

## **Community Computer Networks and the Non Profit Human Services Delivery System**

**John G. McNutt**

**Graduate School of Social Work, Boston College**

**The human services delivery system of the next millennium is in the process of emerging from the industrially based system that currently exists. As we move into an information economy, our current system will no longer be relevant. A new structure will be developed and, in many ways, is already being implemented. Part of this emerging arrangement is apparent in the proliferation of contracting for services and the increasing reliance on managed care and other cost control mechanisms. The ideas of Wolch, Smith, Kramer and those involved with the *Hollow State* debate in public administration are consistent with predictions that futurists have made about tomorrow's organizations. This trend toward contracting out, "outsourcing" and "downsizing" is probably irreversible and promises a less than desirable future for traditional non-profit human services providers. The freedom to innovate and to determine client eligibility and treatment protocols may be lost forever. There is potential, however, for nonprofit human services system to overcome this future and evolve new forms of services and service delivery. Community computer networks may provide this opportunity.**

**Community computer networks offer the potential of a new arena for non-profit human services agencies. These networks, often called FreeNets™, allow free or low cost access to governmental and non-governmental resources and information, Internet access, e-mail, public freespace and a host of related services. They can also be the environment for the non profit human services delivery system to reinvent itself and escape from the forces that may lead to a loss of the sector's independence and vitality.**

**This paper explores the potential of transforming the non profit human services delivery system within the growing community computer network movement. The development of community computer networks is briefly considered, as is the changing circumstances of the traditional non-profit human services delivery system. The next section discusses the role that community computer networks could play in**

**social service delivery. New, technologically based intervention methods are discussed. Updated methods of delivering traditional interventions are also considered. A view of a technologically enhanced sector will be presented. The many commonalties between community networks and nonprofit social agencies are considered.**

**The strengths and limitations of this approach are also taken into account. Access for the poor and oppressed is discussed and the limitations of technologically enhanced communication are examined. Funding issues and policy framework issues are considered. Implementation problems, professional issues and client concerns are discussed.**

**Nonprofit social services agencies and community computer networks have much to gain from a partnership. The real benefits, however, accrue to the entire community.**

## **Community Computer Networks and the Non Profit Human Services Delivery System**

The social service system in the United States is undergoing a number of important changes that will alter the basic character of how services are conceptualized, funded and delivered. Some of these changes threaten to damage or destroy the unique character of the nonprofit social services sector, merging it forever into other sectors with different goals. The rise of the information society (McNutt, 1995, November; Dillman, 1992; 1985; Cleveland, 1985; Williams, 1988; Porat, 1977) and the advent of technologically based social interventions may intensify these already occurring trends. On balance, community computer networks (Schuler, 1996; 1994) offer the hope of reinventing the sector with in a new technological milieu.

### **Current Trends in Non-Profit Human Services Delivery**

Nonprofit agencies have played a distinctive role in the American welfare state (Salamon, 1994; 1987; Kramer, 1994; Trattner, 1995). Nonprofit agencies could be more innovative and more able to respond to changing social conditions (Salamon, 1987; 1994; Kramer, 1987; 1990; 1994). This serves to make the entire social welfare system more able to adapt to changing conditions and enhances its ability to survive.

The changing nature of the social services delivery system threatens this role. Three of the most important trends are the rise of human services contracting, the implementation of cost containment mechanisms, such as capitation and managed care, within third party reimbursement schemes and reductions in federal funding of human services and welfare reform. Each of these issues will be discussed in turn.

#### **Contracting:**

The delivery of public social services by private non-profits has been increasing over the past two decades (Smith & Lipsky, 1993; Smith & Smyth, 1996; Kramer, 1994; 1987). Public agencies negotiate contracts with community agencies and those agencies provide services for the contracting agency's clients. While the vast majority of these vendors are non-profits, for profit agencies and even governmental agencies may provide these services (Kramer, 1994).

This is part of a general movement toward privatization of governmental services (Donahue, 1989). The arguments for privatization include (1) competition makes services delivery more efficient (2) non-profits can do the job better than for profits and (3) privatization is more ideologically compatible with conservative political views (Donahue,

1989; Kettner & Martin, 1996; Smith & Lipsky, 1993). There is also a feeling that privatization will encourage non-profits to adopt more businesslike methods (Smith & Lipsky, 1993). Many of these assumptions clash with the available research (Smith & Lipsky, 1993; Kramer, 1994; Smith & Smyth, 1996).

A considerable body of literature exist on the actual and potential impacts of human services contracting on the non-profit sector (Smith & Lipsky, 1993; Smith & Smyth, 1996; Kettner & Martin, 1988; 1989; 1996; Stone & Bigelow, 1993; Stone, 1996; Kramer, 1994; 1990; 1987; Milward & Provan, 1993; Ferris, 1993; Wolch, 1990). The degree of control that the public agency has over the non-profit agency is troubling to many scholars. Wolch (1990), for example, argues that contracting has created a parallel agency structure that she refers to as the *Shadow State*. Non profits perform many state functions, without actually being state actors. Others, while not disagreeing with Wolch, are concerned that state control of non-profits will compromise the sector's innovativeness, independence and responsiveness (Kramer, 1994; Smith & Lipsky, 1993). Some argue that contracting with governmental entities will pull the sector away from its community roots (Smith & Lipsky, 1993). Others argue that contracting has important implications for both management and organizational structure (Stone, 1996; Smith & Lipsky, 1993; Kettner & Martin, 1988). It is also likely that this trend will affect the nature of the services offered by this group of agencies (Smith & Lipsky, 1993).

There is disagreement about the potential degree of control that can be exercised by the contracting agency over the nonprofit. Smith and Lipsky (1993) point to political activities that nonprofit use to influence contracting agencies and the difficulties that agencies have in actually controlling nonprofits, given the small size of their staff resources. Ferris (1993) echoes the later point and suggests that productivity measurement is problematic. Smith and Lipsky (1993) and Kettner and Martin (1989) question the degree of competition present in the contracting system.

While there is disagreement about the extent of these impacts, but very few scholars argue that contracting is an unrestrained blessing for the non-profit sector. It is also important to note that many of the factors currently blunting the full force of control by contracting are situational in nature. Changing settings could reduce or eliminate their protecting influence.

#### Cost Containment Measures:

The rising cost of medical care has lead to various methods to curb the growth of spending, including capitation, prescriptive pay systems and managed care (Strom-Gottfried, 1996, February; Sederer & Bennett, 1996). In the beginning, these methods were

used almost entirely in third party reimbursement systems, but their eventual impact could be much larger. Many of these methodologies are largely confined to the health and mental health arenas, but aspects of these systems permeate most other arenas. While child welfare, criminal justice and school social work agencies do not commonly incorporate the same cost containment methods, the collection of health insurance by some agencies means that managers still must deal with these systems. In addition, diffusion of the cost containment methodologies to other reimbursement programs is likely if they are successful in lowering expenditures. In short, the latest round of cost containment strategies are likely to have a significant impact on most areas of non-profit social services delivery.

Capitation strategies are designed to limit the cost of care by placing limits on the amount of outlays that a provider is willing to fund. This can be at the level of the diagnosis (such as Medicare's Diagnostic Related Groups (DRG) strategy), the individual or even entire groups of insured. Capitation can be considered a form of rationing health care by restricting the size of the funding pool.

Managed Care strategies require that a gatekeeper approve all care and in most cases, that care be delivered within a closed systems of providers (Karon, 1995; Strom-Gottfried, 1996, February; Sederer & Bennett, 1996). Since the primary reason for implementing managed care is cost containment, lower cost care is favored. Both the type and duration of care is carefully monitored by the gatekeeper. One of the difficulties of managed care is that control over which services (both for diagnosis and treatment) are provided is ceded to an outside entity (such as an insurance company). New and innovative treatments are usually not covered by managed care plans and service delivery options are tightly controlled.

#### Reduction of Federal Funding and Welfare Reform:

Pushed by a combinations of a more conservative political climate, fiscal problems brought about by a series of recessions, side effects of past policies and concerns (however realistic) about the federal deficit and debt, federal funding of non-profits has been restricted. As Salamon (1987) observes, the primary source of funding for non-profit human services agencies is the federal government. Any reduction in the funding of human services will have significant consequences for non-profit human services agencies. The recent welfare reform legislation could have such consequences, both because of cost cutting and devolution (Marchetti, 1996, September 5). The latter refers to moving the locus of funding away from federal control to state control (Breslow, 1996).

This is likely to lead to a situation where there will be more competition for available contracts. This would lead to a more power position for the agencies offering those contracts. In addition, categorical grant for emergent social problems are probably going to be harder to find. This would place agencies who were previously funded under special problem programs at the mercy of state agencies who might see these areas as less crucial. Both of these aspects of welfare reform would further interfere with the balance of power between the agencies offering contracts and those agencies that depend upon them.

These three forces create the potential for a situation where non-profits will be forced into a narrower definition of service delivery, with reduced choices in terms of innovation and client access. This, in itself, is cause for concern. In the near future, however, emergent trends will add to the magnitude of the threats to the traditional mission of non-profit human services agencies.

### Emerging Trends in Non-Profit Human Services Delivery

The American welfare state is in the midst of a major transformation. Born of the transition from an agricultural economy to an industrial economy, the social welfare system is now faced with the emerging dominance of the information sector (Porat, 1977; Naisbitt, 1982; Dillman, 1985; 1992; Williams, 1988; McNutt, 1995; 1995, November). Two aspects of this trend are useful for the present discussion: the emergence of the hollow state and the revolution in accountability and control.

#### The Hollow State

The hollow state is a government that does not deliver public services directly, but uses other agencies to provide services (Milward, Provan & Else, 1993; Milward, 1994; Peters, 1994). This trend concerns political scientists because many of the traditional restrictions on government do not extend to the contractees and because accountability and responsiveness may be problematic. Peters (1994, 753) states that:

The option of pursuing more privatized means of service provision and an indirect, principle-agent relationship between government and service providers is attractive to many critics of government, but threatens some of the most fundamental values of the public sector in democratic systems. It tends to substitute one narrow conception of efficiency for the more fundamental values of accountability and responsiveness. . . . It also tends to replace values of public service with those of the market.

This suggests that the outcome of this process would be a loss of some of rights and other benefits, but that the benefits could be largely illusionary. While this students of

contracting are familiar with such processes, the movement toward the hollow state can go far beyond mere contracting. Milward, Provan and Else (1993) discuss a community mental health system that allows even funding decisions to be made by private organizations (see also Milward & Provan, 1993).

If the hollow state argument holds, state social services agencies are likely to shrink dramatically in size. Since most of the personnel in a social service agency deliver direct care, divesting the agency of its service provision function will greatly affect the size and probably the structure of the agency.

As Milward, Provan and Else (1993) note, a similar process is taking place in the proprietary sector as corporations become virtual organizations. The virtual corporation is a similar development in the corporate world (Bleeker, 1994). A virtual corporation outsources the major corporate functions (such as production, HRM, sales and marketing, legal services, benefits) to other entities and coordinates the development of a product through a series of relationships. Many traditional production corporations have gone to this model in an attempt to become more competitive. The virtual corporation can reinvent itself through an almost unlimited pattern of alliances. This model is finding favor in the health care sector (Pallarito, 1996).

The glue that holds the virtual corporation together is information technology (Bleeker, 1994). Information technology facilitates the maintenance of communication between units in a virtual corporation, makes "just in time inventory" systems possible and allows corporations to create functional accountability. There is no reason to suspect that the hollow state is not moving toward a similar fate and that information technology will become more and more a part of governmental operations.

### Accountability and Control

Coordination and control have always been major problems for organizations and represent a core management issue. These problems have been traditionally solved by a hierarchy that facilitates human control over processes and other people. The computer revolution has made this process more efficient and facilitated the elimination of layers of middle management.

Information technology can control human behavior in ways so minute as to be unprecedented in human experience (Wallace, 1988). In the past, both managed care agencies and contracting agencies have relied on rather crude systems of accountability (Smith & Lipsky, 1993; Ferris, 1993). That was necessary because the amount of staff time that would be required to provide oversight was limited and the data collection/analysis needs were considerable (Ferris, 1993).

Information technology can make these tasks much easier and facilitate a minute degree of control (Beniger, 1988; McNutt, 1995, November; Reschenthaler & Thompson, 1996; Wallace, 1989). It is possible that contracting and managed care agencies can control practitioner behavior to an extent deemed impossible even a few years ago. Huge quantities of data about agency functioning can be collected and analyzed. More importantly, data about individual service provider employees can be developed. Assuming that the agency will choose to utilize this data, the contracting agency may be in the position of actually controlling the behavior of the nonprofit agency's employees. It is not inconceivable that this contracting agency could take control of the nonprofit agency completely away from management and the board.<sup>i</sup>

Rheingold (1993, 280-81, 289-97) offers an instructive parallel in his comparison of Bentham's *Panopticon* to potential uses of information technology. The *Panopticon* is a building designed to observe the behavior of its occupants in minute detail from an anonymous vantage point and is billed as the ultimate prison. Rheingold (1993) notes that information technology has the potential to exercise this type of control, thus reducing individual freedom and discretion.

The impact that this could have on morale should not be underestimated (Wallace, 1989). Professional workers value autonomy and often resent even the degree of control that current bureaucratic systems impose. Improved control is likely to be resisted and could lead to turnover and poor morale. Smith & Lipsky (1993) discuss the effects of current contracting systems on worker morale and conclude that it might lead to problems. This situation could be made much more serious in an information technology intensive agency.

### Combined Effects

These two emerging trends can intensify the impact of the three existing trends. The rise of the hollow state will cement the gains made by contracting within the social services sector. The greater sophistication of information technology will make contracting potentially more intrusive and limit the autonomy of the sector. Managed care can become more interfering as funding mechanisms are turned over to the private sector as a consequence of the hollow state and information technology becomes a more permeating control mechanism. This will reduce the autonomy of the nonprofit social services sector even further.

While this direction is by no means assured, it is far from speculation. How the trends play out in the future will depend on many factors, including the nonprofit sector's ability to protect itself and control its boundaries. In the past, the sector has been able to

mobilize its political forces and its base of professional support to prevent developments that were not in its best interest (Smith & Lipsky, 1993). How successful it will be in the future remains to be seen.

The potential of these trends to do harm to the non-profit sector's traditional mission is clear. Agencies are likely to suffer reductions in their autonomy, ability to be responsive to new problems and conditions and their ability to be sources of innovativeness within the sector. The connection to the community, long an aspect of non-profit organizations (Smith & Lipsky, 1993), will be diminished as control is ceded to insurers and state contracting agencies.

Who, then, will take over these functions? It is unlikely that many agencies will survive on community funding alone and many of those that do will be small and limited in scope. Fortunately, there is an emerging new type of non-profit that can help to save the future of sector.

### Community Computer Networks

Community computer networks are a new phenomenon in American society (Shuler, 1994; 1996; Molz, 1994; Civille, Fidelman, & Altobello, 1993). Community networks provide access to information and networked communications. They also facilitate civic debate and participation (Schuler, 1996, 24-26). In the best tradition of non-profit organizations, they are supported by the local community and their focus is community issues (Schuler, 1996; 1994).

A community computer network typically consists of a computer that acts as a server and facilities functions like electronic mail and access to on line information (Schuler, 1994). The latter might include information and referral, government information, community information and information posted by community groups. Discussion and debate are facilitated through computer conferences arranged on the server. These discussion groups allow debate on a wide variety of issues and concerns. Typically, schools and libraries are highly involved (Schuler, 1996). Library catalogs are often available and school services are provided through the network. Internet access is also possible. In fact, Community Networks are seen as one way to assure universal access to the Internet (Doctor, 1994; McNutt, 1995, March; 1995 November). While some networks function around dial up modems for persons with home computers, others provide public access terminals in public places for those without computers. Given the distribution of information technology resources and expertise, some kind of public access is essential if a broad cross section of people is to be involved (George, Malcolm & Jeffers, 1993).

One of the oldest community networks is the Cleveland Freenet in Cleveland, Ohio (Schuler, 1994; 1996). This network offers a wide variety of community services and information and facilitates discussion about a large number of public issues. Discussions on hobbies and other interest are also available. Government and nonprofit information is freely available.

Community networks have one additional function. They can deliver technologically based human services. While this capacity has not been ignored (Schuler, 1994; 1996; Civille, Fidelman, & Altobello, 1993), aggressive expansion of this area has enormous potential to rescue the mission of the non-profit human services sector and protect the functions that the nonprofit agencies perform for the community.

### Technologically Based Social Services

Social services are conventionally thought of as labor intensive products that require highly skilled personnel and elaborate support systems. The technologies are non-routine and, in many cases, their effectiveness is unverified (Ferris, 1993).

In nonprofit agencies, one of the more central technologies is counseling and psychotherapy. This service requires a highly trained practitioner who works with a single individual or small group. These services are difficult to automate (although a host of computer enhanced aids are available, see Schoech, 1990 and Butterfield, 1995) and, therefore, productivity is difficult to improve. From an economic standpoint, this means that these services will continue to become more and more expensive. It is likely that, under managed care, fewer and fewer problems will seem amenable to psychotherapy and the pressure for ever briefer encounters is likely to be intense.

Gains are being made in this area, however. Telepsychiatry, a subfield of telemedicine (Heather, 1994), has begun to develop ways to provide psychiatric services electronically. Videoteleconferencing, for example, has been used in rural areas to provide psychiatric treatment (Graham, 1996). The potential for development in this area is enormous and new systems using virtual reality, artificial intelligence and so forth are just around the corner.

Groupwork and community organization services are, perhaps, farther along in developing technological alternatives (McNutt & Byers, 1996, October; Downing, Fasano, Friedland, McCollough, Mizrahi & Shapiro, 1991; Buck, 1996). A variety of technologically enhanced techniques are available and new types of interventions are being explored.

It is also easier to incorporate technology in other types of helping. Access to instrumental help (food assistance, housing assistance, information and referral, job

assistance, etc.) can be provided through network systems (Benton Foundation, 1996; Cranford, 1995; Milward & Snyder, 1996). Even more psychosocial services, such as support groups, diagnosis and referral and crisis intervention can be computer enhanced. Preventive services with an educational base are also good candidates for automation. Some of these services could be turned over to self servicing, where the client accesses the service without the intercession of a human worker (Civille, Fidelman, & Altobello, 1993; Cranford, 1995).

In these cases, technology can assist a human worker or free a human worker for another task. Many of the tasks that social services workers now perform (such as taking public assistance applications, checking probation compliance and so forth) can be easily automated, leaving workers time for other things<sup>11</sup>. In fact, many of these tasks are being computerized under the electronic governance movement -- one aspect of the hollow state (Milward & Snyder, 1996).

Examples of the creative uses of technology in social services abound in the literature (Cranford, 1995; Schoech, 1990; 1991; Butterfield, 1995; Schoech, et, al, 1993). What is now needed is a means to deliver these services to those in need. The community network is a logical choice. Technological social services delivered through community networks could allow small agencies to reach a large number of people with needed services. Services could be provided without extensive physical facilities and without a great deal of overhead costs.

These agencies could be modest enough in size and budget to survive on community fund raising. Fundraising through the Internet and other networks is also possible and fees could be collects through networks. These agencies could be truly accountable to the community. They could be staffed by a combination of volunteers and paid staff.

The nonprofit service provider could take the form of a virtual organization (Bleeker, 1994). A small central staff could contract with workers and technology vendors in the community. This type of agency could rapidly reorganize itself to meet new challenges and paradoxically, might be more able to respond to change in the contracting environment than traditional agencies.

Existing social services agencies could also take this path, but there are barriers. Computer utilization in the non-profit sector has been less than optimal (Greene, 1993, October 19; Nonprofit World, 1996). Some agencies lack even primitive equipment and have low levels of staff expertise. There is also considerable investment in more traditional technologies, such as psychotherapy. An organization, like a family services agency, may

find it difficult to accommodate technologically based services within their organizational culture. Professions who regard technology as threatening or impersonal may also resist (Wallace, 1989).

This could be the advent of a new type of alternative agency. It may also be the beginning of a new class of traditional agencies as the older agencies are absorbed into the state system.

### Preserving The Flame

While some agencies will survive and remain true to their original intent in the face of contracting, cost containment, budget reductions and related forces, large portions of the current sector may be forced into a semi-state system. The innovation, community orientation and responsiveness that characterized the sector will be lost. New efforts, based on technologically based practice and community networks, can rekindle this part of the non-profit charge. In order for this to occur, the following steps are indicated:

- Social agencies and those concerned with social services issues need to become involved in planning community networks. Libraries and schools have been most interested in this type of program and their involvement may lead to networks that reflect their needs. Social agencies are likely to need different access and security arrangements. These capabilities may be ignored if agencies do not have a place at the table for the initial planning.
- Social services professionals must give serious thought about how to use technology in their work. While technology can assist traditional methods in becoming more efficient, its real strength is in opening new horizons of practice. There is no sense in performing 20th century practice with 21st century tools. New and creative ways to build practice technology is essential if practice is to advance and if community networks can preserve a vital nonprofit sector.
- Schools of social work and similar educational programs must give students exposure to technology and technologically based practice. A key component of this educational process should be information literacy (McNutt, 1996, February). This means developing skills in obtaining access to evaluating information. In addition, students will need skills in networking, computer conferencing, Internet publishing and so forth. Schools should be in the forefront of developing new types of technologically based practice.

While the forces that confront the sector are powerful and compelling, there is no reason that the winds of change need blow out the torch of the non-profit sector. Technology can

help us build a sector that can meet the challenges of the future while keeping alive the hope of the past.

## References

Beniger, J. (1988). Information society and global science. *Annuals*, 495, 14-29.

Benton Foundation (1996). What's Working Now. Document Available On Line at <HTTP://www.benton.org>.

Blau, F. (1995). Nonprofits as engines of social benefit. [Working Paper #8]. Washington, DC: Benton Foundation.

Bleeker, S.E. (1994). The Virtual organization. *The Futurist*, 28 (2), 9-14.

Breslow, M. (1996). Death by "devolution". *Dollars and Cents*. (203), 20-22 & 38.

Buck, K. (1996) Community organizing and the Internet. *Neighborhood Works*. 19 (2).

Butterfield, W. H. (1995). Computer utilization in Edwards, R. (Ed.) Encyclopedia of social work [Nineteenth Edition]. Washington, DC: NASW Press., pp. 594-613.

Civille, R., Fidelman, M. and Altobello, J. (1993). A national strategy for civic networking: A vision of change. Charlestown, MA: The Center for Civic Networking.

Cleveland, H. (1985). The twilight of hierarchy: Speculations on the global information society. *Public Administration Review*. 45, 195-195.

Cranford, J. (1995). Tops in technology. *Governing*. 8 (4) 61-72.

Deacon, D. & Golding, P. (1991). The voluntary sector in 'the information society': A study in division and uncertainty. *Voluntas*. 2 (1) 69-88.

Doctor, R.D. (1994) Seeking equity in the National Information Infrastructure. *Internet Research*. 4(3), 9-22.

Donahue, J.D. (1989). The Privatization decision: Public ends, private means. New York: Basic Books.

Dillman, D. (1985). The social impacts of information technologies in rural north America. *Rural Sociology*. 50 (1), 1-26.

Dillman, D. (1991). Information society In Borgetta, E. and Borgetta, R. (eds.). The Encyclopedia of Sociology. New York: Macmillan.

Downing, J., Fasano, R., Friedland, P., McCollough, M., Mizrahi, T. & Shapiro, J. (Eds.) (1991). Computers for social change and community organization. New York: Haworth Press.

Ferris, J.M. (1993). The Double edge sword of social services contracting: Public accountability versus nonprofit autonomy. Nonprofit management and leadership. 3 (4), 363-376.

George, Y., Malcolm, S.M. & Jeffers, L. (1993). Computer equity for the future. Communications of the ACM. 36 (5), 78-81.

Graham, M.A. (1996). Telepsychiatry in Appalachia. American Behavioral Scientist, 39 (5), 602-615.

Greene, S.G. (1993, October 19). Technology: Are charities missing the revolution?. Chronicle of philanthropy. 6 (1), 1+.

Heather, T. (1994). Electronic house calls. American Demographics, 16. (3) March, 6. (1996). How you & other nonprofits are using technology: Latest survey results. Nonprofit World. 14 (3), 36-39.

Karon, B.P. (1995). Provision of psychotherapy under managed health care: A Growing crisis and a national nightmare. Professional Psychology: Research & Practice. 26 (1), 5-9.

Kettner, P.M. & Martin, L.L. (1988). Purchase of services contracting and private practice. Journal of Independent social work. 3 (1), 77-91.

Kettner, P.M. & Martin, L.L. (1989). Factors affecting competition in state contracting for human services. Journal of sociology and social welfare. 16, 181-194.

Kettner, P.M. & Martin, L.L. (1996). The impact of declining resources and purchase of services contracting on private, nonprofit agencies. Administration in social work 20 (3), 21-38.

Kramer, R. M. (1994). Voluntary agencies and the contract culture: Dream or nightmare? Social services review 68.(1), 33-60.

Kramer, R.M. (1987). Voluntary agencies and the personal social services. In Powell, W.W. (Ed.) The Nonprofit sector: A Research Handbook. New Haven: Yale University Press.

Kramer, R. M. (1990). Nonprofit social services agencies and the welfare state: Some research considerations. In Anheier, H.K. & Seibel, W. (Eds.). The Third sector: Comparative studies of nonprofit organizations. Berlin: De Gruyter. Pp. 255-267.

Marchetti, D. (1996, September 5). Reeling from welfare overhaul. The chronicle of philanthropy. 8 (22), 38-43.

McNutt, J. G. (1995, March). National Information Infrastructure Policy as the social Policy of the Next Century: An Empowerment Perspective. Paper presented at the 1995 CSWE Annual Program Meeting, San Diego, CA.

McNutt, J. G. (1995, November). The Development of a the National Information Infrastructure and the American Welfare State: Implications for Non-profit Human Services Agencies. Paper read at the 24th Annual Meeting of the Association of Nonprofit and Voluntary Action Scholars, Cleveland, OH.

McNutt, J.G. & Byers, K.V. (1996). Building community and social capital: Roles for groupworkers in a fragmented society. Paper prepared for the Association for the Advancement of Social Work with Group's 18th Annual Symposium, Ann Arbor, MI, October, 24-28.

Milward, H.B. & Provan, K.G. (1993). The hollow state: Private provision of public services. In Ingram, H.A.& Smith, S.R. (eds.) Public policy for democracy. Washington, DC: Brookings Institution. Pp. 222-237.

Milward, H. B., Provan, K.G. & Else, B.A. (1993). What does the "Hollow State" look like? In Bozeman, B. (Ed.) (1993). Public management: The State of the art. San Francisco: Jossey Bass. P. 309-332.

Milward, H.B. (1994). Nonprofit contracting and the hollow state. Public Administration review. 54 (1) 73-77.

Milward, H.B. & Snyder, L.O. (1996). Electronic government: Linking citizens to public organizations through technology. Journal of public administration research and theory. 6(2), 261-275.

Molz, R. K. (1994). Civic networking in the United States: A report by Columbia University students. Internet Research. 4 (4), 52-62.

Naisbitt, J. (1982). Megatrends: Ten new directions transforming our lives. New York: Warner Books.

Pallarito, K. (1996). Virtual healthcare. Modern Healthcare 26 (12), 42-47.

Peters, B.G. (1994). Managing the hollow state. International journal of public administration. 17 (3 & 4), 739-756.

Porat, M. (1977). Information Economy: Definition and measurement. Washington: US Department of Commerce.

Reschenthaler, G.B. & Thompson, F. (1996). The Information revolution and the new public management. Journal of public administration research and theory. 6 (1), 125-143.

Rhinegold, H. (1993). The Virtual community. New York: Harper & Row.

Salamon, L. M. (1994). The nonprofit sector and the evolution of the American welfare state. In Herman, R. The Jossey Bass handbook of nonprofit leadership and management. San Francisco: Jossey Bass., pp. 83-99.

Salamon, L.M. (1987). Partners in public service: The Scope and theory of government-nonprofit relations. In Powell, W.W. (Ed.) The Nonprofit sector: A Research Handbook. New Haven: Yale University Press.

Schoech, R. (1990). Human services computing: Concepts and applications. New York: Haworth Press.

Schoech, R. (1991). Human services: Stages and issues in teaching computing. Social sciences computer review. 9 (4), 612-623.

Schoech, D., Cavalier, A. & Hoover, B. (1993). A Model for integrating technology into a multi-agency community service delivery system. Assistive Technology. 5 (1) 11-23.

Schuler, D. (1994). Community networks: Building a new participatory medium. Communications of the ACM. 37, (1), 39-51.

Schuler, D. (1996). New Community networks: Wired for change. Reading, MA: Addison-Wesley.

Sederer, L.I. & Bennett, M.J. (1996). Managed mental health care in the United States: A Status report. Administration and policy in mental health. 23 (4), 289-306.

Sherman, T. (1991). Electronic networking for nonprofit groups. Washington, DC: Benton Foundation and Apple Computers.

Smith, S.R. & Lipsky, M. (1993). Nonprofits for hire. Cambridge, MA: Harvard University Press.

Smith, S.R. & Smyth, J. (1996). Contracting for services in a decentralized system. Journal of public administration research and theory. 6(2), 277-296.

Stone, M.M. (1996). Competing contexts: The Evolution of a nonprofit organization's governance system in multiple environments. Administration and society. 28, (1), 61-81.

Stone, M.M. & Bigelow, B. (1993). Reexamining the contractual idea: Organizational and political realities. New Haven: Yale University Program on Non-Profit Organizations, Working Paper #194.

Strom-Gottfried, K. (1996, February). Managed care's implications for social work education. Paper presented at the 42nd Annual CSWE Annual Program Meeting, Washington, DC.

Stuart, R. (1995). High tech redlining. Utne Reader. (86), p.73.

Trattner, W. (1995). Poor law to welfare state. [Fifth Edition] New York: Free Press.

US Department of Commerce. (1993). The national information infrastructure: Agenda for action. Washington: Author.

Wallace, M. (1989). Brave new workplace: Technology and work in the new economy. Work and occupations. 16 (4), 363-392.

Williams, F. (1988). The information society as an object of study. In Williams, F. (ed.). (1988). Measuring the information society. Newbury Park: Sage Publications.

Wolch, J. (1990). The shadow state: Government and voluntary sector in transition. New York: Foundation Center.

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<sup>i</sup> Since there is really nothing to stop agencies from contracting directly with private practitioners, it is possible that some nonprofit agencies could become unnecessary. While this would be difficult in situations that involve a large physical plant (such as a child care institution), those agencies that provide psychotherapy and other individual services could readily disappear.

<sup>ii</sup> The IBM web page (<HTTP://www.ibm.com>) has a connection to the Center for Electronic Government. Case studies of a host of interesting projects are available on this page.