it out.

6. This includes services such as education, hospitals and welfare organizations, services to business management, food and beverage services, and amusement and recreation with a mix of salary and hourly wage workers that most closely resembles a situation for voluntary labor—a 52/48 split in the favor of hourly wage workers (Ross, 1994).

7. Although the question asked for supervision time per volunteer per activity, the responses were given per activity as volunteers are generally supervised in groups and thus hours reported were per activity and not per activity per volunteer. This was clarified during the interviews.

8. We get significantly different estimates for average hours contributed by a volunteer when we look at the responses of managers (101 hours/volunteer/year) and volunteers ($6.24 \times 52 = 324$ hours/volunteer/year). We do not believe it is a reporting error. The differences arise because of the fact that the managers average the hours over active and relatively passive volunteers, all of whom appear on the hospital volunteer database. The response given by volunteers, generally the more active volunteers (they were surveyed on premises in most cases), is higher, as expected. In assessing benefits to the hospital, we have used the former, and we used the latter when estimating net costs to the volunteer who provided us responses on their opportunity costs and their willingness to pay for benefit estimates.

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