THE CATHOLIC UNIVERSITY OF AMERICA

A Paradigm Shift in Catholic Health Care: An Evaluation of a Community-Based Program for Homeless People

A DISSERTATION

Submitted to the Faculty of the
School of Nursing
Of The Catholic University of America
In Partial Fulfillment of the Requirements
For the Degree
Doctor of Nursing Practice

©

Copyright
All Rights Reserved

By
Timothy S. Godfrey

Washington, D.C.

2011
Rising costs in the U.S. health care industry have prompted a “paradigm shift” among health care systems from acute, disease-focused care to community-based, population-focused care. Central to this shift is the formation of integrated systems of care that redefine the traditional boundaries that delineate agencies. Community health partnerships of various community agencies reflect this move towards integrated systems as they strategically restructure their respective organizations to collaborate more effectively in providing community-based, population-focused care.

Catholic health systems are similarly engaged in shifting to community-based, population-focused care. By forming partnerships with other agencies, Catholic health systems are attempting to fulfill their mission of addressing the health needs of the community, especially those who are most vulnerable. They are also attempting to contain health costs that can be driven by community health issues.

This project was an evaluation of the first six months of a collaborative venture between a Catholic health system and other community partners to address the health concerns of the homeless population in Tucson, Arizona. The collaborative purchased a mobile van to provide primary care to homeless individuals and to facilitate a continuum of
care for them. The project used descriptive statistics to evaluate two short-term outcomes—the van’s outreach to vulnerable homeless adults and the integration of services it provided for them.

Due to gaps in data collection, results showing the effectiveness of the van for the two outcomes were inconclusive. The difficulties encountered in the initial months of the van’s operation, however, confirmed the experience of other collaborative ventures found in the literature. The van’s experience also affirmed the need for establishing strong processes within the partnership that promote the integration of agency resources.

The available data revealed the characteristics of those whom the van did serve and the possibilities for expanding the van’s outreach. The implication for Catholic health care is that creating healthy communities is a way of re-imagining its future. The project also points toward the need for nursing leaders who can effectively lead community partnerships, collaborating with Catholic health systems to develop new models for promoting population health.
This dissertation by Timothy S. Godfrey fulfills the dissertation requirement for the doctoral degree in Nursing approved by Mary A. Paterson, Ph.D., as Director, and by Rebecca Robert, Ph.D., and Jeanne Matthews, Ph.D., as readers.

Mary A. Patterson, Ph.D., Director

Rebecca Robert, Ph.D., Reader

Jeanne A. Matthews, Ph.D., Reader
Table of Contents

Signature Page ii
List of Figures v
List of Tables vi
Introduction 1

I. The U.S. Health Care Context 3
   Background 3
   The Current Environment 6

II. The Mission of Catholic Health Care 10
   A Complex Moral Imperative 10
   Ethical Considerations 11

III. Challenges to the Catholic Mission 15
   The Tension Between *Organizational Survival* 15
   and *Service to the Community*
   Strategies to Maintain *Organizational Survival* 17
   No Margin, No Mission? 21

IV. A Paradigm Shift in Delivery of Care 22
   Strategic Integration of Services 22
   Community-Based, Population-Focused Care 25
   Community Health Partnerships 25
   An Exemplar of a Community Health Partnership 27

V. A Population-Focused Program for Those Who are Homeless in Tucson 33
   Homelessness 33
   The Southern Arizona Health Village for the Homeless 38
   Program Components 40
      The formation of a CHP. 41
      Mobile Van. 42
      Case Management. 43
      Telemedicine. 44
   Sustainability of the Program 45
## VI. Evidence-Based Project: Evaluation of the Van of Hope

- **Purpose**: 46
- **Significance of the Project**: 47
- **The Conceptual Model**
  - **The model.**: 49
  - **Application of the model to SAHVH.**: 52

## VII. Project Methods

- **Setting**: 54
- **Population**: 54
- **Protection of Human Subjects**: 55
- **Description of Project and Data Collection**
  - **Short-term outcomes.**: 55
  - **Definitions.**: 57
  - **Measures.**: 59
  - **Data Collection.**: 60
- **Data Analysis**
  - **Descriptive Statistics.**: 62
  - **Ratios.**: 63
  - **SWOT analysis.**: 63
  - **Cost assessment.**: 63

## VIII. Results

- **Findings**: 66
- **Discussion**
  - **Strengths.**: 68
  - **Challenges.**: 77
  - **Opportunities.**: 78
  - **Threats.**: 79
- **Recommendations**: 81
- **Limitations**: 83

## IX. Implications

- **Partnerships for Community Health**: 90
- **The Catholic Mission: Re-Imagining the Future**: 95
- **Nurses as Partners**: 102

## Conclusion**: 109

## References**: 113
List of Figures

Figure 1: Totals for sheltered and unsheltered chronically homeless individuals in Arizona, 2005 – 2009. 35

Figure 2: The model for organizational transformation in health care systems. 50
List of Tables

Table 1: Client Characteristics to Ascertain Homeless Adults who are Vulnerable 67

Table 2: Characteristics of Adult Clients Using the Van of Hope 69

Table 3: Characteristics of Adult Clients Using the Van of Hope by Site 73

Table 4: The Most Common Reasons Given by Clients for Coming to the Van of Hope 75
Introduction

Catholic health care agencies make up the largest network of not-for-profit health systems and facilities in the US, extending to all fifty states (Catholic Health Association of the United States [CHA], 2010). Professing a mission to provide compassionate health care to all with a special attentiveness to vulnerable populations, many Catholic health care facilities function as the “safety net” for those in the communities they serve who cannot afford health insurance (CHA, 2010). Given the soaring costs and competitive climate within the current U.S. health care industry, however, this mission is becoming increasingly difficult to sustain.

Changing payment processes, fragmentation within the U.S. health care system, the cost of technology, and other societal and economic factors have strained health care systems in the US (Shortell, Gillies, & Devers, 1995; Stange, 2009b). In recent years, burdened safety-net health systems have experienced difficulty in meeting greater demands for services as more and more people have utilized them to meet their health needs. Safety-net systems across the country report higher than average increases in uncompensated health costs (National Association of Public Hospitals and Health Systems, 2010).

In this volatile economic environment, Catholic and other health systems whose stated purpose is to care especially for the most vulnerable in society are strategizing how to control costs while continuing to be faithful to their mission. One of these strategies is changing the delivery of care from an individually-focused, acute-care model to a population-focused, community-based model (Shortell et al., 1995). This “paradigm shift”
necessitates a transformation of the health system’s role from providing health care to promoting the health of a community.

One health system that is engaged in this paradigm shift is Carondelet Health Network (CHN), the leading Catholic health care provider in Southern Arizona (Carondelet Health Network [CHN], 2009b). Like other Catholic health systems, CHN states that its mission is to care for the health needs of the community, embodying the value of “generosity of spirit, especially for persons most in need” (CHN, 2009a). To accomplish this mission, CHN is engaging in community-based interventions, partnering with those “who share our commitment to healing and service” (CHN, 2009a).
The U.S. Health Care Context

Background

Researchers have expressed concern about the sustainability of not-for-profit hospitals—especially those serving as safety-net hospitals—for the last 20 years (Cunningham, Bazzoli, & Katz, 2008). Forces such as cost containment, payment options, new developments in technology, consumer preferences, and various legislative policies over the years have forced hospitals to employ different strategies to ensure sustainability (Lewin & Baxter, 2007; Shortell et al., 1995). These strategies reflect the underlying premise that survival of hospitals ultimately depends on their ability to maintain their profitability (Feldstein, 2007).

In the mid-1980s, revenues changed for hospitals due to the shift in Medicare payments from “cost basis” to “fixed-price” according to the type of admission (Feldstein, 2007). This served as an incentive for hospitals to keep their costs and convert their cost savings into more competitive prices in order to gain Medicare market share. At the same time, a primary strategy in containing health costs was the move from “fee-for-service” payment for health services to managed-care reimbursement (Shortell et al., 1995).

The “fee-for-service” model specified that the more services a provider supplies, the greater the earnings—and, consequently, the higher the profits (Shortell et al., 1995). The model of managed care, however, capitated spending by providing health services within a contracted budget (Shortell et al., 1995). Managed care emerged as a means of capping
costs by shifting many services from the hospital (the most expensive setting) to other facilities (Feldstein, 2007).

The prevalence of managed care in the health industry yielded a two-fold effect. First, health providers streamlined services by diagnosing and treating people within a continuum of care in an effort to be more efficient (Shortell et al., 1995). Second, increased competition among managed-care providers further contributed to the perception that health care is a “commodity,” subject to the forces of the marketplace (Pellegrino, 1999). In the extreme, the managed-care model expressed “the market ethos in tightly restrained risk selection, high-powered marketing and advertising, strict rules about denial or approval of care, competitive price-cutting, and putting substantial portions of the physician’s income at risk” (Pellegrino, 1999).

With the shift to other venues of care such as step-down units, outpatient facilities, and skilled nursing centers, the demand for hospital care diminished and profit margins decreased (Feldstein, 2007). The combination of Medicare’s payment system and managed care’s supervision of the delivery of care resulted in the under-utilization of hospitals, requiring significant changes in the industry. Many hospitals declared bankruptcy, struggling hospitals merged, and still others lowered the price at which they provided care, competing to be incorporated into managed care networks (PPOs) (Feldstein, 2007).

By the mid-1990s, managed care organizations had so expanded their hospital networks they were no longer able to bargain for lower discounts in exchange for larger volumes of clients (Feldstein, 2007). Competition increased between risk-bearing managed care providers and private insurance companies, and hospitals were once again able to
increase their bargaining power. Due to this increased bargaining power—as well as the decline in the number of hospitals and the streamlining of hospital services—hospitals began to see an increase in profits in the late 1990s (Feldstein, 2007).

In the last ten years, hospital profits have continued to erode. Coming out of the 1990s, hospitals had greater market power and were able to increase their prices which—in turn—increased their profitability (Feldstein, 2007). Various socioeconomic forces shifted, however, and the overall costs of health care in the U.S. once again started to rise, putting hospital net revenues at risk.

The proliferation of for-profit hospitals increased competition among providers, while the expansion of many hospitals into wealthy suburbs made it difficult for urban hospitals to attract higher-income, privately-insured clients (Cunningham et al., 2008). Physicians themselves contributed to market forces since many of them began to provide specialty-care and services on an “outpatient” basis (Cunningham et al., 2008). Changes in reimbursement for government-sponsored programs such as Medicare and Medicaid also negatively impacted the financial stability of not-for-profit agencies.

The Balanced Budget Act of 1997 reduced the expenditures of Medicare by decreasing reimbursements for inpatient and outpatient services, medical education, capital expenses, and home health (Bazzoli, Lindrooth, Kang, & Hasnain-Wynia, 2006). It similarly limited state spending on Medicaid, such that Medicaid compensation continued to decrease while the number of Medicaid participants (along with the number of uninsured) continued to increase (Cunningham et al., 2008). This change in government reimbursement for services added even greater financial stress to “safety-net” not-for-profit hospitals that
had a poor payer mix of elderly, low-income, and uninsured patients (Harrison & Sexton, 2004).

**The Current Environment**

In 2009, health care costs amounted to approximately $2.5 trillion dollars—17.6% of the gross domestic profit (Martin, Lassman, Whittle, & Catlin, 2011). Between 2004 and 2008, hospitals accounted for 33% of the total health care costs in the US, 64% of hospital expenditures were due to goods and services, and of this percentage most of the cost (35%) was attributable to labor costs (American Hospital Association [AHA], 2010b). Given an aging population and the likelihood of increased service demand, labor costs will continue to increase because of the shortage of available hospital staff such as nurses, pharmacists, and other clinical workers (AHA, 2010b).

The rising demand for medical care is another contributing factor to hospital costs, accounting for 34% of hospital expenditures (AHA, 2010b). An aging population and the increase in chronic disease due to determinants such as obesity have increased the need for advanced medical interventions to improve and prolong life. Finally, 2% of the growth in hospital expenditures is due to increased utilization of advanced technology to care for more complex patient needs (AHA, 2010b).

Feldstein (2007) identifies several threats to the financial future of hospitals. First, the use of increasingly advanced technology poses a double threat—not only will it continue to drive up costs as patient conditions become more complex, it will also enable providers to care for people in outpatient settings, further reducing the need for hospital services.

Second, given the possibilities provided by this advanced technology, the proliferation of
physician-owned facilities and specialty hospitals will be a further source of competition for hospitals (Feldstein, 2007).

Finally, with an aging population the number of enrollees in Medicare will increase (Feldstein, 2007). In an effort to stem the drain on the Medicare Trust Fund, changes will have to be made to the Medicare payment system. These changes will most likely result in an even greater decrease in hospital reimbursements (Feldstein, 2007).

These scenarios certainly pose threats to hospital profitability, especially in the long-term. Recent federal policy enactments, however, also pose “threats” to hospital profitability. Feldstein did not foresee these policy changes in his predictions; however, their impact on hospital profits may be significant.

The Internal Revenue Service (IRS) has exercised oversight of not-for-profit hospitals since 1954 through Section 501(c)(3) of the Internal Revenue Code. In an attempt to ensure that not-for-profits are justified in receiving their tax exemption, the IRS recently issued a redesigned reporting instrument for not-for-profit hospitals, Form 990 (Hellinger, 2009; Studdert, Mello, Jedrey, & Brennan, 2007). Form 990 requires not-for-profit hospitals to be more transparent by providing detailed information regarding their charity care, unreimbursed Medicaid costs, and community health education programs (Hellinger, 2009).

In a similar fashion, Section 9007 of the Patient Protection and Affordable Care Act stipulates new requirements for tax exemption which will impact the future of not-for-profit hospitals (Internal Revenue Service [IRS], 2010). These new requirements are:

- Not-for-profit hospitals must conduct a community health needs assessment (CHNA)
  every three years and adopt an implementation strategy to meet the community
health needs identified by the assessment. The CHNA must engage people who represent the broad interests of the community served by the hospital—including those with expertise in public health—and this assessment must be made available to the public. The hospital is then required to account for how it is addressing the needs identified in the CHNA. Failure to comply with this mandate will result in a $50,000 tax to the institution.

- Not-for-profit hospitals must also establish a financial assistance policy that establishes eligibility criteria as well as processes for applying for assistance and calculating charges. Not-for-profit hospitals must also develop a policy relating to emergency medical care which affirms provision of care regardless of the institution’s eligibility criteria for financial assistance.

- Not-for-profit hospitals must not overcharge for emergency or other medically necessary care that is provided to individuals eligible for assistance under the organization’s financial assistance policy. Charges must be commensurate to the amounts generally billed to individuals who have insurance covering such care.

- Finally, not-for-profit hospitals must first take reasonable steps to determine whether the individual is eligible for assistance under the hospital’s financial assistance policy before it employs any special collection activities (IRS, 2010).

Given these policy changes, the competitive health care environment, and the public demand for better services, many health systems find themselves struggling between the values of service to the community and organizational survival (Williams, Smythe, Hadjistavropoulos, Malloy, & Martin, 2005). Service to the community denotes an ethical
stance that upholds patient-focused beneficence and regards health care as a necessary human good; whereas organizational survival conveys a business ethic that promotes pragmatism, competition, no malfeasance, and treatment based on ability to pay (Pellegrino, 1999). The challenge for not-for-profit health systems (particularly Catholic institutions) is to balance these competing values.
The Mission of Catholic Health Care

A Complex Moral Imperative

The United States Conference of Catholic Bishops (USCCB) reaffirmed the Church’s stance regarding the right of all people to adequate health care in the document entitled *Forming Consciences for Faithful Citizenship: A Call to Political Responsibility from the Catholic Bishops of the United States*. In this document the USCCB underscored the Catholic Church’s commitment to protect the dignity of the human person, and identified health care as one of those basic human rights that promote and sustain the fundamental “right to life” of every human being (United States Conference of Catholic Bishops [USCCB], 2007, p. 8). The bishops go on to state that any reform of the U.S. health system must be grounded in values that “respect human dignity, protect human life, and meet the needs of the poor and uninsured, especially born and unborn children, pregnant women, immigrants, and other vulnerable populations” (USCCB, 2007, p. 23).

In a later document regarding the rights of employees in Catholic health care facilities, the USCCB further stipulates that Catholic facilities must respect the dignity of employees, provide a living wage with benefits, and offer staff opportunities for “advancement, learning, and growth” (USCCB, 2009, p. 7). The document represents ten years of dialogue between the USCCB, the Catholic Health Association, and union leaders representing workers in Catholic health care agencies. It reaffirmed the responsibility of those working in Catholic health care to respect human life and dignity while being
“responsive to the needs of the poor, the vulnerable, the marginalized, following the example of the healing ministry of Jesus” (USCCB, 2009, p. 7).

Rooted in the Christian Gospels’ assertion of the dignity of every person and the need to care for the least of one’s sisters and brothers, these two documents re-affirm a complex moral imperative that the Catholic bishops put forth in their earlier document regarding the normative principles of Catholic health care, Ethical and Religious Directives for Catholic Health Care Services (USCCB, 2001). Health care is a human right that promotes the dignity of the human person; therefore, Catholic health care agencies must provide care to all—especially the most vulnerable. At the same time, Catholic health care agencies must care for their employees by promoting their rights and dignity, as well as providing them just compensation for their work (USCCB, 2001).

This is a lofty mission. It is also an expensive one, particularly in a competitive health care market. To accomplish this task, Catholic health care institutions have had to become more aggressive in their business practices and adopt strategies which often seem to compromise the very ideals they purport to uphold (Studdert et al., 2007; Williams et al., 2005).

Ethical Considerations

The socioeconomic and political forces that threaten the future profitability of hospitals and health systems necessarily impact the delicate balance between the values of organizational survival and service to the community, with organizational survival emerging as the dominant good. To respond primarily to organizational survival, however, is to give preponderance to a market ethos which treats health care as a commodity that is bought and
sold according to the manipulations and demands of the free market (Stange, 2009b). The U.S. health system has increasingly adopted a competitive approach to health care, and while the cost of health care has increased, its value has decreased—the health of more people and communities has gotten worse (Stange, 2009b).

Pellegrino (1999) maintains that treating health care as a commodity rather than a human good raises the ethical question of whether the marketplace is the proper context for arbitrating the distribution of health. Reflecting on the issue Pellegrino states, “One thing is certain: if health care is a commodity, it is for sale, and the physician is, indeed, a money-maker; if it is a human good, it cannot be for sale and the physician is a healer” (Pellegrino, 1999, p. 262).

For Pellegrino (1999), health is a “good” which is necessary for human flourishing. The condition for human flourishing not only benefits the individual, it benefits society as well. The proper functioning of society is dependent on the health of its population, so there is a connection—a reciprocity—that exists between the health of the individual and the health of society as a whole (Pellegrino, 1999).

Stange (2009b) goes a step further. He states that the root problem with the health system today is its fragmentation and the way it subsequently isolates, quantifies, and commercializes the healing process. For Stange (2009b) healing occurs through relationships, and recognizing the interrelationships that exist on all levels of being is lost within the machinations of the health industry.

The way into the future, therefore, is not by further fragmentation of services, but by adopting a “systems-thinking” approach that emphasizes the interconnectedness of health
between individuals, families, and communities (Stange, 2009b). There needs to be greater understanding of the multiple determinants of healing and illness—the biological and social processes which operate within specific environmental and economic systems (Stange, 2009c). Finally, a systems approach to health incorporates all levels of healing, including the interrelationship between transcendence (the spiritual) and health (Stange, 2009c).

The core of Catholic social teaching, which is foundational to the Church’s mission in health care, similarly recognizes the interrelationships that exist within the realm of human experience. At the heart of the Church’s ethic is the premise that all human life is sacred, and moral action consists of respecting the dignity and sacredness of human life (USCCB, 2007).

The affirmation of human life is not only an ethical principle, it is a religious conviction that emanates from the experience of the God portrayed in the Christian Scriptures (USCCB, 2001). It is the experience of a God who affirms, who loves, and who identifies so intimately with the human community—particularly the most vulnerable—that He assures His followers that when they care for the “least” in the community, they are caring for Him (Matthew 25:40). This God also commands His followers to love others—including those who are vulnerable—in the same way that He has loved them (John 15:12).

Relationship, then, is not only an encounter with the dignity and sacredness of another, it is also the privileged moment of encounter with Transcendence; and it is this underlying reality that serves as the context for moral action (USCCB, 2007). By affirming the sacredness of the human person, Catholic social teaching advances the dignity of all people and each person’s “right to life,” and it shapes the Church’s mission in public
ministries such as health care. By providing for the health needs of others so that they may realize their human dignity and “right to life,” Catholic health care facilities fulfill the Gospel mandate to “love one another as I have loved you” (John 15:12, Revised Standard Version; USCCB, 2007).
Challenges to the Catholic Mission

The Tension Between Organizational Survival and Service to the Community

Thomson Reuters released a report in August, 2010 from its study of the 100 Top Hospitals which indicated that out of 255 hospitals, Catholic and other church-owned health systems demonstrate significantly better quality performance than for-profit systems; and Catholic health systems are more likely to provide higher quality service to the communities they serve than secular not-for-profit health systems (Foster, 2010). This is an achievement for Catholic health systems which seek to provide service to the community through quality and compassionate health care (CHA, 2010). It is also impressive since this report is released at a time when the country is still reeling from the effects of the economic downturn of the last several years and organizational survival for many institutions is the top priority.

The American Hospital Association (AHA) indicates that hospitals continue to be negatively affected by the recession in the US (AHA, 2010c). In AHA’s March 2010 survey, 70% of the hospitals reported an overall decrease in the volume of patients (an indication that people may be delaying care), and there was a significant increase in the number of Medicaid and CHIP enrollees—two programs which generally do not cover the full cost of care. Finally, 9 out of 10 hospitals reported an increase in the provision of care for which they received no pay at all (AHA, 2010c).

The consequence of these environmental factors is that hospitals report a decrease in their operating margin, and 87% of hospitals report increased bad debt and charity care as a
percent of total gross revenue (AHA, 2010c). The findings from the AHA survey, therefore, make the Thomson Reuters report regarding Catholic health systems even more remarkable. The question, though, is how Catholic health systems—and other not-for-profit hospitals—can sustain their level of service to the community when the current state of the economy threatens organizational survival.

Responding to the Gospel mandate to love others and to care for the “least” in society—especially those who are unable to pay for it—is a difficult task for Catholic not-for-profit institutions in a volatile health care market. This is why the findings of the Thomson Reuters survey that associates Catholic hospitals with a high provision of quality care to both patients and the communities they serve are impressive (Foster, 2010). However, what is missing from the report—and what is integral for a complete assessment of the success of Catholic hospitals in fulfilling their Gospel mandate—is an analysis of who is receiving the quality care and which communities overall are benefitting from this quality care.

Given the on-going struggle of not-for-profit health systems to remain fiscally viable, the balance between organizational survival and service to the community can easily shift, compromising service to the community. Often the behavior of not-for-profits is no different than for-profit hospitals, even in the provision of uncompensated care (Feldstein, 2007). Catholic health systems continue to struggle to balance their survival in difficult markets with maintaining their fidelity to the mission of Catholic health care, and some of them seem to be more successful at approaching that balance than others.
Strategies to Maintain *Organizational Survival*

The environment in which not-for-profit agencies currently exist has forced them to adopt a range of strategies such as limiting uncompensated care; managing payer mix by increasing the number of privately insured and Medicare patients; upgrading or expanding facilities to become more competitive; and expanding services into more affluent communities through mergers, partnerships, and acquisitions (Cunningham et al., 2008). As not-for-profits, Catholic health systems have had to adopt many of the same strategies. This behavior has sometimes led the public to question whether or not Catholic hospitals are being faithful to their stated mission (Singer, 2006).

In order to maintain *organizational survival*, Catholic health care institutions—like other not-for-profit hospitals and health systems—have attempted to remain solvent through system reorganization. One Catholic hospital system, for example, tried to form a joint venture with a for-profit system in order to pool assets within a particular market environment (Studdert et al., 2007). While the conglomerate agreed to fulfill the Catholic system’s community-benefit responsibility, the IRS reviewed the joint venture and terminated the Catholic system’s tax-exempt status (Studdert et al., 2007).

A federal jury ultimately ruled the terms of agreement between the Catholic system and the for-profit system did provide adequate assurance that the Catholic system would meet its community responsibilities and reinstated its tax-exempt status (Studdert et al., 2007). This example illustrates the difficulties that begin to surface in mergers between two health systems that have different legal responsibilities. It also elucidates the deeper—and
more complex—moral questions that arise when the distinction between for-profit health systems and Catholic health systems begins to blur.

Some Catholic health systems have also adopted efficiency strategies that do not necessarily include mergers with—or acquisitions of—other health systems, but are realignments within their own system. One such strategy is *selective diversification*. Selective diversification identifies which health services are inherently profitable and which are not, establishing a rationale for deciding which services to provide and which to avoid (Robinson & Dratler, 2006).

One Catholic health system applied the process of strategic diversification to salvage an unsuccessful attempt at creating an integrated delivery system of care (Robinson & Dratler, 2006). It analyzed both its facilities and its social mission according to this principle. For its facilities, the system delineated which services were more advantageous due to a growing, more affluent population with relatively minimal competition and those services which either posed risks due to a low-income population or to high competition from other agencies (Robinson & Dratler, 2006).

The Catholic system then applied the same strategy to its social mission. It evaluated its social contribution by assessing the charity care delivered (including service to Medicaid participants) and the levels of vulnerability within the communities in which the system had facilities (Robinson & Dratler, 2006). The purpose of this comprehensive evaluation was to identify the best means for achieving greater return on capital investments while preserving the goal of serving vulnerable communities (Robinson & Dratler, 2006).
The outcome of the analysis was that the system apportioned the largest investment of capital to its most profitable facilities which delivered smaller amounts of charity care and Medicaid services (Robinson & Dratler, 2006). The system then targeted its older facilities that were important sources of charity care for renovation or replacement. Finally, the remaining agencies within the system that did not demonstrate high financial return or high social contribution received limited capital investment (Robinson & Dratler, 2006).

Strategic diversification is another approach to balance organizational survival and service to the community. The difficulty, however, is that limiting care in one community in order to invest in another may diminish a community’s only source of charity care (Cunningham et al., 2008). Given the current economic climate and the number of people without insurance, populations “at risk” will increasingly challenge Catholic hospitals to provide needed unprofitable services such as emergency care (Studdert et al., 2007).

There is also the ethical issue of transparency of purpose. Catholic health care has a stated commitment to improve the health status of communities and to provide compassionate, quality care to everyone—especially the most vulnerable (CHA, 2010). If, however, a Catholic health system is also committed to increasing its capital reserves by investing in facilities in geographically profitable markets that provide minimal charity care (strategic diversification), the system should be transparent about that commitment.

The struggle to achieve the balance between organizational survival and service to the community is often detected in the not-for-profit’s public “statement of purpose”—its mission statement. Mission statements are a management tool that articulates the values of the institution to stakeholders inside, as well as outside, the organization (Smythe, Malloy,
Hadjistavropoulos, Martin, & Bardutz, 2006). They describe the role and purpose of the organization (Bolon, 2005), energizing employees to realize the organization’s values and accomplish its stated purpose (Desmidt & Heene, 2007; Smythe et al., 2006; Vandijck, Desmidt, & Buelens, 2007).

White, Chou, and Dandi (2010) analyzed 41 Catholic health systems (a total of 452 hospitals) according to a range of services that they associated with the values of justice and compassion, services thought to benefit vulnerable populations. The results showed that “Catholic hospitals provide more justice-related and compassion services to those local communities that are small, urban, more affluent, or composed of greater percentages of elderly people” (White et al., 2010, p. 184). Hospitals that serviced larger populations of indigent people provided fewer services associated with justice and compassion (White et al., 2010).

White et al. (2010) conclude that Catholic hospitals are providing important services to underserved populations regardless of whether or not they are associated specifically with the values of justice and compassion. They add, however, that their findings highlight the lack of congruence that can exist between stated values and organizational strategy. Aligning stated values to organizational behavior and provision of services demonstrates an organization’s adherence to its stated mission and ensures that the benefits it offers the community justifies its tax-exempt status (White et al., 2010).

The findings of White et al. (2010) are congruent with the literature analyzing the relationship between values and behavior of not-for-profit hospitals. Bolon (2005) found in comparing the mission statements of 52 not-for-profit hospitals with 60 for-profit hospitals
that there were minimal differences in content between them. In another study, White and Dandi (2009) found that there were enough similar values expressed in the mission statements of Catholic hospitals to indicate that they form a homogenous grouping; however, there was also a noticeable variation of values among them. The authors suggest that there needs to be greater clarification of what values are core to the Catholic health care mission, how these Catholic values translate into praxis, and how organizational outcomes align with an institution’s unique Catholic mission (White & Dandi, 2009).

No Margin, No Mission?

The slogan “no margin, no mission” has captured the imagination of leaders in the health care industry for many years, and generated multiple strategic theories and approaches in order to balance organizational survival and service to the community (Kinzbrunner, 2002; Meliones, Ballard, Liekweg, & Burton, 2001). In their linguistic analysis of hospital mission statements, Smythe et al. (2006) maintain that the wording of mission statements often reflect the underlying ethical principles that guide the institution. The challenge that now confronts Catholic health care is to decide finally—in light of the principles that arise from its deepest religious beliefs—which word in the slogan really takes precedence: mission or margin.
A Paradigm Shift in Delivery of Care

Strategic Integration of Services

Despite the tension between service and profitability, not-for-profit health systems continue to provide uncompensated care and community-oriented activities. Between the years 1994 and 2006, U.S. hospitals increased their community orientation activities irrespective of whether or not they were subject to local community-benefit laws (Ginn & Lee, 2006; Rosenau & Linder, 2003). The recurring fluctuations in the economic environment over the last 20 years has forced hospitals and health systems to become much more strategic in planning delivery of care while minimizing costs.

Formal strategic planning has become a common and valued function in health care institutions (Begun, Hamilton, & Kaissi, 2005). Strategic planning has enabled health organizations to adapt more readily to changing environmental conditions, resulting in greater economic efficiency and increasing the organization’s financial performance (Ginn & Lee, 2006). Research has similarly demonstrated that greater hospital efficiency is associated with an increase in the provision of uncompensated care (Hsieh, Clement, & Bazzoli, 2010).

Another strategy that has increased health system efficiency is the “integrated systems” approach to delivery of care. Provan and Milward (1995) in an early study of the effectiveness of network integration, found that among mental health networks in four different U.S. cities, network integration was associated with better system-level outcomes depending on the internal and external environments of the networks. Sikka et al. (2009) in
a later study found that same-system hospitals within geographic areas that formed regional systems—or “clusters”—to distribute services across facilities were often associated with higher efficiency scores, depending on the make-up of the cluster.

The shift in hospitals and health systems toward more integrated care has reaped other benefits besides better system outcomes and cost-effectiveness. In an evaluation of the performance of an integrated community health center, Suter, Hyman, and Oelke (2007) found that not only did the overall functioning of the center at a system level improve over time; there were also high levels of patient and provider satisfaction with the services. Hsieh et al. (2010) likewise found that there was a positive relationship between higher levels of hospital efficiency due to system integration and the provision of charity care, especially in communities that demanded high levels of uncompensated care.

The literature reveals, however, that system reorganization requires an understanding of the mission of the organization (which reflects the ethical underpinnings of the institution) as well as a commitment to evidence-based strategic planning (Kaissi & Begun, 2008; Smythe et al., 2006). Rosko and Proenca (2005) found in their study of efficiency at the hospital, network, and system level, mere membership in a network or system does not improve hospital efficiency. Highly centralized and coordinated health systems were associated with higher levels of efficiency, and hospitals demonstrated greater efficiency (and consequently experienced greater benefits) to the extent that as members of a health system they utilized the system in the provision of services (Rosko & Proenca, 2005).

In a later study of hospital performance, Trinh, Begun, and Luke (2010) similarly found that system mergers and acquisitions to provide integrated services do not guarantee
better overall system and hospital performance with enhanced profits. Their study indicated that hospitals which relied on other hospitals within the system to provide services demonstrated greater performance outcomes and increased profits than the hospitals within the system which provided the services (Trinh et al., 2010). As the authors point out, in terms of individual hospital self-interest, “receiving” (relying on other hospitals within the system to provide services) is better than “giving” (providing the services).

Trinh et al. (2010) conclude that there is a delicate balance that must be maintained between “receiving” and “giving” between institutions within a system, and the individual interests of participating institutions must be balanced in light of the overall goals of the system. Greater centralization within a system can ensure more flexibility and coordination of services at a system level to match the needs of a local market, though this coordination may sometimes conflict with the self-interests of a particular hospital member. Trinh et al. (2010) suggest that system-wide strategic planning can more effectively assess the needs of the external environment in light of system resources, assist system and hospital leaders to negotiate the delicate balance between system goals and individual hospital interests, and distribute services to attain greater system-wide efficiency.

Arndt and Bigelow (2009), based on a review of the literature, echo the need for careful assessment in strategic planning for they conclude that evidence-based management involves more than simply adopting “best practices,” and health systems must continually evaluate actual outcomes—one size does not fit all for complex organizations operating in complex environments. In a similar review of the literature, Kaissi and Begun (2008) surmise that many mergers and system alignments are driven by efficiency concerns, and
that these adopted strategies are simply “imitative” behaviors of popular exemplars. Unexamined “best practices” can often lead to negative outcomes which range from cyclic patterns of reorganization to system failure (Kaissi & Begun, 2008).

**Community-Based, Population-Focused Care**

The strategy of the “integrated system” has expanded beyond individual health care agencies and health systems to the community itself. Due to the increased drive for service efficiency within capitated budgets, health systems have discovered that the optimal place to deliver care is not in the hospital, but in the community (Shortell et al., 1995; Shortell, 2010; Woulfe, Oliver, Zahner, & Siemering, 2010). This awareness has subsequently led to the growth of community-based interventions that engage community partners in promoting primary care, disease prevention, and health promotion (Fawcett, Schultz, Watson-Thompson, Fox, & Bremby, 2010; Mays & Scutchfield, 2010; Shortell et al., 1995).

A **paradigm shift** has consequently emerged in health care delivery. Health care systems are increasingly shifting from managing disease and supplying acute care to creating “new community-centered, population-based health care delivery models built on integrated systems of care” (Shortell et al., 1995). According to this paradigm shift, health systems cease to be the main focus of health in a community and become partners with other community organizations in promoting and distributing health within the community (Shortell et al., 1995; Starfield, Hyde, Gérvias, & Heath, 2008).

**Community Health Partnerships**

Along with this shift to community-based delivery of care, the concept of *prevention* has similarly evolved from emphasizing individual risk factors to identifying the risk factors
that compromise a population’s health (Starfield et al., 2008). The enactment of the Patient Protection and Affordability of Care Act marks a new stage in this evolution by highlighting at a national level the need for greater prevention initiatives which address population health outcomes and health education. The health reform legislation not only emphasizes the importance of engaging the public and private sectors in promoting the health of communities, it allocates new funding opportunities for local initiatives which strengthen public health infrastructure, craft interventions that target chronic diseases, and build safer and healthier communities through systemic change (Shearer & American Public Health Association, 2010).

As evidence of this shift in health care strategy, there has been a rapid growth in the number of community coalitions that have formed to improve community health (Butterfoss, Goodman, & Wandersman, 1993; Green, Daniel, & Novick, 2001; Roussos & Fawcett, 2000). These community health partnerships (CHPs) are coalitions of public and private organizations within a community that are created to address community concerns and improve the health of the population (Mitchell & Shortell, 2000). By drawing on a wide variety of community players—politicians, churches, grassroots organizations, as well as health providers—CHPs can be effective in confronting many community-related issues from educational and economic development to social and health services (McGuire, 2006; Roussos & Fawcett, 2000).

The proliferation of CHPs is a key feature of the paradigmatic shift in health care delivery which is more population-focused and community-based. Given a volatile market and changing societal forces, health systems must continue to develop—and participate in—
new organizational structures that serve community needs (Mays & Scutchfield, 2010; Shortell, 2010). Again, while organizational strategies such as CHPs have been effective in producing positive health outcomes, it is prudent for health systems considering such approaches to assess any strategy in light of the environmental forces both inside and outside their respective organizations before adopting it (Arndt & Bigelow, 2009; Kaissi & Begun, 2008).

**An Exemplar of a Community Health Partnership**

There are Catholic health care institutions which have formed CHPs that have successfully aligned mission values with outcomes to effectively balance *organizational survival* and *service to the community*. One such Catholic hospital has been instrumental in promoting a community-based, integrated system of care which is both efficient as well as effective (Thorson, Brock, Mitchell, & Lynn, 2010). It is the community—not the hospital—which serves as an exemplar for providing population-focused care that is of higher quality than what is usually the case in community-based systems of public health (Thorson et al., 2010).

Grand Junction, Colorado has a collaborative of several independent health care agencies that are closely aligned to form an integrated system of care (Thorson et al., 2010). The primary agencies in the collaborative consist of a level II trauma center (St. Mary’s Hospital), a hospice and palliative care center, a local HMO, a physicians’ practice network, and a local quality improvement organization that manages an electronic health information-sharing platform. The collaborative represents health professionals and business leaders
from across various sectors of the community who have addressed different health issues and concerns that have arisen in the community over the years (Thorson et al., 2010).

The approach to health care in Grand Junction is that it is managed as a “common-pool resource” like other natural community resources such as fishing grounds and water supplies (Thorson et al., 2010). As a common-pool resource, it is accessible to all, but can be exhausted or diminished by overuse. Grand Junction has established several key mechanisms to ensure the well-being and sustainability of this community resource.

First, there is a shared understanding and commitment within the community that the goal of provider services is to improve the health of the total community (Thorson et al., 2010). Second, quality care is maintained by regular exchanges of site visits among the providers. Third, there is a collective agreement among providers to limit health care costs, and the local third-party payer offers rewards to providers for maintaining standards that prevent the overuse of health services (Thorson et al., 2010).

Fourth, the information exchange which provides patient information and summarized statistics is used by the majority of providers (Thorson et al., 2010). Fifth, the community utilizes participative processes which encourage open discussion and shared decision-making. Finally, there are social and professional constraints to ensure accountability for community decisions (Thorson et al., 2010).

The Grand Junction model exhibits many of the elements the literature identifies as critical to the effectiveness of CHPs (Woulfe et al., 2010). The partnering organizations bring needed resources to the collaborative effort of maintaining an effective health system for the community, and they reflect diverse constituencies within the health care community.
The organizations also share a common vision that the whole community should have access to quality care, they incorporate open discussion and participative decision making into the partnership structures, and they promote a strong sense of community which strengthens trust and provides a respectful context for managing conflict (Woulfe et al., 2010).

The model of health care delivery that has evolved in Grand Junction is reflective of the community’s response to the challenges posed by its external environment. Given its geographic location in western Colorado, the community has developed a sense of autonomy, responsibility, and interdependence in the provision and stewardship of limited resources (Thorson et al., 2010). The Grand Junction collaborative has drawn on these attributes and effectively forged an integrated delivery system that utilizes available health resources to ensure quality care for everyone in the community.

The result of Grand Junction’s commitment to community-based, population-focused care is that it is the only region that has consistently ranked among the lowest-cost Hospital Referral Regions in the Dartmouth Atlas of Health Care since the report began in 1996 (Thorson et al., 2010). The system manages chronic disease and end-of-life care without over-utilizing hospital resources; relying heavily on primary care, home health, and hospice services. Information exchange and the use of appropriate social services are also elements that further enhance the provision of low-cost, high-quality care (Thorson et al., 2010).

As for St. Mary’s, in comparison to other hospitals St. Mary’s demonstrates better outcomes in shorter lengths-of-stay, in more patients discharged directly to home, and in reductions in mortality rates associated with hospitalization after six months (Thorson et al., 2010). While these findings are important for highlighting the quality and efficient care that
St. Mary’s offers as a hospital, they reveal only a part of the overall effectiveness of St. Mary’s. The other measure of effectiveness is the leadership St. Mary’s has provided in improving the health of the people and communities it serves—a value that is explicit in its mission statement (Thorson et al., 2010).

Thorson et al. (2010) interviewed 28 key leaders from the various health care organizations operating in Grand Junction and inquired how Grand Junction developed its health care structure. The investigators found that many of the leaders attributed it to the mission of the Catholic nuns at St. Mary’s Hospital, citing their “actions and their beliefs as the most direct and persistent influence” (Thorson et al., 2010, p. 1682). Regarding the future, most of the leaders expressed optimism due to the on-going collaborative partnerships among the health providers; the strong sense of mission and community; and the commitment to delivering quality, patient-centered care to all in the region.

Thorson et al. (2010) conclude that a critical factor accounting for the success of the collaborative model of health care delivery in Grand Junction is the coordinated effort of institutions and community leaders who work together to solve community issues as they arise. This pattern of community engagement began when the Catholic nuns and supportive physicians first brought the community together to address community health and delivery of care issues. The presence of St. Mary’s—a dominant health care institution with a strong mission to serve the community—helps to sustain the collaborative momentum of the community (Thorson et al., 2010).

In reviewing the literature, Mitchell and Shortell (2000) identify CHPs as voluntary collaborations which form to improve the health of the community. Woulfe et al. (2010)
define community collaboration as “the process of system change, shifting the focus from the responsibilities and effectiveness of individual institutions to their relationships and collective effect on population health” (p. 1). The Grand Junction model of health care delivery is the product of system change, brought about through the on-going collaborative efforts of the partnerships formed by the community organizations within Grand Junction—with St. Mary’s Hospital being one of the primary partners.

St. Mary’s Hospital stands as an exemplar, particularly of a paradigm shift in Catholic health care. Its success is not that it is “outstanding” for its own merits, but that it is embedded within the community collaborative to bring about quality care for all of Grand Junction (Thorson et al., 2010). St. Mary’s fulfills its mission by providing quality medical care to the community, as well as serving as a “leaven” among the community leaders to respond to the needs of the community and working in solidarity with the community as a partner so that all in Grand Junction might enjoy the “right to life.”

The literature speaks of the importance of leadership in the effectiveness of CHPs and the crucial role systems-thinking and trust play in the working and sustainability of the partnership (Kindig, Booske, Siemering, Henry, & Remington, 2010; McGuire, 2006; Woulfe et al., 2010). The integrity of the leadership of St. Mary’s in pursuing a mission of service to the community has facilitated the development of a structure which is systemic in scope and which promotes a sense of community among peers through open dialogue, peer relationships, and participative decision-making (Thorson et al., 2010). The outcome is a community partnership that is mission-oriented, that aligns its action according to its
mission, and that develops system-level interventions to meet the health needs of the community (Thorson et al., 2010).

The Grand Junction model demonstrates the effect a CHP can have on the health and well-being of a community, and St. Mary’s demonstrates the role a Catholic institution can play as a member of a CHP. St. Mary’s is not a “best practice” to be imitated, but it stands as a model of how Catholic agencies can serve as partners to help identify the unique health needs of a specific community and provide the appropriate leadership to facilitate the development of a systemic approach to address those needs (Kaissi & Begun, 2008; White et al., 2010). This is the challenge of Carondelet Health Network as it joins with other community partners to form a collaborative, the Southern Arizona Health Village for the Homeless, to provide for the health needs of the homeless population in Tucson, Arizona.
A Population-Focused Program for Those Who Are Homeless in Tucson

Homelessness

The rate of poverty in the US increased between 2008 and 2009 with median household income declining for both the white and African-American populations (DeNavas-Walt, Proctor, Smith, & U.S. Census Bureau, 2010). The number of homeless people on the street declined between 2008 and 2009; however, the number of homeless families increased during the same period—a reflection of the deleterious effects of the recession (U.S. Department of Housing and Urban Development, Office of Community Planning and Development [HUD], 2010). At a single point-in-time count on a night in January, 2009, there were approximately 643,067 sheltered and unsheltered homeless people in the US (HUD, 2010).

The U.S. Department of Housing and Urban Development (HUD) defines homelessness as living in places not meant for human habitation (such as streets and abandoned buildings); residing in emergency shelters or transitional housing; or facing the loss of housing within seven days with no alternative source of residence, funding, or social network to secure a place to live (National Alliance to End Homelessness, 2009). The passage of the Homeless Emergency Assistance and Rapid Transition to Housing (HEARTH) Act in May, 2009, broadened this definition to reflect the emphasis on the prevention of homelessness present in the legislation. Once the new regulations go into effect, the definition of homelessness will also include persons who are at “imminent risk” of losing their housing (within 14 days with no alternative resources or contacts to secure
housing), as well as families and unaccompanied youths whose living situation is considered “unstable” according to specified criteria (such as having to move frequently or meeting the conditions for “homelessness” as defined by other federal programs) (National Alliance to End Homelessness, 2009).

The January 27, 2009 point-in-time survey for the state of Arizona revealed that 4,057 adults and children in families accounted for 47.9% of sheltered persons in Arizona, 15.9% higher than the national average for the previous year (Department of Economic Security, Arizona Homeless Coordination Office, 2009). The count for chronically homeless persons (defined by HUD as an unaccompanied individual who suffers from a disability such as mental illness and has been continually homeless for the last 12 months or homeless at least four times in the last three years) showed that sheltered and unsheltered chronically homeless people represented 29% of all unaccompanied homeless adults (Department of Economic Security, Arizona Homeless Coordination Office, 2009). The total of 2,232 chronically homeless persons in the state of Arizona represents a 66% increase from the 2005 total of 1,348 with the majority of chronically homeless being located in Maricopa and Pima Counties (Figure 1) (Department of Economic Security, Arizona Homeless Coordination Office, 2009).

According to the Homeless Management Information System (HMIS) report, 5,372 adults and 1,516 children (a total of 6,888 people) accessed homeless services at some point between July 1, 2009 and June 30, 2010 in Tucson/Pima County (Tucson Planning Council for the Homeless, 2010). HMIS is a computerized instrument which records client
characteristics and service needs, and HUD requires all agencies serving homeless populations which receive HUD funding to use HMIS. Tucson and Pima County agencies initiated HMIS in 2008 and the report summarizes data from over 90% of the agencies providing services to those who are homeless, representing those persons who are in transitional housing as well as in some type of permanent supportive housing situation (Tucson Planning Council for the Homeless, 2010).

![Figure 1. Totals for sheltered and unsheltered chronically homeless individuals in Arizona, 2005 - 2009. Adapted from Current status of homelessness in Arizona and efforts to prevent and alleviate homelessness (18th Annual Report) by the Arizona Homeless Coordination Office, Department of Economic Security, 2009, p. 6. Phoenix, AZ: Author.](image)

Service providers from across the country identify two common factors leading to homelessness (particularly for families)—the lack of employment and the lack of affordable housing (Department of Economic Security, Arizona Homeless Coordination Office, 2009).
They also assert that the age of those who are homeless is increasing (which often means that they have greater health needs); but several providers suggest that the age of veterans who are homeless is decreasing while their level of impairment is increasing (HUD, 2010).

Those who are homeless experience a high degree of morbidity due to the inability to access health services (Post, 2007). Two dominant reasons for the inaccessibility of health services are lack of health insurance and lack of transportation (Post, 2007). Qualitative studies eliciting the experience of homeless people indicate that they encounter other barriers to adequate health care (Daiski, 2007; Martins, 2008). Many homeless individuals feel stigmatized and isolated, and they report that health care providers are often insensitive and disrespectful (Daiski, 2007; Martins, 2008; Nickasch & Marnocha, 2009).

The lack of regular health care is associated with poorer health and higher prevalence rates of chronic illness (Kushel, Vittinghoff, & Haas, 2001; Zlotnick & Zerger, 2009). Kushel et al. (2001) found high rates of chronic illness, mental illness, and substance abuse in a study of homeless individuals; and Lee et al. (2005) discovered that many people who were homeless were undertreated for hypertension, hyperlipidemia, cardiovascular disease, and diabetes. Hwang and Bugeja (2000) similarly found that homeless individuals had difficulty managing their diabetes due to a paucity of food choices, limited availability of medication, and poor coordination of medications with food intake.

While many older homeless people may have some type of health insurance, they are less likely to receive regular primary and preventive health services—particularly if they have schizophrenia or other psychiatric conditions (Folsom et al., 2002; Garibaldi, Conde-
Martel, & O'Toole, 2005). Homeless veterans as well are less likely to seek regular care even though it is available to them through the Department of Veterans Affairs (VA) (Desai, Rosenheck, & Kasprow, 2003). The lack of health insurance and the subsequent lack of a regular source of health care are associated with increased use of expensive hospital services which drive up the cost of health care (Kushel et al., 2001; Newton, Keirns, Cunningham, Hayward, & Stanley, 2008; Oates, Tadros, & Davis, 2009).

Kushel et al. (2001) found that homeless persons were more likely to use emergency departments for care. Their study also showed that hospital admission rates for homeless individuals were 4 times that of the general U.S. population. In a later study, Kushel, Perry, Bangsberg, Clark, and Moss (2002) found that repeated emergency room use by those who are homeless was associated with poor health, transient housing, substance abuse, and mental health problems.

Moore, Gerdtz, Hepworth, and Manias (2010) further studied multiple emergency department visits by homeless people. They found that repeat visits to the emergency departments were associated with homeless individuals who were mentally impaired; unable to follow medication schedules; or who had comorbidities of substance abuse, mental illness, and chronic disease. These people required high levels of community services due to their vulnerability, necessitating better coordination of services to care for their multiple needs (Moore et al., 2010).

The use of the term “vulnerable” is associated in the literature with those homeless individuals who experience multiple risk factors. The Vulnerability Index is an evidenced-
based tool which defines a *vulnerable* homeless person as someone who is at risk of dying on the streets, and lists eight different characteristics to identify a homeless person as “vulnerable” (Common Ground, n.d.). One characteristic is the co-occurrence of chronic disease, substance abuse, and psychiatric condition (Common Ground, n.d.).

While not using the term *vulnerable* to indicate the level of risk, the HMIS uses the category “disability of long duration” for the chronically homeless to identify debilitating conditions which render a person unable to work or perform one or more activities of daily living, such as comorbidities of chronic disease, substance abuse, and mental illness (Tucson Planning Council for the Homeless, 2010). The category of “disability of long duration,” then, is associated with similar conditions (comorbidities) that describe a homeless person as *vulnerable* according to the Vulnerability Index. Given this association, the HMIS reports that 1,419 homeless adults (32%) in Tucson/Pima County had disabilities of long duration, signifying that they are *vulnerable*.

**The Southern Arizona Health Village for the Homeless**

Carondelet Health Network (CHN) is the largest Catholic not-for-profit health system in southern Arizona, serving 1.5 million people (CHN, 2009b). CHN is “committed to Christ’s healing ministry” (CHN, 2009a), and its mission is to provide health care to the community; to embrace the whole person in mind, body, and spirit; and to serve everyone with dignity (CHN, 2009a). This mission is accomplished by (a) providing evidence-based care and using the latest technology, (b) offering consistent and high-quality services in a
spiritually integrated and compassionate environment, and (c) partnering with those who share CHN’s commitment to healing and service (CHN, 2009a).

In light of this mission, CHN joined with other local agencies in Tucson, Arizona to enhance “community efforts to improve the stability, capacity and well-being of homeless individuals” (Sklar & Zazworsky, 2010). A needs assessment revealed that greater coordination of services among the various community agencies would be more effective in providing care for those who are homeless (Sklar & Zazworsky, 2010). The result was that CHN and several other organizations formed a collaborative partnership, the Southern Arizona Health Village for the Homeless (SAHVH) (Sklar & Zazworsky, 2010).

The overall goal of SAHVH is to meet the health needs of the homeless population living in Tucson by providing “a seamless health care delivery system” (Sklar & Zazworsky, 2010, p. 55). This “seamless delivery system” begins with the provision of primary care services and facilitates the prevention of acute conditions which drive up costs due to emergency room and in-patient admissions to the hospital (Sklar & Zazworsky, 2010). To attain this goal, the partnership has invested in a mobile van—the Van of Hope—to deliver primary care and to serve as a referral source through its case management and telemedicine capabilities, linking homeless individuals to services within the community (Sklar & Zazworsky, 2010).

The presence of 6,888 homeless individuals in Tucson (of whom 1,419 can be considered vulnerable) suggests high rates of emergency room use and hospital admissions (Kushel et al., 2001; Kushel et al., 2002; Moore et al., 2010). This appears to be the case in
Tucson since one of the aims of SAHVH is to “reduce inappropriate use of emergency department resources” (Sklar & Zazworsky, 2010, p. 55). The Van of Hope, therefore, must not only be cost-effective in bringing down the rate of emergency department use, it must also be able to provide appropriate outreach to the vulnerable homeless population in order to meet the level of care they require (Moore et al., 2010).

**Program Components**

SAHVH identified five objectives to help meet its overarching goal of providing an integrated system of care for the homeless population of Tucson (Sklar & Zazworsky, 2010). These objectives include (a) establish a consortium of partners, (b) increase the number of health care service visits for those who are homeless, (c) improve their clinical outcomes, (d) reduce inappropriate use of emergency department resources, and (e) create a continuum of care. SAHVH obtained a mobile van—the Van of Hope—to meet these objectives and facilitate the integration of community services for those who are homeless (Sklar & Zazworsky, 2010).

The literature recognizes *integration of services* as central to a population-focused health care delivery system (Butterfoss, 2009; McGuire, 2006; Mitchell & Shortell, 2000; Shortell, 2010). *Integration of services* is the coordination of procedures, information, planning, results, and analyses to support system goals and to ensure that the system operates as an inter-connected unit (Baldrige National Quality Program, 2005; Lukas et al., 2007). The SAHVH program incorporates four key components to achieve an integrated system of care—the formation of a CHP, a mobile van, case management, and
telemedicine—and each has demonstrated its effectiveness in improving the health status of the homeless and reducing health costs.

**The formation of a CHP.**

The literature is uneven in demonstrating the overall effectiveness of CHPs on program outcomes for community-based, population-focused care (McGuire, 2006). Studies of the national Access to Community Care and Effective Services and Supports (ACCESS) program showed that there was an inconsistent integration of services among participating CHPs (Goldman et al., 2002). The result was that only housing—among all the other available services—demonstrated an increase in use by homeless individuals (Rosenheck et al., 2002; Rosenheck et al., 1998).

However, another national program—the Collaborative Initiative to Help End Chronic Homelessness (CICH) program—achieved a high level of integration of community services among participating CHPs (Greenberg & Rosenheck, 2010; McGraw et al., 2010). The result was an increased use of available services which consequently improved health outcomes for the homeless participants in the program (Mares & Rosenheck, 2010). Service costs to the chronically homeless also declined; and by the end of the first year of the program, service costs had decreased by almost a half—the largest reduction being in-patient hospital care (Mares & Rosenheck, 2010).

Research regarding the effectiveness of CHPs in providing community-based systems of integrated care has shown positive outcomes for the homeless and community alike. By aligning objectives and integrating agency services, CHPs have demonstrated
positive health outcomes for homeless individuals who abuse alcohol, are chronically ill, or are infected with HIV (Buchanan, Kee, Sadowski, & Garcia, 2009; Larimer et al., 2009; Sadowski, Kee, VanderWeele, & Buchanan, 2009). Community-based, collaborative initiatives for the homeless have benefitted the community by decreasing hospitalizations (with the added benefit of decreasing the amount of uncompensated care provided by hospital systems) and lowering the utilization rates of community emergency resources with the result of lower overall health costs to the community (Larimer et al., 2009; Sadowski et al., 2009).

**Mobile van.**

Mobile vans have demonstrated their effectiveness in providing outreach to various at-risk populations, including those who are homeless. Outreach to the homeless population is the provision of accessible and welcoming services to homeless people who cannot or will not go to fixed-site clinics (Post, 2007). Providers state that it is more cost-effective to provide outreach to the homeless population in a mobile van than in ambulatory or emergency room settings; and they maintain that mobile vans ensure quality of care because of the privacy they provide for thorough physical assessments and in-depth consultation with clients (Howe, Buck, & Withers, 2009; Post, 2007).

The most common use of mobile vans is to provide primary care to homeless individuals, but providers also utilize them to provide an array of other services such as oral hygiene, behavioral health care, and case management (Clayton, 2009; Post, 2007). Studies show that the use of a mobile van is particularly effective for screening at-risk people during
a sexually transmitted disease outbreak (Hibbs & Gunn, 1991; Mimiaga et al., 2008). One study, however, found that using a mobile van to provide rapid HIV screening was more expensive than using a community clinic, indicating the need to carefully assess the cost-benefits of a program before investing in a mobile van to deliver services (Shrestha et al., 2008).

**Case management.**

The case management provided by the Van of Hope has certain features that are closely associated to a form of case management known as Intensive Case Management (ICM), an intervention that has been effective for people with high levels of disability due to mental illness (King, 2006). King (2006) reviewed the literature, however, and found that the evidence is not consistent that ICM improves clinical or social outcomes, and the intervention appears to be cost-effective only in comparison to lengthy inpatient hospitalization. King (2006) suggests that ICM may be more effective as a temporary intervention for incorporating people with high levels of need into a continuum of care.

Evidence from studies of Housing First programs, which utilize case management to incorporate homeless clients with multiple disabilities into comprehensive services, supports King’s suggestion. Providing housing and case management for chronically ill homeless clients is associated with better health outcomes, reducing their need for hospitalizations and emergency department visits (Sadowski et al., 2009). Furnishing case management and housing for alcoholic, chronically homeless individuals is likewise associated with a
decrease in alcohol use, a decrease in public and health services utilization, and a decrease in public and health service expenditures over time (Larimer et al., 2009).

CHN has extensive experience in providing case management that produces high patient satisfaction and improved health outcomes (Ethridge, 1997; Lamb & Zazworsky, 2005). Incorporating case management with the other services offered by the Van of Hope allows CHN to link with community resources in providing for client needs, and to collaborate more effectively with the other partnering agencies to create a continuum of care. The challenge of case management is to ensure that homeless clients experience the care, respect, accessibility, and competence that generates trust and increases the likelihood of successfully connecting people to the appropriate community resources (Lamb & Zazworsky, 2005).

**Telemedicine.**

Telemedicine technology has been an effective method of delivering health care and health education to various populations, and it is an intervention which is continuing to grow with ever-expanding capabilities (Chepesiuk, 1999; Eren, Subasi, & Coskun, 2008). Studies have shown that telemedicine reduces costs while improving health status, and researchers continue to devise more sophisticated measures to assess its overall cost-effectiveness (Davalos, French, Burdick, & Simmons, 2009; Wang, 2009). Research has shown that telemedicine can increase patient awareness of certain life-threatening diseases (Idriss, Alikhan, Baba, & Armstrong, 2009); and the utilization of telemedicine technology in providing mental health services has been so successful, practice guidelines are now
available to assist practitioners in providing quality care via telemedicine (American Telemedicine Association, 2009).

Telemedicine is similarly effective in promoting disease management, improving quality of life, and reducing costs that are often associated with chronic illness (Finkelstein & Friedman, 2000). One prospective study demonstrated that the use of telemedicine for diabetes education was as effective in improving HbA1c levels and acquiring high patient satisfaction ratings as in-person education sessions (Izquierdo et al., 2003). The versatility of telemedicine for education, consultation, and treatment makes it a vital component of the van’s outreach for addressing the multiple needs of those who are homeless, and it enables the Van of Hope to create a comprehensive continuum of care by providing access to a wider range of providers within the community.

**Sustainability of the Program**

CHN secured the support of a donor who pledged $2 million dollars to SAHVH with the understanding that the collaborative would develop a plan to ensure the program’s sustainability (Sklar & Zazworsky, 2010). SAHVH proposed an initial plan which utilized state and federal funding as well as community resources to continue the program. The partnership has since instituted a comprehensive process evaluation of the Van of Hope and of SAHVH in order to develop a more comprehensive and compelling sustainability plan that is based on evidence.
Evidence-Based Project: Evaluation of the Van of Hope

Purpose

This evaluative project is a component of the first phase of the comprehensive process evaluation of the Van of Hope program. The purpose of the project is to establish the effectiveness of the van in reaching the most vulnerable among homeless adults—those with comorbidities who have not been seen by a health care provider in 12 months—and to do an initial assessment of the demographics of this population. The project also assesses the effectiveness of the partnership in creating a continuum of care for vulnerable homeless adults through the van’s outreach. The study will answer the following questions:

- Is the van reaching vulnerable homeless adults?
- What are the demographics of this population?
- Where does the van receive the most vulnerable homeless adults?
- Does the van demonstrate positive outcomes for the two short-term goals of providing outreach to vulnerable homeless adults and of demonstrating an integration of services for them?

Improving the health status of those who are homeless is certainly important; however, the focus of this initial evaluation is twofold: (a) to determine if there is evidence that this community-based, population-focused intervention is reaching homeless adults who are vulnerable, and (b) to ascertain if the van is successful in connecting them to available community services. The findings of this assessment have implications for CHN as it attempts to balance organizational survival with service to the community, as well as for
SAHVH as it seeks to more effectively meet the health care needs of Tucson’s homeless population.

**Significance of the Project**

Program evaluation has a three-fold purpose: (a) it assesses problems that arise in a program, (b) it identifies the means to resolve those problems, and (c) it monitors the outcomes of the program (Ervin, 2002). Due to the complex nature of community coalitions, the evaluation of programs developed by CHPs must incorporate several additional components. These components include an assessment of the dynamic processes within the CHP itself, an assessment of how the program meets the stated objectives and mission of the collaborative, and an assessment of the changes the program produces within the partnering organizations as well as within the wider community (Butterfoss, 2006).

The evidence derived from program evaluations can positively impact policy formulation and resource allocation on both the organizational and community levels (Ervin, 2002). Program evaluation identifies the short-term effects of a health program on its targeted recipients, as well as the long-term effects on service delivery and the health status of a community—elements which are critical in determining the sustainability of the collaborative effort over time (Butterfoss et al., 1993; Butterfoss, 2006). A robust program evaluation can also contribute to the on-going research of the effectiveness of collaborative behavior on program outcomes (McGuire, 2006).

It is essential to design appropriate methods to evaluate the effectiveness of the Van of Hope—as well as SAHVH—for several reasons. First, it enables CHN to be accountable to the donor who insisted on the development of a sustainability plan for the program (Sklar.
& Zazworsky, 2010). Substantiation of positive outcomes can attract further funding sources and increase community support to insure the sustainability of the program beyond the initial donation (Ervin, 2002).

Second, demonstrating positive outcomes for vulnerable homeless adults provides evidence that CHN is achieving a balance between organizational survival and service to the community. By engaging in community partnerships that deliver community-based, population-focused care which is also cost-effective, CHN is able to remain faithful to its mission of meeting the health care needs of the community with “generosity of spirit, especially for persons most in need” (CHN, 2009a). This evidence takes on added significance given the changes in the reporting requirements for charity care and community engagement that the IRS and the recent health care reform legislation have mandated for not-for-profit hospitals (Hellinger, 2009; IRS, 2010).

Finally, an evaluation of the Van of Hope highlights the progress SAHVH is making towards its stated goals (Butterfoss et al., 1993). An evaluation of the van can provide immediate feedback regarding short-term outcomes of the program, clarify the concerns and roles of each organization within the collaborative, and strengthen the interaction among the partners (Butterfoss, 2009). Determining the appropriate measures to evaluate the Van of Hope can similarly highlight how SAHVH is functioning as a unit, as well as how successful the partnership is in creating a continuum of care that meets the needs of those homeless adults who are most vulnerable (Sklar & Zazworsky, 2010).
The Conceptual Model

The model.

Central to the paradigm shift in health care delivery is the formation of integrated systems of care that redefine the traditional boundaries that delineate units, departments, and agencies (Shortell et al., 1995). CHPs reflect this move towards integrated systems as they strategically restructure their respective organizations to collaborate more effectively in providing community-based, population-focused care. The ability of the individual member organizations to integrate and align themselves within the CHP is critical for achieving positive outcomes that match a community’s needs (Mitchell & Shortell, 2000; Shortell, 2010).

The model for organizational transformation in health care systems developed by Lukas et al. (2007) depicts the process that is necessary to produce better health outcomes and effect sustained systemic change (Figure 2). Though the model portrays the process of transformation within a single agency or system, it is also applicable to CHPs which share similar organizational concerns such as leadership dynamics, effective communication across sectors, strategic planning, and the organization and dissemination of information (McGuire, 2006). Like a health system, CHPs must undergo a process of organizational transformation involving several key elements in order to produce improved health outcomes for a community (Fawcett et al., 2010; Lukas et al., 2007; Mitchell & Shortell, 2000).

The key elements which the model identifies as critical to bringing about sustained improvements in client care include the following: (a) an *impetus* that

stimulates and drives change within the system, (b) leadership that is committed to improving the quality of care, (c) improvement initiatives that actively engage staff throughout the system in meaningful problem-solving, (d) the alignment of system-wide goals with resource allocation and actions at all levels of the system, and (e) the integration
of the subunits within the system (Lukas et al., 2007). These key elements do not stand alone, nor do they progress in an orderly or linear fashion. Rather, they are part of a dynamic process that impacts all facets of the system (Lukas et al., 2007).

According to the model, the system itself is comprised of four basic components: (a) the *mission/vision/strategy/priorities* that set the direction of the system; (b) the *culture* that reflects the system’s values and norms; (c) the *operational functions and processes* that deliver the care; and (d) the *infrastructure* (information technology, human resources, fiscal resources, and facilities management) which supports the delivery of care (Lukas et al., 2007). The five key elements permeate the system and interact with these four components, resulting in the transformation of the system over time. *Time* is an important feature of the model for it confirms the sustainability of organizational change, and it verifies that transformation must be an ongoing process if a health system is to remain vital in rapidly changing and demanding health care environments (Lukas et al., 2007).

The model for organizational transformation in health care systems describes the process of transformation that is needed in health systems in order to improve quality of care and achieve better health outcomes. The model is applicable to CHPs as well since they function as a “system” to produce better health outcomes for community populations. Through the dynamic interaction of environment, leadership, innovative strategies, alignment, integration, and time, CHPs can achieve sustained improvements in health care for a community.
Application of the model to SAHVH.

While the goal of CHPs is to produce positive, population-focused health outcomes, community-based interventions do run the risk of unintended negative consequences (McGuire, 2006; Zaccagnini & White, 2011). Systems exist within systems forming a complex network of interrelationships that impact one another either positively or negatively (Zaccagnini & White, 2011). In a health care system, for example, “networks” of stakeholders both within and without the system can embrace or reject new technologies (change) depending on the perceived risk to their sense of professionalism, autonomy, priorities, values, and agendas (Dopson, 2007; Sikka et al., 2009).

The risk of partnerships like SAHVH is that knowledge translation (transformation) needs to occur at multiple levels (Shortell, 2010; Woulfe et al., 2010). Sustained knowledge translation must occur within each of the partnering agencies if the partnership is to remain viable. Sustained knowledge translation must also take place within the SAHVH partnership itself to be effective as a “system” in producing positive, sustainable health outcomes for the homeless (Butterfoss, 2009; Lukas et al., 2007).

The model for organizational transformation in health care systems identifies the process needed for the health system’s success “in moving to sustained, highly reliable, evidence-based improvements that ultimately lead to patient care transformation across the organization” (Lukas et al., 2007, p. 313). This process promotes acceptance of new technologies among stakeholders by emphasizing the integration of services and units, effective communication between sectors, collaborative interaction between leadership and staff, alignment of goals and priorities, and dynamic problem-solving at all levels of the
system (Lukas et al., 2007). When community agencies work together as a collaborative system to meet community health needs, the same process of transformation must occur across multiple systems (Morse, 2007; Woulfe et al., 2010).

The success of SAHVH is dependent on improvement of health outcomes for the homeless over time, but also on effective knowledge translation across the partnership to produce these outcomes. An evaluation of the community program instituted by SAHVH must, therefore, include measures to assess the processes within the partnership that affect the quality and delivery of care (Butterfoss, 2009; Jackson & De Jong, 2001; Zaccagnini & White, 2011). The incorporation of longitudinal measures can also provide evidence of improved access to care over time, serving to verify the effectiveness of the program and consequently endorsing the sustainability of the program (Butterfoss, 2009).
Project Methods

Setting

The Van of Hope is a 38-foot long vehicle which includes a waiting room, multi-use consultation room, and an exam room. The van has a 4-person staff (a nurse practitioner, a care coordinator, a behavioral health therapist, and a driver) that provides basic primary care services, as well as behavioral health, dermatology, and cardiology screenings. The van is also equipped with telemedicine capability to facilitate consultations with other health professionals and an electronic medical records system (NextGen IT) to facilitate case management for the clients.

The Van of Hope operates Tuesdays, Fridays, and one Sunday a month, regularly visiting four different sites throughout Tucson. The sites include shelters and other service venues where homeless individuals tend to gather. The van also participated in one of the annual local community outreach events for people who lack regular access to basic health and social services.

Population

The purpose of the study is to establish the effectiveness of the Van of Hope in reaching vulnerable homeless adults in Tucson, Arizona. The HMIS reports 1,419 adults (anyone 18 years of age or older) in Tucson/Pima County as having a “disability of long duration,” a designation that also indicates “vulnerability” (Common Ground, n.d.; Tucson Planning Council for the Homeless, 2010). The HMIS report does not provide data on children (anyone 17 years of age or younger) who might be considered vulnerable. For
purposes of measuring the outreach of the Van of Hope to those homeless who are vulnerable in Tucson, this project only considered vulnerable homeless individuals who were 18 years of age or older accessing the van.

**Protection of Human Subjects**

The primary investigator submitted the evaluative study to the Institutional Review Board (IRB) of Carondelet Health Network, El Rio Clinics, and The Catholic University of America for review and received approval for the study from each institution. All data used for the study was de-identified with the coding unknown to the primary investigator to protect the confidentiality of the clients and to comply with HIPAA regulations. Finally, since there was no client contact required for the evaluative study and all data was collected and de-identified by van staff and then given to the primary investigator, a client consent form was not necessary.

**Description of Project and Data Collection**

The purpose of program evaluation is to assess problems that arise in a program, resolve those problems, and monitor the outcomes of the program (Ervin, 2002). Due to the complex nature of CHPs, evaluation of programs developed by CHPs must likewise include an assessment of the dynamic processes within the CHP itself (Butterfoss, 2006). Butterfoss (2009) has adapted the Centers for Disease Control and Prevention’s Framework for Program Evaluation in Public Health to assess the effectiveness of CHPs in addressing community health issues, and her revised framework has guided the development of this evaluative project.
In evaluating a program developed by a CHP, Butterfoss (2009) identifies three levels for assessment: (a) the partnership structure and processes, (b) the partnership program, and (c) the health and systems-change outcomes. At the program level, evaluation focuses on short-term and intermediate outcomes regarding the effects of the program on targeted groups, as well as the scope of the efforts it initiates (Butterfoss, 2009). For this initial assessment of the Van of Hope, the evaluation is at the program level, assessing the short-term outcomes for the van.

**Short-term outcomes.**

During the early stages of the development of the Van of Hope program, SAHVH retained the services of a consultant to develop a process evaluation for the program. The primary investigator met with the consultant and the program manager of the Van of Hope, forming an evaluation team to devise a process evaluation for the first year of the program. The evaluation team agreed that the primary investigator’s evaluative project would be a constitutive part of the first year evaluation, assessing the first six months of the van’s operations.

The evaluation team proceeded to develop a method to evaluate the first six months of the van’s outreach. The team identified two short-term outcomes that would serve as initial indicators of how well the van was progressing towards its objectives of increasing the number of health care service visits for those who are homeless, improving clinical outcomes for the homeless population in Tucson, and creating a continuum of care (Sklar & Zazworsky, 2010). The short-term outcomes to be measured were (a) the outreach of the
Van of Hope to vulnerable homeless adults, and (b) the *integration of services* by the partnership in forming a continuum of care for them.

**Definitions.**

*Outreach* is the use of the van to offer medical services, to provide case management, and to connect homeless clients to community services (Sklar & Zazworsky, 2010).

*Vulnerable* indicates those homeless adults with comorbidities who have not been seen by a health care provider in 12 months. The chief quality/medical innovations officer for one of the primary partners within the collaborative requested that the initial assessment determine if the Van of Hope was reaching the most vulnerable among the homeless population. He defined *vulnerable* as those homeless individuals with comorbidities.

The physician also thought it important to know if the van was reaching those who did not have regular health care, so he further defined the population as those homeless individuals with comorbidities who have never accessed the safety-net system for the homeless population in Tucson or who have accessed the system but have not seen their health care provider in the last year. The primary investigator simplified the criterion to *those who have not been seen by a health care provider in the last year.*

*Comorbidities* denote the presence of hypertension and/or diabetes, as well as a diagnosis of substance abuse and/or behavioral disorder. In the literature, the term *comorbidities* refer to co-occurring disorders related to substance abuse and behavioral disorders (Center for Substance Abuse Treatment, 2007). The physician on the leadership
team of SAHVH requested that an assessment be done of the van’s outreach to those homeless with comorbidities (whom he identified as vulnerable) who have not been seen by any of the health care providers in Tucson in the last year.

Another leader in the collaborative later requested that comorbidities also include a diagnosis of “chronic illness” such as diabetes. The primary investigator, in consultation with the manager of the Van of Hope and the evaluation consultant for SAHVH, narrowed the category of “chronic illness” to hypertension and/or diabetes since there is a high rate of morbidity and mortality among homeless populations due to various cardiovascular risk factors and the difficulty of adequately managing diabetes (Hwang & Bugeja, 2000; Lee et al., 2005). Given the desire of the SAHVH leadership to include several types of co-occurring disorders in the evaluation, the primary investigator refined the definition of comorbidities to a diagnosis of hypertension and/or diabetes, as well as a diagnosis of substance abuse and/or behavioral disorder.

To ascertain the presence of comorbidities in the homeless clients coming to the van, the nurse practitioner relied on the self-report of the clients as well as their use of prescribed medications for behavioral disorders and/or hypertension and diabetes. The nurse practitioner also confirmed client history using the NextGen IT medical record on the van. If the client had an elevated fingerstick glucose level or blood pressure reading but was not in the medical record or was in the system but did not have a prior diagnosis of hypertension or diabetes, she did not diagnose chronic illness but referred the client to their own provider or to the partner clinic for a more thorough assessment.
Integration of services is the coordinated communication between the Van of Hope and the partnering community resources so that a “feedback loop” is created between the van and these referral agencies. The nurse practitioner entered the referral into NextGen; and if the client followed up on the referral, notification was sent to the partner clinic where it was entered into the client’s NextGen medical record.

Measures.

The evaluation team identified measures for both short-term outcomes of the evaluation. To assess outreach to vulnerable homeless adults, the team decided upon four measures. The first measure was to count those vulnerable homeless adults who utilized the van in its first six months of operation.

The second measure was to collect the demographic information of those vulnerable homeless adults utilizing the van according to the different categories of age, race, gender, homeless status, and type of insurance. The third measure was to categorize the demographic data according to the four sites visited by the van to determine the sites at which the van was more accessible to vulnerable homeless adults, and the fourth measure was to compare the number of vulnerable homeless adults who accessed the van to the total number of vulnerable homeless adults in Tucson.

The evaluation team identified two measures for the integration of services among the partners. The first was to count the number of referrals issued by the nurse practitioner on the van to vulnerable homeless adults that had documentation of follow-up activity in the clients’ charts. The second measure was to compare the number of referrals to vulnerable
homeless adults that had documentation of follow-up activity in the clients’ records to the total number of referrals given to vulnerable homeless adults accessing the van.

Data collection.

During the course of the six months of operation, various adjustments were made in the operation of the Van of Hope. Instead of going to nine sites as originally intended, the Van of Hope participated in one local community service event and regularly visited four sites—two shelters and two service agencies—with a regular pattern of visits occurring during the third and fourth months of operation. There was also a change in scheduling due to personnel availability, with the days of operation shifting from Mondays, Wednesdays, and Fridays to Tuesdays, Fridays, and one Sunday a month.

The staffing of the Van of Hope was similarly in flux for the first five months of operation. Only one nurse practitioner (rather than two) was available to go out regularly on the van (which also affected the number of days the van was serviceable), and the care coordinator did not become part of the team until the fifth month of operation. Due to the variation in staffing and site visits during the first five months of the program (as well as the delayed arrival of computers for the NextGen IT), the initial methods for data collection also varied, with the team adopting a more systematic approach during the sixth month of operation.

Data collection for this evaluative project began when the Van of Hope began its initial outreach in July, 2010. During the first months, there were three sources used to collect data—intake notes, the nursing notes of the nurse practitioner, and the NextGen IT.
For outreach to vulnerable homeless adults, all three sources were used to collect demographic data and morbidity data. Once the care coordinator became a regular member of the team in month 5 of operation, collection of these data became more systematic.

For integration of services, the nurse practitioner noted in her nursing notes (and then eventually in NextGen IT) that a referral was made to a specific agency. She later entered this information into the client’s NextGen medical record. Notification of follow-up activity by the client was sent from the referral agency to a nurse in one of the partnering clinics who then entered it into the client’s NextGen medical record as well.

After six months, the evaluation team requested from the partner clinic the pertinent patient characteristics needed to evaluate the van’s outreach to vulnerable homeless adults and its integration of services. The clinic staff downloaded the applicable client records from the NextGen IT database, though only the first five months of data were available. The staff of the Van of Hope then supplemented the demographic and site data from early intake notes and the nurse practitioner’s nursing notes, de-identified the data, and entered them into an Excel spreadsheet using Microsoft 2007 Software. To guarantee the clients’ confidentiality, the primary investigator did not have access to any information regarding patient codes or any other protected information about the clients. The primary investigator used this de-identified data for the data analysis.
Data Analysis

Descriptive statistics.

The evaluation of the Van of Hope measured the outreach of the van to vulnerable homeless adults and the integration of services between the van and the partnering agencies that provide care to the homeless population in Tucson. Only data from the first five months of operation were available for analysis since client information from the sixth month was still being entered into NextGen by the van’s staff. Due to the lack of personnel and other factors during the beginning months of the van’s operation, data collection was inconsistent and consequently incomplete.

The primary investigator used Microsoft 2007 Excel software as well as IBM’s SPSS statistical software to assess the available information. To measure the van’s outreach, the primary investigator counted the overall number of homeless adults accessing the van and categorized the demographic data according to sites to determine which site received the most clients. To ascertain integration of services, the primary investigator similarly used these software applications to count the number of referrals that the nurse practitioner had given to vulnerable homeless adults that had evidence of follow-up activity in their medical records.

The primary investigator then analyzed the available information from the van using SPSS statistical software to ascertain any other trends in the data. This analysis provided further insight into the characteristics of those who accessed the Van of Hope during the first
five months. It also highlighted the most common health concerns of the clients utilizing the van.

**Ratios.**

The primary investigator developed two ratios for comparison of the data. While there was not enough information to assess the impact of the van’s outreach to vulnerable homeless adults, the primary investigator did set up an impact ratio which compared the number of homeless adults who accessed the van in the first five months to the total number of homeless adults in Tucson. The primary investigator also set up an effectiveness ratio to assess the integration of services, comparing the number of referrals that had evidence of follow-up in the NexGen medical records to the total number of referrals given to homeless adult clients by the nurse practitioner.

**SWOT analysis.**

Finally, the primary investigator developed a SWOT analysis of the van. The SWOT analysis can be used in several ways for strategic planning. By identifying the van’s strengths and weaknesses as well as its opportunities and threats, the analysis can provide an overview of the van’s current capacity and assist in the development of the strategic steps to ensure sustainability.

**Cost assessment.**

While not included in this evaluative project, a comparison of service costs between the Van of Hope and the emergency room of the safety-net hospital for vulnerable homeless diabetic and/or behavioral health adult clients using marginal cost analysis could determine
the initial cost-effectiveness of the Van of Hope. *Marginal cost analysis* does not include “fixed costs” which are higher in the emergency room setting due to overhead costs, but analyzes those costs which are traceable to the direct care of the patient—providing a more balanced comparison between the two settings. Such an analysis would provide useful short-term programmatic outcome for the Van of Hope (Buchanan et al., 2009; Sklar & Zazworsky, 2010).

*A marginal cost analysis* would consist of a two-step process of performing a cost-finding analysis, and then assessing cost-effectiveness by comparing costs to specific measures of the “effectiveness” of the program. The cost-finding analysis would first determine the breakdown of costs directly traceable to the direct care of a client in both the emergency room and van settings. Staff interviews would elicit the costs of staff time, supplies used/given out, and the medications/pharmaceuticals used/given out to the diabetic or behavioral health client per client visit.

In order to compare the cost effectiveness of the van to the emergency room, there are several measures that could determine “effectiveness.” Some of these measures include *in-patient admissions, patient satisfaction, and/or patient education*. The primary investigator would then develop a ratio for both the van and the emergency room, comparing the incremental cost of the outcome to the incremental change in outcome.

Using the measure of *in-patient admissions*, for example, the primary investigator would first develop the ratio of the cost of in-patient admissions for vulnerable homeless van clients over the number of in-patient admissions of vulnerable homeless van clients. The
investigator would then develop the second ratio of the cost of in-patient admissions for vulnerable homeless emergency room clients over the number of in-patient admissions of vulnerable homeless emergency room clients. Finally, the primary investigator would compare the results of the two ratios to determine the cost of the van on the emergency room admissions.

The results of the cost-finding and cost-effectiveness analysis would provide a comparison of the service costs between the emergency room of the safety-net hospital and the Van of Hope. Including a *marginal cost analysis* with the assessment of the Van of Hope’s *outreach* and *integration of services* would also provide a more sound evaluation of the first six months of the van’s operation. Subsequent evaluations of the Van of Hope should include some type of cost assessment.
Results

Findings

The number of adult clients who visited the van during the first five months of operation numbered 126. Various factors such as limited staff for the van and the use of several data collection instruments during the first months of operation contributed, however, to large gaps of missing data for many patient characteristics. The inability to access collected data from the last month of operation similarly hampered a robust evaluation of the van’s six months of operation.

In answer to the first study question Is the van reaching vulnerable homeless adults?, none of the clients who came to the van for services met the criteria for vulnerable by having the requisite comorbidities with the added criterion of not visiting a health provider in the last year (Table 1). Two clients had comorbidities of hypertension and substance abuse, 2 clients had comorbidities of diabetes and behavioral disorder, and 13 clients indicated that they had not been to a health care provider in at least a year. None of the available information shows, however, that any of the clients were vulnerable according to the study criteria.

Due to gaps in the data, it remains inconclusive whether or not the van served any vulnerable homeless adults as defined by the study. Since the available data do not identify any vulnerable homeless adults, the following two study questions—What are the demographics of this population? and Where does the van receive the most vulnerable homeless adults?—are unanswerable.
Table 1

*Client Characteristics to Ascertain Homeless Adults who are Vulnerable*

<table>
<thead>
<tr>
<th>Client Characteristics</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension</td>
<td>18</td>
</tr>
<tr>
<td>Diabetes</td>
<td>7</td>
</tr>
<tr>
<td>Substance abuse</td>
<td>5</td>
</tr>
<tr>
<td>Behavioral disorder</td>
<td>7</td>
</tr>
<tr>
<td>Not seen by health provider in &lt; 12 months</td>
<td>13</td>
</tr>
<tr>
<td>Hypertension and substance abuse</td>
<td>2</td>
</tr>
<tr>
<td>Diabetes and behavioral disorder</td>
<td>2</td>
</tr>
<tr>
<td>Comorbidities and not seen by health provider in &lt; 12 months</td>
<td>0</td>
</tr>
<tr>
<td>Number of homeless adults who are vulnerable</td>
<td>0</td>
</tr>
</tbody>
</table>

*Note.* N = 126. The data represents the first five months of the van’s operation. For this study, to be *vulnerable* is to have comorbidities of hypertension and/or diabetes, as well as a behavioral disorder and/or substance abuse. It also includes not being seen by a health care provider in at least 12 months.
The final question, *Does the van demonstrate positive outcomes for the two short-term goals of providing outreach to vulnerable homeless adults and of demonstrating an integration of services?*, is likewise inconclusive.

The available data do not indicate that the van served any vulnerable homeless adults, so there is consequently no evidence of integrated services for this population. Given the extent of the missing data (particularly the missing information from the last month of service when the care coordinator was on staff and collected data more consistently), it is possible that the van actually did serve vulnerable homeless adults and provided integrated services for them. In light of this possibility, the findings of the study are therefore inconclusive regarding the van’s outreach and its integration of services for vulnerable homeless adults during the first six months of operation.

**Discussion**

While the results are inconclusive regarding the outreach and integration of services of the Van of Hope, the available data do provide useful information which can serve to improve the effectiveness of the van in delivering care. An analysis of the characteristics of the van’s clientele using the SPSS software and the Excel spreadsheet offers an initial depiction of this population. It also highlights where the gaps in information are, underscoring the need for greater precision in data collection to better ascertain who the van is serving.

The range in ages of the clients coming to the van was between 21 years and 66 years, with a mean age of 47 (Table 2). There were 3 times as many male clients as female
clients; and of the available information, most of the clients were homeless (43%) while some were not (7%). Of particular note is the characteristic of race.

Although data are missing for 71% of the cases, 26% of the clients were Hispanic and 3% were White; however, there is no record of any Blacks utilizing the van.

Table 2

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
<th>Percentage</th>
<th>No Data&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Percentage&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Age</td>
<td>47</td>
<td>33</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>94</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>32</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>4</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>33</td>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homeless</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>54</td>
<td>43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>57</td>
<td>45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>57</td>
<td>45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visits to van</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twice</td>
<td>10</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three times</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four times</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. N = 126. The data represents the first five months of the van’s operation.

<sup>a</sup> This is the number of cases that had no data for the characteristic.  
<sup>b</sup> This is the percentage of cases that had no data for the characteristic.

This finding is noteworthy since the HMIS report states that African-Americans are over-represented among the homeless given their proportion within the general population of Tucson/Pima County (Tucson Planning Council for the Homeless, 2010). While African-
Americans may have accessed the van, without documentation there is no evidence of the van’s outreach to this sector of the homeless population.

Similarly, if the majority of people accessing the van continue to be Hispanic, then provisions need to be made for this population. Recent immigrants tend to be healthier in general than native homeless people, but the level of functionality of homeless Hispanics decreases depending on the level of acculturation and sense of ethnic identity (Chiu, Redelmeier, Tolomiczenko, Kiss, & Hwang, 2009; Gamst et al., 2006). If Hispanics are actually the majority of the van’s clientele, then culturally sensitive assessments need to be performed which can best ascertain the needs of this population—especially for mental health services (Gamst et al., 2006).

Another characteristic of note is that the number of clients who have insurance equals the number of those who do not have insurance (45%). A breakdown of those with insurance shows all but one person (who had private insurance) had some variety of government-sponsored insurance—Medicaid, Medicare, Indian Health Insurance, or VA benefits. This finding is similar to that of the HMIS report which showed that of those accessing the homeless system in Tucson/Pima county, 47% had some type of government-sponsored insurance (Tucson Planning Council for the Homeless, 2010).

These findings differ somewhat from the literature which indicates that a majority of homeless do not have health insurance, even veterans who might qualify for VA benefits (Kushel et al., 2001). Post (2007) states, however, that besides the lack of insurance, a significant barrier for those who are homeless is the problem of transportation. This may be
the case for many who are homeless in Tucson, indicating that a mobile van would be an
effective method for delivering health services to them as well as to others who may not be
homeless but share similar barriers of lack of insurance and/or lack of transportation.

As more data becomes available regarding those who are accessing the Van of Hope
for care, SAHVH may need to clarify two issues: a) whether the van will be a source of
primary care (medical home) for clients, and b) whether the van will extend its services
beyond the homeless population. If the van is accessible to those who may be homeless but
lack transportation to other community providers, perhaps it will need to develop its
capacity to serve as the source of primary care for certain clients. Similarly, if the van
increasingly attracts people who are not homeless but find the van more accessible than one
of the community clinics, it will need to address the internal and external concerns that arise
from such a decision.

Another trend that Table 2 suggests is that clients are beginning to return to the van
for services. While only 14 people returned for services thus far, this number could increase
as the van expands its site visits and it becomes better known within the community. This
initial finding has implications for those who are homeless, for the van, as well as for the
larger community.

Homeless individuals often feel that they are treated with a lack of respect (Martins,
2008; Nickasch & Marnocha, 2009), and the initial finding of return visits indicates that
clients are feeling comfortable enough to return to the van for services. The evidence of
return visits signals the beginning of a regular pattern of health care which research has
shown results in the improved health status of homeless individuals over time (Savage, Lindsell, Gillespie, Lee, & Corbin, 2008). Improved health status of those who are homeless has the broader, subsequent long-term effect of driving down health costs due to the decrease in emergency room visits, in-patient admissions, and use of other community services (Kushel et al., 2001; Mares & Rosenheck, 2010; Oates et al., 2009).

Evidence of clients returning to the van for services may also indicate that the van is providing a service for a segment of the community that other health agencies are not. As the outreach of the van extends to different sectors of the city, this service could possibly begin to attract individuals and families who do not have adequate access to services but who are not homeless either. Again, SAHVH will need to monitor those coming to the van, and at some point it may have to clarify or redefine its mission in order to avoid the over-extension of resources and to ensure that the van is appropriately caring for the population it wishes to serve.

Table 3 depicts characteristics of the clients accessing the van according to the five sites the van has visited. The breakdown of client characteristics by site can assist in determining where the van can best meet program objectives. During the first five months of operation, the van regularly provided services at two shelters (Gospel Rescue Mission Men’s Center and Gospel Rescue Mission Women’s and Children’s Center) and two private agencies that provide various services for the homeless population (Southside Presbyterian Church and Z Mansion); and it participated in one community event that annually offers various services for the underserved population of Tucson (Hopefest).
Southside Presbyterian Church provided the most clients with 37 individuals (29%) accessing the van, followed closely by Gospel Rescue Mission Men’s Center with 33 individuals (26%). Z Mansion had 28 clients (22%) and Gospel Rescue Mission Women’s and Children’s Center had 20 clients (16%). At Hopefest, 8 people (6%) who

Table 3

*Characteristics of Adult Clients Using the Van of Hope by Site*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>GRMW (n = 20)</th>
<th>Southside (n = 37)</th>
<th>GRMM (n = 33)</th>
<th>Z Mansion (n = 28)</th>
<th>Hopefest (n = 8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Age</td>
<td>39</td>
<td>49</td>
<td>52</td>
<td>49</td>
<td>45</td>
</tr>
<tr>
<td>ND</td>
<td>1</td>
<td>11</td>
<td>19</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0</td>
<td>36</td>
<td>33</td>
<td>21</td>
<td>4</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0</td>
<td>29</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>ND</td>
<td>18</td>
<td>7</td>
<td>32</td>
<td>27</td>
<td>5</td>
</tr>
<tr>
<td>Homeless</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>20</td>
<td>1</td>
<td>33</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>ND</td>
<td>0</td>
<td>36</td>
<td>0</td>
<td>27</td>
<td>0</td>
</tr>
<tr>
<td>Insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>19</td>
<td>10</td>
<td>18</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>17</td>
<td>13</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>ND</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*Note. N = 126. GRM-W = Gospel Rescue Women’s Center; GRM-M = Gospel Rescue Men’s Center; Southside = Southside Presbyterian Church. ND = the number of cases that had no data. Van service to GRMM and Z Mansion began in October, 2010; service to GRMW and Southside began in November, 2010. Hopefest was a community event that took place in October, 2010.*
were not homeless but had no insurance sought services at the van. Given the number of clients the van served, the ethnic make-up, and the number of uninsured among the clients, Southside Presbyterian Church and Z Mansion appear to serve a homeless client population that is most at risk for inadequate health services and consequently poor health outcomes (Gamst et al., 2006; Kushel et al., 2001). The data from the two shelters, however, reveal that while the residents are “homeless,” they do have a temporary residence at the shelter that offers access to various services, and many of them have some type of insurance. As the van extends its services, there may come a point when SAHVH will need to assess the best use of its resources and make choices regarding what sites the van will regularly visit in light of the level of vulnerability of the homeless population being served at a particular site.

Finally, Table 4 lists the most common reasons clients sought assistance from the van. By matching ICD-9 codes to a client’s “chief complaint,” a descriptive analysis showed the frequency of the reasons given for coming to the van. There were six complaints that were the most common among those who came to the van for services. Hypertension and diabetes were among the most common chronic disease complaints, confirming the research that homeless individuals often suffer from these conditions (Hwang & Bugeja, 2000; Lee et al., 2005; Schanzer, Dominguez, Shrout, & Caton, 2007). The frequency of dental complaints also confirms studies that show that dental issues can pose a chief health concern for the homeless population (Conte, Broder, Jenkins, Reed, & Janal, 2006; Gibson et al., 2003; King & Gibson, 2003). An unexpected finding, however, is the overwhelming frequency of the generic request for a “check up.”
Table 4

*The Most Common Reasons Given by Clients for Coming to the Van of Hope*

<table>
<thead>
<tr>
<th>Reason for Coming to Van</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check up</td>
<td>30</td>
<td>23</td>
</tr>
<tr>
<td>Hypertension</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Diabetes</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Dental concerns</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Upper respiratory infection</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Insect bites</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

*Note. N = 130 reasons. Four clients gave two reasons for coming to the van making a total of 130 reasons. The data was analyzed by matching complaint with the ICD-9 code.*

The request for a “check up” indicates the lack of a specific reason for seeking care, but one explanation for its frequency among the van’s clientele may be that it signifies a desire to have contact with a trusted person who is concerned about the client’s well-being. Homeless individuals often experience feelings of loneliness, isolation, and the inability to rely on family and friends for help (Reichenbach, McNamee, & Seibel, 1998; Thompson, Pollio, Eyrich, Bradbury, & North, 2004). Service providers (such as health care professionals) sometimes play a significant role in alleviating the feelings of isolation and loneliness, and they can foster a sense of empowerment and self-worth that will eventually assist an individual to take the necessary steps to transition out of homelessness (Thompson et al., 2004).
Greater sensitivity to the underlying subtexts that may be present in unspecified requests for a “check up” enables the van personnel to be more effective in attending to the psychosocial needs of a homeless client. Careful attention in general to the frequency of “chief complaints” of those utilizing the van not only enables the staff to shape the van’s services to meet the needs of the people they seek to serve, it can also provide the SAHVH collaborative with greater insight into the environmental determinants which negatively impact the health of the larger population. Tracking the health concerns of those who are homeless across Tucson can equip SAHVH with critical data to effect systemic change, enlisting the homeless population and others as partners in advocating for policy changes to improve the overall health of the community (Daiski, 2007).

While the available data does not allow an assessment of the van’s outreach to vulnerable homeless adults, an impact ratio can provide insight into the van’s outreach to homeless adults in Tucson. Since the HMIS report parallels the Van of Hope by counting those who have accessed homeless services even if they are not currently on the street but have some type of residence, its count of 5,373 adults can serve as the denominator for the van’s count of 126. The result shows that the van reached 2% of the homeless adults in Tucson/Pima County during the first five months of operation.

A similar ratio can demonstrate the effectiveness of the van’s integration of services for adult homeless clients since 65 clients received referrals from the nurse practitioner. Of these 65 referrals, 2 records—or 3%—indicate follow-up activity by the client, showing that the van and other community agencies have established a “feedback loop” to track two of
the van’s clients. While modest in scope, the results provided by the two ratios do indicate the van’s initial success in reaching homeless adults and in attempting to integrate services so as to provide a continuum of care for clients; and they likewise supply a baseline against which the van’s progress can be measured in the future.

As a final assessment, the SWOT analysis provided a comprehensive view of the Van of Hope after six months of operation. Since the Van was still in the beginning phase of operation, it was appropriate to assess its “challenges” rather than its “weaknesses.” The analysis, therefore, consisted of evaluating its strengths, challenges, opportunities, and threats.

**Strengths.**

One of the van’s strengths is the make-up of its staff which consists of the program manager, driver, nurse practitioner, care coordinator, and behavioral therapist. The behavioral therapist provides the needed services of assessing clients, making referrals when necessary, and providing case management to ensure follow-up on referrals; and the care coordinator similarly adds to the van’s capacity by facilitating data collection, enrolling/re-enrolling clients in Arizona’s Medicaid program, and assisting the behavioral therapist and other community providers with case management of clients. Each member of the team appreciates his or her role in the program, and the program manager fosters a sense of cooperation among the staff as well as respect for the clients.

A second strength is the service the van provides. The van has served a total of 162 adults and children over the last six months; and—as noted in the earlier analysis—it has
provided primary care outreach and begun a continuum of care for some of them. Also, the van now offers bus passes to ensure that clients are able to make their referral appointments.

Finally, the staff is coalescing into a “team” which is developing strategies to improve the van’s outreach to the homeless community. The team, for example, has initiated client surveys to gather feedback on how best to meet client needs. As roles and procedures become further clarified, the van’s team will be able to be more effective and efficient in providing care to the clients.

Challenges.

Given the gaps in information for the six-month evaluation, accurate data collection is a clear challenge for the van’s team. The staff needs to develop clear procedures that include identification of relevant fields for input, staff training, and timely data entry to ensure appropriate data collection. This leads to a second challenge because it requires greater coordination and cooperation between the van staff and the partnering agency using NextGen IT.

The last month of operation was not available for the evaluation because of an issue regarding the timeliness of data entry, but also because of a cumbersome process of data retrieval across agencies. The process of data retrieval reveals a systemic problem, requiring the need for further communication regarding how to best integrate and align resources among the partnering agencies. To achieve this, however, each organization must re-align its internal processes in order to meet the goals of the CHP; and because it is a systemic issue, it must be resolved at the partnership level.
A final challenge is the development of appropriate metrics to measure outcomes not just at the program level, but at the collaborative and community levels as well. While it may be too early to measure outcomes of community change, it is not too early to assess the functioning of the collaborative which directly impacts the effectiveness of the Van of Hope. Identifying an appropriate instrument to measure partnership satisfaction and effectiveness is as important as identifying appropriate measures to ascertain program effectiveness and efficiency.

**Opportunities.**

There are several new initiatives which will provide the Van of Hope greater opportunities to serve the homeless population of Tucson. First, the van is increasing its outreach by adding three new sites to its schedule. Second, with its telemedicine capabilities, the Van of Hope is able to expand its mental health outreach by offering behavioral health encounters for clients when needed; and providing the nurse practitioner/clients specialty care consultation as well as access to services such as telepharmacy.

Third, the Van of Hope was instrumental in securing a grant to develop a respite care program for homeless individuals newly discharged from the hospital. As part of the program, one of the partnering homeless shelters will have designated beds for these patients, and a home health nurse will provide skilled nursing care as needed to the patient at the shelter. The Post-Hospital Program is significant because it not only provides an essential service for homeless people who may need surgery but have no where to recover, it
strengthens the collaborative effort among the partnering agencies of SAHVH by enhancing the continuum of care for the homeless population.

Another opportunity is the increasing possibilities for expanding the services of the Van of Hope. Besides the addition of three new sites, there are opportunities to provide services to families and children, as well as outreach to adolescents. With the likelihood that the van will be able to hire a medical assistant and add a second nurse practitioner to provide primary care, the increase in staffing will allow the van to provide more services at more sites.

Finally, one of the partner foundations has expressed interest in supporting the Van of Hope, and the original donor continues to show interest in—as well as fund—the project. The positive response that the Van of Hope has generated in the wider Tucson area has energized SAHVH to begin to strategize various means for engaging other community stakeholders in the project. At the six-month point, this discussion is vital for ensuring the sustainability of the program.

**Threats.**

There is only one identifiable threat to the Van of Hope at this point—the intersection of the current political and economic environments which can ultimately affect the program’s sustainability. This threat is ubiquitous, threatening the resources of each of the partner organizations that comprise SAHVH as well. If resources for service agencies—including health systems—continue to evaporate, the collaborative itself may be at risk.
**Recommendations**

The evaluation team for the Van of Hope found the six-month evaluation helpful because it strengthened some of the van’s internal processes—such as the recording of client information—and it highlighted the need for clearer lines of communication between the staff of the van and the partnering agency for data retrieval. Two outcomes from the evaluation were the development of an Excel spreadsheet for intake and client assessment, and a method to coordinate the notes generated by the care coordinator, the behavioral therapist, and the nurse practitioner. Since the care coordinator was also an employee of the partnering agency, the care coordinator was going to explore a simpler inter-agency process for retrieving NextGen IT data.

The evaluation team decided that the assessment of the van’s first year would similarly measure the outreach to vulnerable homeless adults using the same criteria developed for the six-month evaluation, as well as measure the rate of client follow-up activity on the referrals issued by the nurse practitioner and the behavioral therapist. It would also include, however, an assessment of the outreach to clients who had other comorbidities. Given SAHVH’s new initiatives as well as the evaluation team’s focus for the evaluation of the van’s first year of operation, there are four recommendations—based on the results and analysis of the six-month evaluation—that might assist the collaborative to prepare for the first year evaluation as well as improve the Van’s operation.

First, there needs to be clarity among the staff regarding the pertinent information that should be collected to measure identified outcomes. There now is an Excel spreadsheet
template to collect data regarding the van’s outreach to vulnerable homeless adults and the integration of services, but there needs to be further clarification of which comorbidities will be assessed and how they will be measured. Similarly, since the van is expanding its service to three new sites and considering new opportunities for outreach to families, children, and adolescents; it would be important to consider how to assess the van’s effectiveness in relation to these homeless sub-populations.

Second, the next evaluation must include some type of cost analysis which provides evidence that the van is not only effective but is cost-efficient as well—evidence which is necessary for program sustainability (Butterfoss, 2009). One of the stated objectives of SAHVH is to reduce emergency room costs that are caused by “inappropriate emergency and inpatient admission for conditions that are often preventable but highly acute due to lack of primary care” (Sklar & Zazworsky, 2010, p. 56). The first year evaluation must provide evidence of how this is being achieved.

Butterfoss (2009) states the effectiveness of a CHP must include an evaluation of the functioning of the partnership. The third recommendation, then, is that the SAHVH collaborative develops a process to evaluate the structure and communication of the partnership. On-going evaluation will strengthen the partnership by promoting open communication, managing differences, and improving participatory satisfaction among the partnering agencies (Woulfe et al., 2010).

Finally, the fourth recommendation is that SAHVH proceed in identifying creative ways to communicate to other stakeholders and the larger Tucson community the
achievements of the partnership and of the Van of Hope in serving the homeless population. The challenge is not just to communicate positive outcomes, but to do so in a way that incites others to participate in the program—especially business leaders who may find it difficult to understand why a community health project for those who are homeless should interest them (Webber & Mercure, 2010). Formulating outcomes which engage the interest of stakeholders both within and outside the collaborative maintains the momentum for community change and contributes to the overall sustainability of the program (Butterfoss, 2009).

**Limitations**

There are four limitations to this study. First, there are large gaps of missing information in the data collection, making a robust assessment of the Van of Hope impossible. There are several reasons for the lack of information—inaadequate staffing at the outset, no computers to enter data, and the use of multiple instruments for data collection—all of which point to the difficulty of coordinating efforts and resources among multiple organizations (Fawcett et al., 2010; Roussos & Fawcett, 2000).

Second, the study lacks a cost analysis of the program. This analysis should include an assessment of the cost the van has incurred over the first six months of its operation, as well as an assessment of its cost-effectiveness. The cost analysis of a program provides important evaluation outcomes that can play a significant role in determining a program’s sustainability (Butterfoss, 2009).
Third, there is no comparative analysis of the Van of Hope to another service provider, such as the emergency department of the major safety-net hospital. A comparative analysis using appropriate measures would demonstrate whether or not the van provides a better service for vulnerable homeless adults (as well as the community) than the emergency department. Again, evidence of positive outcomes is necessary for generating public support and additional funding for a program, increasing the likelihood of its sustainability (Butterfoss, 2009).

Finally, the project does not fully consider how vulnerable the homeless population using the Van of Hope is. The Vulnerability Index is an evidenced-based tool which indicates that a homeless individual is vulnerable (at risk) for dying on the streets according to eight discreet criteria (Common Ground, n.d.). A more thorough study in the future would establish how vulnerable the population is by assessing the level of vulnerability of the homeless population according to the eight criteria of the Vulnerability Index, thus providing stronger evidence to validate the need for the services offered by the Van of Hope program.
Implications

There are implications for the delivery of health care that emerges from this evaluative study—particularly for CHN as a Catholic health system and the partnering agencies of SAHVH. The AHA (2010a) asserts that clinically integrated care holds the promise of delivering greater quality care while providing more efficient client-centered care. The key to any health care reform, then, is finding ways to integrate services in order to ameliorate the negative consequences of the current fragmented system (AHA, 2010a).

Catholic hospital systems have found that integrating services, developing a strong IT infrastructure, and initiating evidence-based protocols has generated greater quality of care for patients as well as reduced the costs of providing care (Hagland, 2010). Keeping in mind Catholic values and the mission to serve those who are vulnerable within communities, Catholic health care leaders emphasize the necessity of a transformational change in hospital culture through innovative ventures that promote quality care and constant improvement of services (Hagland, 2010). Some observers contend that the current economic recession and the spiraling of health care costs provide the fertile soil for such innovative ventures to emerge (Stange, Ferrer, & Miller, 2009).

On the local level, CHN is attempting one of these innovative ventures by collaborating with other care providers to provide an integrated continuum of care to meet the health needs of the homeless population in Tucson, Arizona. The six-month evaluation of the partnership’s Van of Hope revealed, however, the operational difficulties involved in developing such a venture. The difficulties of staffing, delays in purchasing equipment, and
the coordination of data collection resulted in the inability to draw conclusive findings regarding the two short-term outcomes of the Van’s outreach to vulnerable homeless adults and the creation of a feedback loop between the van and other community agencies (integration of services) regarding client follow-up on referrals.

While the lack of information underscores the need for better processes of data collection, the other operational difficulties point to the larger systemic challenge of trying to attempt a collaborative community health program among partnering agencies. The literature abounds with the difficulties inherent in forming collaborative partnerships such as SAHVH (Fawcett et al., 2010; Green et al., 2001; McGuire, 2006; Mitchell & Shortell, 2000). It is difficult to arrive at consensus on issues such as the mission of the partnership, the handling of resources, and the roles within the collaborative when agencies have different organizational structures, processes, and interests (Butterfoss et al., 1993; Fawcett et al., 2010; Mitchell & Shortell, 2000).

The experience of the Van of Hope at its outset, then, is not unique. One implication for CHN—as well as the other partners—is the need to promote a healthy environment within the SAHVH partnership. This necessitates open communication, ongoing evaluation, and effective leadership (Green et al., 2001; Morse, 2007; Woulfe et al., 2010).

Well-functioning collaborative processes are essential particularly when there are signs of growth. As seen in the SWOT analysis of the Van of Hope, there are two areas of growth—“opportunities”—that will require effective management in order to produce positive outcomes for the community as well as for SAHVH. One of these opportunities is
the Post-Hospital Program for homeless individuals who are discharged from the hospital; and the other is the expansion of the van’s services—which may result in attracting more people to the van for services who do not easily fit the profile of the van’s targeted population.

The Post-Hospital program requires managerial oversight to ensure that these homeless individuals who are released from the hospital to one of the shelters are receiving the appropriate attention. This requires further alignment of agency roles and the integration of agency services within the collaborative to deliver quality “home health” to the client. While the services of a home health nurse will cover much of the client’s immediate care, there are larger operational issues such as communication between caregivers and shelter staff, transportation to and from appointments, length of stay in the shelter, and ultimately the financial sustainability of the program.

The second issue—the expansion of services which could attract clients beyond the homeless population—is a larger systemic concern that must be addressed by SAHVH in light of its mission and objectives. Assessment of these clients might show that while they may not be homeless, they could share some of the barriers to adequate health care that the homeless have (such as lack of insurance or lack of transportation) and would benefit from the services of a mobile van. The decision of how to respond to this need—as well as others that will emerge in the future—requires a well-functioning collaborative team that can process new data and respond effectively to new situations (Mays & Scutchfield, 2010).
A second implication for SAHVH is the larger role the partnership can play as an advocate for the overall health of the population of Tucson. If the mobile van identifies a larger community need for accessible health care, this is an issue that must be addressed at a community/systems level. As a collaborative of community health organizations, SAHVH has the opportunity to assume a central role in the health of the community by highlighting the social and economic determinants which affect the health of the community, and working to address the policies and funding structures that can effect the equitable distribution of health within the community (Butterfoss, 2009).

A third implication is specific to CHN. As a Catholic institution with a specific mission to care for vulnerable populations, CHN has an opportunity to play a unique role within the collaborative. St. Mary’s hospital in Grand Junction, Colorado serves as an animator that pulls the community leadership together and focuses them on the mission of maintaining the equitable distribution of health throughout the community (Thorson et al., 2010). While CHN may not be able to replicate the exact role in SAHVH that St. Mary’s plays within the CHP in Grand Junction, it can take on a crucial function by upholding the right of all people to accessible health care and in identifying the systemic determinants that negatively impact the health of the community—especially those who are most vulnerable.

Lukas et al. (2007) state that organizational transformation requires effective leadership that promotes change throughout the organization. Leaders sustain change by reinforcing a sense of urgency, articulating a consistent direction, providing needed resources for change, and calling for accountability to support transformation (Lukas et al.,
Systemic change to promote community health is no different, and CHN—as a community leader—has the opportunity to bring about transformational change for the homeless community as well as for the larger Tucson population.

A final implication is that each of the agencies comprising SAHVH must be committed to making the collaborative work, and they must invest the time and the effort it takes to bring about long-term health outcomes. While the literature affirms the effectiveness of CHPs in bringing about positive population-focused health outcomes, it also attests to the need for creative, sustained efforts on the part of the partnering agencies to effect systemic community change (Mays & Scutchfield, 2010; Shortell, 2010; Wei-Skillern, 2010). The six-month evaluation of the Van of Hope revealed the organizational effort and patience it takes just to begin an innovative collaborative program—bringing about a change in the health status of the homeless population will require even more effort and patience.

This evaluative project of the Van of Hope elucidated several implications for CHN as well as SAHVH. Given that these “systems” exist within larger systems that make up the overall health care system within the US, this study points to the broader implications for several of these larger systems as well. The remainder of this discussion, then, will focus on the broader implications for community health partnerships as expressions of the paradigm shift in health care, Catholic health care which professes a specific mission within the changing health care landscape, and the profession of nursing which is undergoing its own transformational change.
Partnerships for Community Health

The ability of the SAHVH partnership to reach homeless adults and begin to create a continuum of care for them implies the possibility of expanding this community-based model of care to the wider population of Tucson. The evidence of people utilizing the van who have insurance (or who are not homeless) may reflect the desire on the part of some to have a convenient source of care; or it may signal the desire to have the more personal, manageable approach to care that the van provides (Stange, 2009b).

Reflecting on the structure of the U.S. health system, Stange and Ferrer (2009) posit that one of the primary dysfunctions of the system is its emphasis on the cure of disease rather than on the health of individuals, communities, and populations. Specialty care has become the dominant mode of delivering health care, de-emphasizing the generalist approach of primary care that stresses a more personal, holistic, and integrative method of delivering care. What is needed is a structure that reverses this dynamic by placing greater emphasis on (and thus rewarding) a robust system of primary care which integrates and supports disease-specific specialty care when needed (Stange & Ferrer, 2009).

The restructuring of the health delivery system to focus on primary care conforms to the growing evidence that providing a comprehensive approach that coordinates and integrates access to levels of care within a caring, personal relationship with a provider does improve health (Stange, 2009a). In essence, this vision of a re-structured health system is grounded in the assumption that the purpose of a health care system is ultimately to improve the health of the entire population (Stange, 2009a). Rather than narrowly focusing on
improving the quality of health care by equating health with disease reduction, the vision to improve the health of a community is comprehensive in its scope and recognizes the importance of “integrating, prioritizing, contextualizing, and personalizing health care across acute and chronic illness, psychosocial issues and mental health, disease prevention, and optimization of health and meaning” (Stange & Ferrer, 2009, p. 295).

Such a vision also encompasses a broader perspective on the determining factors of health. This broader perspective is seen in the release of Healthy People 2020 with its renewed focus on promoting health for all people across the US by specifically addressing the personal, social, economic, and environmental determinants of health (U.S. Department of Health and Human Services, 2010b). To bring about the health of the population, Healthy People 2020 affirms the need for continued collaboration across sectors of the community and the nation (U.S. Department of Health and Human Services, 2010a).

CHPs like SAHVH provide the means for promoting the well-being of a community by addressing the determinants of health on the local level. Based on healthy community initiatives over the last 20 years, researchers are finding common operational themes among collaborative attempts to develop and enact population health strategies (McGuire, 2006; Pittman, 2010). Two themes that emerge are the need for shared leadership of the collaborative where no one organization solely provides the governance, as well as the importance of aligning the concerns and goals of local CHPs with governmental policy-making and funding processes (Pittman, 2010).
Reflecting on a specific community-based, population-focused health initiative—the Mobilizing Action Toward Community Health (MATCH) project—a panel of experts proposed recommendations for future practice and research to improve population health through community-based partnerships (Kindig et al., 2010). The panel identified the need to develop more precise population-based measures that can track the effectiveness of community programs and policies over shorter time-frames. The group also recommended that there needed to be more research to identify better measures for determinants of health as well as assess the cost-effectiveness of different policies and programs in addressing specific health determinants (Kindig et al., 2010).

The panel similarly proposed several areas for further exploration regarding CHPs (Kindig et al., 2010). Acknowledging that there can be a wide range of partnership types, the panel suggested further investigation of “best-practice” processes that might be applicable especially for strategic planning and capacity-building of a partnership. The issues of sustainability of partnerships and the balancing of inter-agency priorities were also areas that the panel felt needed further investigation (Kindig et al., 2010).

A discussion of the importance of leadership in CHPs, partnership formation, and partnership effectiveness similarly emerged at the MATCH project discussion—topics that recur in the literature examining CHPs (Kindig et al., 2010; McGuire, 2006; Mitchell & Shortell, 2000; Shortell et al., 1995). The literature continues to identify the need for competent leadership in partnership management, as well as the need to develop partnerships that can successfully address a population health issue (McGuire, 2006; Morse,
There is also a growing awareness that CHPs need to better identify, develop, and allocate community resources to achieve population-focused health goals (Kindig et al., 2010; Pittman, 2010).

One area that requires further study is the role “incentives” play in motivating individuals, organizations, and various sectors to become involved in allocating resources for community health (Kindig et al., 2010; Webber & Mercure, 2010). There is a growing awareness that CHPs such as SAHVH must “incentivize” organizations across sectors of the community to allocate resources for initiatives such as the Van of Hope by linking the health of a population to the self-interests of the organizations/sectors within the community (Kindig et al., 2010). This includes educating the local business community about the impact of a population’s health on the local labor force and its productivity while highlighting the social benefits businesses can accrue (being recognized as leaders who promote the good of the community) by becoming partners in community health programs (Webber & Mercure, 2010).

Finally, CHPs such as SAHVH highlight the need to look at establishing broader partnerships among private and public organizations to address systemic, population-focused health. Creative developments in combining concepts such as enhanced medical homes and accountable care organizations (ACOs) are gaining recognition as various communities across the US are instituting local community health systems (Hester, 2010). Vermont, for example, is developing a “pay-for-population health system” which integrates both the medical home and ACO models; as well as aligning financial incentives,
information technology, and delivery of care infrastructure in order to support population-focused health at the community level (Hester, 2010).

The health care system that has emerged in Grand Junction, Colorado attests to a community’s ability to provide an affordable, integrated system of care that meets the health needs of the population (Thorson et al., 2010). Achieving this type of integrated care is difficult, and the alignment and cohesion needed among the partnering organizations is not easy to accomplish—as CHN and the other organizations comprising SAHVH are discovering. Partnering agencies, therefore, must identify for themselves—and the partnership—the needed incentives to maintain the momentum to achieve the transformational change that must occur within their partnering agencies as well as within the community (Lukas et al., 2007; Woulfe et al., 2010).

Given a health care environment that continues to reward and reimburse the treatment of diseases rather than addressing the determinants of health and promoting population-focused health outcomes, these incentives must include more than capital gain to ensure organizational survival (Pittman, 2010). They must imaginatively and affectively engage organizations at the level of service to the community (Webber & Mercure, 2010). For many health care organizations—especially Catholic ones—this is the level which provides the fundamental rationale for their existence in the first place.

Engagement in community collaboratives which affect the paradigm shift from disease-focused, acute care to the promotion of health across sectors of a population necessitates a fundamental commitment and a willingness to sustain the momentum to bring
about systemic change within a community. For Catholic health systems such as CHN, this paradigm shift is an invitation to “re-imagine” the mission of Catholic health care within the larger context of the fragmented U.S. health care system. As the example of St. Mary’s Hospital in Grand Junction, Colorado affirms, such a re-imagining is broader than simply health care delivery—it means addressing the more fundamental issue of promoting the health of a community (Thorson et al., 2010).

**The Catholic Mission: Re-imagining the Future**

As early as 1982, calls for adaptation within Catholic health care to address current industry trends began to appear in the literature. At that time, Bishop Joseph Sullivan identified the need for greater collaboration first among various Catholic institutions—religious communities and diocesan bishops—and then between Catholic health agencies and local communities (Brown, 1982). For Bishop Sullivan, engaging the community is not just a matter of survival, it is the way to broaden a sense of mission by creating a sense of *ownership* for the mission at the community level (Brown, 1982).

Communal engagement in the mission of Catholic health care means actively participating in the structures of the institutions (Brown, 1982). This participation deepens the sense of interdependence and responsibility for others, engendering greater social responsibility for the care of the whole community. As Bishop Sullivan (1982) states:

The health care ministry offers from the Christian perspective one of the greater opportunities for conversion, meaning that people face their own lives in terms of
their relationship to God and to their community. Sickness provides for all of us an opportunity to reflect on who we are, what we are about and where we are going.

The greatest support the church can give to the health care system is the challenge for everybody to participate in a way that they discover they are mutually interdependent and that the service provides the medium for people to discover each other. Health care is a way for people not only to find out what life is about but also to discover each other in the process, and to discover that they’re not only equals but are also accountable to each other (p. 92).

More than a decade later, moral theologian Richard McCormick, S.J. (1995) similarly identified a contextual change in the health care industry, but assumed a more pessimistic outlook regarding the sustainability of the traditional Catholic hospital. McCormick (1995) contends that broader environmental factors are impacting Catholic hospitals, striking at the very heart of Catholic identity. He summarizes these environmental factors as a) an increasing depersonalization within health care delivery, b) an on-going evolution of medicine as a business, c) a market-driven, competitive strategy that discharges sicker patients from the hospital sooner, d) a culture that more aggressively denies human mortality, investing in disease eradication rather than promoting health, and e) the diminishment in the centrality of the hospital in the wider health system and its loss of influence in promoting religious values (McCormick, 1995).

Given these environmental factors, Catholic hospitals struggle to maintain their identity, their sense of purpose, the very culture that makes them Catholic (McCormick,
When this culture is lost—when those within the institution no longer derive their identity from, or are animated by, the Gospel of Jesus—then the Catholic mission is impossible. McCormick (1995) wonders if the Catholic mission in health care is salvageable in such a context.

Writing at the same period, Cardinal Joseph Bernardin (1995) viewed the changing health care system from a different perspective. For Bernardin (1995), the changes occurring in health care delivery provide a “Catholic moment” (p. 28) which presents an opportunity to develop a creative response to a changing environment. Under the guidance of the Holy Spirit, Catholic health care stands at the threshold of a “future-to-be-pursued” (Bernardin, 1995, p. 25), a reality that awaits to be imagined.

Cardinal Bernardin (1995) does not expound on the details of that reality, but he does highlight the initial steps for engaging this future-to-be-pursued—steps which initiate a fundamental change in the way Catholic health care is delivered. First, he states that Catholic providers “are being asked to leave behind their attachment to acute care institutions and to forge a new future in the world of community-based networks” (Bernardin, 1995, p. 28). Second, they are being asked to let go of an older paradigm that focuses on illness and develop a new paradigm that is centered on wellness.

Finally, Bernardin (1995) states that Catholic providers are being asked to move beyond their enclosed institutions “so that they might, in concert with others of good will, provide for the well-being of the poor and the marginalized” (p. 28). With their roots grounded firmly in the Catholic tradition, Bernardin considers Catholic health care providers
well-equipped to engage “these exciting and challenging times” (Bernardin, 1995, p. 28).

Given the on-going paradigm shift in health care to a community-based, population-focused model, Cardinal Bernardin’s insight is prophetic; and 16 years later his words still challenge Catholic health care leaders today to a radical conversion in how they approach this ministry.

Signs of a shift from acute care to more community-based, population-focused care continue to surface within the Catholic health care system. Just as CHN has formed a community collaborative to address the health needs of the homeless population in Tucson, so other Catholic health systems are responding in similar fashion to their local community’s needs. One Catholic health system has developed a community-based chronic disease management program, and it is currently in the process of expanding a partnership to provide retail clinics in Walmart stores to be more accessible to the communities in which the health system serves (Hagland, 2010).

Catholic voices also continue to be raised concerning the increasing alienation within the health care system and the need for a fundamental change. Franciscan friar Daniel Sulmasy (2006)—who is also a physician—echoes McCormick’s concerns regarding the secularization of the health care system, enunciating the deleterious effects it can have on both patients and clinicians. For Sulmasy (2006), the challenge for the health care system today is to provide care that is personal, compassionate, and imaginative; and to develop better structures and processes that can ensure this care.
Sulmasy (2006) also provides a context—a spirituality—for the promotion of health and prevention. Reflecting on St. Paul’s reference to the human person as a temple of the Holy Spirit (1 Cor. 6:19), Sulmasy (2006) affirms that the human body is good—God given—and should be cared for because it is a “sacred space” (p. 105). Human persons, therefore, must become good “stewards” in caring for this great gift—this sacred space—which connects people to one another and ultimately to God (Sulmasy, 2006).

Stewardship of the body means “responsible care for one’s body—not being wanton and reckless, not being neglectful, and not being miserly or afraid to share it” (Sulmasy, 2006, p. 109). By exercising good stewardship of one’s body, one can be available to God for praise and thanksgiving, as well as attend to the needs of others. Stewardship of the body, then, becomes the Christian’s rationale for health promotion and preventive medicine (Sulmasy, 2006).

Providing a Scriptural base and linking the concept of stewardship to preventive care, Sulmasy (2006) offers another means for Catholic health care to re-imagine its service to the community. The pressure to achieve organizational survival, however, continues to weigh on Catholic hospitals and health systems, especially as these institutions discover that in order to survive they must become a “high-quality, low cost provider” (Hagland, 2010, p. 19). Tensions are increasingly erupting over what services a Catholic hospital provides—often putting the hospital/health system in the difficult position of weighing its role within a pluralistic society against its fidelity to its Catholic identity.
In one township several community organizations lobbied the state to reject a proposal to build a Catholic hospital in the county rather than another not-for-profit hospital because the Catholic hospital would deny local women access to various reproductive services (Stein, 2011). Conflict has also arisen between Catholic hospitals and local bishops over the procedures offered at Catholic hospitals, with bishops in both Oregon and Arizona finally declaring that hospitals providing certain procedures in their dioceses could no longer identify themselves as Catholic (Stein, 2011). The American Civil Liberties Union has similarly entered the fray by filing a complaint with the Centers for Medicaid and Medicare Services stipulating that all hospitals receiving government funds must provide emergency care, including emergency reproductive procedures (Stein, 2011).

The convergence of more sophisticated technology, increasing consumer demand, and ever-greater dependence on public funding forms the “perfect storm” for Catholic hospitals that portends more contentious and divisive battles both within secular society as well as within the Church regarding the services provided by Catholic hospitals. When Catholic mission and identity become synonymous solely with what medical procedures are provided in the acute care setting, disagreements regarding these technologies can quickly escalate to hostility, authoritarianism, and censure—easily sabotaging the community and shared responsibility Bishop Sullivan felt Catholic health care should engender (Brown, 1982; Keehan & Dolan, 2011; Olmstead, 2011). Furthermore, to the extent that the Church narrowly focuses on the availability of certain medical procedures it considers objectionable, it contributes to the depersonalization, commodification, and secularization of health care;
and it becomes complicit in limiting its own role in promoting the health of a population (Stange, 2010).

Cardinal Bernardin (1995) poses a corrective to this narrow and ultimately self-defeating stance by shifting the focus from the acute care setting to the promotion of health within the community. Health is “the ability to develop meaningful relationships and pursue a transcendent purpose in a finite life” (Stange, 2010, p. 102). Re-imagining the future of Catholic health care means investing in those personal and environmental determinants which promote healing, relationships, and meaning; and addressing those determinants which negatively affect health in order to minimize the need for acute services (Stange, 2010).

Stange (2010) contends that the reformation of the U.S. health system needs to be a conscious, collaborative effort in which health systems re-establish their moral authority by moving beyond self-interest to using their power and influence to affect a shared moral purpose.

Working in small teams and large groups, we might look for opportunities for moral leadership in working with others toward system change, in both the larger systems and those in our own practices and communities. We might seek to develop new partnerships with patients, colleagues, and community organizations. We might focus these partnerships on fostering the emergence of new models of health care and health promotion to emerge [sic]—working together to develop the awareness and truthfulness that lead to common
experience and understanding that facilitate shared goals and the possibility of shared sacrifice that generates collective abundance (Stange, 2010, p. 103).

Working collaboratively to generate collective abundance—the equitable distribution of health which includes those who are marginalized within a community—is a constitutive element of the “Catholic moment” in health care (Bernardin, 1995; USCCB, 2001). As Cardinal Bernardin (1995) affirms, re-imagining such an inclusive mission for Catholic health care necessitates the collaboration of men and women of good will who share this vision. Among health care professionals, nurses remain compatible partners both in promoting the shift to population-focused health and in enabling Catholic health care to re-imagine its future according to this paradigm.

**Nurses as Partners**

The collaborative partnership formed by CHN reflects the developing paradigm shift that is occurring in Catholic health systems and within the wider U.S. health system. As CHN and the other partners of SAHVH are discovering, integrating services to achieve a population-focused goal requires time and commitment. Successful outcomes for collaborative ventures also necessitate skilled management of multiple systems, as well as the development of appropriate measures to evaluate the effectiveness of programmatic interventions (Zaccagnini & White, 2011).

Observers within and outside of nursing recognize nursing’s unique capabilities to provide leadership in managing new approaches to health care delivery (Rother & Lavizzo-Mourey, 2009; Tumulty, Pickert, & Park, 2010; Zaccagnini & White, 2011). The Institute
of Medicine (IOM) (2011) published a report that identified nurses as being poised to assume leadership in advancing health care reform. Central to this leadership, however, is nursing’s ability to re-conceptualize its role within health care, particularly in providing collaborative leadership within the community setting (Institute of Medicine [IOM], 2011).

The IOM (2011) specifies that nurses need to build partnerships with “other clinicians, business owners, philanthropists, elected officials, and the public” (p. 222) in changing policy to bring about improved health outcomes. Nurses need to be leaders, therefore, who are adept at the formation and management of CHPs which can deliver population-focused care. This means that nurses must also have some degree of competence with health care financing, system design, and organizational development (Gawande, 2011; IOM, 2011).

These competencies are particularly germane to doctorally-prepared advanced practice nurses (DNPs) in the community/public health setting (Dreher & Smith Glasgow, 2011; Fulton, Lyon, & Goudreau, 2010; Spross, Hanson, & Hamric, 2009). As Dreher and Smith Glasgow (2011) affirm, “At the end of the day, it is all about leadership” (p. 459). The DNP’s ability to analyze care from a systems perspective; to work collaboratively with other professionals and community members to meet population needs; and to develop, implement, and evaluate quality, evidence-based programs and interventions allow the community nursing specialist to be a valuable resource for communities that want to address their health needs (Ervin, 2002; Fulton et al., 2010; Spross et al., 2009).
The literature—as well as the experience of the SAHVH partnership—reflects the challenges and unforeseen obstacles that the DNP will encounter in working with community partnerships (Kindig et al., 2010; McGraw et al., 2010; McGuire, 2006). There is a growing body of research that identifies characteristics of successful community partnerships, but further study of collaborative formation and management needs to be done (Fawcett et al., 2010; McGuire, 2006; Morse, 2007). Working with CHPs to promote community health affords the DNP an opportunity to contribute to the literature—both by confirming already identified evidence-based strategies as well as developing new evidence for effective collaborative management (McGuire, 2006).

The DNP can also play a significant role in evaluating the efficiency of collaborative programs and their effectiveness in achieving improved population health outcomes. Research already points to this association, but more study is needed in the area of community collaboratives (Greenberg & Rosenheck, 2010; Kindig et al., 2010; Mares & Rosenheck, 2010). As the experience of the Van of Hope exemplifies, demonstrating the effectiveness of a program without robust measures, accurate data collection, and adequate resources/personnel is very difficult; and the DNP must ensure a sound evaluative process, incorporating all dimensions of the CHP program in the assessment (Butterfoss, 2009).

The DNP figures significantly in the IOM (2011) vision of health reform; but the DNP can also assume a pivotal position in the paradigm shift of Catholic health care as well. The ability to think systemically allows the DNP to weigh different alternatives, to assess innovative options for care delivery, and to provide leadership in collaborating with others
to reach a common goal (Spross et al., 2009). These skills are precisely the leadership competencies Catholic health care needs as it struggles to re-imagine its mission in the future.

Working with CHPs like SAHVH to address the social, economic, and political determinants that affect a community’s health enables the DNP—and by extension the nursing profession—to rediscover nursing’s traditional commitment to social justice (Falk-Rafael, 2005; Spross et al., 2009). Highlighting the commitment of professional nursing, the American Nurses Association (ANA) (2010) states:

As members of a profession, registered nurses work toward equitable distribution and availability of healthcare services throughout the nation and the world. . . .

Nurses promote the health of the individual and society regardless of cultural background, value system, religious belief, gender, sexual identity, or disability. Nurses commit to their profession by utilizing their skills, knowledge, and abilities to act as visionaries, promoting safe practice environments, and supporting resourceful, accessible, and cost-effective delivery of health care to serve the ever-changing needs of the population (pp. 25, 26).

Beginning with Florence Nightingale, nursing leaders have identified the relationship between health and the debilitating effects of poverty, powerlessness, ignorance, and exploitation (Falk-Rafael, 2005). Nursing’s unique role of addressing the health disparities of vulnerable populations necessitates its engagement with the complex issues and structures that cause these disparities, and the role of advanced nursing practice is to do just that—to
address social injustice by engaging in ethical reflection, advocacy, and policy development (Bekemeier & Butterfield, 2005; Spross et al., 2009). Nursing, then, becomes a fitting partner for re-imagining Catholic health care as a community-based, population-focused collaborative ministry that concentrates on the health of the whole community, with particular concern for “the well-being of the poor and the marginalized” (Bernardin, 1995, p. 28).

Nursing and Catholic health care share a common bond since both seek to remain authentic within a health care environment replete with compromise. The competitive, market-driven, organizational survival values which dominate the acute care setting are similarly present within community/public health settings (Donley, 2010). Community/public health nurses have traditionally been proponents of social justice values and equity of health distribution, but they are increasingly pressed to balance organizational survival with service to the community within their community agencies as well (Donley, 2010).

The issue for nursing is the same as for Catholic health care—how to maintain a mission that attends to the health needs of all people, but especially those who are underserved and marginalized. Sr. Rosemary Donley, SC (2010) contends that while nursing has affirmed its commitment to social justice and is quick to extol the legacy of those who have been exemplars in confronting health inequities in the past, nursing needs to come up with contemporary responses to inequities that exist now. She asks, “Nursing is for
social justice, but what, exactly, does it mean and how do you do it in a market-driven era?” (Donley, 2010, p. 37).

Donley (2010) responds to her own question by advocating for further research as well as action on the part of nursing leaders.

The cost-saving, money-making climate in health care environments, coupled with some ambiguity about the meaning of social justice in contemporary nursing literature, reaffirm the need for study, analysis and dialogue about the social justice tradition as it has been articulated by faith communities, secular writers and the nursing community. . . .

If social justice is to inform nursing practice and education in the future, nursing leaders must do more than name social justice as a value in nursing. Educators, clinicians and administrators must reinvest in and advocate for a health system that manifests and advocates for its own principles (Donley, 2010, p. 37).

As the nursing profession embraces its role in the IOM (2011) vision of reforming the U.S. health system, it must join Catholic health care in a similar process of re-imagining its future. Those DNPs who are community/public health nursing leaders must be proficient in competencies such as collaborative management and evaluation to ensure that CHPs provide effective and efficient interventions for community-based, population-focused care. They must—at the same time—be proficient in crafting and promoting interventions which promote healing, relationships, and meaning—the constituents of health (Stange, 2010).
Stange (2010) contends that moral authority is “the power to influence others to do the right thing. It is granted to those using their power for a larger good than promoting narrow self-interest, and originates from self-awareness, truthfulness, compassion, and from making personal sacrifice for a societal good” (p. 100). Moral authority does not come by fiat, but it comes “from walking the talk—from living with congruence between thought, word, and action” (Stange, 2010, p. 100).

What is at stake for both nursing and Catholic health care is to retain their moral authority within health care—to be able to influence others to “do the right thing” (Stange, 2010). In the end, it is about mission—*service to the community*—and being consistent in “thought, word, and action” (Stange, 2010, p. 100). By retrieving the fundamental values of nursing and fashioning creative models which can respond to contemporary health needs within a community, DNPs can achieve a leadership role—one that is perhaps broader and even more satisfying than that envisioned by the IOM (2011)—in re-imagining the future of health care in the US.
Conclusion

Muennig and Glied (2010) did a study comparing the 15-year survival rate of men and women in the US to men and women in 12 other countries with populations of at least 7 million and per capita gross domestic product (GDP) of at least 60% of the US GDP. The study was a longitudinal study that spanned three decades—1975 to 2005. The findings reveal that the 15-year survival rates of U.S. men and women has declined and fallen behind the 15-year survival rates of the men and women in the twelve comparison countries—even as health care spending has increased in the US (Muennig & Glied, 2010).

The authors state that the data does not associate the decrease in survival rate with behavioral risk factors such as obesity and smoking, nor to population diversity within the US (Muennig & Glied, 2010). While the increase in the number of people without insurance may be attributable to the decrease in survival rates, Muennig and Glied (2010) maintain that this factor alone has not been associated with a significant decrease in life expectancy. The authors suggest, therefore, that the cause for the decline in survival is multi-faceted, generated by the rise in health care spending itself (Muennig & Glied, 2010).

Muennig and Glied (2010) offer three reasons why the increase in health care spending has contributed to the decline in survival rates. First, rising health costs does increase the number of uninsured who are not able to afford adequate health care, increasing the likelihood of reduced survival. Second, rising health costs and investment in medical care may be diverting public funding for services such as public health, health education,
and community development which can promote increased survival rates for the population (Muennig & Glied, 2010).

Third, unregulated fee-for-service reimbursement and the emphasis on specialty care has produced a fragmented system of care that increases the likelihood of medical errors, unneeded procedures that can lead to secondary complications, and poor communication between providers which can impede quality care (Muennig & Glied, 2010). These three factors are the consequences of the structural dynamics of the U.S. health system, with the cumulative result of increased health spending but a worsening of life expectancy. Muennig and Glied (2010) contend that genuine reform of the health system “may not just save money over the long term, it may also save lives” (p. 2112).

The need for health care reform is clear and partnerships which bring together different sectors of a community continue to evolve to maximize their expertise and leverage their resources to bring about systemic change for a community’s health (Wei-Skillern, 2010). Catholic health systems are a part of this shift in delivery of health care, and CHN demonstrates one Catholic health system’s attempt to balance its mission of service to the community with organizational survival by engaging in a community-based partnership to promote population-focused care for those who are homeless.

As the largest segment of the health care workforce, nurses can play a decisive role in developing creative systems for delivering care and promoting health (IOM, 2011). Health professionals are adopting creative means for identifying and targeting high-cost patients to improve their health outcomes while reducing health care costs—transforming
the delivery of care and promoting the equitable distribution of health in some of the most disadvantaged cities in the US (Gawande, 2011). Nurses have the opportunity to be colleagues in this transformation by collaborating in the development of strategies to address those systemic determinants which negatively impact the health of a community (Bekemeier & Butterfield, 2005).

Bekemeier and Butterfield (2005) maintain that nursing as a profession has perpetuated a “think small” (p. 159) mentality which reduces the nurse’s focus only to patient care while ignoring the “broken healthcare systems and underfunded prevention strategies that perpetuate poor health, lack of access to services, unsafe environments, and health inequities” (p. 159). Bekemeier and Butterfield (2005) state that nurses need to “think big” (p. 161) by seeing themselves not only as caregivers but also as reformers who must engage systemic processes to create healthier communities. Given the volatility of the health care industry, the time for nurses to think big is now.

Cardinal Bernardin (1995) envisioned a reform of Catholic health care that looked beyond the current institutions to imagine a delivery system that was community-based and that incorporated a cohort of men and women of good will who would promote the health of the community, giving special attention to the needs of those who were vulnerable. Bernardin’s vision continues to challenge those working in Catholic health care to think big by imagining a future that is not content with the status quo. By pursuing community-based projects that promote population-focused care and the equitable distribution of health, Catholic health care can partner with other health care leaders to fashion models of care that
restore “health” to the system and safeguard a mission that is “catholic” in its broadest sense.
References


doi:10.1093/her/8.3.315


Dopson, S. (2007). A view from organizational studies. Nursing Research, 56(4) (Supplement 1), S72-S77. doi:10.1097/01.NNR.0000280635.71278.e9


123


http://www.cdc.gov/pcd/issues/2010/nov/10_0132.htm


128


doi:10.1377/hlthaff.28.4.w620


Retrieved from [http://www.cdc.gov/pcd/issues/2010/nov/10_0110.htm](http://www.cdc.gov/pcd/issues/2010/nov/10_0110.htm)


Tumulty, K., Pickert, K., & Park, A. (2010). America, the doctor will see you now. *Time, 175*(13), 24-32. Retrieved from


Retrieved from


