Patient Access to Care in Health Reform: Opinions of Primary Care Physicians on St. Maarten, NA, Identifying Barriers and Developing Solutions

Joseph Thompson Ichter, IV, DrPH, MHA

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Approved by:
Edward "Ned" Brooks, DrPH, MBA (Chair)
Sandra Greene, DrPH
Jonathon Oberlander, PhD
Darren Dewalt, MD, MPH
Bruce Fried, PhD

ABSTRACT

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(Under the Direction of Edward "Ned" Brooks, DrPH, MBA)

Physician opinions on patient access in health care reform are a valuable contribution to the design, implementation and success of health policy changes. As part of a more broadly defined stakeholder group including patients, providers, policy makers, insurers, and private industry, physicians offer unique perspectives on the health care system and the challenges patients face in accessing care under current policy. This dissertation examines physician attitudes toward health care reform on St. Maarten, NA using interviews with primary care physicians. Although physicians identified barriers and solutions to health care access that were often specific and actionable, most physicians also saw a need for the development of an overall vision of reform for the health care system.

The St. Maarten physicians' presented barriers and solutions that closely paralleled those of the Pan American Health Organization's (PAHO) Primary Health Care-Based System approach. For the island nation to succeed in health reform, the PAHO framework provides the necessary vision for a health care system whose primary purpose is to improve the population's health under difficult circumstances, including St.

Maarten's limited resources and relative geographic isolation. Leadership in reform is a key element in St. Maarten's ability to address health reform in an efficient and effective manner. This dissertation research presents a unified voice for physicians as a stakeholder group and an open path to active participation in health reform.

ACKNOWLEDGEMENTS

To my parents Dr. Joseph Thompson Ichter III (in memoriam)

and Mrs. Catherine Roberta Ichter:

My father valued nothing outside his family more than education and the learning process. Although not endowed with exceptional social graces, he took great pleasure participating in spirited discussions with educated and passionate people on topics ranging from medicine and Wall Street to politics and God. I have both my parents to thank for not only supporting my successes, but also for continuing an educational legacy, instilling the value of learning with me, my siblings and their children.

There are so many people that you can acknowledge in your life's accomplishments and milestones, but no one like family. Thanks to you both mom and dad for a lifetime of support, generosity, love, compassion, determination and achievement.

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GLOSSARY OF ABBREVIATIONS AND ACRONYMS

NA	Netherlands Antilles
WIMA	West Indies Medical Association
SMMA	St. Maarten Medical Association
PHC	Primary Health Care
CME	Continuing Medical Education
NAF	Antillean Guilder
SHI	Social Health Insurance
WHO	World Health Organization
PAHO	Pan American Health Organization
LOS	Length of Stay
SVB	Social Insurance Bank
AZV	Algemene Ziektekosten Verzekering (proposed name of a General Medical Insurance)
BZV	Bureau Ziektekostenvoorzieningen
FZOG	Fonds Ziektekosten Overheids Gepensioneerden (Health Care Insurance Fund for Retired Central Government Civil Servants)
SMMC	St. Maarten Medical Center
PPK	PRO Paupre or Poor People Card
NHS	Britain's National Health Service

CHAPTER I

INTRODUCTION

A. Statement of Issue

Health care reform is a matter of political and social debate around the world. Regardless of wealth and political structure, when formulating health care policies, countries struggle with issues of access, costs, quality, and health outcomes. Although a multitude of financing schemes for health care exist, the development of social health insurance (SHI) across Africa, Asia and Latin America prompted the World Health Organization (WHO) to begin specific campaigns using SHI strategies for mobilizing resources for health, pooling risk, providing more equitable access to care for the poor, and delivering better quality health care (Hsiao and Shaw 2007) (Department of Health Systems Financing 2005; US State Department 2008).

The Island Territory of St. Maarten, Netherlands Antilles, is among many countries currently considering health care reform through SHI (Buncamper-Molanus 2008). St. Maarten's upcoming transition from island territory to independent country creates a window for policy makers to meet the challenges and opportunities that portend sweeping health care changes. During the transition from the Netherlands Antilles to

independence, St. Maarten is free to establish a new constitution as well as reform its health policies.

This dissertation explores primary care physicians' opinions regarding the potential of health policy reform to improve the population's access to health care. Through qualitative interviews, primary care physicians identify access barriers and offer solutions. While physicians represent a key and well-informed stakeholder group, their responses should be considered in combination with other stakeholders such as patients, the government, and community organizations.

Access to care on St. Maarten is a critical issue: 30.9% of the population lacks access to affordable health insurance options (Fuchs, L.Grievink et al. 2002). Also, specialty consultation rates lag behind many other countries. For example, in 2002, 26.9% of St. Maarten residents consulted a specialist compared to 42% of the population in Curaçao and 39.4% in the Netherlands (Fuchs, L.Grievink et al. 2002). The difference in specialist utilization between St. Maarten and Curaçao is particularly striking given they both operate under the Netherlands Antilles federal health policy and have similar population demographics. Throughout my two years of ethnographic observation and cultural immersion, I identified other access challenges including transportation, insurance, and cultural accommodations of the island's diverse community.

Research consistently indicates that regardless of industrialization or other economic indicators, legislative and administrative policy initiatives aimed at

strengthening primary care—specifically increasing the supply and use of primary care physicians and improving clinical care in primary care practices—improves population health (Starfield, Shi et al. 2005; Macinko, Montenegro et al. 2007; Starfield and Shi 2007). The Pan American Health Association (PAHO), in conjunction with its parent organization, the World Health Organization (WHO), issued a position paper in July 2005, outlining the need to renew primary health care (PHC) in the Americas. They define a PHC-based system as "an overarching approach to the organization of health systems designed to improve population health and maximize equity" (Macinko, Montenegro et al. 2007). Starfield's research (Starfield, Shi et al. 2005; Starfield and Shi 2007) cites many of the same reasons PAHO/WHO believes PHC is of paramount importance to the populations of the Americas and, for that matter, the health of the entire world (World Health Organization 1978). This declaration was reissued by such organizations as The Network: Towards Unity for Health, a Maastricht-based international health policy organization, in their Bogota briefing on primary health care (Executive Council 2008). Reasons for this resurgence of interest included the rise of new epidemiologic challenges in caring for chronic illness, primary care's ability to address the social determinants of health and inequality, and societal recognition that health is a human right (Macinko, Montenegro et al. 2007).

Assuming government has the will to support, strengthen or potentially reform health policy, what reforms related to access to health care services are most likely to be successful? Primary care practitioners are in a unique position to translate health policy reforms into practice. Indeed, successful implementation of health system reform

requires cooperation and support from physicians having a central role in health care delivery (Heyssel 1993; Wilf-Miron, Rotstein et al. 1999). Rather than physicians seeing government as a challenging interest to the governance of effective health policy, why not have physicians be part of the creative process (Harrison and Ahmad 2000)?

A 1999 British study by Whynes and Baines (Whynes and Baines 2002) found that those who finance health care engineer the majority of health policy reform initiatives, acting independently of health professionals charged with care delivery in reformed structures. Furthermore, "Whilst the purely technical aspects of reform, such as consequences for behavior, have been reasonably well-researched in many countries, relatively little attention has been paid to professionals' opinions on, and attitudes towards, the reforms which were being, by and large, simply imposed upon them (p.112)." Whynes and Baines found differences in primary care practitioner's policy support, leading them to ask and answer the question: "why should GP attitudes necessarily matter in a government-funded and government-controlled health care delivery system (p.128)?" First, the medical community is a powerful political force and second, general practitioners' attitudes were shown to impact the fortunes of the new fundholding schemes (Whynes and Baines 2002). Given the opportunity to gather health professionals' opinions prior to health reform initiatives, what policy reforms would primary practitioners support in their health systems with respect to patients' access to health care? As major stakeholders in this reform effort, primary care providers' opinions should contribute to the development of a vision and strategy for St. Maarten's health system (Kotter 1996).

A majority of the literature, surveys and research surrounding physicians and health reform are retrospective, acting as a platform for physician criticism of reform proposals, existing policy, or enacted reforms. Conversely, I did not offer the physicians I interviewed a plan or scenario to critique. Instead, the question I posed to primary care providers was simply, "knowing what you do about your patients and your practice, what aspects of health policy should be changed to improve the access to health care services of St. Maarten residents?" The purpose of this dissertation's recommendations is to move St. Maarten's health system toward improved access and population health by informing policy-makers of ideas and opinions of physicians during the policy formation process.

B. Background

The Island Territory of St. Maarten

As an isolated island territory, St. Maarten is located approximately 186 miles east of San Juan, Puerto Rico and 1,200 miles southeast of Miami, Florida in the Leeward Islands of the Lesser Antilles, Northeast Caribbean at 18.1° N and 63.3° W. The island itself is 37 square miles, that landmass being divided between Dutch St. Maarten in the South (16 Square miles) and French Saint Martin in the North (21 square miles). It is the planet's smallest sea island landmass shared by two completely independent governments. This division includes completely separate basic utilities, monetary

systems, and government agencies with the exception of a joint tourism marketing agreement. Common languages spoken on the island are English, Dutch, French, Haitian Creole, Papiamento, Spanish and several Caribbean dialects.

The population is primarily of Afro-Caribbean decent and Caucasians of mixed North American and European descent. The 2005 census reported 36,259 residents but informal population estimates by government officials include undocumented residents and are closer to 45,000 year-round inhabitants. Population estimates do not account for tourists and short-term seasonal population with part-time island residences using St. Maarten's health system.

St. Maarten remains economically dependent on tourism. Little arable land and no natural fresh water sources are available to support farming or manufacturing, therefore, they have no exports. All consumer goods are imported to the island, with Venezuela, the United States, Europe and Mexico as principle trading partners. The primary currency is the Antillean Guilder (NAF) with a fixed exchange rate of NAF 1.79 to one US dollar. It is uncertain whether an independent St. Maarten will retain the Antillean Guilder or be encouraged to convert to the Euro or American Dollar.

Since 1945, the federation of the Netherlands Antilles (NA) – Curaçao, Bonaire, Saba, St. Eustatius and St. Maarten – have been autonomous in internal affairs, but ultimately report back to the Kingdom of the Netherlands (US State Department 2008). This political arrangement between St. Maarten as part of the NA is slowly

disintegrating. The intent follows Aruba's 1986 actions to secede from the NA, gaining status apart from the Kingdom of the Netherlands. In 1989, St. Maarten's political leadership decided to achieve full independence and in 2006 it became official: the NA would completely dissolve through a new constitutional process. The absolute date of dissolution and establishment of country status seems quite fluid. Recent government plans to achieve status-apart state an effective date of October 10, 2010, aptly named "Country St. Maarten 10.10.10."

Negotiation and occasional conflict continue between St. Maarten, Curaçao and the Kingdom of the Netherlands over the division of assets, security, and monetary policy. Independence, or status apart, gives Island Government the ability to form its own laws and policies under a new constitution (Island Executive Council 2008). French Saint Martin, occupying the island's northern half, went through a similar years-long process in seceding from Guadeloupe. On July 15, 2007, French Saint Martin officially became Collectivité de Saint-Martin, an overseas collectivity of France and a part of the European Union. St. Martin adopted the French health care system and social insurance policies, universally covering all its citizens.

Health Care Financing and its Organizations

St. Maarten's current health care policies are directed by its federal seat in Curaçao, resulting in identical health system financing on all five Netherlands Antilles

islands. Once St. Maarten gains independence and Curaçao's administrative capacities become irrelevant, the entire health financing system must be reformed.

Several different public insurance schemes exist, all uniformly covering primary care services with little to no difference in overall scope of covered services. Dental care is highly restrictive under certain plans and non-existent in others. Private health insurance covered services vary widely according to plan and are not government regulated. Insurance coverage estimates are based on the 2005 documented population (those citizens legally on Dutch St. Maarten in possession of residency permits) of 36,259, the majority of an estimated 31% uninsured are undocumented individuals living on St. Maarten and residents falling between health insurance schemes (Fuchs, L.Grievink et al. 2002). Because medical care cannot be denied on St. Maarten, the burden of care often falls on the health system and private practitioners as uncompensated care. Details of each plan are as follows:

- Social Insurance Bank (SVB) administers the Fonds Ziektekosten Overheids Gepensioneerden (FZOG) (described below) and includes the employer-based program offered to employees making less than NAF 4,270.50 (US$2,385) per month on a premium-sharing basis. The premium is 12.5% of salary comprised of 8.3% employer contribution and 2.2% employee contribution. It is estimated that 60-70% of the documented population is covered under SVB and FZOG (approximately 25,000 persons) but also of note is the fact that non-documented persons with a five-day per week work contract can be covered under SVB. The number of non-documented covered under SVB is estimated at 7,000

although there is no official tally. Once a non-documented individual becomes unemployed, SVB coverage is terminated creating uninsured periods when the chronically ill may not be cared for due to cost. SVB acts as an unemployment or disability fund paying 80% of daily wages after 4 days of confirmed illness. Once retired, SVB no longer applies and Dutch nationals or permanent residents may be eligible to request Pro Paupre or Poor People Card (PPK) coverage (low-income medical assistance). SVB is exploring the possibility of coverage expansion beyond retirement age.

- Fonds Ziektekosten Overheids Gepensioneerden (FZOG) insures retired central and island government civil servants. Pharmacy, inpatient, outpatient, laboratory and behavioral services are included. Premiums are paid through island government pension funds. This fund is often referred to in *Daily Herald* articles as being "perpetually broke" paying providers 6-12 months late or never.
- Bureau Ziektekosten Voorzieningen (BZV) is an administrative body governing federal and island government civil servants programs. BZV programs cover all current civil servants up to NAF 4,000 (US$2,234) monthly income and social welfare recipients not insured elsewhere. 10% of the population is estimated to have BZV coverage.
- PRO Paupre or Poor People Card (PPK) insures low income and/or no income St. Maarten residents legally registered at the census office for 5 or more years and Dutch nationals legally registered at least 3 months. Government Medical Card is also used to refer to the PPK, reducing stigma associated with the Poor People Card. Island government funds the scheme and administers it

through the BZV. PPK provides insurance for those exhausting other coverage options and making less than NAF 3,875.30 (US$2,164) per month. Family coverage is attained through proper documentation of dependents. Applications are taken through the St. Maarten Department of Labor and Social Affairs.

- Private insurance options are dominated by three offerings covering an estimated 10-15% of the island population. Premiums are based upon individual health and require a physician examination prior to premium establishment. Those with pre-existing conditions can be locked out of the private market through premiums priced beyond their incomes. Private insurance often includes age limits, only insuring up to age 55-60. No community rated private plan is offered to the population.

On March 27th, 2009, *The Daily Herald,* an independent island newspaper, published an article entitled, "SVB the Target of Medical Migrants." They detailed several cases of chronically ill patients suspected of moving to St. Maarten to receive care, such as HIV/AIDS treatment or dialysis, under the SVB insurance plan. "Medical migrants" is a term not seen in the literature, but in this case refers to those migrating to a specific country to receive medical benefits not found in their present country of residence. The article also highlighted situations wherein medication received from the SVB plan for an individual is sent to someone outside St. Maarten. Safeguards are in place aimed at limiting these various abuses, such as limitations on prescriptions, "seguro" photo identification cards, and screening of immigrants for conditions like gonorrhea and HIV/AIDS. However, screening processes are ineffective for illegal

workers covered by SVB because screening is accomplished in the residency process as opposed to the SVB process.

The *Daily Herald* coverage exhibits many instances of fiscal strife between St. Maarten's physicians and almost all public payers. In the majority of articles reviewed during my time living on the island, reporters did not appear deterred by implication of public or private figures and often included controversial governmental issues. I was able to search two years of the paper's archives in the online version. When searching the on-line archives, articles returned with key words (physicians, SVB, FZOG, BZV and PPK) were not accompanied by the publication date for the printed or on-line versions. Using dates referenced in the actual text, an approximate timeline of articles was established. Searches often returned an "abstract" linked to pages that were no longer located on the server or, alternatively, sourced pages were irrelevant to the intended link. The ability to search was disabled within a few weeks of my discovering the function. Calls to the paper regarding further electronic access to *The Daily Herald* archives went unreturned. Although of interest, researching articles prior to 2006 was impossible without reviewing each archived printed newspaper at the offices.

Past discussions (unrelated to the actual interviews) with practitioners revealed tension between their practices and public payers for reasons of timely remuneration and the capitation (tariff) amount or basic fees paid. The capitation concept hinges on paying providers an amount per patient per month, regardless of how little or how much care a specific patient requires. The capitation fee paid is typically based on the law of

averages, so although some patients might never seek care, others might access care weekly. Assigning a value to that average is similar to the actuarial exercise used by the insurance industry to manage risk. Conceptually capitation, or providing a set amount of payment to physicians per patient, is meant to encourage health services utilization management by the provider.

Two separate but equally pertinent issues exist with St. Maarten's current capitation arrangements. The first is the value of the provider's payment, and the second is the process of assigning capitated patients. The actual value of the capitation amount or subscription tariff has remained stagnant since 2001, and is based upon 1998 tariffs using actuarial data from pre-1998 records. If physicians maintained income levels during this time, it was through seeing private pay patients, increasing the number of patients seen, or decreasing practice operating expenses.

Capitation payments used by public insurers are not age-gender adjusted, nor are they adjusted for severity of illness or special chronic disease groups. A prime example of the difficulty this presents is the challenge for the provider accepting all HIV/AIDS patients. Standard office visit utilization for these patients is estimated to be 15-32 consultations per year while St. Maarten's 2002 health survey reported an average rate of four general practitioner consultations per year for residents surveyed (Fuchs, L.Grievink et al. 2002). Translating patient visits into physician time commitment, if an average of 20 minutes is utilized for a clinical encounter, the average patient requires 80 minutes of clinical time annually.

Appling this same concept to an HIV/AIDS patient with more complex and intensive care needs, the time commitment may range between five and ten hours annually. In financial terms, a physician seeing the average patient earns between NAF 92.76 (US$58.82) to NAF 123.66 (US$69.08) per hour, while a physician who sees more complicated patients, such as those with HIV/AIDS, earns NAF 12.36 (US$6.91) to NAF 24.73 (US$13.82) per hour. These patients require a specific skill set from their care providers and those physicians offering specialized service under a "one price fits all" policy are financially penalized through adverse selection. This system adds insult to injury because to effectively care for patients with more complicated diagnoses, attending physicians must undergo additional clinical training at personal expense of both time and money.

A recent Dutch court case (brought in the federal seat of Curaçao) in response to a lawsuit brought by all St. Maarten family doctors, disputed the validity of the capitation rate setting exercise. In mid-September 2008, a decision was handed down in favor of the physicians with retrospective payment of an updated tariff. If this decision is not appealed by the Federal Government, primary care practitioners will see the per patient per year tariff increase from NAF 123.66 (US$69.08) to NAF 133.38 (US$74.51). This is a relatively bittersweet victory for the physicians because the new rate is based on an eight-year-old actuarial exercise reflecting costs and patient care needs at 2001 levels.

The fairly unified stance of primary care providers was exhibited in a demonstration on the day of the federal capitation court ruling. Primary care physicians in the West Indies Medical Association (WIMA) gave all non-insured patients free medical consultations as a symbolic effort to signify continued support of patient care. Their goal was only to seek fair and reasonable compensation for services rendered to federally insured patients. St. Maarten physicians would ideally have been represented at the ruling but the time and expense of traveling between even neighboring islands can be prohibitive. Realizing the magnitude of this case, Curaçao's primary care physicians closed their clinics on that morning and attending the court ruling as representatives of the St. Maarten physicians.

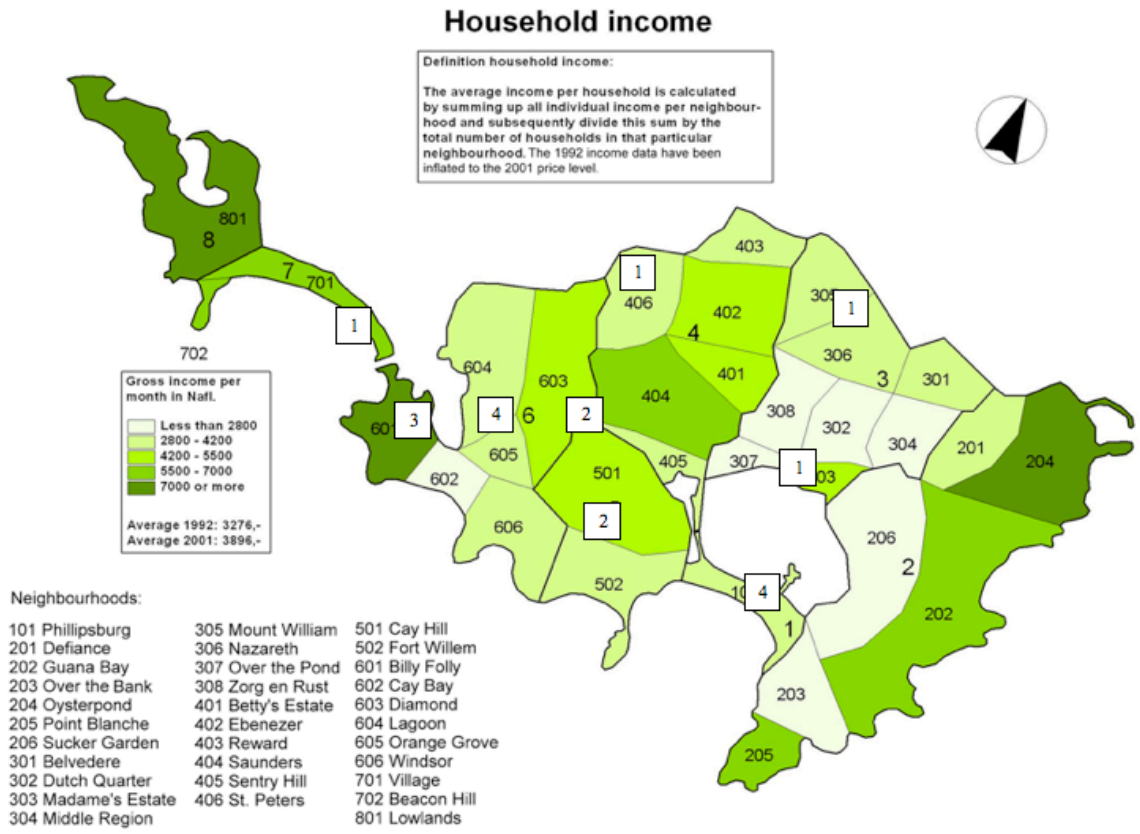
The second issue pertains to the capitation system and methods of assigning or distributing patients among primary care providers. Sector Health Care Affairs (SHCA) sponsors open enrollment periods twice a year, when individuals can choose or change their primary care physician under certain federal insurance schemes. Exceptions are made to this enrollment guideline for HIV/AIDS patients or those with other complicated, chronic diseases needing more specialized services. Current St. Maarten health policy does not require that individuals granted public insurance enroll with a primary care physician. Conversations I had with physicians prior to this research provided anecdotal evidence that many individuals do not have a specific primary care provider until they are in need of care. Without the balance of those not currently in need of care on physician panels, the actuarial rationale of capitated payments does not favor

adequate overall compensation. In the United States, equivalent capitated systems often default patients into an assigned physician panel, avoiding this skewing effect.

An equally frustrating issue between primary care physicians and public payers is the linkage of patients and billings to actual patient encounters. Numerous articles published in *The Daily Herald* demonstrate years of tensioned history surrounding significantly delayed payment, lump sum payments without associated service detail and/or the proposed tariff levels for individual services. This creates a schism between practice and income making proper fiscal management of accounts payable and accounts receivable virtually impossible. Independent (non-governmental or non-publicly supported) practices may be forced to change business models, disallowing certain insurances and potentially closing their doors restraining access to services.

Research on career satisfaction among physicians indicates that providers practicing in communities with high levels of uncompensated or under-compensated care tend to have lower career satisfaction and lower perceptions of the quality of care provided due to their financial difficulties (Pagan, Balasurbramanian et al. 2007). In turn, patient care may be affected through decreased access, reduced provider choice, and possible lower real or perceived quality of care due to the physician's dissatisfaction with practice conditions. Figure 1 illustrates the island's neighborhoods with average income per household exhibited (Boer 2004). The number of primary care physicians practicing in each area is overlaid in each white box.

Figure 1. St. Maarten Household Income by Neighborhood, 2001.



Similar maps were produced of the Level of Education, Economic Burden, Inhabited Living Accommodations in Bad Condition and Perception of Health. A review of each of these maps showed lower income equating to lower perception of health, poorer living conditions, low levels of education and a high economic burden.

St. Maarten Primary Care and its Supporting Agencies

The St. Maarten Department of Economic Policy and Research officially describes and recognizes Primary Health Care on the island as the following;

> Primary health care consists of all preventive measures, which collectively serve to stimulate health and healthy lifestyles among the population. The concept is that participation of the population in identifying and taking up their responsibility of health problems can result in positive behavioral changes leading to the improvement of the quality of life and well-being. Primary health care is provided by private health care professionals, non-governmental and governmental health care organizations such as; general practitioners; district nursing; dental care; paramedical care and other health care professionals e.g. psychologists; Turning Point Foundation (Drug Rehab Center); Sector Health Care Affairs; and voluntary health care delivery services (Department of Economic Policy and Research 2003).

This rather eloquent description of "primary health care" implies an integrated system active within the population, but is actually more of a vision than a reality for St. Maarten's preventive care. My personal observations of the reality experienced by patients and providers of care show a much broader scope of care actually provided on the island by primary care physicians. Moreover, the services provided often appear underfunded, understaffed, and lack sustainable public plans beyond those subsidized by non-governmental organizations.

The foundational concept of the vision, "participation of the population" through patient responsibility and engagement, amounts to a multi-faceted and illusive concept even for nations outside the developing world. In October of 2008, the Center for Health System Change reported on this concept, assigning the term *patient activation*. This study of US health consumers, found that patient activation is highest among the privately insured, those in higher income brackets and those with higher degrees of education (Hibbard and Cunningham 2008). None of the aforementioned characteristics

are applicable to the bulk St. Maarten's population, making patient activation as a primary care strategy a further challenge.

The Island Government's Sector Health Care Affairs (SHCA) is the primary local public health, disease prevention, and health improvement authority. SHCA was also my principal interface with the island government. Four departments are under the jurisdiction of SHCA:

- The Department of Preventive Health covering Health Policy, Epidemiology and Prevention along with Youth Health Care
- The Department of Hygiene and Veterinary Affairs
- The Department of Ambulatory Care covering Ambulance Services and Ambulatory Mental Health
- The Department of Medical Affairs covering Policy and Control, Occupational Health Services, and Health Insurance

I was unable to find an agency-generated diagram or detailed description of the primary care delivery or financing system within any private or government entity. Consequently, this background section could become an explanatory document for the current efforts of engaging stakeholders in health reform.

Primary Care Delivery

Twenty-one registered physicians in disciplines covering general practice and family medicine provide primary health care on St. Maarten. Using the estimated 45,000

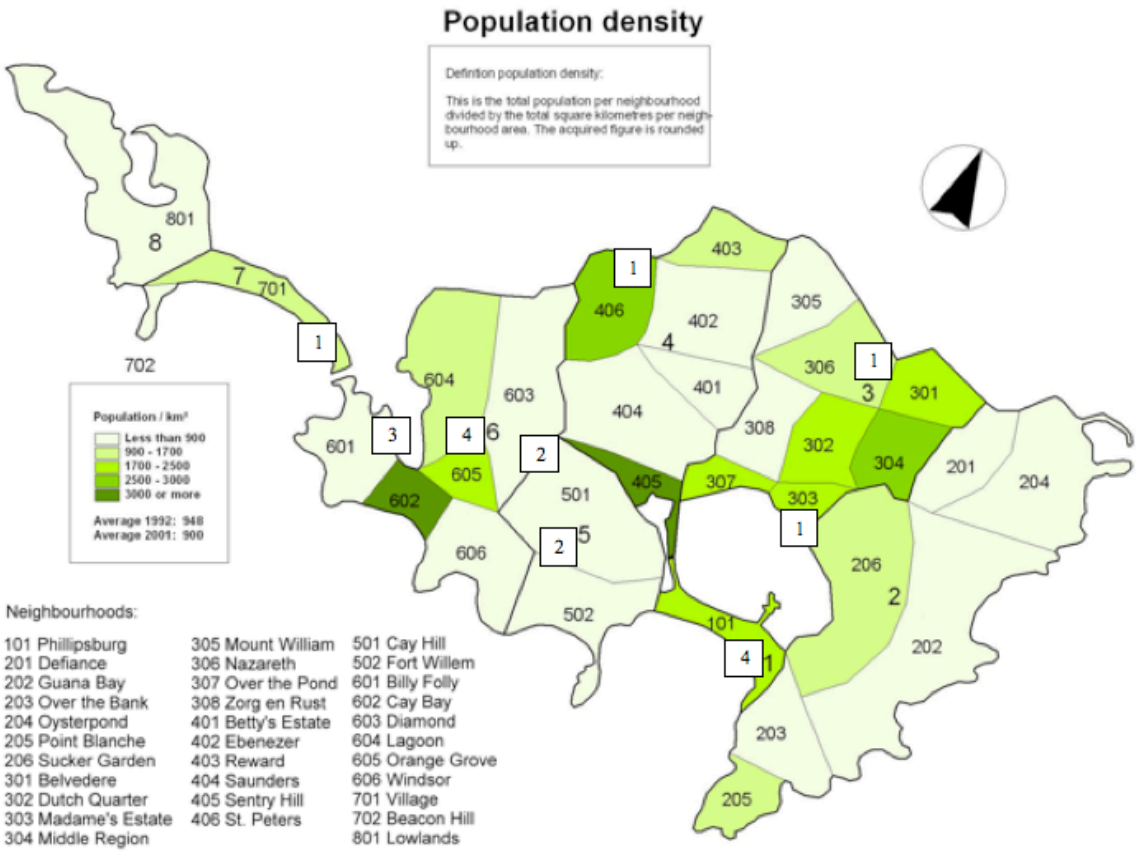
Dutch side inhabitants as a denominator, this translates to 2,142 patients per physician, considered an adequate to possibly short supply by published standards (Green, Savin et al. 2007; Murray, Davies et al. 2007). In actuality, these 21 registered primary care physicians represent less than 21 full-time equivalents owing to extended vacation time off-island and limited days or hours of practice. Overall patient satisfaction with primary care providers was reported at a mean of 8.7 out of 10 (including questions related to primary care access) in the 2002 St. Maarten Health Survey (Fuchs, L.Grievink et al. 2002). Midlevel care providers (nurse practitioners and physician assistants) are not currently utilized but limited home nursing services and community health workers are provided through the White and Yellow Cross elder care and community nursing organization.

The number of physicians, primary and specialty care alike, is regulated by Sector Health Care Affairs (SHCA) through a 2005 policy entitled "Health Care Services in St. Maarten" and the "Temporary Federal Ordinance Restriction Establishment Medical Practitioners" (Department of Health Systems Financing 2005). These policies, now over two years old, provide set numbers of physicians needed per 100,000 population. Statements made by SHCA indicate these supply policies are being considered for changes, but nothing is yet documented.

With regard to expansion of primary care providers, conversations I had with physicians prior to beginning my fieldwork suggested they were not in favor of additional providers due to the possibility of diluting available income sources. The distribution of

primary care physicians in relation to population density according to neighborhood is shown in Figure 2 (Boer 2004). White squares imposed across the map show the exact numbers in each neighborhood (the total of 19 physicians reflects two without a permanent office location and practicing as locums physicians).

Figure 2. St. Maarten Population Density by Neighborhood, 2001.



All primary care physicians are medically educated and trained outside St. Maarten although there is a United States accredited, private, for-profit medical school on the island, The American University of the Caribbean Medical School (AUC). Despite the medical school's annual offering of a local scholarship, only one St. Maarten resident

has met the academic enrollment criteria and completed a medical education at AUC. The majority of physicians are educated in Europe, more specifically the Netherlands, as SHCA's policies are preferential in allowing Dutch physicians to practice on the island and the costs of those schools are considerably lower than the local option (AUC) or any US-based institution. St. Maarten's health policies and health system do not mirror that found in the Netherlands and physicians coming to practice in the NA must learn new laws governing medical practice. The public and private insurance schemes are unique to the NA and the islands have a lower socio-economic patient base than physicians likely experienced during their European training.

Three medical associations serve the island: the largest is the West Indies Medical Association (WIMA) (general practitioners), followed by the St. Maarten Medical Association (SMMA) and lastly the Medical Specialist Association (medical specialists). The two generalist associations exist because of a principled disagreement in 2006 regarding clinical treatment opinions, tariffs, practice styles and general business arrangements.

St. Maarten cannot cost effectively provide the full scope of health services on the island, making primary care a medical discipline whose responsibilities to the population's health are far reaching. Citizens are flown to Curaçao and treated by contracted Antillean physicians when necessary care is outside the island's capacities. Patients requiring care outside Curaçao's capacities are referred to facilities in the Netherlands, the United States, Martinique or Guadeloupe. Although some specialists are

available within driving distance on French Saint Martin, current public policy prohibits using those specialists and payment is refused with exception to a small civil servant health insurance program (BZV).

A rich 300-year history shows a fundamental lack of cooperation between the Dutch and French sides regardless of economic, health, or socially related issues. Only in late 2008 was an agreement reached allowing patients on the Dutch side to access a single cardiologist on the French side. Current policy is protectionist toward physician services offered to Dutch citizens on the Dutch side of the island, but frustrations exist among primary care physicians over the lack of cooperation between the two governments' Ministries of Health.

A separate schism occurred between one particular St. Maarten physician and Island Government, resulting in a refusal to contract for services and essentially requiring patients to pay out-of-pocket or through private insurance policies for care. This physician purchased and installed the only magnetic resonance imaging (MRI) machine on the island. Due to some undisclosed differences between Sector Health Care Affairs and this physician, the government refuses to contract with him and continues to fly patients needing MRI diagnostics to Curaçao.

The majority of St. Maarten primary practice organizations are solo, with a few partnership agreements accommodating part-time work, care provided on neighboring islands, and semi-retired physicians. Medical records systems are generally comprised of

large note cards or file folders with no standardization of cooperatively developed or enforced patient information. Two practices use computer-based medical records and some discussion has been initiated surrounding the need to electronically integrate with the St. Maarten Medical Center (SMMC) laboratory and radiological systems. Practice business models are simple fee-for-service billing and collection through private and public revenue sources, offset by operational practice overhead expenses. Administrative systems are typically electronic, using on-site personal computers.

Specialty and Inpatient Care

Local specialist service options for St. Maarten residents are extremely limited. Specialists in the areas of general surgery, pediatrics, dermatology, obstetrics/gynecology and orthopedics maintain practices on the island. Patients requiring services in any other area or sub-specialty are typically flown to Curaçao or Holland at the expense of the insurer or the individual. Visits to French St. Martin specialists and the cost of any necessary diagnostic testing are fully the patient's responsibility.

The St. Maarten Medical Center (SMMC) operates as a private, not-for-profit foundation, providing all of the on-island inpatient care for St. Maarten residents. More complicated cases are flown to facilities in Curaçao or Holland. Located centrally in an area referred to as Bel Air, the hospital provides surgical care, emergency care, dialysis, and laboratory services. Wards are divided into intensive care, pediatrics, obstetrics and gynecology, and medical/surgical areas. Except for in its surgical suites and the

Emergency Room, the facility lacks air-conditioning. Approximately 75 beds are located around an open courtyard in shared rooms with up to four patients per room. When visiting patients at the SMMC, I found poor sterile conditions, numerous insects in the rooms, and few nurses on the patient floors.

Health Reform Efforts to Date

The St. Maarten Commissioner of Health and Island Government Executive Council Member, Ms. Maria Buncamper-Molanus, convened several meetings on health policy reform. The basic question posed in these forums was how the island could provide a form of social health insurance (SHI) or what is also referred to as universal care, to St. Maarten residents. In January 2008, a meeting was held to garner the opinions of community leaders and review a study of the health system recommendations commissioned by the St. Maarten government. This study entitled the "Draft AZV-Report" or "Met de Welvaart Stijgen de Ziektekosten" was conducted by a Dutch consultancy. This 180-page report is written in Dutch and still is under review (as of November 2009) by government officials.

A summary of the report findings were provided in the form of a Power Point presentation by SHCA (Hassink and Roos 2007). The main findings included:

- 2005 total per capital health expenditure was 2,863 NAF (US$1,590) and estimated the year 2020 to have a per capita health expenditure of 4,347 NAF (US$2,425)

- A predicted aging of the population (those 60 plus years) from the current 4% to an estimated 15% in 2020
- Current levels of uninsured on the island were unacceptable (estimated at 31%)
- Current financial records are not transparent, and health related programs fail to provide adequate information.

This report was the only document provided to community leaders analyzing proposed policy or financial system changes for St. Maarten. The report recommendations consisted of a "market solution" and a "public solution" with no middle ground presented. Details of financing and impacts on the existing health systems remain unaddressed, including those dealing with the loss of administrative capacities in their Curaçao offices. Primary care or any subset of health care delivery was not mentioned individually or given a preferential standing in the report summary. The process of reform was initiated with AZV discussions, but due to the February 2010 elections, completion of the plan lags because members of the incumbent governmental party feared voters may not support their reform efforts.

C. Significance of Including Physician Opinions in Health Reform

Physician contribution to policy formation should result in health reform sensitive to clinical issues as well as the needs of patients and the community. Opinions expressed by physicians represent a single stakeholder view among many and their opinions should

be considered in context of their position, responsibilities and potential motivations. Opportunities for physicians to contribute to policy formation in conjunction with other stakeholders should result in fundamentally sound and executable policy changes.

Although many developed countries continue to support private, free market approaches and systems relying on less than optimal complements of primary care to the overall health system (Starfield, Shi et al. 2005; Starfield and Shi 2007), developing countries should operate with an eye toward lower cost, population health orientated delivery, and systems that reduce health disparities (Hefford, Crampton et al. 2005; Macinko, Montenegro et al. 2007). Garnering the opinions of primary care physicians should directly inform policy debate on effective primary care practice and health system attributes supporting improved access to care.

CHAPTER II

LITERATURE REVIEW

Introduction

A paucity of data exists on primary care physicians' involvement in the health care policy and health care reform development process in countries throughout the world. The majority of existing literature and research examines attitudes and opinions of enacted reforms, explanations of current health policy, and physicians' responses to proposed health policy reforms. This chapter reviews three broad topics found in the literature that are relevant to St. Maarten's cultural circumstances and health reform initiatives: a. studies on physicians' attitudes and perceptions of health reform, b. physicians engaged as stakeholders, and c. access to care. The key words used to conduct the literature review included health policy, reform, physician attitudes, ideas, and opinions.

A. Studies of Physicians' Attitudes and Perceptions of Health Reform

Sixteen studies were located directly addressing physician attitudes or perceptions of enacted or proposed health policy reform. Because of the very limited results when searching only for attitudes and opinions of primary care physicians, the wording "primary care physician" was not used in the search, but expanded to include

"physician." No particular country or region was excluded, resulting in a total of seven countries represented with the frequency in parenthesis: Australia (1), Israel (2), Canada (5), United States (5), United Kingdom (2), Lithuania (1), Russia (1) and Germany (1).

A 1993 article by Blendon is particularly relevant "To explore the concerns of practicing physicians as a way to inform the health reform debate (p.194)" (Blendon, Donelan et al. 1993). This research investigated whether physicians practicing in the United States would prefer health reforms resembling those national health plans found in Canada and Germany. Essentially it amounted to a health system model critique and discussed whether physicians felt the basic policies should be applied to the US population. This study was the most relevant to this research because it used physicians' opinions to form health policy, but did so through presentation of options rather than allowing for creative expression of physicians in formulating reform.

The table below presents the sixteen studies focusing on physicians' attitudes and perceptions of health policy reform.

Author & Year	Country & Study Population	Purpose	Methods	Results
Majorbanks & Lewis, 2002	Australia, 3 key General Practice Journals looking at 343 "items" on MD autonomy	Improve understanding of how GPs perceive their work and autonomy	Content analysis of literature published by medical associations representing GPs in Australia	Members of the GP community are committed to an ideal of professionalism in which autonomy is central; GPs should have the freedom to control all dimensions of patient care without interference
Gross, Tabenkin, et al, 2006	Israel, 990 primary care physicians employed by four	Examines primary care physicians' perceptions of a national health	Quantitative mailed survey	Most MDs responded that the main components of the NHI law were "very

	health plans.	insurance law introducing managed competition.		desirable" or "desirable," most MDs perceived the law did not change their professional autonomy.
Cohen, Ferrier, et al, 2001	Canada, all family physicians having received certification after completing a FM residency between 1989 and 1991 and practicing in Ontario in 1993, n=236.	To determine the effect on a cohort of family physicians of health system reforms in Ontario and the relationship of reforms to career satisfaction.	Mixed method mailed survey	Three of the selected 13 health reforms were believed to have a favorable outcome, low levels of career satisfaction, quality of health system was seen to decline.
Millard, Konrad, et al, 1993	United States, random sample of 300 primary care MDs practicing in NC, 69% response rate.	Assess satisfaction with current insurance-based scheme and preference between the two most frequently discussed reform proposals.	Qualitative mailed cross-sectional survey	Dissatisfaction with the current system and strong feelings of inadequate access to care. Of those who responded, 37% preferred managed competition, 38% favored the current system and 25% preferred single-payer.
Neimanis, Paterson, et al, 2002	Canada, 82 of 107 MDs who participated in a pilot project and 101 of 150 who did not participate	To determine physicians' reasons for and against participating in a primary care reform (PCR) pilot project	Cross-sectional mailed survey	Physicians and government should clarify expectations for PCR and a need to register patients more efficiently and improve information technology
Buciuniene, Blazeviciene, et al, 2005	Lithuania, all GPs working at Kaunas primary health care level establishments in October – December 2003, n=243	Study job satisfaction of MDs and GPs at primary health institutions during health care reform	Self-administered, quantitative questionnaire	Total job satisfaction of PC MDs in Lithuania is low; compensation, workload and social status were among the key factors
Deckard & McCoy, 1997	United States, random sample of 2,000 Florida MDs, n=338	To obtain MD perceptions of health reform	Quantitative, mailed survey	Physicians' knowledge, input and support for health reform were low
Goldacre, Lambert, et al, 1998	United Kingdom, 10,504 MDs graduating in 1977, 1988 and 1993	Understand how MDs view their own professional position in the wider NHS	Quantitative, mailed survey	Viewed recent changes to a competitive model unfavorably, most viewed their own professional opportunities and positions favorably.
Wilf-Miron, Rotstein, et al, 1999	Israel, 2000 practicing MDs	Look at attitudes of MDs prior to reforms with predicted effects of the reform on health care and MD practice.	Quantitative, mailed survey	Most respondents stated that the system needed to change, resulting in increased quality of community care, but possibly an adverse effect on medical practice
Ackerman & Carroll, 2003	United States, 3188 randomly sampled MDs from the AMA master file	To determine the general attitude of US MDs toward the financing of national health care	National mailed survey	A plurality of US physicians support government legislation to establish NHI, this support may be relevant to the success of future efforts to reform health care.
Sangster & McGuire, 1999	Canada, purposefully selected sample of 14 practicing primary	To determine primary care physicians' perceptions of their role	Qualitative, in-depth interviews	Diverse role perceptions existed. Results of the study could provide

	care MDs	in a reformed health system		information to identify specific issues that might facilitate changes.
Twigg, 2002	Russia, 362 MDs and 88 insurance administrators	To probe support and resistance to change in Russia's system of health care financing and delivery	Mailed surveys	Lead MDs in two camps: those claiming support for the reforms and those wanting to go back to the Soviet model
Blendon, Donelon, et al, 1993	United States, Canada and Germany, 602 US MDs, 507 Canadian MDs, 519 German MDs	To explore practicing MDs opinions as a way to inform policy debate	Telephone surveys	US MDs view affordability as greatest barrier to access to care; unavailability of services and long wait times were a Canadian concern.
Malter, Emerson, et al, 1994	United States, 1000 MDs	Attitudes of Washington State MDs about health care reform and specific elements of managed competition and single-payer proposals	Mailed surveys	Most MDs favored substantial change; reduced administrative burden was identified as a major improvement; more procedure-oriented MDs preferred to leave the system unchanged.
Whynes & Baines, 2002	United Kingdom, two separate MD surveys 1997 n=386 and 2000 n=525	Primary care MD opinions of the health reform actions	Mailed surveys	Those opting to manage independent budgets were more likely to support reforms. Professional attitudes remained homogeneous. MDs favored user charges to help manage demand.
Hunter, Short, et al, 2004	Canada, 1200 randomly selected family MDs in Ontario, Canada	Assessing the views of practicing family MDs toward primary care reform initiatives	Mailed questionnaire	The majority of those MDs surveyed did not expect to join the Ontario Family Health Network

Research on physician attitudes and opinions focuses primarily on effects of enacted health reforms on: 1) physician professional autonomy, 2) the perceived health of their patients, and 3) individual practices (Blendon, Donelan et al. 1993; Millard, Konrad et al. 1993; Malter, Emerson et al. 1994; Goldacre, Lambert et al. 1998; Sangster and McGuire 1999; Wilf-Miron, Rotstein et al. 1999; Cohen, Ferrier et al. 2001; Gillett, Hutchison et al. 2001; Neimanis, Paterson et al. 2002; Hunter, Short et al. 2004; Buciuniene, Blazeviciene et al. 2005; Gross, Tabenkin et al. 2007). There is a wealth of physician feedback regarding managed care as a narrowly defined health reform component. However, while health and medical journals frequently publish letters to the editor, personal commentaries, and even some group commentaries from physicians

regarding their attitudes and opinions of US managed care, little actual peer-reviewed, rigorous, qualitative or quantitative research exists on this topic. Though some literature details health reform recommendations of sanctioned physician committees coming to consensus through organized discussion, these articles are not included in this review because they do not involve elements of research necessary to establish a baseline understanding for this study.

Other research, much of it conducted over the last 15 years since US President Bill Clinton's initial efforts at health reform, has examined physicians' attitudes and opinions on more broadly proposed health reform plans and policy changes (Collins 2000; Ackermann and Carroll 2003; McCormick, Himmelstein et al. 2004). The literature review completed for Ackermann's research found no previously published research that focused specifically on general physician attitudes about the financing of health care (Ackermann and Carroll 2003). A review of Ackermann's references showed no articles on studies conducted outside the United States and Canada, which no doubt limits his findings.

Several articles from the 1990s report on studies using quantitative, predominantly mailed, surveys of physicians from different states, including Washington, Hawaii, North Carolina, and Florida, to examine physician attitudes and opinions regarding proposed health reform (Millard, Konrad et al. 1993; Malter, Emerson et al. 1994; Sunderland 1995; Deckhard and McCoy 1997). In one of these articles from 1994, the author comments that he was unable to locate reports in the peer-reviewed journals

about physicians' preferences for plans currently under consideration in the United States. Furthermore, he notes that articles occasionally appearing in the non-peer-reviewed literature involved survey methods that were rarely described and included possible bias of sponsoring organizations (Malter, Emerson et al. 1994).

Thematic Areas within Studies

Four distinct themes emerged when analyzing the literature on physician attitudes and opinions regarding health reform policies: 1) patient access to health care, 2) physician autonomy, 3) practice finance and administration, and 4) quality of health services. Each theme is analyzed in more detail below.

Patient Access to Health Care

Blendon and colleagues used survey methodology to conduct a comparative study of US, Canadian, and German physicians' opinions on barriers to access to health care within their respective countries. The survey researchers presented physicians with specific questions related to access such as coverage or waiting times. US physicians rated medical indigence as the greatest barrier to accessing care, while those in the Canadian and German systems stated that access to certain health services or health facilities (in Canada referred to as queuing or wait time) are the greatest barriers (Blendon, Donelan et al. 1993). Although this study aimed to use physicians to inform the health policy debate, an obvious limitation of the research is that survey methodology

only permits a finite number and type of responses; it does not permit open-ended responses.

The research of Blendon and colleagues demonstrates important differences in physicians' perceptions of patient access to care in countries with different health care systems. For example, Canadian physicians reported perceptions of longer wait times in Canada and less availability of certain specialized procedures than in the United States. This was in contrast to the fact that in Canada, every citizen has access to care through the Canadian national health plan. Further confusing the analysis, the study findings in Germany (also having a universal care plan, but better reported access) do not suggest provision of single payer health care via the government is necessarily a trade-off for wait-times or available scope of services. These points help to validate the vast array of systems of care and associated access outcomes across nations categorized as single payer, government owned or under social health insurance schemes.

In a survey study of physicians responses to health reform in Israel, Wilf-Miron and colleagues report, "Despite a desire for change, respondents do not believe that the newly enacted (National Health Insurance) Law would greatly improve the system: it is believed that the scope of services will diminish…(p.144)" (Wilf-Miron, Rotstein et al. 1999). Specialist physicians, as opposed to primary care physicians, held this opinion possibly owing to the fact they predicted a shift in balance from hospitals to communities. The study did not define whether physicians understood this renewed

focus on community-based health would improve access to care despite the diminished service scope such as some inpatient hospital-based care.

These studies suggest that access to care may not be improved by the existence or introduction of a public mechanism to pay for care. In fact, Blendon's research (Blendon, Donelan et al. 1993; Blendon, Donelan et al. 1993; Blendon, Kohut et al. 1994) demonstrates that aspects of the health system configuration (rather than universal coverage), available health resources, and social factors, all may have an equal or greater influence on whether or not patients have access to health care services.

Physician Autonomy

Physician autonomy refers to the legitimate control physicians exercise over their work (Marjoribanks and Lewis 2003; Gross, Tabenkin et al. 2007). Regulation of the work of practitioners is a point of contention between physicians and policymakers when regulation appears to infringe on a physician's ability to treat according to their personal clinical judgment. Many practitioners consider autonomy of practice one of the main attractions of the medical discipline (Cohen, Ferrier et al. 2001; Buciuniene, Blazeviciene et al. 2005).

The level of autonomy for front-line practicing physicians is referred to as micro-work freedoms, as opposed to mezzo or macro levels of freedom with respect to the state and the "biomedical model" (Harrison and Ahmad 2000). The micro-work aspects

include concepts of gatekeeping, pre-set budgets (capitation), and treatment guidelines, which all have an impact on clinical care. Depending on policy structure, administrative procedures have the potential to infringe on this assumed right of practice. Policy makers should not underestimate the importance of maintaining sensitivity to physicians' perceived autonomy of practice. The literature review resulted in eight articles dealing with issues of autonomy of practice in health reform, by far the most mentioned aspect of physician practice in health reform.

Israel's 1995 health reforms introduced market force into the health system. The key components of their reforms included:

- A National Health Insurance Law – included a basic package of benefits and consumer choice among sick funds
- The Ministry of Health would no longer directly provide services, but act as a policy arm of government
- Hospitals became non-profit and would compete for sick fund contracts
- Regionalization of Israel's health care into 5 or 6 financially independent entities

Two separate qualitative survey studies were conducted on Israeli physicians' attitudes toward Israel's health reforms. The first study was broadly constructed with a survey component entitled, "effects on the medical practice" (Wilf-Miron, Rotstein et al. 1999), and was adopted from a previous version by Blendon (Blendon, Donelan et al. 1993). The second study specifically dealt with issues of professional autonomy in the health reform, but with respect to the same set of reforms as the first survey. The authors

state “this study is the first to empirically measure the effect of perceived infringement on autonomy, controlling for other factors that may affect the perception of reform (p.1451)” (Gross, Tabenkin et al. 2007).

Israeli physicians were permitted to affiliate with one of four national sick funds. Each of these plans competed, but was required to offer a minimum set of services. The reform involved a fundamental move towards general practitioners (GP) acting as gatekeepers and comprehensive care managers, in effect, giving more power and authority to GPs than previously allowed. “Acting as a gatekeeper was correlated with high job satisfaction (among GPs) (p.145).” The strengthening of the GPs gatekeeper role in health reform correlated with higher job satisfaction (Wilf-Miron, Rotstein et al. 1999).

Freedom to care for all persons, knowing each is covered by a universal care plan, is often mentioned with regard to physician autonomy (Blendon, Donelan et al. 1993; Blendon, Donelan et al. 1993). Care guidelines and formularies place a direct restraint on physician practice, while lack of coverage limits a physician’s choices for an individual’s treatment plan. Blendon also researched physicians’ ability to secure needed services for patients, which is directly related to insurance coverage and the scope of coverage. Canadian physicians (practicing in a universal, public care model) mentioned difficulties securing care more frequently than US or German counterparts. Canadian, German and US physicians uniformly reported problems securing long-term care and rehabilitative services. The most frequently cited reasons for these difficulties were “the patient did not have adequate health insurance” (37%) and “the patient did not have the financial

resources to pay individually" (25%). Problems of service availability within the physical health care delivery system were not noted, however individual patient access to services was an issue.

A 2001 British study examining the attitudes of primary care physicians toward the 1991 health reforms revealed a link between reform and autonomy in practice (Whynes and Baines 2002). In an effort to introduce more competition in the delivery of health care, the National Health Service (NHS) developed a system of fundholding, offering groups of health care providers opportunities to receive fixed or discretionary budgets rather than fixed salaries. Physician groups voluntarily elected to take part and were offered a clinical and financial management role with larger general practices permitted to become "fundholders". The authors described participating physicians as representative of a shift in thinking, instilling a sense of vision and empowerment to practices (Whynes and Baines 2002).

The British reform research was conducted in two separate surveys, one in 1997 with 386 respondents and another in 2000 with 525 respondents (Whynes and Baines 2002). Chi square and Mann-Whitney tests were performed ensuring comparability of the two surveys and differences were found to be statistically insignificant. The surveys' primary goal was to assess differences in fundholder (those accepting the reform) and non-fundholders attitudes (those not accepting the NHS reform). Fundholding physicians continued supporting the policy after it was abolished while non-fundholders continued to provide opinions against the reform. In consideration of the opportunity for British

physicians to accept greater autonomy as fundholders, this case begs the question as to what extent physicians desire autonomy if it means expansion of a fiscal management role?

The fundholding program resulted in pharmaceutical expense reduction, expansion of physician practice services and patient wait time improvements. Fiscal and clinical autonomy appeared to improve patient care while reducing total costs. Specific statistics were not provided on the number of physicians accepting the fundholding scheme, although it was stated that fundholders remained a minority of practicing primary care physicians. Non-fundholding physicians developed perceptions that fundholders were receiving unfair financial advantages and the patients of non-fundholders may be suffering disadvantages.

The majority of physicians did not elect to be fundholders and the program was viewed as creating a "two-tiered" British health system. The program was formally abandoned in 1999 after the more liberal Labor Party defeated the Conservative incumbent party (Warden 1997). Although evidence in this study pointed to fundholders' experiencing improved patient care, reduced costs, and increased physician satisfaction, it was unclear why the successful minority fundholding system did not translate to permanent policy.

Similar to the British fundholding scheme is the concept of primary care capitation, a system of reimbursement used in parts of the United States and Canada.

Gillett, in a 2001 report of a qualitative study of 13 Canadian physicians, opined that capitation was the "thin edge of the wedge that might lead ultimately to a loss of professional autonomy (p.591)" (Gillett, Hutchison et al. 2001). He further commented that accepting capitation among physicians was politically seen as "selling out to the government" although he did not clarify why a fee-for-service reimbursement method would constitute a different attitude toward government than capitation. Allowing expanded control of patient care through added discretionary fiscal management in reform may not always be perceived as an increase in autonomy. Gillett's study (Gillett, Hutchison et al. 2001) does not appear in the table of applicable literature because it is geared toward evaluation of capitation and not health policy reform. Although outside the identified articles, the inclusion of Gillett's findings is meant to show that physicians may perceive autonomy differently, whether it is direct or indirect control of clinical decision-making.

In a 1997 health reform survey of two thousand Florida physicians, tort reform and physician autonomy were deemed the most important aspects of reform (Deckhard and McCoy 1997). This dissertation research and review does not address tort reform because St. Maarten, like most nations, does not have similar malpractice laws to those found in the United States. Physician support for reform measures was ranked first on professional issues (including autonomy) followed by access and patient/population health status. Using a five point "Likert-type" scale, 75% of responding physicians rated physician autonomy as "very important," while only 22.1% placed importance on care coordination, 37.6% on the maintenance of private insurance, and only 28.1% on cost

control (Deckhard and McCoy 1997). These latter issues, although asked separately from the broad category "physician autonomy," may indirectly affect physician autonomy in practice. The survey responses reinforce previous findings that physicians often do not grasp the entire scope of reform or interconnected nature of issues of financing, access, autonomy of practice, and quality of care (Heyssel 1993; Millard, Konrad et al. 1993).

The literature presented regarding physician autonomy in reform does not adequately address the balance of autonomy and regulation dealing with practice variation and quality of care. Defining "legitimate control" of the medical profession by physicians is a difficult task and one that can lead reform down a path of too much autonomy (Tabenkin and Gross 2000; Marjoribanks and Lewis 2003). The balance of autonomy in reform is more likely to be achieved though the inclusion of a broader group of stakeholders representing patients and the various health system sectors.

Practice Finance and Administration

In countries with privatized delivery systems and public health insurance for the majority of the population, the financial conditions of physician practices (and therefore the personal incomes of physicians) are highly dependent upon national health policy. A 2002 survey of 86 Russian doctors showed polarization between those favoring marketization of health care and those favoring a return to Soviet-style socialized medicine. The doctors were fully united on the support of reform offering opportunity for immediate enhancement of personal incomes (Twigg 2002). Physician support is

unlikely for any measure of reform resulting in a real or perceived decrease in personal income.

Lurie and colleagues' 1993 article referenced physicians' ability to block reform measures that competed with their self-interest, including measures that might result in loss of income (Lurie, Miles et al. 1993). A 1994 study of US physicians reported that 61% of respondents felt reforms related to managed care and managed competition would result in an effective income decrease (Blendon, Kohut et al. 1994). Additionally, due to insufficient physician reimbursement, Ontario, Canada, was unsuccessful in its reform efforts (Cohen, Ferrier et al. 2001).

Whynes conducted research on British physicians' and their attitudes toward the British national health reform fundholding scheme (Whynes and Baines 2002). His study demonstrated an embrace of fundholding by physicians resulting in some practices, particularly those in urban areas, collaborating to gain economies of scale and scope. Physicians reported a reinvestment of budget surpluses into their practices, fiscally improving the practice by increasing patient volume. Limitations of Whynes' research included voluntary participation policies and possible self-selection of more entrepreneurial physician practices.

Fundholding enabled some practices to negotiate for previously unpaid services, such as nursing home care and management allowances from the NHS. Increased reimbursement was achieved through empirical research showing the care of nursing

home patients was a disproportionate burden in terms of time and the pharmaceutical allowance compared to a control group of the same age and sex not residing in a nursing home (Groom, Avery et al. 2000). The use of the fundholding mechanism permitted the physicians' to demonstrate previously unrecognized differences in the total cost of various care methodologies.

Other influences of reforms on the operation of physician practices, referred to as *structural factors* in one survey (Sangster and McGuire 1999), include increased work hours or practice duties (Cohen, Ferrier et al. 2001; Neimanis, Paterson et al. 2002), increased insurance hassle (Deckhard and McCoy 1997; Neimanis, Paterson et al. 2002), the necessary changes to accommodate information technology, and the general working environment (Goldacre, Lambert et al. 1998). A combination of these factors led 32.8% of respondents in a 2002 survey of Canadian primary care physicians to state that these were the main reasons why they chose not to participate in Ontario's health reforms (Neimanis, Paterson et al. 2002).

Quality of Health Services

Improvement in health service quality may be of differential importance to providers in reform efforts. Whynes' research on the British reforms toward the fundholding or "internal market" schemes showed that 39.4% agreed and 40.4% agreed strongly that reforms produced real quality of care benefits (Whynes and Baines 2002). Consideration of these statistics with the reported majority of respondents who agreed or

agreed strongly that the government was right to abolish the reforms (53.1% and 52.9% for 1997 and 2000 respectively), presents a potential disconnect between providers' goals and improved patient care (Whynes and Baines 2002). A separate study of 323 British primary care physicians reported that 38% believed health service quality improved under the same discontinued reforms referenced by Whynes (Leese and Bosanquet 1996).

A 1995 survey of 2000 Israeli physicians showed that, in the face of reforms aimed at increasing the autonomy of hospitals and increasing community-based care, the quality of services would slightly decrease. More specifically, the quality of primary care and community-based specialty care would rise, while the quality of both in-patient care and individual level preventive medicine would suffer under the proposed reforms (Wilf-Miron, Rotstein et al. 1999). Although it would have been informative for the research to identify specific aspects of the Israeli reforms physicians feel would result in this decreased quality, they were simply asked how they felt quality would fare under the reforms.

Canada's 1998 health reforms set out to specifically increase the quality of primary care in Ontario. A cross-sectional study of 107 participating physicians and 150 non-participating physicians highlighted the differences between those who chose to participate and those who did not. "Just one quarter of (participating) physicians surveyed cited "improved patient care" as their primary motive for participating. Similar numbers of physicians reported more important reasons were improved information

technology, better working conditions, and better pay (p.312)" (Neimanis, Paterson et al. 2002).

B. Physicians Engaged as Stakeholders

Evidence in the literature shows a lack of physician support can result in ineffective policy implementation or, in some cases, complete failure. Successful implementation of health system reform can be facilitated by cooperation, support and involvement of physicians and others with a central role in health care delivery (Wilf-Miron, Rotstein et al. 1999). Cohen and colleagues' research on Canadian family physicians' involvement in unsuccessful reforms found that 59.7% of respondents reported having little or no involvement in reform while only 2.3% reported having substantial involvement (Cohen, Ferrier et al. 2001). Other research shows that Canadian physicians expressed little knowledge of their country's reforms and provided minimal input into government initiated policies (Soisson 1993; Deckhard and McCoy 1997).

A study evaluating outcomes of an unsuccessful policy requiring 60-hour postpartum length of stay (LOS) and a public health follow-up to mothers and newborn infants demonstrates the importance of provider support to successful implementation of policy (Watt, Sword et al. 2005). The nursing staff surveyed reported they did not consider the policy viable due to lack of physician support for increasing LOS. The authors state, "Providers need to be 'on-board' with at least the intent of the policy; they need to value, support and act on any policy entitlement (p.60)." They concluded,

"Policy implementation in any health care system relies upon provider commitment. Policies that do not address the organizational, professional or social contexts are unlikely to achieve successful implementation (p.60)" (Watt, Sword et al. 2005). Sangster and colleagues, drew a similar conclusion from their qualitative survey regarding Nova Scotia's family physicians' perceived role in reform: "Primary care physicians will be the critical component of the primary health care system, so it is important to consider their role in the framework of the system… social, environmental and medical aspects of health (p.95)" (Sangster and McGuire 1999).

A British survey asked primary care physicians the question, "Could the operation of the fundholding schemes have been improved if the expertise of successful, 'leading edge' fundholders had been used to train the less successful?" This survey was conducted in 1997 and again in 2000 with both fundholders and non-fundholders. A majority of fundholders expressed that this mentorship model would have aided in the scheme's success. In the 1997 survey, 55% of fundholders either agreed or strongly agreed with the model, while in 2000, 67.8% of those surveyed agreed or strongly agreed (Whynes and Baines 2002).

This concept is again reinforced by a 2002 Canadian study of 557 family physicians who acknowledged the need for change in primary care's organization and financing. Physicians' options included opting in or out of a particular reform. Exhibiting a proper understanding of the reform and possible consequences were paramount to participation. A majority of the study's physicians planned to opt out of the

reformed network; half of the opt-out respondents said they did not understand the reform well enough to make an informed decision (Hunter, Short et al. 2004).

A North Carolina survey of 300 physicians reported nearly one-third of physicians felt they had insufficient information to choose between proposed reform plans, despite "extensive media attention devoted to health care reform proposals, a large volume of medical literature devoted to the topic, and the availability of a 1-page enclosure describing alternative plans (p.442)" (Millard, Konrad et al. 1993). The study's results highlight challenges associated with what physicians recognize as adequate education in proposed reforms versus policy makers' perception of appropriate educational processes.

Other health care industry segments, such as technology assessment and implementation, have developed methods valuing "end-user" involvement as a means to increase impact. Conceptually, my dissertation research plan is meant to consider primary care physicians as an "end user" for the purposes of health policy development and implementation (Oliver, Mossialos et al. 2004; McGregor and Brophy 2005).

C. Patient Access to Care

An exhaustive literature review on access to care would result in several hundred pages of text and it is not my intention to completely report on the access to care literature. This targeted review of the topic is intended to exhibit the broad-based set of

concerns of how people obtain needed medical care from the health system. In conducting the semi-structured interviews, this information was used to frame potential issues related to access to care for the respondents. The results are detailed in Appendix 4, Barrier Probe Areas for Access to Care.

The majority of published research on access to care focuses on special populations and narrowly defined demographic groups. Access to care issues dealing with the uninsured (Gardner and Kahn 2006; Cunningham, Hadley et al. 2007), children (Weinick, Weigers et al. 1998; Halfon, Inkelas et al. 1999), and minority populations (Phillips, Mayer et al. 2000; Ku and Matani 2001; Cunningham 2009) appear most often in the literature. In the most general sense, access to health care is reported in the literature referring to indicators measuring access in a community, population or country (Berk and Schur 1998; Cunningham and Felland 2008). Attributes of access to care in impoverished countries and affluent countries exhibit documented differences. Lack of access to health care in impoverished countries is frequently widespread among the population because of inadequate health service provision. In affluent countries, access is more likely inequitably distributed or health care seekers might be forced to wait for appropriate services (Guilliford and Morgan 2003).

The US Institute of Medicine (IOM), in their 1993 report entitled, "Access to Health Care in America," defines access as "the timely use of personal health services to achieve the best possible outcomes (p.4)" (Millman 1993). The IOM report chronicles the personal, organizational and financial barriers to health care access. The report's

section entitled “A Model for Monitoring Access” provides a topical framework for the barrier probe areas.

1. Delivery System and Structural Components
2. Health Insurance and Health Finance
3. Immigration and Legal Status
4. Cultural Barriers
5. Patient Activation (Personal Health Responsibility)

The Kaiser Family Foundation, the Center for Health System Change, and the Robert Wood Johnson Foundation have each also sponsored studies on issues related to access of care for a wide array of defined populations (1995; Berk and Schur 1997; Berk and Schur 1998; Strunk and Cunningham 2004; Cunningham and Felland 2008). Survey details were integrated with the original access framework to compile access barrier probes. In the interviews for this dissertation research, these barrier probe areas were provided to physicians helping to define the broad scope of access to care they could consider in their responses.

CHAPTER III

METHODOLOGY

Key informant interviews were conducted in order to garner opinions of primary care physicians on improving access to care in St. Maarten's health reform efforts. Ideas, attitudes and suggestions were analyzed. Common themes were identified and recommendations for improving the population of St. Maarten's access to health care were outlined to share with island policy makers. Emerging health policy is the study's dependent variable while the independent variables are those identified through the key informant interviews. The research design uses grounded theory and is qualitative, explorative, descriptive and contextual.

A. Grounded Theory

Grounded theory is (re)constructed as a problem-oriented endeavor in which theories are abductively generated from data patterns, elaborated through the construction of plausible models, and justified through their explanatory coherence (Haig 1995). The research's emerging and situational nature (as opposed to hypothesis testing) embodies the necessary elements of grounded theory. Key to the previous statement is the use of the term "emerging". Glaser suggests two main criteria for judging the adequacy of the emerging theory: that it fits the situation and that it works. A working theory helps

people in the situation make sense of their experience and better manage the situation (Glaser and Strauss 1967; Dick 2005).

The use of grounded theory necessitates the consideration of St. Maarten's culture, experience, and history when crafting health policy. This dissertation garners and assesses physician opinions and attitudes toward developing a preferred or consensus model addressing access to health care challenges of the current system of health care provision and financing.

B. Qualitative Research

Qualitative researchers typically rely on four methods for gathering information: (1) participation in the setting, (2) direct observation, (3) in-depth interviews, and (4) analysis of documents and materials (Marshall and Rossman 1998). I worked in St. Maarten for almost two years, participating through direct observation (i.e., ethnography) and collaborating with members of many of the island's institutions. Due to my tenure with the community, it is more appropriate to say that I worked "with" the island's physicians, rather than conducted research "on" them. Clear and relaxed rapport with the interview participants was facilitated through my status as a non-governmental, objective community member with no personal financial or political interest in the research outcomes.

Patton identified three different types of qualitative interviews: 1) the semi-structured interview, 2) the informal interview, and 3) the open-ended interview. The semi-structured interview, also referred to as a focused or "interview guide approach," (Patton 1990) allows for more systematic and comprehensive data collection during the interview. Semi-structured interviews were conducted in this study. Informal or conversational interviews were not chosen because data appropriate to the study question needed to be collected systematically. The standard open-ended interview format was not chosen due to its use of a strict script and inability to integrate "emerging" concepts as proposed in the grounded theory approach.

C. Subject Population, Selection and Recruitment

A primary care physician was defined as any family practitioner or general practitioner licensed through Sector Health Care Affairs to practice medicine in St. Maarten, NA. Primary care providers' names and contact information were procured from the West Indies Medical Association (WIMA) and the St. Maarten Medical Association (SMMA). The two lists were combined into a single Excel grid including name, landline and cellular phone contacts, and home and/or practice addresses. Lists were reviewed with each association's medical director to ensure inclusion of all known practicing primary care physicians.

Twenty-one licensed primary care physicians were identified as potential study participants. Eligible physicians had to be licensed as a St. Maarten primary care

physician and be actively caring for patients in their own practice. These criteria did not discriminate in terms of race, gender, age, years in practice, country of origin, or chosen medical association.

Locum tenens (temporary) physicians were excluded because they lacked connection to patient reimbursement issues and patient panel responsibilities. Two active, licensed primary care physicians were excluded because of their locum tenens status. Primary care physicians from neighboring or regional islands were not considered for this research (although some are part of the West Indies Medical Association). The health policy formulated by the new constitution and government will only impact physicians practicing on, and those residents living in, Dutch St. Maarten.

The list of potential physician interview participants totaled nineteen after considering all inclusion and exclusion criteria. Interviews took place with 13 of the 19 potential physicians. Three of the 19 did not participate because they were off-island for extended periods of up to two months, two failed to respond to my two attempts to contact them, and one verbally declined to be interviewed due to personal time constraints. This left an overall survey response rate of 68.4%.

Each physician's contact information was verified by calling the numbers from the medical association lists, documenting changes in practice locations, cellular phone numbers, clinic phone numbers and email contacts. Contact attempts were documented in a table to indicate the contact date, if the physician answered, the method of contact,

the scheduled date for the interview, and explanations if an interview was declined or other reasons why the physician could not be interviewed. The table was also used to verify interview completion and that the digital recording was transferred to the folder entitled "SXM Interviews".

The interview candidates were initially informed of the research effort via their island medical associations in the hopes of garnering support and a colleague champion (endorsement) with each association's president. This occurred in their March meetings where I presented physicians with an overview of the research question and methods. In April of 2009, physicians were contacted via email with an invitation to participate in a 60-minute personal interview to occur within a two-week period from the point of contact. Those physicians not having a known or active email account were called on their land or cellular lines during normal business hours.

The majority of interviews were scheduled via a personal phone conversation through an approach script, giving the purpose of the research, expected length of time required for the interview, and a brief plan for feedback of the results. Physicians who did not respond to the first phone call or email were contacted a second time. If they still did not respond after the second attempt, the physician was documented as non-responsive to the research and no further contact attempts were made.

D. Guide for the Semi-structured Interviews and Process

The interview guide was submitted with the original UNC IRB application. It was determined and reported May 7, 2008, that the submission did not constitute human subjects research as defined under federal regulations [45 CFR 46.102 (d or f)] and did not require IRB approval. Adherence to the approved interview guide during the interview process contributed to minimization of interview bias in conducting the questioning.

When initiating the interview process, each physician was apprised of the survey's purpose, time commitment, and given an opportunity to ask questions prior to beginning the interview. An introductory script was used, ensuring each interview was preceded by identical information to level each participant's knowledge of the interview process (Appendix 2). The questioning encouraged open and honest discussion, allowing the physicians to draw upon their training, experiences in practice, and perceptions and suggestions for improving access to care in St. Maarten. All questions garnering a "yes" or "no" response were probed further to better understand the basis of those responses.

The initial questions probed physicians' opinions on access to health care, aspects of their patient populations and whether St. Maarten's move towards independence offered opportunity to improve access to health care services. A second, more open-ended section, allowed the exploration of current barriers to health care access and potential barrier solutions (Appendix 3). Physicians appearing at a loss for identifying multiple barriers were presented with a comprehensive list of access barrier probe areas for discussion (Appendix 4).

Interview appointments were requested for a 60-minute discussion. The actual length of interviews was dependent on the physician's responses, timing of the interview (patient care time, personal time, beginning or end of the day) and individual schedules. The average recorded interview time was 44 minutes. Unless otherwise directed by the interviewee, the time limit was adhered to, respecting the busy calendars of St. Maarten's primary care physicians.

Interviews were conducted at the physician's practice except in two cases where one physician elected to be interviewed at home and the other in a private setting off a downtown Phillipsburg hotel lobby. I preferred conducting the interviews in the physicians' offices, as it tended to minimize disruptions.

Each physician was asked for verbal consent to digitally record the interview. Consent was given in all instances with relatively few questions regarding the introduction script. Handwritten notes were taken during interviews but digital recording ensured accuracy and completeness for ease of data analysis and interpretation. Handwritten interview notes were integrated in the data analysis phase.

Interviews were conducted in English and did not present any particular communication difficulties except for a few interpretation/transcription challenges with dialectal Caribbean languages. Unfamiliar terms or phrases presented in the interview process were immediately clarified. My tenure living and working on the island

permitted an adequate understanding of local words, phrases and contextual meanings. This tacit knowledge of contextual factors was a significant contributor to the openness and confidence of the interview subjects.

Interviews followed the interview guide to control possible interviewer bias (Appendix 3). Additionally, I attempted to create the same environment for each interview by seating myself across from the interview subject, holding just a single writing pad; the digital recorder was always placed between us. Conversation beyond the Guide for the Semi-structured Interviews was limited or eliminated from the interview session notes.

E. Confidentiality

Data were stored on a password protected Apple MacBook Pro and backed up on a Scandisk 2 gigabyte dedicated pen drive. When not in my possession, both were locked in my home or office. Audio recordings were completed on a Sony ic digital device. Once interviews were completed, the schedule order was randomly reassigned, leaving no connection between the interview transcript data and the participant. Audio files were sent for transcription into Microsoft Word via encrypted email to *The Transcript Co-op*, San Francisco, California. After the transcription was returned, the audio files were destroyed. Transcripts or primary documents, as loaded into the hermeneutic unit, had no identifiable information and were sequentially numbered according to the date they were added to the hermeneutic unit.

F. Data Analysis

The analysis was accomplished through the disassembling and reassembling of the data through the coding process (Charmaz 1983). "Codes serve to summarize, synthesize, and sort many observations made of the data… coding becomes the fundamental means of developing the analysis… researchers use codes to pull together and categorize a series of otherwise discrete events, statements, and observations which they identify in the data (p.6)" (Charmaz 1983). Data were analyzed with the ATLAS.ti qualitative software package, version 6.1.2, using a grounded theory approach as detailed in Chapter 3, Section A. Computer assisted qualitative data analysis software was chosen as it is more transparent, replicable and supposedly time saving in the analysis procedure. See *Appendix 5* for a diagrammatic structure of the analysis process.

Analysis spanned a four-month period and was initiated after completing all thirteen primary care provider interviews. An open coding process was used in the initial transcript reviews, codes were assigned to fit the defined quotation within each primary document (Strauss and Corbin 1990). The open coding process was repeated through two complete reviews of the hermeneutic unit. Open coding resulted in a code list of 183 words or phrases associated with the transcripts. A third round of coding was initiated to seek out conceptually similar codes, determine overlap in definition or purpose and fold them back into appropriate areas, resulting in a revised total of 101 codes.

Throughout the analysis process, searchable topically relevant memos were kept in ATLAS.ti. Each memo evolved with continued analysis and became recognized as a thematic area within the research. The process resulted in 25 memos covering the entire span of the interview guide questions. The initial four questions, with their more directed line of questioning, were analyzed individually.

In the barrier and solutions section, axial coding was used to match existing codes with the remaining 21 memos via a combination of inductive and deductive analysis (Strauss and Corbin 1990). Thematic areas associated with quality of care, preventive care, multiculturalism and governance were identified within the 21 memos as crosscutting themes rather than individual thematic areas and were removed to avoid duplicate memo results. Within the ATLAS.ti software, the linking of codes with memos created a "supercode" under the themes of the 17 remaining memos. Memos were further divided into those associated with "barriers" (7) and "solutions" (10). These supercodes resulted in the stratification of interview quotes into nine key findings.

CHAPTER IV

RESULTS

A. Contributions of Physicians

Interview respondents appeared genuinely interested in the research and undeterred by the topic or methods. Most physicians expressed some frustrations with the current lack of physician input to the health reform processes, but viewed the research as a meaningful contribution to the government's health policy work. Physicians expressed some apprehension that the government may not utilize the results or recommendations from other research initiatives. One physician lamented, "The issue is that we don't have much say in this. I mean up to now this has been controlled by a commission that doesn't know anything about health care."

Primary care physicians are the health care system for many of the uninsured, low income and illegal residents of St. Maarten. The government's role is to provide care for the population, but it falls short in many measures, as discussed earlier in the Background Section. Primary care physicians take up where the government fails, facing the desperation of patients in need of care. Findings from this research portray physicians' compassion for people and highlight their position on access to care for the population of St. Maarten.

B. Key Findings

Discussion during the interviews often moved from "problem listing" to diagnosis and potential treatment of identified barriers. Individual barriers and solutions identified in the interviews are summarized and attached as Appendix 6 and Appendix 7. Issues related to the island's multiculturalism, the operation of St. Maarten's government (both island and federal), preventive care and quality of care were cross-cutting themes and are not addressed as individual barriers but woven throughout the nine key findings of the research. A summary grid of key findings is presented as Figure 3, below.

Figure 3

Key Findings Summary Chart

Key Finding #1	Physicians are supportive of social health insurance policies (AZV) and view them as necessary to care for the island's uninsured and immigrant populations.
Key Finding #2	Reimbursement for primary care services should be structured to better incentivize the full scope of primary care practice.
Key Finding #3	Community engagement is necessary to address socio-economic determinants of health, prevention, issues of education and health literacy and cultural accommodation in St. Maarten's immigrant neighborhoods.
Key Finding #4	Cooperative, community oriented primary care practices should be organized to build systems of care to better accommodate population health issues.
Key Finding #5	Expansion of international partnerships and cooperation in health care delivery will improve patient's access to specialty care.
Key Finding #6	External expertise is necessary to design St. Maarten's health system reforms and local leadership is needed to champion the effort.
Key Finding #7	Physicians are supportive of developing a more integrated electronic public health data system to help continuously guide health system development.

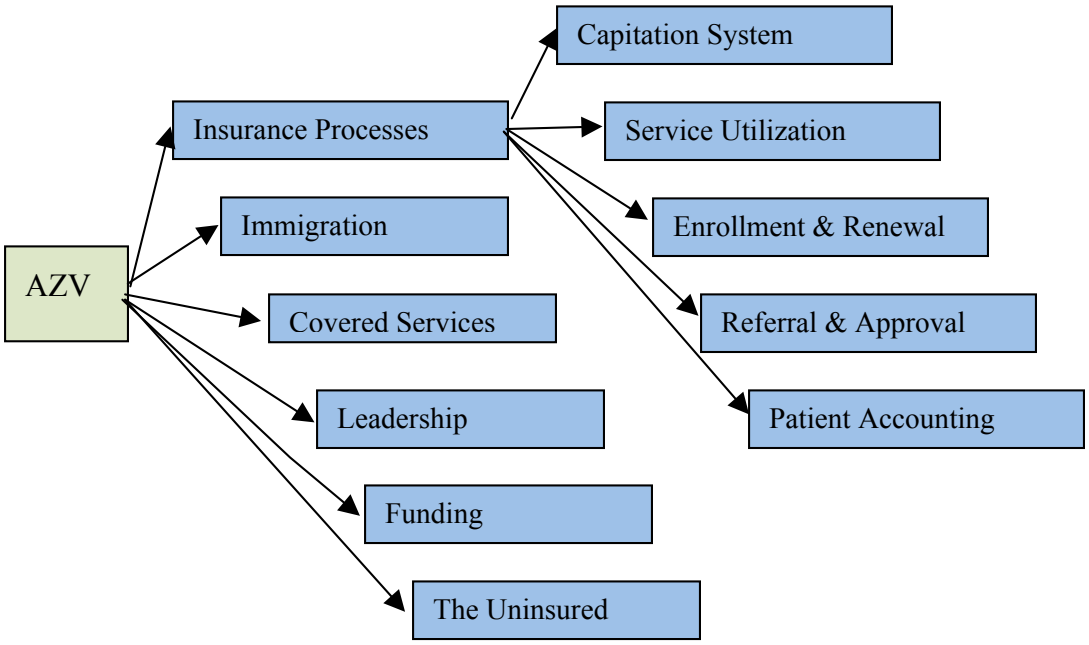
Key Finding #8	Integrated planning of health care workforce recruitment and retention must take place to ensure future access to care in St. Maarten.
Key Finding #9	The system of continuing medical education (CME) needs structural renewal, monitoring and standardization of requirements ensuring the quality of care and uniform standards of practice on St. Maarten.

Key Finding #1

Physicians are supportive of social health insurance policies (AZV) and view them as necessary to care for the island's uninsured and immigrant populations. Figure 4 below represents the interconnected topics streaming from the AZV concept.

Figure 4

AZV Implementation



Insurance Processes

The onerous bureaucracy involved with all public programs, as well as the majority of private programs, was identified as an access barrier. One respondent

referred to the largest insurer, SVB, as "a horribly bad service organization." Physicians were clear that simply providing AZV social health insurance operating under the same rules as one of the previous plans, would not serve the interests of the population: "The SVB is outdated and their whole book of rules and regulations is outdated as well as their administration." The underlying processes of the current plans were identified as barriers to the health system achieving optimal outcomes at the lowest cost. Physicians provided solutions to generally improve the current capitation systems used by insurers, create alternative cost sharing arrangements to ease overutilization, reform internal administrative processes to reflect the population's needs, and implement new patient accounting techniques.

The Capitation System

Interviewees generally favored capitation over fee-for-service reimbursement systems due to the administrative simplicity of the accounting. Additionally, physicians saw the capitated system as providing a beneficial opportunity to become more familiar with their patients and their patients' needs through regular opportunities to see them in clinic. "It helps in the matter of more information base, that you can know more about the patient. I think it is a good thing in that respect." SVB was often characterized as the easiest insurer to deal with in terms of payment because of their capitated contracts.

SVB patients are requested (but not required) to choose primary care providers at the point of enrollment, formally making each a patient on the physician's roster. The government determines capitation payments to physicians using these individual patient

rosters. Processes regarding SVB assignment and renewal create such a barrier that patients often forgo provider selection or enrollment until they are actively ill. "But if they don't renew their card, they are off my list, but they are still my patient. So I don't get paid for them anymore." Not choosing a primary care physician at plan enrollment skews the intended risk distribution of capitation by only including actively ill patients on physician rosters. Physicians suggest patients be required to select a primary care physician at enrollment, as a condition of enrollment. This change eliminates problems associated with selecting a primary care physician once a patient is ill.

Health Services Utilization

St. Maarten is not immune to the effects of moral hazard with insurance. Patients typically pay a fee of US$25 to see a primary care provider if they are uninsured (or insured but not assigned to that physician). No copayment exists for visits to a patient's assigned primary care physician or downstream care including diagnostic and laboratory services. Physicians stated that "zero-threshold access," or no charge at the point of care, creates significant problems of over utilization by patients viewing the care as free.

The majority of physicians supported a copayment for health services (professional and technical services). "Some patients, they come in very often and want everything done because they don't feel the heft of what it costs. They might need to (feel some)." One physician acknowledged that in other countries, co-payment plans often deterred the poorest people from seeking care, "and you end up hurting the persons that generally need help." When this statement was probed, the physician agreed a

system of sliding-scale copayments based upon income should alleviate such deficiencies while helping to curb unnecessary utilization.

SVB covers all downstream services free of charge to the patient. Because of this, patients often go to another physician "shopping" for a prescription or specific referral should their assigned physician not accommodate their perceived needs. "There is an enormous shopping, called doctor shopping, where the patients will try many doctors to get something." A patient may opt out of a more restrictive physician's panel to join another who may be more lenient in making referrals or prescribing medications. The 2002 St. Maarten Health Survey found that medical shopping is a well-known phenomenon; one-third of the health survey respondents indicated they sometimes consult different physicians with the same complaint looking for the "right" answer (Fuchs, L.Grievink et al. 2002). Several physicians voiced concern regarding competition for capitated patients in this scenario as counterproductive to health and overall expenses.

The primary care physician's lack of connection to ancillary services essentially leaves downstream utilization unregulated. If assigned primary care physicians were the only providers able to authorize of downstream care, costs would be controlled more effectively. This policy change should also eliminate the problems associated with physicians ordering tests or referring to keep a patient satisfied and on their patient panel (rather than according to clinical indication).

Enrollment and Renewal

Multiple respondents mentioned inefficient insurance administrative processes and gross insensitivity to patients' time in enrollment, coverage renewal, and referral approvals. "The fact that people get up at 2 or 3 o'clock in the morning, get to the SVB office at 4am to stand in line because they need to get a number at 7am, is not good. SVB dares to declare that they don't have to do that, but if you don't you won't get a number to be serviced that day." Physicians suggested that these barriers could be corrected through critical analysis of the enrollment and renewal processes in order to better understand the population's needs. I experienced similar inefficiency dealing with the island's utility company, Department of Transportation, and the police, possibly making it the Caribbean rule rather than the exception.

Referral and Approval

Referral processes that continually send chronically ill patients back into the cumbersome administrative systems were deemed as major barriers to care. "Insurance has patients who are diabetic, have to come in to get a prescription stamped every time, or get the test strips. They have to sit for three hours to get stamped to then go get the medication or diagnostic testers every time." Approvals were voiced as highly bureaucratic and insensitive to physician care directives and patients' time. Difficulties with insurance processes can also guide care patterns. For example, one physician discussed the case of a patient diagnosed with deep vein thrombosis. Rather than caring for the patient as a primary care outpatient and dealing with the requisite approvals, the physician thought it much simpler to admit the patient to the hospital. This approval

process barrier increased the patient's treatment cost significantly and caused greater disruption of his daily life than necessary.

Patient Accounting

Respondents suggested that better patient accounting was needed to improve patients' understanding of what they pay into the system versus what insurance pays for their care. Public insurance administration currently provides no feedback loop helping patients understand what is paid in and paid out. "You know what you pay? You pay 100 guilders in insurance this month. You see this prescription? It is 300 guilders, so you are making 200 guilders profit this month and that is even without my office visit. I try and educate them like this."

Immigration Coordination

During interviews, physicians exhibited palpable frustration with the care of uninsured illegal residents. When asked what should be done to alleviate the challenges in dealing with issues of immigration it was stated, "It is our typical Caribbean way to create the problem (unenforced immigration policy), and that problem creates another problem (caring for the illegal/uninsured population) and then the people that deal with the secondary problem have to solve the problem (the physicians). There shouldn't be illegals, so we won't have the illegal problem in health care that is ours."

The nature of being a small island nation in an area of close proximity to other island nations poses significant barriers to limiting or controlling immigration. Bribery

and human smuggling were mentioned as barriers to a proper immigration system for St. Maarten. “If you come with a passport to Juliana Airport (St. Maarten) and you are in the proper line with a few hundred dollars, you get in.” In the absence of controlled immigration, risks were voiced about St. Maarten becoming a destination for those out-of-country seeking care under a social health insurance system.

Proper immigration enforcement is hampered by a fundamental lack of coordination between the approval and enrollment processes of the public insurers and immigration departments. Multiple respondents suggested that any reforms endeavored should include a definite and direct linkage between immigration and the public insurance administration. If a person is given legal status on St. Maarten, they and their families should also be directly enrolled in social health insurance.

Immigration policy and health insurance regulation did not keep pace with economic and labor needs as St. Maarten quickly grew over the last decade. “SVB health insurance is linked to employment and not [legal] status. Because in the old days, there were no illegals, they forgot to change the law. So we have to retool those laws.” This is not to say that physicians do not back the island’s growth through immigration. Full recognition was given to immigrants’ role in building the country and their right to public health insurance for their contributions.

The basic premise of SVB is employer-based coverage. For employees qualifying for SVB due to income levels, the employer pays a portion of their employee’s SVB

premium and the employee pays the remainder. Respondents felt that lack of coverage enforcement was deemed to exacerbate the uninsured issues because employers are more apt to hire undocumented illegals, avoiding the expense of SVB contribution. The government must enforce and tighten its regulation of coverage requirements. If there is to be legal responsibility of employers to report and pay a portion of employee's health care, this must be closely monitored. "Check those bosses and see if they are sticking to that law. You have people working, you have to be SVB insured, and no? Well, first of all you insure them and second of all you get a fine." Although this is the process under current law, it is rarely enforced.

Covered Services

A basic package of health services, including more broad-based preventive care, should be determined for provision within the AZV. Another respondent suggested, "a separate policy [be] offered to those without documentation (and uninsured) to at least give them basic health services." The process of determining the basic service package was initiated under the AZV discussions, but has not yet come to consensus. Some respondents also commented that private insurers should be required to offer the same minimum package to be involved or compete in the market.

The coverage gap for retired workers (age greater than sixty years) making too much income to be offered the PPK insurance, but too little income to afford the private insurance, was viewed as a barrier by the physicians interviewed. In the process of this research, it was reported in *The Daily Herald* that the St. Maarten government recognized

this uninsured population and extended coverage under a Federal Sickness Insurance Ordinance and the SVB. Sliding scale premiums are applied to person's pensions to allow reasonable "buy-in" to the SVB coverage.

Private insurance coverage barriers were identified including the exclusion of pre-existing conditions and prohibitive pricing policies for chronic disease coverage. Physicians suggested private insurances are required to offer the same basic service package as AZV and eliminate pre-existing conditions clauses to offer their insurance products on St. Maarten.

Leadership

Respondents felt that, if or when a system of locally based social health insurance is established, community leadership is vital to ensure the insurance meets the population's needs. As one physician commented in reaction to criticism that the Curaçao-based leadership of SVB had little to no accountability to St. Maarten's local needs, "Having even a direct representative of different areas that participates on a board or something, may help keep the coverage closer to the needs of the local people."

Funding

Finding funding for social insurance reforms is a difficult issue. Respondents felt that increasing taxes on private insurances and businesses, or increasing the employee/employer contribution percentages would be possible funding solutions. This

pool of money should fund the AZV program and also have a portion ear-marked to reimburse physicians and the hospital for care of the island's remaining uninsured.

Some physicians were confident that, if a proper accounting took place after the relationship with Curaçao ended, the government would find a much larger pool of funding available for health services after eliminating Curaçao's administrative layer. This assumption was due to a perceived lack of transparency in the reported finances of public health insurance programs. Physicians often stated that Curaçao's administration of public insurance programs grew rich from St. Maarten's contributions.

Caring for the Uninsured

The provision of AZV does not preclude the existence of uninsured people on St. Maarten, but depending on its structure, physicians recognized its ability to significantly reduce the numbers of uninsured. Managing care for the uninsured often falls on the physician and does not follow the usual channels. "If an uninsured person is hospitalized now and there is need of care that is not provided on the island, he (the physician) has to start calling the whole world. It's nothing organized." The St. Maarten Medical Center has active refusal for the uninsured and no central government agency is tasked with assisting in uninsured care coordination. This lack of management and funding often necessitates referral to a substandard clinic based on ethnicity or illegal status.

Uninsured patients can purchase primary care consultation services with a $25 fee or less. Significant barriers for the uninsured exist in referral, diagnostic, pharmacy and

other ancillary services often making proper diagnosis difficult. Problems with financing may be an even greater challenge for those uninsured with chronic illnesses. Care for chronic illness often involves recurring costs in terms of medication and durable medical equipment. Dedicated funding sources should be determined to alleviate downstream barriers of the uninsured.

Key Finding #2

Reimbursement for primary care services should be structured to better incentivize the full scope of primary care practice.

Most interviewees saw the value of primary care services from the perspective of total cost and population health, but acknowledged that the government's policies did not reflect this value. "They (government) need to make sure that the primary physician can do whatever he can do. The only reason to refer a patient should be because we cannot do it. If you make us refer people because of the system, that's stupid. We are always the cheapest part of the whole thing."

Capitation

During the interviews, the decade of stagnant SVB capitation rates was a primary discussion point and barrier for most physicians. Consideration of practice expenses and stagnant reimbursement limits physicians' income options and can have a downstream effect on the practice's other employees and services. Most physicians continually accommodated the necessary annual 3-4% cost of living increases among staff, further

eroding their personal income over time. All physicians interviewed expressed concern over reimbursements. "The payment even for the insured population is not enough. But again, making it more challenging, you are taking care of the uninsured also which is nothing."

Several expressed their thoughts on capitation in terms of physicians forced to become more "creative" in their billing processes. The response was that creativity is a difficult task given the capitation system. One physician, when asked whether an increase in reimbursement would affect potential fraudulent or creative billing, responded, "It is hard to work around. No, they wouldn't do it (in reference to fraud)." These instances were viewed as a survival tactic for some of the island's physicians dealing with unreimbursed care. A more scientific approach was suggested using actuarial analysis to appropriately set capitation amounts and incentivize physicians. Options stated for indexing of capitation payments included age, gender, "minority status" and primary diagnosis.

Respondents suggested that new contract capitation language should accommodate cost-of-living increases based upon the annual inflation rate. This method would avoid the expensive, drawn out, and demoralizing processes of legal battles between the physicians and insurers to achieve reasonable reimbursement.

Office Procedures

Included in a physician's capitation payment are cognitive services, but not procedural services such as stitching or simple excisions. Procedures are billed under a separate reimbursement outside the capitation amounts at levels generally deemed unsatisfactory. Most physicians found this to be a barrier to care. For example, one commented, "Stitching a wound costs me money in the current structure, which is ridiculous. But the hospital will send anybody back registered to me who doesn't have a wound on the head, face or hand if during the day." Physicians suggested constructing a fair and reasonable procedural fee schedule incentivizing care in the lowest cost environment.

Chronic Illness and Home Care

Time with any provider in a medical practice other than the physician is not covered by health insurance. Practices attempting more innovative care management models using mid-level nursing care lead an uphill battle. Not only did physicians say they were not reimbursed for this care, but that patients did not perceive nursing to be adequate if they feel they are there to see a physician. The advent of less acute, chronic care issues has increased the importance of this barrier given the intensity of health management needed for this population.

Dealing with chronic disease necessitates patient interactions emphasizing education and counseling, often taking more time than encounters of episodic or acute illnesses. "I find that communicating with the patients, orienting them, because I talk about that because my patients complain that they go to physicians and they just listen,

write and they are gone. Because some physicians do have over a thousand (patients) or whatever, they cannot handle all of that." Barriers created by inadequate payment structures have the ability to dictate the parameters of the patient encounter without recognition of disease burdens and treatment methods.

The inadequacy of reimbursement for home care was presented as a barrier to access for those homebound due to illness or injury. Under the SVB insurance scheme, covered persons have 100% reimbursement for lost wages but almost no access to care if an individual is immobile. Physician respondents, however, showed a willingness to make home visits in special cases despite great personal expense of time and money. They also commented that a home nursing system was established, but had little utilization due to reimbursement. "If they are sitting home with a broken leg, or having a baby, there is no access to care. The White and Yellow Cross will not work together with them (SVB) because the five guilders they want to pay for home-based care. They said, forget about it." Government should support social services assisting patients to return to the work force.

The lack of government provided social services is exacerbated by the changes in support historically provided by extended family. With greater rapidity than might be expected, "The whole basic family unit of St. Maarten is changing." This barrier to care is a result of not only immigration to St. Maarten of partial families, but the emigration of some family members out of the country.

Key Finding #3

Community engagement is necessary to address socio-economic determinants of health, prevention, issues of education and health literacy and cultural accommodation in St. Maarten's immigrant neighborhoods.

Community-based Prevention

Prevention education was associated with several barriers including the lack of consistent patient information, language, culture and responsibility to provide preventive care. When one physician was asked if he had a role in prevention activities, he responded that it was solely government's job. Most interviewees would appreciate more organized and concerted prevention efforts by government and communities in educating the population at large. Some respondents pointed out that even without truly universal care in place, the majority of associated costs of care for preventable disease fall back to government.

Community-based efforts for prevention education fell short on the ability to liaison between health authorities and the various cultural communities. "Once you have it there, at the community leader, then it goes in a small circle around him. It doesn't go further into the hills and bushes and wherever." The identified barrier within this description was the lack of basic understanding of health, such as that provided by a trained community health worker. In the current dealings with community leaders, there is a connection to the language and culture, but not the translational capacities to health and preventive topics.

Current community-based health strategies lack continuity and act as a barrier to improved access to care. In reference to past health improvement successes with community assistance, one respondent stated, "In the moment, we have the issue resolved and then we don't communicate anymore until the next ad hoc decision or problem arises that needs a decision." It was clear that sporadic involvement was not optimal for building trust and understanding between the health system, government and the island's various cultural communities. Dedicated community health workers should be integrated in neighborhoods to forge more enduring community-health partnerships.

Respondents felt that the last three to five years of improvements in preventive care education in St. Maarten should be attributed to non-governmental organizations (NGO) on the island such as the Positive Foundation (breast health), HIV/AIDS and the Diabetes Foundation. Physicians cited health fairs and other small scale-activities sponsored by these NGOs as effective prevention tools. Conversely, government's efforts were seen as disorganized and not sustainable and thus were presented as a barrier to longer-term success.

Health fairs on the island offer a great deal of prevention information. These fairs are primarily held at commercial centers and are sponsored by the specific NGO covering an issue or disease. Although well attended, a barrier identified is the insured population accessing free care at the health fairs rather than attracting those uninsured persons. Whether it is the location or communication of these events, they miss the mark in

engaging the already disenfranchised immigrant and uninsured communities. Some physicians suggested that locating health fairs in more traditional neighborhood settings would have a greater chance of reaching the uninsured and increasing access.

School-based Prevention

Respondents were extremely critical of the St. Maarten Public School System's health education efforts. Lack of curriculum in the areas of personal health, exercise and lifestyle were seen as major barriers to working with younger St. Maarten residents to stem the tide of chronic disease. The poor health habits of parents were viewed as "…rusted in their pattern, in their life pattern, it is very difficult to get them to change. Changes need to be implemented in schools, so that the youngsters grow into it."

Respondents suggested that health and health care should be offered as a basic science in students' curriculum. Physicians were willing to work with education officials in determining appropriate curriculum surrounding personal health care for students of all ages. This was viewed as education that lasted the duration of students' education, not a single year. "Education and promoting health lifestyles, not only starts with 45 minutes of gym in the morning, but that start with 5 years old and continue it with education all the way through." Support in creating basic sciences health curriculum was presented as a method to inform children of preventive activities and consequences of risk behavior.

Education and Health Literacy

As a cultural melting pot of the Caribbean Region, St. Maarten's primary care physicians demonstrated many challenges in caring for a population whose understanding of medicine spans everything from Haitian voodoo to expectations of sophisticated diagnostic services and treatment. Primary care physicians deal with this wide scope of care on a daily basis. The majority of barriers proposed within this finding were related to the island's schools, communities, and government but few within the confines of the physician office. Current education and health literacy practices were identified as major barrier areas to treatment and management of chronic disease and preventive care.

Bush medicine was mentioned in several interviews because of its prevalence and conflicting views with the traditional or western medical education of the island's physicians. "When we advise a diet or whatever, they're not - - the compliance is not that always great. Of course, they have their own bush medicine. They take, say, green papaya is as good as Tylenol." Changing health beliefs is not as simple as an educational session, but instead represents a much deeper issue with the concepts of St. Maarten's westernized system of health care and cultural accommodation. More organized efforts in understanding western medicine and treatment should be taken into the various immigrant communities.

Care for chronic illnesses involves a lifetime of maintenance and care that St. Maarten residents often miss because of a basic lack of understanding and education, mistaking chronic management with a "cure." Physician respondents saw the longer-term compliance factor as a barrier because less educated patients often see health

improve with medications, but stop once they realize improvement. One physician stated that without a complete understanding of the disease and engagement of their care, "You find patients start to feel better, then they stop. Then you have to start all over again and ask them to come in at least twice in a week to check how their progression is going."

Early detection and the knowledge of signs and symptoms were viewed as barriers to patients presenting for care early in a disease process. Basic levels of knowledge were not limited to chronic disease but also expressed as a barrier to controlling communicable diseases. Further research should explore how these barriers affect the uninsured as well as the poor and uneducated.

A current lack of balanced public health communication efforts was stressed including print, radio and television. Improvement in health literacy was generally viewed as the responsibility of primary care practice, communities and government. Several solutions were identified within the topic of patient education including more unified approaches, sharing more detailed and culturally competent chronic disease management literature. Should the concepts of community-oriented primary care be developed through local health workers or district clinics, they should use this same literature and information in a multi-lingual fashion. "It (chronic care guidelines) has to get out there in the local culture, from what they are reading, how they are getting information, hook up on that information stream."

Several respondents mentioned the lack of specificity in the patient education process and the depth a physician may cover disease specific consequence with available materials as barriers to care. From the physician perspective, standardization can be achieved through Key Finding #9 dealing with treatment of common illnesses through improved continuing medical education.

Language and Cultural Accommodation

Barriers in communication arose using solely Dutch and English as the standard language for educational materials. Although the island's official language remains Dutch by law, public communications are in English. The regulation requiring use of the Dutch language was seen as a barrier to the inclusion of more commonly spoken immigrant languages such as Spanish, French (Creole) and other Caribbean dialects. Furthermore it was pointed out that informational brochures are not designed considering illiteracy or low-levels of comprehension.

Although the majority of physicians interviewed spoke at least three languages, several mentioned the general topics of language and translation capacities as a barrier. When probed, physicians expressed the greatest difficulty understanding dialects, even with the basic understanding of the "core" language of Spanish or French. One respondent commented wryly, "When you can't understand your patient's language, it becomes much more like veterinary medicine." As detailed in Key Finding #4, models utilizing culturally appropriate community health workers would alleviate some translational issues by acting as a liaison between the patient and health system.

Tactics related to better engagement with the faith-based community were suggested. Given the rather direct cultural linkage between immigrant communities and their chosen religion, faith-based initiatives were seen as a way to access relatively homogeneous groups. Through this tactic, culturally appropriate education initiatives should be designed and communicated. For some of the island's poorest populations, faith-based approaches were mentioned as one of the only central points of communication.

Key Finding #4

Cooperative, community oriented primary care practices should be organized to increase access to care and better address local population health needs.

Physicians offered bold solutions in the form of community oriented public health services intended to capture the multi-cultural and changing nature of St. Maarten's population. Innovations in clinical practice have already begun to address the influx of chronic illness. Additional ideas were expressed regarding primary care's geographic coverage and the government's responsibility to assist practices to promote prevention. Within each solution related to this key finding is an underlying sense that current structures are not culturally competent and solutions should be sensitive to the evolving demographics of St. Maarten. Issues not directly related to health and health care, such as immigration, challenged the practicality of some solutions but helped raise awareness of the interconnectedness of policy in discussions.

Going into the Communities

In recognition of the need for basic chronic care services, interview respondents suggested the island be divided into neighborhoods, each taking responsibility for the district's population health. Staff in district facilities should be chosen for language competency and trained to manage particular chronic illnesses. Although primary care physicians were mentioned as a part of this group, it was in the capacity of a medical directorship rather than on-site caregiver. This solution would have little effect on the existing primary care practice locations due to the level of community care being offered.

Sector Health Care Affairs should employ culturally competent community health workers acting as liaisons between the community and health system. Integration of Haitians, Santo Domingans and Jamaicans within the health department structures should occur. Respondents also suggested that culture specific community health workers would help bring health fairs and educational activities into communities as opposed to the traditional locations of mainstream grocery stores and banks.

"Getting people from the communities trained with the necessary health tools and sending them back into their communities keeps them in contact." This idea was presented as a way to connect culturally and avoid loss of momentum with communities between incidences of need, like that experienced with dengue or other public health emergencies. This method allows for interactions over time and building of trust necessary to deal with chronic, longer-term illnesses.

Practice Innovation

Recognizing the high volume of patients in need of basic chronic diabetes management, one practice integrated a nurse health educator to work with this population. The practice's physician commented, "Our main goal was to try to get that population (diabetics) regulated so that it will eventually have less strain on the practice." The practice initiated this care innovation without reimbursement arrangements or government recognition of the service's legitimacy. Another respondent routinely sends private pay patients to the nurse health educator because of the benefits to patient care, but even private insurance will not reimburse for such services. Government and insurers should recognize the benefits of mid-level (nurse) chronic care management tactics and incentivize their use through appropriate reimbursement.

Geographic Access to Primary Care

Although the overall opinion among respondents was that St. Maarten's primary care services were adequate, many mentioned the geographic distribution of services as a barrier to care for some patients. Although the government attempted to implement a regional distribution model for new primary care practices opening on the island, this was not enforced. Some respondents, however, suggested that enforcing the regional distribution model would improve access in certain island neighborhoods. This idea is explored in more detail in Key Finding #8 in consideration of workforce development.

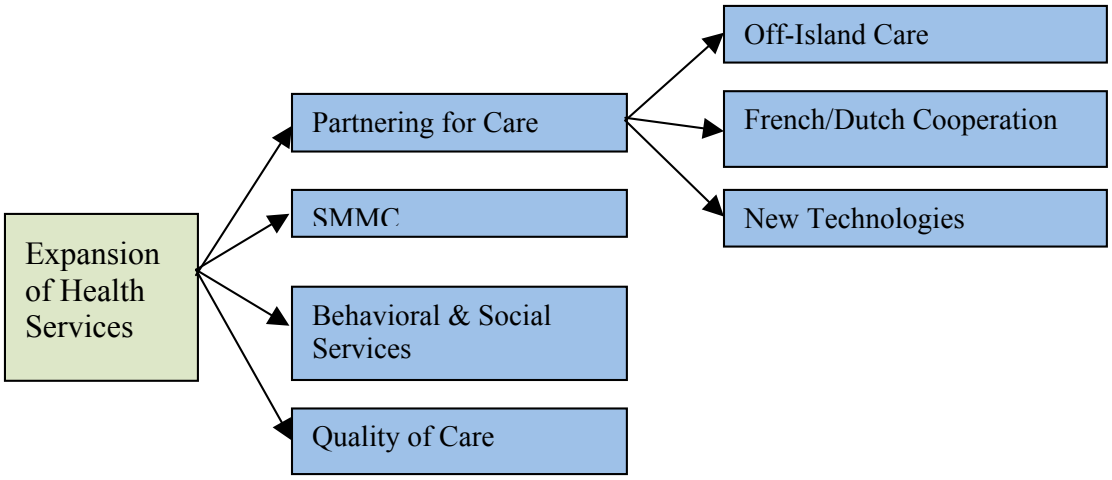
Key Finding #5

Expansion of international partnerships and cooperation in health care delivery will improve patient's access to specialty care.

Physicians expressed interest in working towards policies that increase the scope of health services available to St. Maarten residents. The island's size and population were often used as reasons for service restrictions and better solutions were recognized for St. Maarten given its more advanced regional economic development. Close ties with the Netherlands Antilles and Curaçao's concentration of specialists, coupled with off-island referral practices, were seen as primary barriers to improving the scope of services on St. Maarten. This dependency barrier will be effectively eliminated October 10th, 2010, Independence Day for Country St. Maarten.

Figure 5

Expansion of Health Services



Partnering for the Expansion of Health Services

Physicians took a creative, expansionist view of medical care on St Maarten as opposed to the NA and Curacao's more restrictive views. "We need them (the government) to say, 'Hey, good idea. Let's do it together and build something better.'" Physicians proposed that efforts to expand health services should begin with a critical analysis of the benefits of expansion. They imagined that negotiating and partnering with other regional islands, establishing cooperative arrangements with higher level care in other countries, and piloting expansion with French St. Martin would lead to expansion of health services on St. Maarten.

"We could be a real health care provider for the surrounding islands as a medical hub. We could spread the principle just like a spider web in order to get proper care for the whole region because we are not really independent from the other islands." Some physicians cited the Hughes Clinic on Anguilla (an island with much less infrastructure than St. Maarten) as a successful example to emulate. Physicians suggested that the government should enact a stimulation policy to expand private care offerings. Additionally, proper agreements with other islands would allow insured patients to come to St. Maarten for care, effectively enlarging the population served and services offered. Further economic expansion of international companies on St. Maarten may hinge on this development. "Any company that brings its CEO and employees to St. Maarten has to get their insurances. Insurance card is not enough if you don't have the proper health care services in place."

Off-island Options

More critically ill or medically complex patients are sometimes forced to seek specialty health care outside of St. Maarten. Physicians noted that the inconvenience of distance, language, cost and associated interruption of family and community all make necessary off-island care a major barrier. Current procedures were referred to as "humiliating the patient, disrespecting the patient and they are spending a lot of money." US travel restrictions have also contributed to the distance hardship, forcing many to travel to Europe for specialized care. More organized international partnering and contracting should be undertaken to assure patient expectations are met in seeking specialized care off-island.

During the interviews, physicians expressed frustration over the lack of details they were given on the scope of care their patients received off-island. The government and insurers report no data on off-island services. Physicians wondered whether care could be provided in a more cost-effective manner through locally based specialists. More transparency in total costs was seen as a necessary step to formulate a rational plan for St. Maarten's current and future specialty care needs.

Rather than a simplified analysis showing the predicted health services needs of a defined population (using flat ratios for physicians in each medical and surgical specialty per 100,000 population), government should consider the entire expense scenario of sending insured patients off-island for care. One physician suggested that it might be possible to pay specialty physicians located on St. Maarten a higher reimbursement if total costs of off-island patient care are considered in the analysis.

French/Dutch Cooperative Services

Interviewees saw improved referral relationships to physicians on French St. Martin as an appropriate direction, but held major barriers in terms of politics, language, and government reimbursement. The opinions of two physicians reflected barriers of medical training and prescribing patterns that could not be overcome because the systems were just too different. "Anglo-Saxon people cannot work with French people, not in health care." The convenience factors for St. Maarten residents, coupled with the high expense of off-island travel were cited as major reasons to push future cooperation. Presently, only the BZV insurance has arrangements to pay French St. Martin physicians and even then through an onerous referral process.

The closest opportunity to expand the scope of services to St. Maarten's people is in French St. Martin. Therefore, the physicians interviewed expressed the importance of improving cooperation with French St. Martin, not only to use their services, but to facilitate island-wide coordination, planning, and negotiation. Working through issues of reimbursement, licensing and contracting with French St. Martin should be used as a template for expansion to other islands of the Northeast Caribbean Region. Physicians also mentioned that organizing a coordinated system of medical care with regard to prescriptions, diagnostic testing, or other medical records, would enhance treatment across borders. Future conversations around a centralized data system for the entire island (French St. Martin/Dutch St. Maarten) should address these concerns.

New Technologies

Though improving health care technologies on St. Maarten would improve patient care in many respects, physicians often worried that the small island population would not support maintenance of physicians' clinical skills or ability to fund technology capital investments. One physician gave an example: the first laparoscopic hysterectomy was recently conducted, which reflects great technological innovation for St. Maarten, but the interviewee expressed concern over the surgeon's ability to maintain proficiency given the small population. "He will be doing what, maybe 10 or 20 of these surgeries in a year, not enough I think." Should the solutions outlined above regarding regional partnering be implemented, they would expand the population served by St. Maarten, alleviating concerns of volume and skill maintenance.

St. Maarten Medical Center (SMMC)

The St. Maarten Medical Center (SMMC) is the only inpatient health facility on St. Maarten. Virtually all scope of specialty services discussion must be conducted in cooperation with SMMC. Physicians saw the hospital's protectionist attitude and political backing as a barrier to the formation of a more rational health system. "They have no thinking brain of any new facility on this island that might hamper their existence or further benefit patients." Though physicians offered no practical solutions as to how to break SMMC's control, further consideration of SMMC's role should take place through discussions between government and the health sector.

Behavioral Health and Social Services

Behavioral health was the only specific health service mentioned by the majority of respondents in the context of barriers to accessing health care. The reason given for this barrier was purely the lack of local and federal funding dedicated to inpatient, outpatient and home-based behavioral health services. Speculation surrounding cultural stigma was identified as a possible political driver behind the lack of public funding. Recent improvements have been made in behavioral health services through the Mental Health Foundations; many physicians believed that the primary care community was the impetus behind these improvements. Respondents recognized the difficulty for patients to advocate for their own mental health services. Without the proper inpatient and outpatient behavioral health care facilities, many patients end up placed in the island's prison or released into the community untreated. "You cannot put these people in the prison system, it is not the right place for them and they are not properly cared for."

Physicians lamented that patients with behavioral health problems are expensive to treat due to the chronic nature of their conditions. Behavioral health services must be integrated with any health reform as part of the basic package. More specifically, suggested services included: inpatient and outpatient mental health services, expanded dependent and semi-independent living for the elderly and disabled, and access to social workers and community health workers. Another approach suggested was government employment of psychologists. Complete government support and intervention in any particular medical service area was an uncommon theme in the interviews; it was only expressed for this specific service.

Effects on Quality of Care

The limited availability of specialty services means that primary care physicians' roles and responsibilities to their patients expand, sometimes beyond the physicians' skill set "I might hold somebody longer than healthy for that person because I don't know where to refer them or I will try and solve that problem myself, whereas I am not a specialist in that field. That might make the quality of my care less." In a discussion on social service availability, that same concern was raised regarding physicians giving dietary advice to patients. St. Maarten has one dietician and the rather low reimbursement for her services was mentioned as a barrier to attracting registered dieticians. Expanded specialty options (both off and on island) for physicians and patients and reformed reimbursement models would help to alleviate these problems.

Key Finding #6

External expertise is necessary to design St. Maarten's health system reforms and local leadership is needed to champion the effort.

Leadership and Priorities

Physicians' interview statements regarding current political leadership in health system development were pointed and powerful. "They need a health system czar here to figure things out. Currently there is a lack of will and brainpower." Several physicians cited building and communicating a vision for health care on St. Maarten as a necessary building block for improvement. "One can carry it a long way if there is a vision of what

you really want. We need to have persons with vision that can say these are the priorities besides tourism for our people."

When asked if they could recommend any specific people currently in government to lead proper health reform, no names were provided. Furthermore, physicians were asked if any non-governmental entity or individual living or working on St. Maarten might have the appropriate skills; still no names were presented. "It may be that someone needs to look at it from the outside in and reconstruct everything."

Key Finding #7

Physicians are supportive of developing a more integrated electronic public health data system to help continuously guide health system development.

Modernization of Data Systems

The island's public health data needs and physicians' recognition of the benefits of electronic health records were identified as a synergistic opportunity. Some physicians were supportive of an obligatory system, but this was by no means a unanimous opinion. Alternatively, an incentive system was suggested for integrating medical practices with a central electronic health record. The incentive was structured as an add-on payment to capitation for physicians using the sanctioned data system. "They (the government) expect certain statistics from us. They should have some sort of data system in place where they subsidize or finance such a system."

One physician remarked that the island's medical practices need to be evaluated using a much more substantive data set than simply patient panels. Only through a more integrated and robust data system could quality, cost and patient satisfaction be aggregated and used to compensate providers.

Key Finding #8

Integrated planning of health care workforce recruitment and retention should take place to ensure future access to care in St. Maarten.

A single quote brought the importance of health reform and workforce together. "In terms of revamping health care, it all falls or stands with the professional and how they need to attract work here." This same challenge was expressed in other health services such as nurses' low island wages in comparison to those found internationally.

The effects of low reimbursement (income), quality of life and freedom of practice were detailed as barriers to the development and maintenance of St. Maarten's health workforce. St. Maarten has had problems retaining physicians over the last several years. Physicians were known to start practice on the island, become frustrated with the bureaucracy of local administrative systems, and abruptly leave. Discussions often went beyond the recruitment of physicians and into areas of allied health, nursing and basic clinical support.

Physician Income

Proper and attractive reimbursement for professional services is a prerequisite for attracting new, more permanent medical professionals to St. Maarten. Linkages were established between low minimum wages, the associated percentage contribution for health insurance from those wages and the inadequately funded public insurance. This underfunding then impacts the amount the public insurances can pay providers. The majority of considerations to improve physician income are detailed in the revised capitation process discussed in Key Finding #1 and in the amount and structure of capitation payments detailed in Key Finding #2.

Certain primary physicians are trained to care for those with specific chronic illnesses in the population, such as those with HIV/AIDS or diabetes. Caring for individuals with these chronic conditions can be a heavy burden. Recruiting physicians to serve in this capacity has failed over the last several years. "The work I am doing, I just had a meeting with (name deleted to maintain confidentiality). The work I am doing presently will take three people in the future. I'm doing it by myself and I am not being paid." This discussion led into the unsuccessful five-year recruitment effort, yielding no viable candidates for the work. This specific concern is remedied in Key Finding #2 through the provision of actuarial analysis, adjusting payment rates based upon primary diagnoses.

Licensing

Respondents viewed physician licensing by a governmental inspectorate as a means to control the quality of practitioners. However, respondents did not feel that

licensing was well used in this manner. Sector Health Care Affairs must apply rigorous and level standards of education and training in physician licensing. With a small pool of physicians available, the government should implement peer review mechanisms or possibly probationary periods (termed as "trials" in the interview) for new physicians.

In the past, newly licensed physicians were required to set up practice in a particular area of the island thus ensuring workforce distribution and geographic access to primary care for all neighborhoods. However, as one respondent remarked, "That was the idea, but that is on paper. Like many laws and regulations here, they are not implemented." Figure I, representing population density and the number of practicing physicians in each region, verifies primary care geographic access policy is not enforced.

Planning

Most primary care physicians have been practicing on St. Maarten for ten or more years and have little interest in moving to other islands or nations given their career stages. One interviewee stated, "I am still one of the youngest and I'm 50." Tying this back to the recent recruitment efforts and more temporary nature of placements, St. Maarten has a significant problem looming with the retirement of established physicians.

The majority of primary care physicians thought that the number of primary care physicians on the island was adequate. Respondents felt that government restrictions on practice helped ensure an undiluted patient base and seemed to control the health care delivery environment to avoid supply-induced demand and increasing health care costs.

Interviewees referred to this as a "negative" or "limited" attitude of government acting as a barrier in proper health workforce growth.

When discussing current workforce in the context of reform and the potential for publicly funded social health insurance on St. Maarten, the tone of respondents changed. One physician predicted that social insurance would not survive due to the lack of primary care workforce planning. "I don't foresee that (social insurance) surviving for long. The provider will be I would say – he will be flooded and then you will get a problem between the provider and the one who is going to pay for no-threshold access." Those directing health reform should consider the adequacy of the health care workforce in the context of service utilization models.

To help ameliorate potential discontinuity of health services, a central party should be responsible for assuring continuous coverage or special patient care arrangements. This was pointed out in the context of the only psychiatrist going off-island for a two-month vacation. "There will be coverage for three weeks by another according to a letter I just got and I don't know what happens for the other one month and a half." To expand specialty care access, respondents suggested that specialists have an opportunity to rotate among islands.

Key Finding #9

The system of continuing medical education (CME) needs structural renewal, support, monitoring and standardization of requirements ensuring the quality of care and uniform standards of practice on St. Maarten.

Requirements

No federal or local requirements exist to complete annual CME activity; without it being an enforced regulation, most island physicians did not participate in CME activity. As one physician stated, "we as primary care physicians haven't been putting a lot of effort into – or not enough influence in continuing medical education." One particular private insurer is beginning to encourage CME through private offerings, but has not made CME a requirement. Without an enforced local regulation, physicians expressed concern over quality of care consistency and the evolution of medical practice in an isolated environment.

Respondents recommended that public and private insurers could require a certain number of annual hours of CME that, if not met, would place physicians at risk of losing their ability to bill that insurer for patient care. It should be a governmental agency's responsibility to track and report CME hours. Ideological differences in clinical care and quality of the competing primary care medical associations were cited as the basis of proposed governmental oversight.

Costs

Apprehension was expressed in recommending what would amount to an unfunded or grossly underfunded mandate for physician completion of annual CME credits. Although CME enforcement was suggested as a solution to assure quality of care, this was coupled with the need to revise reimbursement or incentives for CME. Suggested solutions included an increased tax credit associated with CME activities, greater number of free CME courses brought to the island by sponsors (insurers, pharmaceuticals, the American University of the Caribbean), and direct payment for activities through government.

The high cost of professional education in an isolated area can be overcome through cooperation and innovation as detailed in the solutions of physicians. Diversity in methods, using properly accredited internet-based solutions and more local options were encouraged. At the time of the interviews, CME was a considerable topic of discussion in WIMA meetings, so respondents may have felt particularly comfortable and enthusiastic about talking about CME during the interviews.

Content

Several physicians expressed concern over the content of local CME and its applicability to everyday practice. Recognition of the island population's health needs and available treatment options are not appropriately integrated with local or regional CME offerings. The primary care providers most familiar with current disease trends should drive CME content and are willing to provide direction under a more organized system. Convening a panel to determine topics should direct CME toward relevant

population health topics rather than those determined by others off-island. Any data system implemented on St. Maarten should help direct physician education to the health needs of the population.

Quality of Care

The lack of organized CME is seen as a contributor to variations in quality of care among primary care physicians. Several physicians noted that treatments of relatively common illnesses were not uniform among providers. "If you are going to improve the access to quality care, you need to make sure that the persons you have working in the field are going to provide similar care." Furthermore, respondents felt that variations in quality and care practices were not limited to primary care physicians, but also included specialists.

C. Limitations of the Research Results

Participation in this study was voluntary. Physicians who did not respond to the interview requests or who overtly refused to be interviewed reduced the sample size. Those refusing to participate may include physicians who were too busy (real or perceived time constraints) to take the hour interview time, apathetic about the research goals, doubtful of the research's value, or who had prior experiences with similar unsuccessful research or had a negative personal opinion of the researcher. Those initially refusing to participate were not re-approached or otherwise coerced into participating. Those who did not respond to the initial interview request were re-contacted one time, according to the research protocol.

Primary reliance on those interviewed limits the results to the expertise of the participating key informants. Physician data were self-reported in nature and subject to physicians' opinions as shaped by personal experiences dealing with patients, government, the health system and insurance providers. Without question, their views of the health care system could have been biased by their experiences. One negative interaction with a part of the health system may have colored a particular response (rather than a physician giving more general impressions), although providers were asked to look at broader issues rather than singular anecdotal responses.

Physicians' views of the health care system likely differ from that of other stakeholders. Should patient, employer, government and other stakeholders be asked similar questions on barriers and solutions to improving access to care on St. Maarten, the results and recommendations could vary significantly. Amassing the perspectives of various stakeholder groups would permit further triangulation of responses, help close the gap in perspectives, and likely improve the validity of results.

When a single researcher conducts studies, the reliability of the analysis can easily be challenged. To ensure reliability, I made every effort to maintain meticulous records of interviews and document the details of the data analysis process (Mays and Pope 1995). Efforts were made to assure results would be reproducible under another trained researcher using supporting quotes and linked coding schema. The reliability of similar research could be increased through the use of a second researcher, referred to in

the literature as investigator triangulation, using explanations generated by additional researchers studying the same participants (Johnson 1997).

The research methods were intended to ensure reliability and validity through the establishment of confidence in the findings (Guba and Lincoln 1985). Through the data analysis process, I was able to establish response patterns and triangulation of data through government and other public sources as described in the background section.

CHAPTER V

RECOMMENDATIONS

This dissertation explores primary care physicians' opinions regarding the potential of health policy reform to improve the population's access to health care. Qualitative interviews provided the opportunity for physicians to present perceived barriers and offer solutions. This chapter contains three parts: (1) Context: The important demographic, geographic, cultural, political, and health care characteristics that shape the recommendations and may affect the likelihood that the dissertation's recommendations will result in actual change; (2) the assumptions on which the recommendations are based; and (3) the recommendations themselves.

A. Contextual Discussion

Even the most logical, empirically-based recommendations have little chance of being enacted if they are at odds with the local culture and politics. Hence it is useful to summarize some of the major relevant characteristics of this small, complex country. Although the evidence for some recommendations is strong, contextual factors may limit the possibility of full implementation.

I am fortunate to have lived on St. Maarten for almost two years. During that time, I was able to gain the island's physicians' trust and build the foundation needed to carry out this research. Equally important, I came to understand St. Maarten far more deeply than is possible for those visiting or working on the island for only a week or two. This subsection on context is based both on my interviews and my knowledge of the island as well as my review of the literature.

In some ways, St. Maarten is a place of sharp contrasts. Its thin, crystalline, tourist-strewn edges bear no resemblance to its rough and tumble interior. The wealth the tourists bring rarely makes it to the hills where people live in relative poverty. Hotels and restaurants are modern, but much of the island remains the way Herman Wouk described Caribbean life in his 1965 novel, "Don't Stop the Carnival." Wouk used his personal experiences as a Caribbean innkeeper to create a parallel world with new people and new places. "The West Indian is not exactly hostile to change, but is not much inclined to believe in it. Meantime, in a fashion, Amerigo was getting American-ized; the inflow of cash was making everybody more prosperous. Most Kinjans go along cheerily with this explosion of American energy in the Caribbean. To them, it seems a new, harmless, and apparently endless carnival" (Wouk 1992). My experience on St. Maarten confirms Wouk's observation: change happens around the island's people, not with or by them.

Mistrust of Government

A great deal of St. Maarten residents seem to lack respect for the government because they feel it does too little too slowly. Others take exception to their leaders'

decisions. In either case, the island's residents generally lack faith in their government. This opinion is shared by some of the island's physicians, three of whom in particular expressed their frustration in their responses to the second interview question, "Do you believe the current effort at attaining country status presents new opportunities for St. Maarten's health policies related to access to health care?" These individuals appeared to feel demoralized and discouraged with the government. "Any new policy will not make much sense until you have proper government in place, and I think that is what is lacking here on St. Maarten. Nothing on this island is structure; it's just right on confusion."

Interviewees' criticisms of government ranged from benign neglect of the people's health to the outright use of words such as "corrupt" and "incompetent" in describing certain individuals or departments. One physician, for example, cited conflict of interest as a barrier to getting healthier food options in the schools through a politician's personal ownership of on-site school vending machines.

Island Health Status

Data on the health status of St. Maarten's residents is poor. The most thorough data are in a snapshot contained in the 2002 publication, *How Healthy is St. Maarten?* (Fuchs, L.Grievink et al. 2002). Other than this study, mortality statistics and data on infectious disease have formed the bolus of health data coming from the Netherlands Antilles. Changes in population health status are monitored on a limited basis through paper-based registries and are often maintained by non-governmental organizations or other special interest groups. Individual registries often lack organized connections to

Sector Health Care Affairs and subsequent health policy formation. The fact that no legal regulations exist to compel the provision of health statistics by individual physicians has hindered development of more robust health status information. The overall "picture of health" on St. Maarten is more of an approximation rather than rooted in actual data.

According to Fuchs and colleagues' survey of the population, 45.7% of the adult population had at least one chronic health problem (back pain, hypertension, joint pain, headaches, depression, dizziness) and 24.3% reported a co-morbid chronic condition. Among the elderly, who comprise the highest growth age category in St. Maarten, 78% have one or more chronic disorder, the most common being complaints of the joints (52.8%), hypertension (40.4%), Diabetes Mellitus (28.0%), glaucoma (18.6%) and heart diseases (12.4%) (Fuchs, L.Grievink et al. 2002). It is impossible to determine if health status has improved or deteriorated in the eight years since this survey was conducted, as it was the first and only one of its kind. Anecdotal change can only be inferred through the physician interviews; all but one respondent reported preventable illnesses were significant and/or growing in their practices.

Island government and public payers continue to operate under a 1960s Dutch health insurance scheme whereas the Netherland's health systems have evolved reflecting the population's changing needs. The ability to evolve and improve health systems is often a function of population health data. Although the 2002 health study was a seminal work for the Netherlands Antilles, updates are necessary to gain a more longitudinal understanding of the provision of health care, the need for health care, and subsequent

health planning. This more longitudinal understanding of population health and better use of currently available data could help create a sense of urgency toward change efforts, the initial stage of Kotter's Eight-Stage change process (Kotter 1996).

Health Promotion and Disease Prevention

As is the case for most countries regardless of developmental status, prevention is key to population health improvement. The interviewees noted that access to preventive services, community support, and education are necessary components of effective prevention programs. "On a population basis, using the best available estimates, the impacts of various domains on early deaths in the US distribute roughly as follows: genetic predispositions, about 30%; social circumstances, 15 percent; environmental exposures, 5 percent; behavioral patterns, 40 percent; and shortfalls in medical care, 10 percent (p.83)" (McGinnis, Williams-Russo et al. 2002). Whether or not this same distribution applies to St. Maarten, the challenge for physicians is that the majority of prevention happens outside the clinical office.

The primary care physicians on St. Maarten were well aware of the uphill battle to advance the island's health promotion/disease prevention efforts. Several physicians mentioned the need to modify the public school curriculum to incorporate preventive care and healthy lifestyle choices. One issue with focusing on the island's students is that little reliable data exist about the nature and extent of emigration from St. Maarten. Without better data, it is difficult to assess how these school-based strategies may impact

population health in 10 or 20 years because those same students may have moved on to live in other countries.

All but one respondent saw roles for physicians in prevention and promotion. The other physicians tended to view prevention and promotion as a coordinated effort between the government's preventive health specialists, physician offices, communities, and individuals. Their view correlates with findings reported in the literature that the majority of successful prevention activities are broad-based and often integrate the clinical care of primary care physicians (Starfield, Shi et al. 2005; Bodenheimer, Chen et al. 2009).

Quality of Care

Little information about quality of care exists on the island. St. Maarten Medical Center was unwilling to release data that might uncover quality issues related to inpatient services. Other than basic morbidity and mortality data, which is of minimal utility in assessing quality, Sector Health Care Affairs provides no substantive information. I did obtain some self-assessments of physician quality of care from my interviewees, but respondents' observations were largely anecdotal and, no doubt, biased. The near absence of information and regulation concerning quality of care on the island suggests that quality is either assumed to be high or is just not a high priority.

A few anecdotes pertaining to quality: One solo practice primary care physician advertised his clinic as "multi-specialty." This individual offered clinical services from

pap smears to setting broken bones to plastic surgery. Another office provided four-hour clinical rotations for AUC medical students who consistently returned to school with stories of dubious care, particularly in the area of chronic care management. Another physician posted an advertisement in the waiting area for an "herbal foot bath" that would leach impurities from the body. This advertisement included a list of potential benefits and a photograph of feet in the bath surrounded by brown water. These and similar observations were by no means indicative of all primary care practices, but were documented in several of the practices I visited.

Several potential solutions provided by physicians could promote quality of care. Government regulations surrounding licensed physicians' permitted scope of practice, clinical data collection systems, required continuing medical education credits (CME) and/or peer review of physicians, should be instituted to improve quality of care. The lack of quality of care data is a reminder of the well-worn adage, "You can't manage what you don't measure." St. Maarten will not be in a good position to systematically improve the quality of its health services until it better understands its health services and population's needs. Of these options, CME activities are likely the easiest to implement and will help ensure patient care is high quality, up-to-date, and that regional or global practice innovations benefit populations. Physicians were supportive regarding changes to improve CME and a reformed CME structure should significantly improve the integrity of St. Maarten's health care system.

Findings from this research suggest that quality of care is linked to the availability of local specialty care on St. Maarten. Approximately 41,000 people live on St. Maarten, which is not enough to support some specialists and many sub-specialists. The majority of specialty services remain available on Curaçao. Several primary care physicians reported that they, on occasion, felt stretched beyond the usual scope of care (and thus possibly compromising quality of care) because of difficulties referring patients to local specialists. This suggests that the current system of specialty care provision is less than optimal. Given St. Maarten's efforts at achieving country status, physician interviewees stated creativity, partnership, and a more positive tone of local and regional growth should be part of any movement toward increasing access to specialty care.

Health Care Provider Compensation

Interviewees repeatedly noted that access to care is hampered by below cost reimbursements for some services that fall within the scope of primary care practice. Physicians cited multiple examples, saying that compensation for minor procedures, chronic care management, and some basic preventive care was inadequate. One interviewee stated, "You want primary care to be incentivized to do the best things, because it is your least expensive part of the health care." Under the current reimbursement schemes there is little incentive for primary care practitioners to provide preventive services and some basic clinical services. Physicians also indicated there is little financial incentive to innovate. The primary care system of St. Maarten could be the basis for significant improvements in health care access, population health and possibly lower cost of care if more of their services were sufficiently compensated.

I did not interview St. Maarten's specialty care physicians and thus reimbursement for their services is not addressed in my research. Opinions of primary care physicians on the perceived lack of specialty care included reasons of poor reimbursement and income, but also federal influences in Curaçao, licensure restrictions and immigration difficulties. As part of health workforce development on St. Maarten, reimbursement issues should remain a top priority.

Multiculturalism and Health Care

Providing universal access for the varied health care needs of a multicultural population of native islanders and immigrants presents a particular challenge for St. Maarten. Health care provided by "culturally competent and linguistically concordant" teams can significantly improve population health outcomes at the primary care level (Bodenheimer, Chen et al. 2009). On St. Maarten, articles from the *Daily Herald* reveal an overt bias in favor of employing St. Maarten's residents, historically limiting work options for immigrants. Overall, physicians' solutions to the challenges of multiculturalism were based on substantive changes in how the health system should provide more robust, multi-disciplinary, community-based primary care. This culturally competent approach requires a more diverse health workforce (Cohen, Gabriel et al. 2002).

Building a multicultural workforce will not be possible until St. Maarten's immigration policy changes. Current policies and procedures limiting immigration

negatively impact the health system through restricting the immigration of needed health care providers interested in practicing on St. Maarten. The need for local practitioners, culturally competent or otherwise, has been exacerbated by the island's historical dependency on Curaçao's available health resources. Country status will place St. Maarten in an international, competitive open market for clinical workforce and the island's actions on social health insurance and immigration could significantly affect the future cultural diversity of the island's health workforce.

From physicians' perspectives, as presented in Chapter 4, a fundamental disconnect exists between immigration policies, the provision of legal work papers, and immigrants' ability to be served by the SVB insurance program. Without coordination of these governmental functions, immigration and work status problems will continue to plague efforts to provide access to care for this segment of the population.

Interviewees mentioned that language is a barrier to providing care to some people, mainly those who spoke particular dialects (think Haitian Creole and French). No physician interviewed said that he or she was fluent in any less than three languages. Physicians most commonly reported the ability to speak some combination of English, Dutch, Spanish, French and Papiamento. One physician stated he was fluent in five languages. Despite his multilingual abilities, he insisted that his patients speak in English or bring someone with them who could. In his case, fluency in several languages did not contribute to improved communication with patients who have little or no command of English.

When providers and patients do not speak the same language, the use of professional interpreters leads to better care (Chen 2006; Karliner, Jacobs et al. 2007). The variety of languages spoken on St. Maarten necessitates the employment of culturally and linguistically competent community health workers who can serve as translators for patients. While these individuals may not be professional interpreters, they may prove to the best practical option.

Leadership and Vision

Most interviewees said St. Maarten's government does not understand the health system well and should seek expertise in guiding reform. "I don't think that government really understands much about what medical care in general really means. In fact, if you want to go that direction, there is too much (government) involvement in the medical care." No physician thought government should have greater control over the provision of health care. In fact, they wanted government to take a more laissez-faire approach to its involvement in health care.

One physician suggested that one of the island's current practitioners should run for office, become a government official, and help other political leaders better understand the relevant issues. This suggestion is problematic, however, because of the duration of election processes and the loss of a practicing physician would likely stress the remaining providers and decrease access to care on St. Maarten. Also, the suggestion is at odds with the island's history of electing individuals either from known island

families or from those with great financial resources. Given these circumstances, a better solution is for physicians to work with the government on issues of health reform rather than making a bid at getting into the government.

Physicians could not name anyone currently living or working on St. Maarten qualified to lead health reform. Interviewees characterized civil services on the island as congenitally inward looking organizations and proclaimed that outside expertise is needed, to not only guide the government but also the development of the private sector health system. This suggestion may face a hurdle given the rather "nationalistic" feeling of the movement toward country status. However, there must be recognition of local limitations.

Physicians strongly believed that a vision must be created for an improved, future health system on the island. Interviewees provided many specific suggestions for change, but did not reveal an overall vision that would tie fragmented suggestions together in a coherent plan. Kotter made the case for the importance of having a vision: "Clarifying the direction of change is important because, more often than not, people disagree on direction, or are confused, or wonder whether significant change is really necessary. An effective vision and back-up strategies help resolve these issues. They say: This is how our world is changing, and here are compelling reasons why we should pursue these new programs. With clarity of direction, the inability to make decisions can disappear (p.69)" (Kotter 1996).

B. Assumptions

The recommendations I present in this dissertation are based on the following assumptions:

1. A social health insurance scheme (AZV) is "on the table." As of January 2010, the *Daily Herald* continued to publish articles on the government's interest in bringing this concept to fruition. Further conversations with a physician member of their advisory group reinforced the government's intentions to implement AZV. My recommendations, based on physicians' information and opinions, are aimed at creating a more efficient, effective social health insurance program.
2. Country St. Maarten will continue to operate as a high-income developing nation for the foreseeable future. Health expenditures as a percentage of total government spending are unlikely to change significantly in the near future given the global economic outlook.
3. Primary care will remain the focus of locally provided care due to current infrastructure, geographic, and demographic realities. Modifications to the primary care delivery system have great potential to provide short-term impact and longer-term benefits.
4. Specialty care should be further developed on St. Maarten, but will require continued study into infrastructure, partnering opportunities, incentives, and revised insurance processes that assure that local patients are utilizing services appropriately.

C. Recommended Actions

One or more of this study's interviewees suggested each of the following system-wide recommendations detailed below. The physicians proposed other broad suggestions, which I have not included in this section because they stand little chance of being implemented or, if implemented, would result in little improvement.

Insurance

AZV, a social insurance program, should be the island government's top priority. A universal public care plan (AZV) including the following seven components is more likely to improve access to care than multiple piecemeal plans focusing on specific population segments and/or different financing issues.

1. Create reimbursement mechanisms to encourage and incentivize the full-scope of primary care practice including chronic and preventive care.
2. Revise primary care reimbursement rate calculations to reflect a population with various levels of health services needs and severity of illnesses (diabetes, HIV/AIDS, heart disease, etc…).
3. Update administrative processes to reflect the frequent health needs of chronically ill patients.
4. Incorporate local community representation on governing boards of public insurance institutions.
5. Connect insurance eligibility directly with immigration office procedures (assuming insurance remains linked to legal employment status).

6. Examine the feasibility of expanding the insurance pool to other islands, spreading risk among larger populations.
7. Construct income sensitive (sliding scale) patient cost-sharing models to help control unnecessary utilization. (This would be in opposition to the PAHO position on implementing financial barriers to access.)

Expanding Local Health Services

St. Maarten should work toward building local specialty capacities and partnerships to improve the population's access to specialty services. On initial consideration, this recommendation might appear at odds with St. Maarten's primary care-oriented system. Despite the challenges identified in the Context section above, an improved specialty care system can be achieved, but it must not obscure the core structural and functional primary care elements of the population's health needs (Macinko, Montenegro et al. 2007).

Over the long-term, island leaders should aim toward expanding the scope of services on St. Maarten. Specialty care expansion should lead to increased local access and lower patient travel costs. Indirect benefits of specialty care expansion include economic development outside the tourist-based economy and the potential to attract other industries with a greater ability to care locally for residents/employees. The following steps will assist in improving the specialty care infrastructure:

1. Conduct more concerted efforts at achieving medical service cooperation with French St. Martin.

2. Partner or contract with regional island governments to increase the population service base.
3. Assess and modify specialty reimbursement allowances to help ensure practice viability.
4. Analyze current costs of off-island specialty care for St. Maarten's residents (to inform efforts to achieve cost-neutrality or cost savings with on-island specialists).

Reorganizing Primary Care Services

Establish a new model of community-based care using the existing network of primary care physicians. This new model should be culturally sensitive, attend to social and behavioral factors, make use of non-physician caregivers, and address the needs of low-income and immigrant communities. It should:

1. Train linguistically and culturally appropriate community residents as health liaisons (community health workers) in the government's employ.
2. Create multi-disciplinary teams (including non-physician providers) in primary care offices to more effectively deal with chronic illness and preventive care.
3. Take prevention activities into the communities in coordination with primary care offices and government agencies.
4. Enforce the regional population density distribution model as a condition of licensure for future primary care expansion. This model requires new physicians to locate primary practice sites in areas of need.

5. Incentivize the use of a structured, central medical record data system to improve coordination and enhance the ability to assess and plan for the population's health status and needs.

Professional Education

Continuing medical education (CME) on St. Maarten should be structured to take advantage of opportunities assuring access to quality care. Basic steps towards reinforcement of CME should help in updating and equalizing clinical care practices among physicians.

1. Enforce an annual CME requirement, which would be necessary to maintain both licensure and current contracts guaranteeing insurance reimbursement.
2. Develop proper incentives for physicians participating in CME activities (for example, funding, tax credits, and sponsored programs).
3. Create a CME curriculum committee to determine CME topics based upon population health needs.

Public Education Curriculum

Physicians support a partnership between Sector Health Care Affairs, local physician advisors, and school administrators to **develop a preventive health curriculum in St. Maarten public schools**. The curriculum should be culturally sensitive to St. Maarten's population and, in particular, should be part of island-wide efforts to reduce childhood obesity.

Workforce Development

A task force should be created to assess St. Maarten's health care workforce and make recommendations to assure the future adequacy of the workforce. The existing primary care physicians and a representative of Sector Health Care Affairs should lead the task force. This group's recommendations should take into account issues of income, professional autonomy, and immigration of both the health care workforce and general population.

This recommendation is made in conjunction with the call for fair and appropriate reimbursement and insurance processes supporting the treatment and management of chronic care patients. The *reorganization of primary care services* will place greater emphasis on the primary care physician, contributions to population health and better control over patient outcomes.

D. Coming to Grips with a Vision for St. Maarten's Health System

The Pan American Health Organization's (PAHO) publication, *Renewing Primary Health Care in the Americas* (Macinko, Montenegro et al. 2007), provides the basis for this recommendation: **St. Maarten should use PAHO'S primary health care-based system concepts to guide a reorientation of the health system toward prevention, chronic disease care, community integration, and maximization of primary care value under universal coverage.** "The reorientation of health systems towards PHC requires a greater emphasis on health promotion and prevention. This is

achieved by assigning appropriate functions to each level of government, integrating public and personal health services, focusing on families and communities, using accurate data in planning and decision-making, and creating an institutional framework with incentives to improve the quality of services (p.4)" (Macinko, Montenegro et al. 2007).

PAHO's *Facilitators and Barriers to Effective PHC Implementation in the Americas* is presented as Appendix 8. This list of barriers closely resembles the broad-based access to care barriers presented by St. Maarten's physicians. The facilitating factors presented by PAHO overlap with the island's situational context, but exhibit numerous macro-level reforms, within the facilitating factors, needing to be addressed. Concurrent themes include universal coverage, services based on population health needs, participatory reform processes, strengthening of management information systems, continuous professional education, and systems for efficient and equitable resource allocation and utilization.

Most importantly, the PAHO area *Vision/approach to health* offers findings and recommendations that are very similar to those of this research on primary care physicians. Both emphasize community health promotion and prevention, a more integrated approach to health and its determinants, and an association with education and personal responsibility. St. Maarten's health policy leaders would benefit from embracing this vision and the evidence surrounding primary care's benefits to population

health (Starfield, Shi et al. 2005; Hsiao and Shaw 2007; Macinko, Montenegro et al. 2007; Executive Council 2008; Unger, De Paepe et al. 2008).

Building a Coalition for Change

St. Maarten's primary care physicians should act as foundational champions of the PHC-based system regardless of current medical association membership. Supporting organizations should include The White and Yellow Cross, Turning Point, The HIV/AIDS Foundation, The Mental Health Foundation, and the Department of Preventive Health. Depending on the various insurers' ability to interpret cost, quality, and outcome data related to the literature on PHC-based systems, they are likely to be supporters or neutral on the effort.

Potential opponents to this movement are the SMMC and its associated specialty groups. Given the large number of off-island service arrangements for the bulk of medical and surgical disciplines, this opposition may not hold much public or local political backing. Rebalancing the health system and shifting resources toward primary care will likely have little effect on the limited number of specialists residing on St. Maarten, but will require efforts to minimally secure their neutrality in promotion of primary care initiatives.

The coalition must set out overall goals of the PHC renewal, framing the movement, and transition to the next stage in recruiting new supporters. Suggested goals by PAHO, in the context of St. Maarten, include:

1. Creating a more efficient and effective health system
2. Improving health and equity for the rapidly diversifying population
3. Enhancing human development (through health) and contributions to sustained economic growth
4. Increasing access to appropriate health care services

The Way Forward

Government leaders and private health care providers must come to consensus on the island's vision of health care over the next decade. The research results point to the need for an external consultant to help achieve a purposeful plan that assures coordination between government and the private health sector. PAHO could act as the suggested external consultant to St. Maarten to initialize this reform process and work with this core coalition. Island government has a history of cooperative achievements with PAHO in health related projects. I also offer any assistance in creating change according to the results of this research.

The current opportunities for St. Maarten to improve access to health care are unprecedented. Transition to independence permits past policies, methods, and alliances to be critically analyzed and continued or rejected based on merit rather than history or favoritism. New systems should be forged to benefit the island's people. Backed by this

research, primary care physicians have the collective clout to move forward with a unified voice for change, collaborating with other stakeholders to create a clear vision of health care for St. Maarten.

APPENDIX 1

Diagrammatic Structure St. Maarten Health Insurance and Administration

Plan Name/Category	Premium Funding	Enrollment Req's	Coverage Estimates
SVB (Sociale Verzekeringsbank)	8.3 % Employer 2.2% Employee	Workers up to NAF 4,270/mo US $2,385/mo	+/- 25,000
FZOG (Fonds Ziektekosten Overheids Gepensioneerden - admin by SVB)	Accrued Island & Federal Government Pension Funds	Retired Island & Fed Civil Servants	No available stats
BZV (Bureau Ziektekosten Voorzieningen)	Accrued Island & Federal Government Dedicated Funds	Current Island & Fed Civil Servants up to NAF 4,000/mo US $2,234/mo	+/- 4,500
PPK (PRO Paupre or Poor People Kard -admin by BZV)	Accrued Island Government Dedicated Funds	Legal residents w/ no other option up to NAF 3,875/mo US $2,164/mo	No available stats
Private Insurance	Individual Post-tax Contribution based on health status	Anyone with ability to pay, except pre-existing exclusions	+/- 5,000
Uninsured	Unfunded, Self-pay or Charity Care	Unemployed/illegal immigrants and some employed	+/- 10,000 (estimates as high as 15,000)

APPENDIX 2

Interview Introduction Script

Good (morning, afternoon, evening) Dr. _____, my name is Joseph Ichter and I am here today to interview you regarding your thoughts on health policy reforms on St. Maarten. More specifically, polices related to access to health care services are targeted. This research is being conducted in conjunction with the Doctoral program in Public Health Leadership at the University of North Carolina, Chapel Hill, and is my personal study toward completion of the DrPH degree.

I would like to get your verbal permission to digitally record the interview. Please be assured that regardless of your decision, responses will remain anonymous and confidential throughout the research process and after. Signify that you are willing to have the interview digitally recorded by answering *yes* or *no* at this time.

- (If *yes*, state the following) Thank you for your permission to record the interview. The interview will take a maximum of sixty minutes and will be digitally recorded using this *SONY ic* voice recorder. Full transcription of each interview will take place and there will be nothing in the transcription that will be identifiable. After transcription, the original digital voice recordings will be destroyed, responses to these questions will remain anonymous and strictly confidential. Recorded responses will be fully password protected on a single MacBook Pro owned by me.

- (If *no*, state the following) I understand your decision and will take written notes during the interview. The interview will take a maximum of sixty minutes. Your responses to the questions will remain anonymous and strictly confidential. Recorded responses on paper will be transferred anonymously to an electronic format after the interview is complete and written notes will be shredded. The electronic data will be fully password protected on a single MacBook Pro owned by me.

Please consider access to health care in its broadest sense, including medical services, insurance & coverage, physical access, geographic, cultural or any other facet you may see as access related. As a primary care physician and stakeholder in the current and future health care policy, this research is meant to provide the policy makers with complete ideas and opinions of front line primary care physicians. Any information gathered will be released as collective or group information and will not be attributable to any individual physician.

The objectives of this work include:

1. Determine primary care physician's opinions on access to health care in St. Maarten
2. Explore known barriers in accessing health care
3. Gather actionable policy solutions to these barriers

Do you have any questions regarding this interview or anything I have said to you in this introduction?

APPENDIX 3

The questions you will be asked are centered on issues related to accessing health care services for your patient population. Please reflect on your experiences to answer the following questions:

1. Do you believe that St. Maarten needs to try to improve access to primary health care services?

   If yes, why and for what segments of the population?

   If no, why not?

2. Do you believe that the current effort at attaining country status presents new opportunities for St. Maarten's health policies related to access to care?

   If yes, why?

   If no, why not?

3. Do you believe that patients in your practice delay care and present with illnesses that:

   Should have been identified earlier? (*Probe in terms of these patients being first time or part of their panel, continuity of care)*

   Were purely preventable? (*Probe in terms of visits related to prevention, coverage and patient literacy in prevention*)

4. Do you consider your personal medical practice to be open access, accepting all patients regardless of ability to pay?

5. As you know, there are many potential barriers to access to health care, but I am interested in your opinion about the most important ones on the island. What do you believe to be the most important barriers to accessing health services? (*note that this question is asking about health services in general, not specific to primary care as the initial five questions*)

(Write each reason given by the respondent.)

Barrier 1: _____

Barrier 2: _____

Barrier 3:_____

Barrier 4:_____

(*In each of the questions below, continue to probe interviewees for practical answers rather than continued descriptions of problems or barriers. Probes may include issues related to the delivery system capacity, scope of available services, insurance coverage, cultural norms, transportation/mobility, immigration/legal status, language, level of education, aspects of public health services and others as identified through questioning, refer to barrier probe for detail areas*)

5a. About (*the first barrier*), what, if anything, should the government do to lower this barrier?

5b. About (the next barrier), what, if anything, should the government do to lower this barrier?

5c. About (the next barrier), what, if anything, should the government do to lower this barrier?

5d. About (the last potential barrier), what, if anything, should the government do to lower this barrier?

6. (*This question is only pertinent if some facet of the main areas of access mentioned after the ranking question were not covered above*) Now that you have provided those barriers you believe are most important to the island, I would like to list other potential barriers to accessing care and see if you have any opinions on these (*areas not covered will then be stated*).

Thank you very much for your time.

APPENDIX 4

Barrier Probe Areas for questions 6a-6d would include, but will not be limited to the following;

1. Delivery System and Structural Components

- *a. Number of practicing physicians*
- *b. Practice locations, proximity to populations*
- *c. Hours of operation*
- *d. Available appointments & waiting time*
- *e. Diversity of practitioners*
- *f. Scope of services*
  - *1) Types of specialty care available on island/off island (includes French St. Martin*
  - *2) Hospital/Tertiary care*
  - *3) Ancillary services on island/off island (radiology, lab, diagnostics)*
  - *4) Available pharmaceuticals*
  - *5) Alternative Medicine*
- *g. Public health wrap-around services*
  - *1) Long-term care*
  - *2) Mental health*
  - *3) Drug rehabilitation/addiction*
  - *4) Physical rehabilitation*
  - *4) Special needs (HIV/AIDS, TB, disability)*
  - *5) Basic nutrition*
- *h. Literacy of the health system*

2. Health Insurance & Health Finance

- *a. Public insurances*
  - *1) Population coverage*
    - *a) Civil servants, Employed, Elderly*
    - *b) Undocumented Immigrants*
    - *c) Income limits*
    - *d) Covered services*
    - *e) Public knowledge of insurances*
  - *2) Consideration of system as universal access*
  - *3) Consideration of system of single payer*

- *b. Private insurances*
  - *1) Population coverage*
  - *2) Community vs, Individual rating*
  - *3) Total cost of premiums*
  - *4) Pre-existing conditions & exclusions*
  - *5) Available options of coverage*

c. Issues common to public and private insurances

1) Underinsured
2) Contracted fees
3) Methodology of reimbursement
4) Timely reimbursement
3) Family vs. individual coverage
4) Coinsurances, limits, deductibles
5) Affordability (includes total out-of-pocket expenses)
6) Scope of covered services

3. Immigration or legal status (These scenarios may also apply with 'not-working')

a. Legal working and uninsured
b. Legal working and individual insured (not family)
c. Illegal working and insured
d. Illegal working and uninsured
e. Application of Universal Coverage and the illegal population

4. Cultural & other 'home country' barriers (in reference to influx of legal/illegal residents from surrounding islands and the competency of the delivery system to accommodate needs)

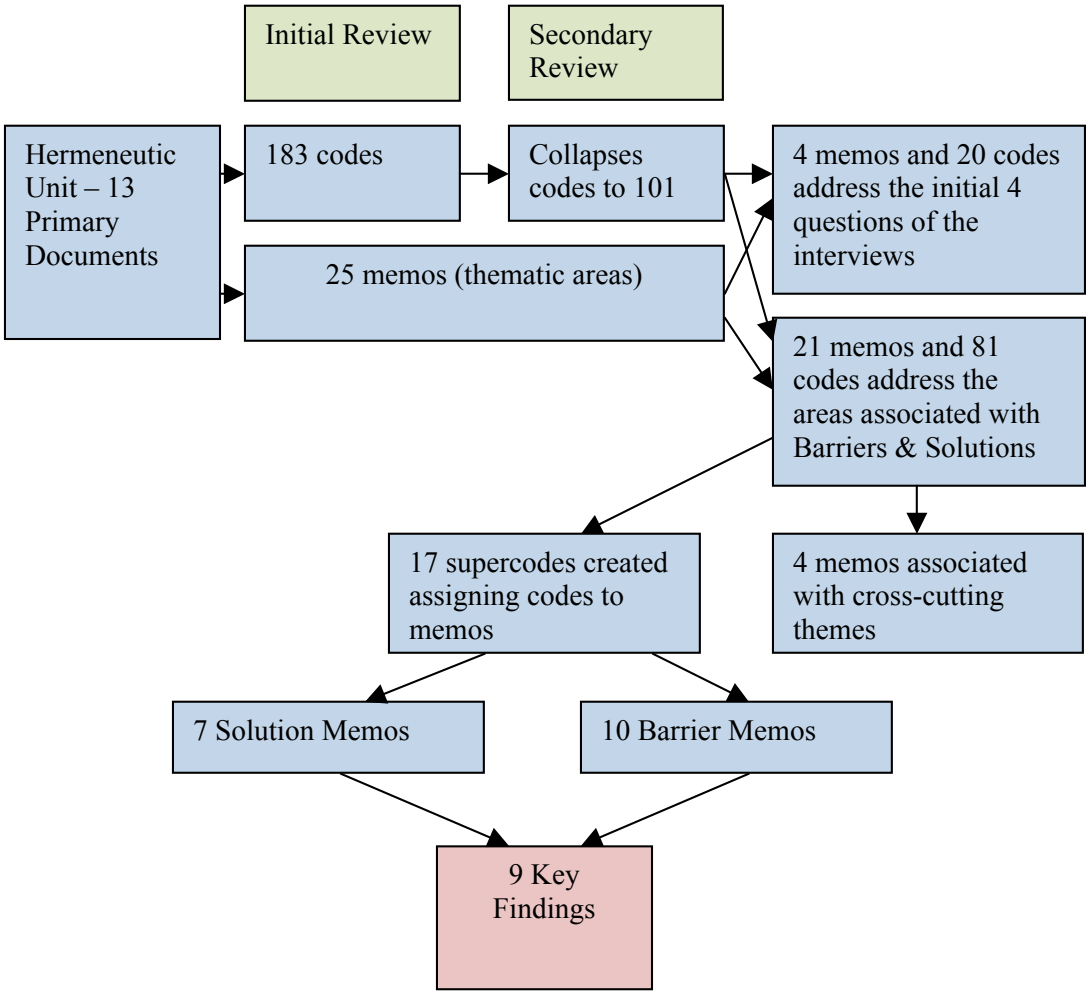
a. Language (inability to interpret all present languages)
b. Family/community support systems (immigrants on island w/o family)
c. Applications of western medicine (particularly with Haitian community)
d. Social norms of care seeking activities
e. Educational levels and literacy (including health specific literacy)
f. Health disparities
g. Religious needs
h. Diversity of the health care practitioners

5. Patient activation (personal health responsibility) and physical access

a. Transportation (cost and availability)
b. Work accommodation
c. Family obligations
d. Preventive care & lifestyle
e. Health literacy

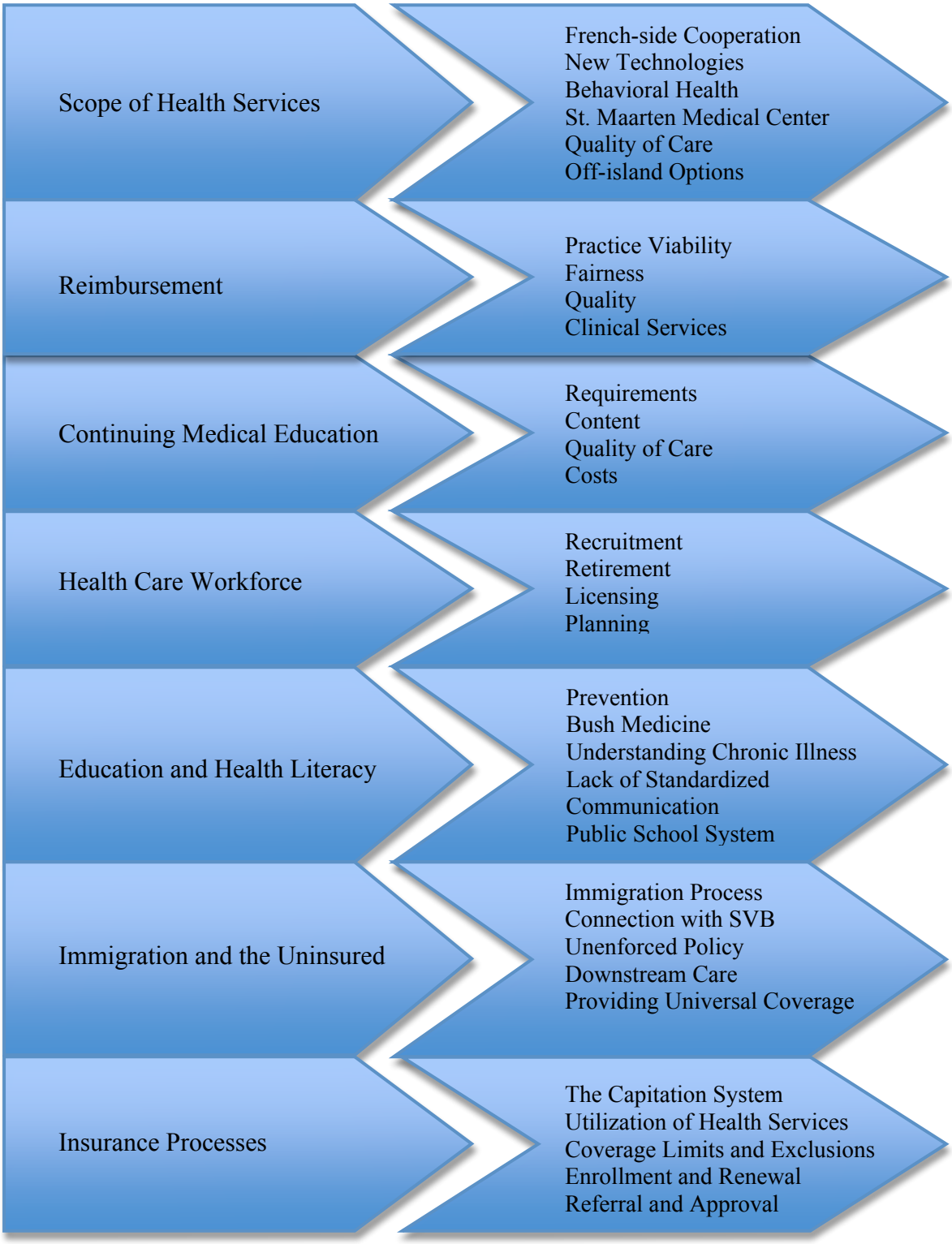
APPENDIX 5

ATLAS ti Data Analysis Map



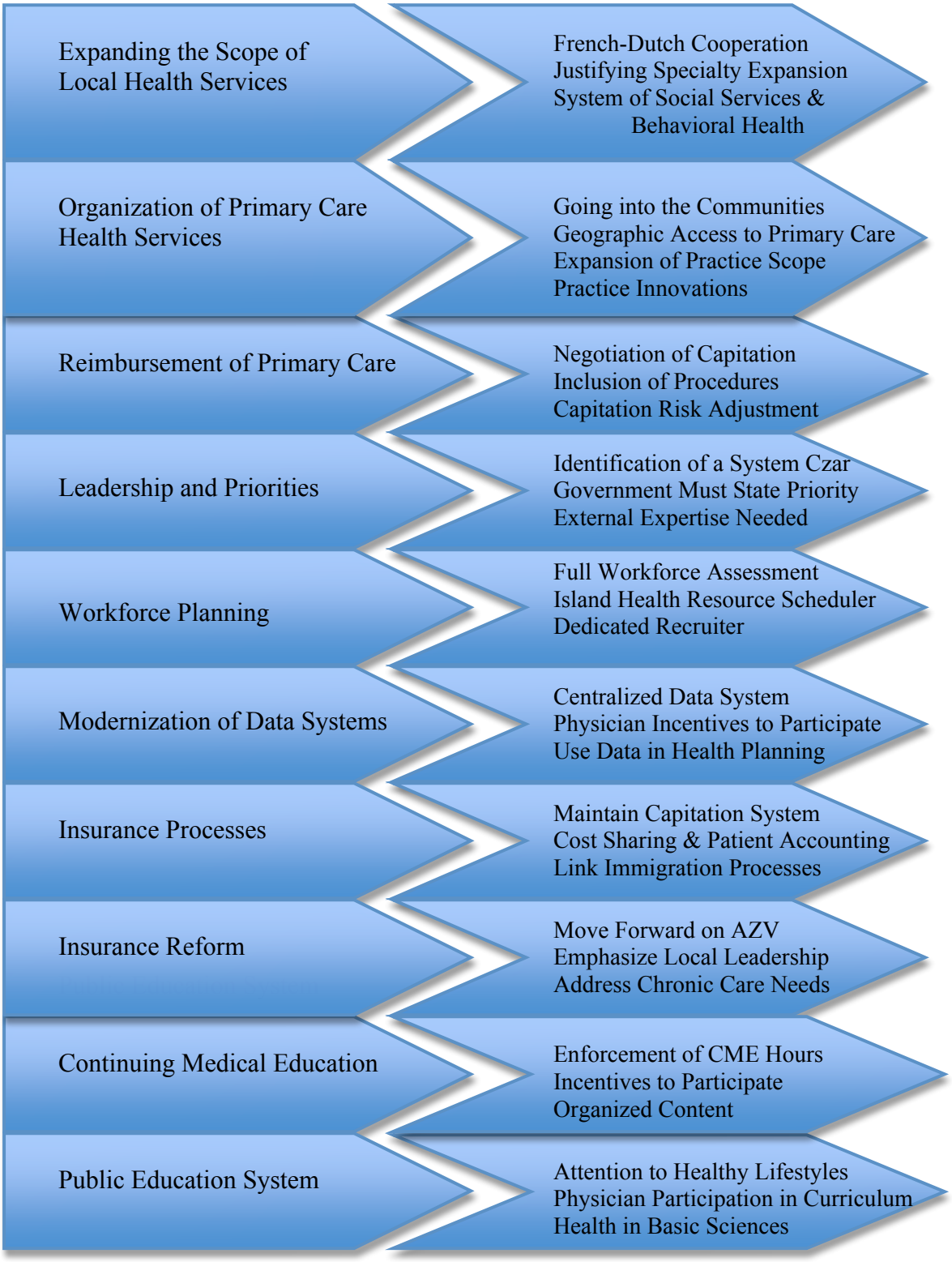
APPENDIX 6

Identified Barriers Summary



APPENDIX 7

Identified Solutions Summary



APPENDIX 8

PAHO Facilitators and Barriers to Effective PHC Implementation in the Americas -

Overlapping Barriers and Solutions (Facilitating Factors) From St. Maarten are in Red

Area	Facilitating Factors	Barriers
Vision/approach to health	• Integrated approach to health and its determinants • Community health promotion • Promotion of individual, family, and community self-responsibility	• Fragmented vision of health and development concepts • Indifference toward the determinants of health • Lack of a preventive and self-care approach • Excessive focus on curative and specialized care • Insufficient operationalization of PHC concepts • Different interpretations of PHC
Characteristics of health systems	• Universal coverage as part of social inclusion • Services are based on population needs • Coordination functions at every level • Care is based on evidence and quality	• Health reforms that have segmented people based on ability to pay for health services • Segmentation between public, social security, and private sector • Lack of coordination and referral systems • Deficient regulatory capacity
Leadership and management	• Regular assessments of performance • Participatory reform processes • Correct identification of sectorial priorities • Consensus-building practices • Integration of local and global cooperation • Strengthened and integrated health and management information systems	• Lack of political commitment • Excessive centralization of planning and management • Weak leadership and lack of credibility before citizens • Mobilization of interests opposed to PHC • Limited community participation and exclusion of other stakeholders
Human resources	• Emphasis on quality and continuous improvement • Continuous professional education • Development of multidisciplinary teams • Research promotion • Development of managerial abilities	• Inadequate employment conditions • Competencies poorly developed • Limited interest in operational research and development • Poor use of management and communication techniques • Predominance of curative, biomedical approaches
Financing and macroeconomic conditions	• Policies to ensure adequate financing over time • Systems for efficient and equitable resource allocation and utilization • More sound, pro-poor macroeconomic policies	• Lack of financial sustainability for PHC • Public spending concentrated on medical specialties, hospitals, and high technology • Inadequate budgets devoted to PHC • Globalization pressures and

		economic instability
International cooperation approach to the health sector	• PHC reflects social values and population health needs • PHC as a central element of national health policies • Reforms strengthen the steering role of the State • Political and legal frameworks for health reforms • Progressive decentralization policies • Health reforms strengthen rather than weaken health systems	• Disease-specific strategies and priorities • Societal values not considered in reform initiatives • Overly time-bound, limited targets that do not reflect population priorities • Poor continuity of health policies • Excessively vertical and centralized approaches • Costs transferred to citizens with limited consultation

Sources: [1,3,11,32,79,92-96] and country reports generated as part of the PHC renewal consultative process

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